Blue Book Advanced

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***Resolved: That the United States Federal Government should significantly reform its environmental policy.***

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DEFINITIONS- ENVIRONMENTAL POLICY

By Matthew Baker

A) ENVIRONMENT

Physical, chemical, and biotic factors that act on organism

Merriam Webster’s Medical Dictionary, 2002

“The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival.”

Biotic & Abiotic factors: organisms, their food, sunlight, soil, air, water, climate, and pollution

The American Heritage Science Dictionary, published by Houghton Mifflin, 2002

“All of the biotic and abiotic factors that act on an organism, population, or ecological community and influence its survival and development. Biotic factors include the organisms themselves, their food, and their interactions. Abiotic factors include such items as sunlight, soil, air, water, climate, and pollution. Organisms respond to changes in their environment by evolutionary adaptations in form and behavior.”

All external conditions affecting life

The Environmental Protection Agency, October 2, 2006, “Terms of Environment: Glossary, Abbreviations and Acronymns,” <http://www.epa.gov/OCEPAterms/eterms.html>

“Environment: The sum of all external conditions affecting the life, development and survival of an organism.”

Physical and biological conditions

US Fish and Wildlife Service, 2001, “Endangered Species Means There’s Still Time,” <http://www.fws.gov/Endangered/Kids/pdf/glossary.pdf>

“Environment: The conditions (physical and biological) surrounding an organism that influences it’s existence.”

Everything around us: air, land, and water

Jody A. Thompson (environmental assistant with the Auburn University Marine Extension and Research Center), March 5, 2008, <http://www.aces.edu/dept/fisheries/aumerc/newspaper-articles/documents/3_5.pdf>

“The environment includes everything around us: the air we breathe, the land we stand on, the water we swim in.”

B) ENVIRONMENTAL POLICY

Rules and regulations concerning the environment

Dr. William P. Cuningham (Ph.D. in Botany from the University of Texas), Dr. Mary Ann Cunningham (PhD in Geography at the University of Minnesota), and Dr. Barbara Woodworth (Ph.D. in Science Education from the University of Iowa), 2001, Environmental Science: A Global Concern, 7th Edition, McGraw Hill, <http://highered.mcgraw-hill.com/sites/0070294267/student_view0/glossary_e-l.html>

**“**Environmental Policy: The official rules or regulations concerning the environment adopted, implemented, and enforced by some governmental agency.”

Environmental protection, conservation, and rational use of natural resources

Dr. Natalia Mirovitskaya [editor] (PhD from the Russian Academy of Sciences in Economics and Visiting Professor of Environmental Policy at Duke University), and Dr. William L Ascher [editor] (PhD in Political Science from Yale and Professor of Government and Economics at Claremont McKenna College) 2001, The Guide to Environmental Policy and Sustainable Development, Duke University Press, p. 186 [Google Books]

“Environmental Policy: a government policy that explicitly intends to promote environmental protection, conservation, and rational use of natural resources.”

Policy concerned with governing relationship between people and their *natural* environment

Professor John McCormick (Professor of political science at Indiana University Purdue University Indianapolis, IUPUI), 1991, British politics and the environment,” p. 7 [Google Books]

“Environmental policy is defined as public policy concerned with governing the relationship between people and their natural environment.”

Law and regulations attempting to address environmental problems

Dr. Deborah M. Brosnan (PhD in Marine Ecology from Oregon State University and President of the Sustainable Ecosystems Institute), “Science, Law, And the Environment: The Making of A Modern Discipline,” Environmental Law (published by Lewis & Clark Law School), Volume 37, Issue 4, 2007, p. 3, <http://legacy.lclark.edu/org/envtl/objects/37-4_Brosnan.pdf> [Note: quote of definition comes from previous publication by Brosnan & Groom]

“Environmental policy is defined as a “broad category and includes all the ways that society tries to address environmental problems, including laws and regulations.”4”

At the deeper policy level, environment policy is integrative and comprehensive; thousands of environmental laws are not designed as environmental policies

Professor Robert V. Bartlett (Gund Professor of Liberal Arts in the Political Science Department at the University of Vermont), 1997, “Integrated Impact Assessment: The New Zealand Experiment,” Environmental Policy, eds. Lynton Keith Caldwell and Robert V. Bartlett, p. 157-58 [Google Books]

“The term “environmental policy” encompasses several layers of meaning. It may refer to all substantive policy as it directly affects the human environment, or only to pollution and conservation policies collectively, or instead to a particular orientation of policy toward environment protection. At a deeper level, however, the term also implies something about the process of policymaking: among other things, for example, truly environmental policymaking is significantly anticipatory, comprehensive, and integrative. Thousands of environmental laws, programs, regulations, and administrative initiatives have been adopted in the past quarter-century, but few have been intentionally designed as environment policies in this last sense. One notable exception has been the widespread adoption of requirements for environmental impact assessment (EIA).”

C) TOPICALITY EVIDENCE

Environmental policy includes limits on pollution, resource depletion, incentive policies, environmental clean up, protection or restoration

Dr. Natalia Mirovitskaya [editor] (PhD from the Russian Academy of Sciences in Economics and Visiting Professor of Environmental Policy at Duke University), and Dr. William L Ascher [editor] (PhD in Political Science from Yale and Professor of Government and Economics at Claremont McKenna College) 2001, The Guide to Environmental Policy and Sustainable Development, Duke University Press, p. 186 [Google Books]

“Environmental policy includes regulations to prohibit or limit pollution and resource depletion; incentives policies (including tax measures) to encourage environmental improvements to discourage pollution and depletion, and direct environmental efforts to clean up, protect, or restore ecosystems.”

Environmental Policy encompasses toxic products, conservation, and access to public areas

Professor Barton H. Thompson Jr (JD, Professor at Stanford, and Director of Sanford Law School’s Environmental and Natural Resource Program) ., “The Environment and Natural Resources,” State Constittuions for the Twenty-First Century, eds. George Alan Tarr, Robert Forrest Williams, Frank P. Grad, p. 308, 2006 [Google Books]

“Environmental policy encompasses a diverse array of issues, usefully divisible into three broad subject areas- control and cleanup of pollution and toxic products (health issues), conservation and allocation of natural resources (resource issues), and public access to and preservation of resources of recreational or other importance to the general population (public access issues).”

Health risks from tobacco and alcohol best addressed through environmental policy such as smoke-free workplaces

Kathy S. Kunath (RN), Jill Myers Geadelmann (BS and RN), Sheila Riggs (DMedSc), and William K. Appelgate (PhD), June 1, 2005, “Chronic Diseases: A Critical Issue for Iowa,” Report Commissioned by Iowa Department of Public Health, <http://www.idph.state.ia.us/common/pdf/publications/chronic_diseases.pdf>

“Yet another strategy for health prevention and risk reduction involves government and legislation. Health risks associated with tobacco and alcohol use are reduced most effectively through environmental policy change. Examples of this are policy changes that support smoke-free workplace ordinances.”

DEFINITIONS- SIGNIFICANT

By Matthew Baker

**Editors Note: Percentage definitions are pulled out of a variety of contexts that may not necessarily be relevant to the 2009-2010 topic. This should be disclosed when reading the cards.**

I. QUALITATIVE

Important

Random House Webster’s College Dictionary, 1999 “Significant”

“Important; of consequence”

Important

Collins English Dictionary, 1999 “Significant”

“Important, notable, or momentous”

Important

Webster’s Revised Unabridged Dictionary, 1999 “Significant”

“Deserving to be considered; important; momentous”

II. QUANTITATIVE

Information about quantity

The Oxford English Dictionary, 1999, “Significant,” 2nd Edition

“Conveying information about the value of a quantity, esp. in significant digit, figure.”

Fairly Large

Princeton University’s WordNet, 1997 “Significant”

“Statistically significant, fairly large”

Fairly Large

The American Heritage Dictionary of the English Language, 2000 “Significant” 4th Edition

“Fairly large in amount or quantity”

III. LESS THAN 51%

5%

General Accounting Office, November 3, 2006, “'Applying Agreed-Upon Procedures: Airport and Airway Trust Fund Excise Taxes',” <http://www.gao.gov/htext/d07132r.html> (Note: the following is taken out of context)

“Significant is defined as 5 percent of the actual certified amount for the quarter.”

25%

Gordon McDonald, September 2005, “EITF Roundup: Audi and Enterprise Risk Service,” Deloitte & Touche, <http://www.deloitte.com/dtt/cda/doc/content/us_assur_EITF%20Roundup%20September%202005.pdf> (Note: the following is taken out of context)

“Significant is defined as at least 25 percent of the fair value of the exchange.”

25%

UCLA Office of Research Administration, 2006, “EFM- Frequently Asked Questions,” <http://www.efm.ucla.edu/faqs.htm> (Note: the following is taken out of context)

“The use of both rates for a given project may be justified if both rates can be clearly identified with a significant portion of the work performed as determined by salary costs. For this purpose, significant is defined as approximately 25% or more of the total project costs and a project's total salary costs exceed $250,000.”

IV. 51%

Above 50%

Dr. Robert E. Keleher (Chief Macroeconomist to the Vice Chairman), August 2000, “International Dimensions to US Monetary Policy,” US Congressional Joint Economic Committee, <http://www.house.gov/jec/fed/intern.htm> (Note: the following is taken out of context)

“Related evidence indicates that foreigners hold significant percentages (above 50 percent) of dollar notes in circulation.”

50% = significant amount

John S. Quinlan, December 1998, “A Step by Step Guide to Building an All Inclusive Snow Spotter Network,” National Oceanic and Atmospheric Administration, <http://www.wdtb.noaa.gov/workshop/WinterWx/presentations/tan13.pdf> (Note: the following is taken out of context)

“Under catch of snowfall- most affected by the height of the rain gauge above the surface. Goodison (1978) proved that an unshielded Universal (Belfort) weighing gauge routinely under catches ground-level snowfall by a significant amount (50 percent under catch with wind speeds as low as 6 mph (5 kts)).”

50% = significant impact

Goodwill Industries, 2004. “Making Work Work,” <http://www.scribd.com/doc/1657391/Department-of-Labor-Tools-Turnover-Reduction> (Note: the following is taken out of context)

“The results of using this model were overwhelmingly positive. Ninety-five percent of participating employers reported that the strategies they implemented had either a significant impact (50 percent) or some impact (45 percent) on the retention and/or advancement of workers placed, particularly those in entry level positions. A total of 3,800 employees were affected by the new strategies.”

Greater than 50%

Dr. Charles Morin (PhD and Professor of Psychology at Laval University), 2005, “Efficacy of Behavioral and Psychological Treatments of Chronic of Insomnia,” <http://www.docstoc.com/docs/2185315/The-Natural-History-of-Opiate-Addiction> (Note: the following is taken out of context)

“Only a small proportion (20–30 percent) achieves full remission (i.e., symptom-free) after treatment, but the majority obtains significant (greater than 50 percent) symptom reduction on measures of sleep latency and time awake after sleep onset, with absolute values of those parameters falling below or near the 30-minute criterion used to define sleep onset and maintenance insomnia.”

Significant portion = 50%

Environmental Protection Agency, June 23, 1999, “National Emission Standards for Hazardous Air Pollutions: Pesticide Active Ingredient Production,” <http://www.epa.gov/fedrgstr/EPA-GENERAL/1999/June/Day-23/g12754.htm> (Note: the following is taken out of context)

“Under option 2, EPA required that a significant portion (50 percent) of the reductions be achieved using pollution prevention techniques, not add-on controls.”

V. ABOVE 51%

40% to 65%

Barbara A. Ormond, Kirsten J. Black, Jane Tilly, and Seema Thomas, November 2004, “Sup portative Service Programs in Naturally Occurring Retirement Communities,” US Department of Health and Human Services, <http://aspe.hhs.gov/daltcp/Reports/NORCssp.htm> (Note: the following is taken out of context)

“In the literature, the age at which a person is considered "older" ranges from 50 to 65 years old, and the definition of a "significant proportion" ranges from 40 to 65 percent. Subject matter experts we spoke with also disagreed on specifics. Some advocated 60 as the lower bound for who is considered older to provide consistency with the Older Americans Act. Others suggested that the cutoff should be related to the level of disability rather than a specific age.”

90 %

Professor Caroline M. Hoxby (PhD from MIT and professor of economics at Stanford University), August 5, 2003, “Deposition of Caroline M. Hoxby,” Superior Court of the State of California, County of San Franciso, <http://www.decentschools.org/depositions/hoxby-c2.pdf> (Note: the following is taken out of context)

“And typically the threshold for something being statistically significant is 90 percent probability or 95 percent probability that it is something that you have really, that is a real phenomena that you have observed in the data, and not an accident of the data. I typically use the 95 percent cutoff.”

TOPICALLY PRESS: ENVIRONMENTAL POLICY = EPA

By Matthew Baker

FRAMEWORK

The EPA develops and enforces environmental policy

Hoovers (A subsidiary of Dun and Bradstreet specializing in business and economic insight and analysis), 2009, “US Environmental Protection Agency,” (accessed June 28 2009) <http://www.hoovers.com/environmental-protection-agency/--ID__130205--/free-co-profile.xhtml>

“The U.S. Environmental Protection Agency (EPA) develops and enforces environmental policy and regulations throughout the country. Besides working to ensure compliance with federal environmental rules, the agency provides support for state environmental protection efforts. In addition, the EPA conducts research on environmental issues through a network of laboratories. The agency was established in 1970, the same year as the first Earth Day, in response to growing concerns over air, water, and soil pollution. The agency is led by an administrator appointed by the US president.”

The EPA has a policy formation function and writes regulations that govern environmental policy

Reese Schonfeld, December 17, 2008, “Browner Not Greener: The Decline and Fall of Environmental Policy,” The Huffington Post, <http://www.huffingtonpost.com/reese-schonfeld/browner-not-greener-the-d_b_151540.html>

“The EPA had always had, directly under the administrator, a coordinator who monitored the activities of all its branches. The EPA has a research and development function that helps form overall policy. The EPA writes regulations that govern environmental policy. Other divisions enforce regulations regarding water pollution, air pollution, emergency response, toxic substances, solid waste, pesticides, drinking water, and, along with the USDA, agricultural biotechnology.”

The EPA establishes and enforces environmental policy

Sarah Dowdey (BA from the University of Georgia and Green Editor for How Stuff Works), 2007, “How the EPA Works,” How Stuff Works, <http://people.howstuffworks.com/epa.htm/printable> (Accessed 7/21/2009)

“Protecting the environment seems to be on everyone's mind these days. Constituents encourage their representatives to propose carbon legislation. Grassroots environmental groups protest polluters. Average citizens concerned with global warming take simple measures to reduce their carbon footprints. But only one organization has the ability to establish and enforce the environmental policy of the United States: The Environmental Protection Agency (EPA).”

EPA: Federal agency that administers environmental policy

Ohio State University Human Resources Extension, June 2009, “Glossary of Extension Terminology,” sac.ag.ohio-state.edu/Glossary.doc (accessed July 28, 2009)

“EPA (Environmental Protection Agency): Federal agency that administers environmental policy and laws.”

The EPA was created to administer environmental policy

Oregon State University Department of Agricultural & Resource Economics, 2005, “Environmental Quality,” <http://arec.oregonstate.edu/jaeger/environment/environmentalqualityoverview.html>

“Public awareness of the potentially high social cost of pollution in the U.S. rose in the 1960s and led to the passage of the National Environmental Policy Act (NEPA) in 1969, which required agencies to publish environmental impact statements prior to conducting projects. This was followed by the creation of the Environmental Protection Agency (EPA) in 1970 to administer environmental policy. The Clean Water Act (CWA) of 1972 was intended to "restore and maintain the chemical, physical, and biological integrity of the nation's waters" (EPA 2005). The EPA and the state Departments of Environmental Quality (DEQ) were charged with establishing and regulating the levels of these chemicals in bodies of water and ensuring that they were below key concentrations. In 1974, the Safe Drinking Water Act was established, intended to ensure that high quality water was delivered to the people of the U.S.”

TOPICALLY PRESS: POLICY = GOAL

By Matthew Baker

DEFINITIONS: POLICY

a) Principles

Chambers 21st Century Dictionary, 1999

“A principle or set of principles on which to base decisions.”

b) General principles

Black’s Law Dictionary, 7th Edition, 1999

“The general principles by which a government is guided in its management of public affairs.”

c) High-level plan

Webster’s Revised Unabridged Dictionary, 1996

“A high-level overall plan embracing the general goals and acceptable procedures esp. of a governmental body.”

d) A set of statements of principles to provide a basis for consistent decision-making

Canadian Heritage Information Network (A division of the Canadian government), 2004, “Developing Intellectual Property Policies: A How-To Guide for Museums,” <http://www.chin.gc.ca/English/Intellectual_Property/Developing_Policies/primer.html>

“A policy is a set of statements of principles, values, and intent that outline expectations and provides a basis for consistent decision-making and resource allocation in respect to a specific issue[10](http://www.chin.gc.ca/English/Intellectual_Property/Developing_Policies/notes.html#10). The word policy comes to us from the Middle English word policie, which means the art of government (and from which our modern word police is derived).”

e) A web of decisions different than a single, discrete decision or action

William H. Park (United Kingdom Joint Service Command and Staff College), 2000, “Policy,” Defining Public Administration Edited by Jay M. Shafritz (Professor of Public and International Affairs at the University of Pittsburgh) [Google Books]

“A decision or, more usually, a set of interrelated decisions concerning the selection of goals and the means of achieving them. The identification of policy as a set or web of decisions is useful in that it underlines the notion that policy is best seen as a course of action- or inaction- rather than a single, discrete decision or action.”

f) A policy is regulation action it is not a single, isolated decision

Dr. Jonathan Baron (Professor of Psychology at the University of Pennsylvania with a BA from Harvard and a PhD in psychology from the University of Michigan, 2008, “Thinking and Deciding,” p. 471-72. [Google Books]

“We can think of decisions about the future as plans or policies. A plan is a decision to do something at a future time. When we cook a meal, we usually have some plan in mind. We do certain things at one time and put off other things for the future. The crucial step here is that we decide now to do something at a later time. There would be no point in planning if we were unable to hold ourselves to this decision. The study of planning, therefore, is intimately tied up with the study of self-control. A policy is a plan that binds us to perform a certain action regularly or under certain conditions. We might establish a policy of practicing the violin for half an hour every day, for example, or a policy of never picking up hitchhikers. A plan is not a policy when it involves only a single, isolated decision, such as planning to go to the movies on a certain day. A policy applies to a whole class of behavior that recurs regularly in our lives.”

VIOLATIONS

Obama has goal to reduce carbon pollution by 80% by 2050 (allowing solar cells & green buildings)

Barack Obama, April 27, 2009, “Remarks by the President at the National Academy of Sciences Annual Meeting,” <http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/>

“But energy is our great project, this generation's great project. And that's why I've set a goal for our nation that we will reduce our carbon pollution by more than 80 percent by 2050. And that is why -- (applause) -- and that is why I'm pursuing, in concert with Congress, the policies that will help meet us -- help us meet this goal. This represents the largest commitment to scientific research and innovation in American history.

Obama has goal to devote 3% of GDP to R&D

Barack Obama, April 27, 2009, “Remarks by the President at the National Academy of Sciences Annual Meeting,” <http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/>

“So I'm here today to set this goal: We will devote more than 3 percent of our GDP to research and development. We will not just meet, but we will exceed the level achieved at the height of the space race, through policies that invest in basic and applied research, create new incentives for private innovation, promote breakthroughs in energy and medicine, and improve education in math and science. (Applause) Just think what this will allow us to accomplish: solar cells as cheap as paint; green buildings that produce all the energy they consume; learning software as effective as a personal tutor; prosthetics so advanced that you could play the piano again; an expansion of the frontiers of human knowledge about ourselves and world the around us. We can do this.”

Obama’s policy: to reverse dependence on foreign oil and build a new energy economy

Barack Obama, January 26, 2009, “Remarks by the President on Jobs, Energy Independence, and Climate Change,” <http://www.whitehouse.gov/blog_post/Fromperiltoprogress/>

“It will be the policy of my administration to reverse our dependence on foreign oil, while building a new energy economy that will create millions of jobs. We hold no illusion about the task that lies ahead. I cannot promise a quick fix; no single technology or set of regulations will get the job done.”

Obama is committed to an EPA that is active in protecting the air, water, and natural resources

Barack Obama, December 15, 2008, “Text: Obama Speech Announcing Environment & Energy Key Personnel,” <http://www.clipsandcomment.com/2008/12/15/text-obama-speech-announcing-environment-energy-key-personnel/>

“For my Administrator of the Environmental Protection Agency, I have chosen Lisa Jackson. Lisa has spent a lifetime in public service at the local, state and federal level. As Commissioner of New Jersey’s Department of Environmental Protection, she has helped make her state a leader in reducing greenhouse gas emissions and developing new sources of energy, and she has the talent and experience to continue this effort at the EPA. Lisa also shares my commitment to restoring the EPA’s robust role in protecting our air, water and abundant natural resources so that our environment is cleaner and our communities are safer.”

KRITIK: ECO-IMPERIALISM

By Matthew Baker

LINKS

Eco-imperialism forces western environmental views on developing countries

Dr. John Studley (ethno-forestry consultant with a PhD in Geography from Loughborough University and a Fellow of the Royal Geographical Society), 2007, “Hearing A Different Drummer,” p. 76 [Google Books]

“Eco-imperialism refers to the forceful imposition of western environmental views on developing countries. Eco-imperialism is said to occur when environmentalists place the well-being of the environment over the well-being of humans, particularly those living in developing countries.”

IMPLICATIONS

A) Racism

Ecological Imperialism breeds racism (Japanese whaling proves)

Brandon O’Neill (Editor of Spiked Online), November 27, 2007, “Harpoon this ecoimperialism,” The Guardian (major UK newspaper), <http://www.guardian.co.uk/commentisfree/2007/nov/29/harpoonthisecoimperialism>

“If you thought the idea that the Japanese are a "cruel race" had gone out of fashion in recent years - except, perhaps, amongst ageing couples in Dorset with bad memories of the second world war - then think again. Over the past week, western officials, commentators and environmental activists have described the Japanese as "viciously cruel", "terrorists", and a people prone to outbursts of "uncivilized barbarity". What has provoked this ugly re-emergence of Jap-bashing? Japan's resumption of whaling. Last week, the Japanese sent a fleet of harpoon-armed ships to hunt whales in the Antarctic. The crews are expected to kill 50 fin whales and 935 minke whales. They are also hoping to kill 50 humpback whales, the first time these beasts have been hunted since 1963. Global campaigns to protect animals from the cruelty of uncivilised johnny foreigners are frequently underpinned by xenophobia. And in keeping with this tradition, the Japanese actions have been described as being "beneath the dignity of a nation like Japan" which is accused of carrying out "barbaric and cruel slaughter". They have been attacked by the US, Australia, New Zealand, the EU and a gaggle of "save the whale" groups, including Greenpeace and an Australian environmentalist outfit called the Sea Shepherd Conservation Society, which have sent ships to "chase, block and harass" the Japanese whaling expedition. Most disturbingly, the governments of New Zealand and Australia are issuing ominous threats against the Japanese. There is talk of boycotting Japanese goods, and some greens are calling on new Australian PM Kevin Rudd to send the military to confront the whaling fleet. Under the cover of concern for marine life, Australia and New Zealand are throwing their white weight around in the Pacific, to demonstrate their cultural superiority over the "yellow" nations. They may not be able to touch Japan in economic terms, but they can use the issue of whaling to show the world that they're morally better than the Japs.”

B) Undermines Democracy

Ecological Imperialism violates democracy and national sovereignty

Brandon O’Neill (Editor of Spiked Online), November 27, 2007, “Harpoon this ecoimperialism,” The Guardian (major UK newspaper), <http://www.guardian.co.uk/commentisfree/2007/nov/29/harpoonthisecoimperialism>

“The attacks on Japan and the straitjacketing of African nations reveal the anti-democratic impulse in global campaigns to protect the environment or save the whales and elephants. Animal rights activists feel they can challenge governments elected by millions of people on the basis that they speak for the animals. Like animalistic aristocrats, these self-elected representatives of the whale community feel little compunction in seeking to curtail the actions of a democratic government. Similarly, green activists working to protect the planet for future generations don't recognise anything so flimsy and short-term as democratically-elected governments or national borders. In calling for international limits on carbon emissions, and the boycotting of eco-unfriendly or animal-abusing states, they show that their higher moral purpose - to preserve the world for those who are not yet born - is far more important than the grubby democratic wishes of people alive right now. Speaking for voiceless beasts and unborn generations, the new ecoimperialists have a blank cheque to do as they please. "What could be more barbaric than whaling?", activists and officials ask. I can think of one thing: the depiction of foreign peoples as uncivilised, and the curtailment of their sovereign rights by white nations and green campaigners who think they know better than the Japs and blacks.”

Eco-Imperialism creates support for China’s Communist regime

Professor James Woudhuysen (Professor of Forecasting and Innovation, De Montfort University, Leicester), July 14, 2008, “Eco-imperialism is alive and well in the West,” The Times, <http://www.timesonline.co.uk/tol/comment/specials/article4315707.ece>

“But the eco-imperialism I am concerned with is the West’s use of Green issues to try to stigmatise and browbeat the Chinese. Bureaucrats in Beijing can only marvel at their luck. The coming decade will offer them a fair number of domestic challenges to their legitimacy. But the more the West continues its green condescension toward China, the more the Chinese Communist Party will be able to play on national feeling and so win popular support. These are the bitter fruits of eco-imperialism.”

C) Developed World Harmed

Eco-colonialism causes Africans to starve, die from malaria, and suffer without electricity

Dr. Willie Soon (PhD in aerospace engineering from the University of Southern California and astrophysicist with the Harvard-Smithsonian Center for Astrophysics) and Paul Driessen (JD from the University of Denver College of Law and Senior Fellow at the Center for Defense of Free Enterprise), June 7, 2009, “Eco-colonialism Degrades Africa,” <http://www.rightsidenews.com/200906075057/energy-and-environment/eco-colonialism-degrades-africa.html>

“Eco-colonialism keeps Africans "traditional" and "indigenous," by insisting that modern technologies are harmful and not "sustainable" in Africa . Abundant, reliable, affordable electricity could power homes, offices, factories, schools and hospitals, create jobs, bring clean running water, and generate health and prosperity. But Rainforest Action Network and other pressure groups oppose coal and natural gas electricity generation on the grounds of climate change, and hydroelectric and nuclear power for other ideological reasons. They promote wind turbines and solar panels that provide electricity unreliably and in amounts too small to meet any but the most rudimentary needs. Biotechnology could produce bumper crops that overcome droughts, floods, insects, viruses, and even global warming and cooling. But Greenpeace and Sierra Club oppose this precision hybrid-making technology, and instead promote land and labor-intensive subsistence farming. DDT and insecticides could slash malaria rates that Al Gore and other climate alarmists falsely claim are rising because of global warming. But Pesticide Action Network and other activists stridently oppose their use, and the European Parliament recently imposed new pesticide restrictions that will further restrict African access to life-saving chemicals.”

Attempting to prevent third world development to save the environment creates major problems

Dr. Lee Jones (DPhil in International Relations from Oxford University), July 4, 2008, “March of the eco-imperialists,” <http://www.thefirstpost.co.uk/44753,opinion,march-of-the-eco-imperialists>

“The only way to save the planet, greens insist, is to scale back consumption at home, and prevent development abroad. This worldview puts the environment, not people, at its centre, and its consequences are disastrous. Eco-activists managed to slash €4bn worth of EU aid to Third World industries in 2007 alone. They have sabotaged World Bank funding for infrastructure projects, like a hydro-electric dam in Gujarat province, India, which would have provided power for 5,000 villages, industries and sewage-treatment works, irrigation for crops and clean water for 35m people - all because, as one activist said, it would "change the path of people". Western development agencies have banned the use of DDT when 300m people suffer from malaria and up to 3m die from it each year. The UN promotes the burning of charcoal instead of kerosene when 5m young people die annually from diseases caused by indoor wood-smoke inhalation. Organic farming is promoted at the expense of mechanized agriculture when 840m people suffer from malnutrition. Guilt-ridden Westerners offset their carbon via charities that re-impose back-breaking drudgery on Third World peasants, while their governments, via the 2008 Bali Accord, pay poor countries to plant trees instead of developing their economies. the river, kill little creatures along its banks and uproot tribal.”

KRITIK: STATISM

By Matthew Baker

FRAMEWORK

Difference between Statists systems is only a matter of time and degree

Ayn Rand (Novelist and political philosopher), October 1962, “War and Peace,” p. 44 Quoted by the Ayn Rand Institute, Ayn Rand Lexicon, 2009, <http://aynrandlexicon.com/lexicon/statism.html>

“The differences among statist systems are only a matter of time and degree; the principle is the same. Under statism, the government is not a policeman, but a legalized criminal that holds the power to use physical force in any manner and for any purpose it pleases against legally disarmed, defenseless victims.”

LINKS

Link: Price caps, Gov control of energy sources, energy subsidies, state supervision of energy generators, plans for energy production and conservation are manifestations of Statism

Bruce Pardy (Associate Professor of Law at Queens University, Canada), October 2007, “Climate Change Charades: False Environmental Pretences of Statist Energy Governance,” Queen's Business Law Symposium Conference Paper, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1029662> [SSRN]

“Statism is centralized state administration and control of economic and social conditions, in which agencies of government attempt to identify desirable outcomes and manipulate policies and institutions to produce them. In the energy sector, statism is manifested by government control of energy prices or price caps; control of the mix of energy sources; state ownership of generating facilities; state supervision of private energy generators; subsidies and investments in particular energy technologies; centralized “plans” for energy production and conservation;2 contracts between government and private companies for energy streams from or operation of particular facilities; and a structure that allows decision-making to be dominated by political considerations.”

Link: “Save the Planet” is the Enviro-Statists rallying cry that leads to way to government intrusion

Mark R. Levin (former deputy solicitor in the US Department of Interior, chief of staff to Reagan attorney General Edwin Meese, and JD from Temple University School of Law), 2009 Liberty and Tyranny, p. 122 [Google Books]

“If nature has “intrinsic value” than nature exists for its own sake. Consequently, man is not to be preferred over any aspect of his natural surroundings. His is no better than any other organism and much worse than most because of his destructive existence. And so it is that the Enviro-Statist abandons reason for a faith that preaches human regression and self-loathing. And he does so by claiming the moral high ground- saving man from himself and nature from man. Most individuals who are sympathetic to environmental causes are unwitting marks, responsive to the Enviro-Statist’s manipulation of science, imagery, and language. Over time, they self-surrender liberty for authority, abundance for scarcity, and optimism for pessimism. “Save the plant!” is the rallying cry that justifies nearly any intrusion by government into the life of the individual. The individual, after all, is expendable.”

Link: Environmentalism and climate alarmism are the new communism

Vaclav Klaus (economist and second President of the post-communist Czech Republic),, May 30, 2008, “From Communism to environmentalism,” Financial Post, <http://network.nationalpost.com/np/blogs/fpcomment/archive/2008/05/30/from-communism-to-environmentalism.aspx>

“I spent most of my life under the communist regime which ignored and brutally violated human freedom and wanted to command not only the people but also the nature. To command “wind and rain” is one of the famous slogans I remember from my childhood. This experience taught me that freedom and rational dealing with the environment are indivisible. It formed my relatively sharp views on the fragility and vulnerability of free society and gave me a special sensitivity to all kinds of factors which may endanger it. I do not, however, live in the past and do not see the future threats to free society coming from old-fashioned communist ideology. The name of the new danger will undoubtedly be different, but its substance will be very similar. There will be the same attractive, to a great extent pathetic and at first sight quasi-noble idea that transcends the individual in the name of something greater than the self, supplemented by enormous self-confidence on the side of those who stand behind it. Like their predecessors, they will be certain they have the right to sacrifice man and his freedom to make their ideas reality. In the past it was in the name of the masses (or of the proletariat), this time it is in the name of the planet. Yet, structurally, both are very similar. I see the current danger in environmentalism, and especially in its strongest version, climate alarmism.”

Link: As opposed to restrictive policies, free markets represent the solution to climate change

Vaclav Klaus (economist and second President of the post-communist Czech Republic), November 7, 2007, “The Other Side of Global Warming Alarmism,” <http://www.klaus.cz/klaus2/asp/clanek.asp?id=73lC09VpjtyZ>

“The deindustrialization and similar restrictive policies will be of no help. Instead of blocking economic growth, the increase of wealth all over the world and fast technical progress – all connected with freedom and free markets – we should leave them to proceed unhampered. They represent the solution to any eventual climate changes, not their cause. We should trust in the rationality of men. We should never forget that the government failure is always much bigger than the market failure. We should not believe more in Al Gore than in the omnipotence of the Soviet or Czechoslovak central planners. Fifty- or hundred-year plans of the current environmentalists will not be any better than the five-year plans which liquidated the economic freedom (and the economic efficiency connected with it) in the centrally planned economies of the past.”

IMPACTS

A) Democide

Concentrated power = most dangerous thing, authoritarian governments more deadly than war

R.J. Rummel (PhD in Political Science from Northwestern University and a professor of political science at the University of Hawaii), July 1997, “Rudolph Rummel Talks About the Miracle of Liberty and Peace,” The Freeman: Ideas on Liberty 47: 396-403, <http://www.hawaii.edu/powerkills/FREEMAN.INTERVIEW.HTM#>

“Concentrated political power is the most dangerous thing on earth. During this century's wars, there were some 38 million battle deaths, but almost four times more people--at least 170 million--were killed by governments for ethnic, racial, tribal, religious, or political reasons. I call this phenomenon democide, and it means that authoritarian and totalitarian governments are more deadly than war.”

More power a regime has the more people are killed

R.J. Rummel (PhD in Political Science from Northwestern University and a professor of political science at the University of Hawaii), July 1997, “Rudolph Rummel Talks About the Miracle of Liberty and Peace,” The Freeman: Ideas on Liberty 47: 396-403, [http://www.hawaii.edu/powerkills/FREEMAN.INTERVIEW.HTM#\*](http://www.hawaii.edu/powerkills/FREEMAN.INTERVIEW.HTM#*)

“The more power a regime has, the more likely people will be killed. This is a major reason for promoting freedom.”

B) Exploitation of the Third World

Enviro-Statists responsible for killing and impoverishing millions in the undeveloped world

Mark R. Levin (former deputy solicitor in the US Department of Interior, chief of staff to Reagan attorney General Edwin Meese, and JD from Temple University School of Law),, 2009 Liberty and Tyranny, p. 145 [Google Books]

“The Enviro-Statist poses as the defender of clean air, clean water, penguins, seals, polar bears, glaciers, the poor, the Third World, and humanity itself. But he is already responsible for the death and impoverishment of tens of millions of human beings in the undeveloped world. Now he has moved on to bigger tasks- imposing his societal designs on a free and prosperous people, dictating their lifestyle, controlling their movement, and breaking their spirit.”

The World Poor are among the Enviro-Statists more victimized populations

Mark R. Levin (former deputy solicitor in the US Department of Interior, chief of staff to Reagan attorney General Edwin Meese, and JD from Temple University School of Law),, 2009 Liberty and Tyranny, p. 122-23 [Google Books]

“Clearly the world’s poor are among the Enviro-Statist’s most victimized populations. Today, almost 1.6 billion people use candles and kerosene lamps to light their homes filling them with smoke and soot and risking fire. In India, where 600 million people live without electricity, Greenpeace campaigned against the incandescent lightbulb because it emits carbon dioxide (apparently forgetting the polluting effect of burning kerosene for light). The lightbulb they said, is “a hazardous product to everyone,” and they dubbed Philips Electronics, India’s major lightbulb producer, a “climate criminal.”

C) War

Statism needs war and major wars of history were started by more controlled economies

Ayn Rand (Novelist and political philosopher), June 1966, “The Roots of War,” Capitalism: The Unknown Ideal, 37. Quoted by the Ayn Rand Institute, Ayn Rand Lexicon, 2009, <http://aynrandlexicon.com/lexicon/statism.html>

“Statism *needs* war; a free country does not. Statism survives by looting; a free country survives by production. Observe that the major wars of history were started by the more controlled economies of the time against the freer ones. For instance, World War I was started by monarchist Germany and Czarist Russia, who dragged in their freer allies. World War II was started by the alliance of Nazi Germany with Soviet Russia and their joint attack on Poland. Observe that in World War II, both Germany and Russia seized and dismantled entire factories in conquered countries, to ship them home—while the freest of the mixed economies, the semi-capitalistic United States, sent billions worth of lend-lease equipment, including entire factories, to its allies.”

ALTERNATIVE

Energy markets are better decision makers than statist government agencies

Bruce Pardy (Associate Professor of Law at Queens University, Canada), October 2007, “Climate Change Charades: False Environmental Pretences of Statist Energy Governance,” Queen's Business Law Symposium Conference Paper, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1029662> [SSRN]

“Statist energy governance is detrimental because it frustrates innovation that might otherwise produce solutions to climate change and other energy problems. It also restricts the liberty of citizens, creates market imperfections, and breaches basic notions of the rule of law. Decision-making comes to be dominated by political considerations, and politicians, bureaucrats and regulators determine energy prices, supplies, sources and investments.41 In a competitive environment, many actors make those choices. The market reflects the aggregate effects of their decisions, and is a better decision-making mechanism than an agency pulling economic levers at a central location.”

Its possible to achieve environmental progress without the government telling us what to do

Matthew Streit, April 22, 2009, “Earth Day Update: Green Without Government,” The Heritage Foundation, <http://blog.heritage.org/2009/04/22/earth-day-update-green-without-government/>

“It’s the day of the year that the world celebrates being green and there’s certainly a lot to be “green” about today. The Pacific Research Institute and the American Enterprise Institute (AEI) published their yearly [Index of Leading Environmental Indicators](http://liberty.pacificresearch.org/publications/index-of-leading-environmental-indicators-2009-report-2) showing major progress in cleaner air and safe drinking water. Despite the apparent “sky is falling” mentality of many environmentalists and Members of Congress, there are good things going on outside of government-directed environmental progress. The report indicates that not one American or Western European city ranks among the top 50 cities in the world for air pollution in a World Bank ranking. In fact, air pollution levels are falling in the 10 most polluted cities in the United States, by as much as 27 percent over the last decade in the case of fine particulates in Los Angeles. What should also interest lawmakers on Capitol Hill debating the Waxman/Markey Cap-and-Trade Legislation, that would impose the largest single tax in American history and in a time of severe recession no less, is that global average temperatures were flat or declining in 2008. The report’s data show 2008 was the coolest year since 2000 and there has been no discernible warming over the last decade. Oh, and arctic sea ice levels rebounded from the all-time modern low observed in 2007. Left to their own devices, the American people are completely capable of being “green” and often decide to do so without Uncle Sam telling them what to do.”

The answer to local environmental problems is economic freedom which = wealth and environmental cleanup

Sheldon Richaman (Editor of the Freeman), May 24, 2006, “Is “the Environment” a Collectivist Idea?,” The Future of Freedom Foundation, <http://www.fff.org/freedom/fd0602b.asp>

“The particular claims of the environmental alarmists can be refuted with economic argument and readily available data. This is not to say that there is no dirty air or water in this place or that. But it is to say that there is no global crisis, and it is to say further that the answer to local problems is economic freedom, which leads to wealth and environmental cleanup.”

Sovereignty for developing countries best alternative for maximizing wellbeing

Milan Ilnyckyj (M Phil in International Relations from Oxford University), November 21, 2003, “Sovereignty and Environmental Protection: Not Incompatible Values,” <http://www.sindark.com/NonBlog/Articles/SovEnv.pdf>

“Still, in the interests of fairness, it is important that developing countries be allowed to make the same kind of choices that the developed world had the ability to make previously. While superior scientific knowledge about the environmental impact of particular choices should certainly be considered in formulating the environmental policies of developing nations, it should not necessarily be the case that standards identical to those in the rich world are the most moral choice. If a relatively brief and dirty period of industrialization can lead to a significant improvement in the lives of current and future generations, such a one-off ‘investment’ might be justifiable. By being able to gauge the particular needs of their citizens, especially in the case of democratic states, the governments of nations are best placed to tailor policies to their condition. In so doing, they have the opportunity to maximize the likelihood of their citizens living good lives. That freedom is one that should not lightly be cast aside.”

50 STATES COUNTERPLAN

By Stephen Menesick

**Editor’s Note: Additional evidence for this counterplan can be found in the federalism DA.**

OBSERVATION 1. NON-TOPICALITY

States are independent of the federal government

Dutch Leonard (PhD in Economics from Harvard University and professor of public management) (interview) May 19, 2008, “Dutch Leonard on Leadership, Crisis Management and Social Responsibility,” <http://www.hks.harvard.edu/news-events/publications/insight/management/dutch-leonard>

“States are independent of the federal government. They are, in many areas – including creating and enforcing their own laws, ordnances, and regulations – sovereign entities.”

OBSERVATION 2. PLAN:

The 50 State governments, District of Colombia, tribal entities, and relevant territories will enact the mandates of the affirmative team’s plan, which are as follows: (insert aff plan text) and the federal government will not act.

Each state government will have the discretion to implement these policy goals as it deems appropriate for their state.

OBSERVATION 3. SOLVENCY

A. States are key to solving climate change and are better equipped than the federal government

Holly Doremus, (Professor of Law, University of California, Berkeley) & W. Michael Hanemann, (Chancellor’s Professor, Agricultural and Resource Economics, University of California Berkeley) 2008, “SYMPOSIUM: Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework Is Useful for Addressing Global Warming” Arizona Law Review, 50 Ariz. L. Rev. 799 (lexis-nexis)

Global warming cries out for recognition of a strong state role in part because the states are well ahead of the federal government. Climate change is not a newly recognized problem. The physics of the greenhouse effect are well understood, and it was apparent by the 1970s that atmospheric CO<2> concentrations had increased since [\*825] the industrial age. n132 The states may be late to the game of dealing with climate change, but not as late as the federal government. Today, "every state in the country has adopted some kind of policy or law to deal with climate change." n133 At least thirty-three states, and a large number of cities and counties, have drafted climate action plans for reducing GHG emissions. n134 Forty-two states have some form of GHG emissions inventory. n135 Seventeen states, and 284 cities outside those states, have set emission reduction targets. n136 They are using a wide variety of approaches to try to reach those targets. According to one study, "states have undertaken well over 250 different types of policy actions" to mitigate climate change. n137 Not only are the states already addressing this problem, they are indispensable to any solution. John Dwyer pointed out in 1995 that the federal government needs the states' resources and political capital to address the problem of conventional air pollution. n138 That remains true today for conventional pollution, and even more so for climate change. Furthermore, with nearly forty years of environmental federalism under their belts, many states are sophisticated environmental players, n139 with as much or (particularly for this problem) more expertise than the EPA. Federal greenhouse legislation should take advantage of [\*826] existing state efforts, and the energy behind them, as the foundation for an essential state role in addressing the climate change problem. Through a SIP-like state climate planning requirement, federal law could recognize the importance of state action, offer standard models without unduly restricting creativity, and provide seed funding to help build state and local capacity. n140

B. State environmental protection policy is better than federal regulations- 4 reasons

Jonathan H. Adler (JD, Professor of Law and Co-Director, Center for Business Law and Regulation, Case Western Reserve University School of Law), 2007 “ARTICLE: WHEN IS TWO A CROWD? THE IMPACT OF FEDERAL ACTION ON STATE ENVIRONMENTAL REGULATION” The Harvard Environmental Law Review, 31 Harv. Envtl. L. Rev. 67, via Lexis Nexis

There are several factors that may cause state-level environmental regulations to be more cost-effective, or otherwise qualitatively superior, than federal regulations of equivalent cost or scope.131 First, and perhaps most important, state policymakers and regulators may have access to knowledge of local problems and conditions.132 Consideration of such knowledge in the development and implementation of state regulatory programs may increase the protectiveness of existing programs without increasing their cost or scope. Second, and related, state policymakers, by virtue of the fact that they are closer both to the environmental problems they seek to address and the regulated community may be more responsive to local needs and concerns. Third, insofar as environmental problems vary from place to place, state policymakers may be able to focus state resources on environmental problems that exist in a given state. Federal standards, on the other hand, tend to impose broad one-size-fits-all requirements that, in actuality, often fit no state particularly well.133 A regulatory requirement that makes perfect sense in one state may not provide much environmental protection in another. Fourth, the existence of a federal standard may inhibit the ability of (or incentive for) state policymakers to innovate or experiment with different approaches to meeting a given environmental goal.

OBSERVATION 4. COMPETITION:

This counter-plan competes through net benefits. Vote negative because of our Disads which link specifically to USFG action.

Disadvantage 1: Federalism

A. Uniqueness: Federalism is respected in the realm of environmental policy

Robert B. McKinstry Jr. (Attorney at Ballard Spahr Andrews & Ingersoll, LLP; Pennsylvania State University - Dickinson School of Law) John C. Dernbach (Widener University - School of Law) & Thomas D. Peterson (Center for Climate Strategies; Penn State Dickinson School of Law), November 2007, “Federal Climate Change Legislation: As if the States Matter” Widener Law School Legal Studies Research Paper Series no. 08-04, via <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1031552#PaperDownload>

Most major federal environmental laws preserve a significant role for state and sometimes local government. They create overarching federal goals and minimum standards and provide for implementation by states, often leaving the design of implementation mechanisms to the states. Preservation of a significant state role in federal programs reflects political reality in the United States. Constitutional limitations on federal power have been reinforced by long political tradition of local decision-making epitomized by the New England town meeting and concern that centralizing power would undermine political freedoms.

B. Link: Environmental Policy has been typically reserved to states and localities – The Aff is encroaching on their ground

Benjamin Sovacool, PhD, Research Fellow in the Energy Governance Program at the Centre on Asia and Globalization, Adjunct Assistance Professor at the Virginia PI and University in Blacksburg VA, June 2008 “ARTICLE: The Best of Both Worlds: Environmental Federalism and the Need for Federal Action on Renewable Energy and Climate Change” Stanford Environmental Law Journal, , 27 Stan. Envtl. L.J. 397, via Lexis Nexis

After World War II, the federal role in environmental protection began a slow transformation that has been described as "creeping federalization." [n38](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n38) Congress became more active in encouraging states to respond to environmental problems as increased industrial production intensified interstate pollution problems. "In 1956, Congress provided funding for the construction of municipal sewage treatment plants over President Eisenhower's veto," arguing that "the benefits of sewage treatment accrued largely to downstream cities" and that federal aid was [\*410] needed to convince upstream states to act. [n39](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n39) That same year, the federal government cancelled construction of Echo Park Dam on the Upper Colorado River, citing concerns that it would harm fish stocks and degrade the natural environment. [n40](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview" \l "n40) In 1958, Congress created the Outdoor Recreation Resources Review Commission to study and report on the quality of the nation's parks and forests. [n41](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n41) But for the most part Congress continued to support local and state autonomy. The 1955 Air Pollution Control Act merely directed the Department of Health, Education, and Welfare to conduct a five-year research program on the effects of air pollution, continuing to emphasize that pollution control was a state responsibility. [n42](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n42) Similarly, the 1956 Federal-Aid Highway Act [n43](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n43) provided federal funding and technical assistance to help the states minimize environmental damage in the creation of an interstate highway system, but left the actual construction of roads and the responsibility for ensuring that they did not contaminate water sources and destroy land exclusively to the states. [n44](http://www.lexisnexis.com/us/lnacademic/frame.do?tokenKey=rsh-20.495758.25886238547&target=results_DocumentContent&reloadEntirePage=true&rand=1215989832864&returnToKey=20_T4150970436&parent=docview#n44)

**And, The federal government has never expressly pre-empted state climate change initiatives**

RAYMOND A. BIERING (JD, Counsel for the San Luis Obispo County Air Pollution Control District, is a legal counsel committee member of the California Air Pollution Control Officers Association) AND BRIAN S. BIERING (JD, University of Oregon School of Law), 2008, “Massachusetts v. EPA: Rescuing Icarus with Environmental Federalism” Journal of Environmental Law and Litigation, Vol. 23, p35-70 <http://www.law.uoregon.edu/org/jell/docs/231/23_35.pdf>

At this juncture, Congress has not expressly preempted state action regarding climate change initiatives, except, perhaps, in the context of limited areas like vehicular fuels. Further, in the absence of comprehensive federal legislation addressing climate change, the states' initiatives, both regulatory and voluntary, are not yet conflicting with federal law. Finally, until the federal government acts definitively and comprehensively, implied preemption will be limited to those areas where Congress has actually left no room for supplementary state regulation.

C. Impact: Tyranny

Federalism checks over-centralization and tyranny

Nick Robinson (JD from Yale University), 5/14/2007, “Citizens Not Subjects: US Foreign Relations Law and the Decentralization of Foreign Policy,” Akron Law Review, <http://www.uakron.edu/law/lawreview/docs/Robinson404.pdf>

“Second, federalism provides a check on the over-centralization of power. Federalism embraces a “conception of justice” that implies that a diffuse political ordering is both “necessary and desirable.”175 In *Federalist 51*, James Madison reassures his readers that a federalist republic provides a “double security” against usurpations of power because power is not only divided between the different branches of the federal government, but also between the federal and state governments.176 Justice O’Connor picks up this theme in *Gregory v.* *Ashcroft* where she remarks that “[j]ust as the separation and independence of the coordinate branches of the Federal Government serve to prevent the accumulation of excessive power in any one branch, a healthy balance of power between the States and the Federal Government will reduce the risk of tyranny and abuse from either front.”177

Federalism protects individual rights by diluting power and creating mechanism to check overreach

Patrick M. Garry (Associate Professor at the University of South Dakota School of Law), 2006, “Liberty from On High: The Growing Reliance on a Centralized Judiciary to Protect Individual Liberty,” Kentucky Law Journal, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1078675>

“The Constitution’s embodiment of the structural principles of federalism is designed not just to create a workable government but to create one that protects individual rights.21To the Framers, the primary justification of federalism was the role of the states as guardians against possible federal tyranny.22By diluting the power of the centralized national government, federalism restricts the opportunities for the abuse of power. Furthermore, by maintaining a separate governmental watchdog layer in the states, fed­eralism provides a built-in mechanism to combat any overreaching by the national government.”

And, American Environmental Federalism is modeled globally – our impacts are worldwide

Benjamin Sovacool, PhD, (Research Fellow in the Energy Governance Program at the Centre on Asia and Globalization, Adjunct Assistance Professor at the Virginia PI and University in Blacksburg VA), June 2008, “ARTICLE: The Best of Both Worlds: Environmental Federalism and the Need for Federal Action on Renewable Energy and Climate Change” Stanford Environmental Law Journal, 27 Stan. Envtl. L.J. 397, via Lexis Nexis (Ellipses in original)

Third, other countries continue to model American-style federalism. Germany, the Republic of Austria, Russian Federation, Spain, India, and Nigeria have all based parts of their government structure on American federalism, choosing to decentralize power by adopting constitutions that are more federalist than the ones that they have replaced. n24 The "American experience with ... federalism," writes John Kincaid, "may have useful implications for an emerging federalist revolution worldwide." n25 Mikhail Gorbachev even stated that "the phenomenon of federalism affects the interests of the entire global community." n26 Given such trends, it seems likely that other countries may model American environmental federalism. If this is the case, ensuring that the United States government addresses renewable energy and climate policy at the proper scale becomes even more important for the signal it sends to the world.

Disadvantage 2: EPA

A. Link: Federal Environmental Laws are administered by the EPA

Reese Schonfeld, December 17, 2008, “Browner Not Greener: The Decline and Fall of Environmental Policy,” The Huffington Post, [http://www.huffingtonpost.com/reese-schonfeld/browner-not-greener-the-d\_b\_151540.html](http://www.huffingtonpost.com/reese-schonfeld/browner-not-greener-the-d_b_151540.html" \t "_blank)

“The EPA had always had, directly under the administrator, a coordinator who monitored the activities of all its branches. The EPA has a research and development function that helps form overall policy. The EPA writes regulations that govern environmental policy. Other divisions enforce regulations regarding water pollution, air pollution, emergency response, toxic substances, solid waste, pesticides, drinking water, and, along with the USDA, agricultural biotechnology.”

B. Internal Links:

1. The EPA fails as a regulatory agency and is wrought with bureaucratic problems that are entrenched within the organization

Jessica A. Knoblauch, Dec 9, 2008 “Obama’s uphill battle in improving the EPA”, Plenty Magazine, <http://www.plentymag.com/thecurrent/2008/12/obamas_uphill_battle_in_improv.php>

But some insiders say [the transition won’t be easy](http://www.plentymag.com/features/2008/11/now_what.php" \t "_blank). This week, in an [interview](http://www.loe.org/shows/segments.htm?programID=08-P13-00049&segmentID=1" \t "_blank) with Public Radio International's Living on Earth, former EPA veterans said that the agency is “beset by low morale, weak enforcement, and political meddling in science” and that turning the EPA around won’t be accomplished just by switching out a few people at the top.”

2. EPA fails in enforcement because it fails to implement its existing authority

John B. Stephenson, (Director Natural Resources and Environment @ GAO), June 15, 2006, “SUPERFUND: Better Financial Assurances and More Effective Implementation of Institutional Controls Are Needed to Protect the Public” US Government Accountability Office, <http://www.abanet.org/litigation/programs/docs/0309_epa_gao_financial.pdf>

Notwithstanding these challenges, EPA could better ensure that bankrupt and other financially distressed businesses meet their cleanup obligations by making greater use of existing authorities. For example, EPA has not implemented a 1980 statutory mandate under Superfund to require businesses handling hazardous substances to demonstrate their ability to pay for potential environmental cleanups—that is, to provide financial assurances. Also, EPA has done little to ensure that businesses comply with the agency’s existing financial assurance requirements in cleanup agreements and orders.

3. Example – Though Factory Farming was found to be Harmful by the EPA, they still craft rules that mask the problem and let farms slide

Judy Vorreuter (founder and director of Animal Advocates of the Finger Lakes), April 5, 2008, “Factory farms hurt the environment” The Citizen, <http://www.auburnpub.com/articles/2008/04/06/lake_life/lakelife04.txt>

Factory farming is one of the biggest contributors to the most serious environmental problems. A recent United Nations report concluded that the meat industry causes almost 50 percent more greenhouse-gas emissions than all of the world's transportation systems - including all the cars, trucks, SUVs, planes and ships in the world combined. Unfortunately, the Environmental Protection Agency has proposed a rule that would let factory farms get out of reporting their releases of ammonia, hydrogen sulfide and other toxic air pollutants caused by the breakdown of animal manure in massive lagoons. “Under pressure from agriculture industry lobbyists and lawmakers from agricultural states, the Environmental Protection Agency wants to drop requirements that factory farms must report their emissions of toxic gases, despite findings by the agency's own scientists that the gases pose a health threat,” as reported by The Washington Post.

C. Impacts:

1. Turns Case – They don’t solve for the environment but instead make the problem worse, extend Aff impacts

2. Wasted Resources on an inefficient agency

2N EVIDENCE: 50 STATE COUNTERPLAN

SOLVENCY: States solve better than Feds

States solve emissions better – they have greater capabilities to address the causes of emissions at a level closest to those who produce emissions

Holly Doremus, (Professor of Law, University of California, Berkeley) & W. Michael Hanemann, (Chancellor’s Professor, Agricultural and Resource Economics, University of California Berkeley) 2008, “SYMPOSIUM: Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework Is Useful for Addressing Global Warming” Arizona Law Review, 50 Ariz. L. Rev. 799 (lexis-nexis)

There is yet another reason to keep a substantial share of the responsibility for reducing GHG emissions at the state and local level: those governments have greater political and practical abilities than the federal government to deal with a substantial share of emissions, particularly those connected to individual behaviors. Allowing any level of government to directly regulate the sorts of individual behaviors responsible for GHG emissions is awkward at best, not to mention politically challenging. Most behavioral changes will have to be voluntary, triggered by education, norm activation, [\*828] or other catalysts. n150 Nonetheless, there is a clear role for government, and that role is best served at the state or local level. State and local governments have authority over key infrastructure choices that mediate behavioral decisions and the emission consequences of those decisions. They determine, among other things, patterns of development, building codes, and the availability of public transit. They can regulate farming practices, wetland draining, and the extraction of fossil fuels, although so far they have largely chosen not to do so. The choices available to state and local governments can have surprisingly large effects on GHG emissions. According to one recent study, for example, compact development patterns can reduce vehicle miles traveled, and the associated carbon emissions, by as much as 20-40%. n151 According to another, residential and commercial buildings account for one-third of U.S. carbon emissions. n152 Building codes, development patterns, and appliance efficiency requirements all strongly affect the carbon emissions associated with buildings, and all are subject to state control. n153 Development impact fees assessed on a sliding scale tied to the level of carbon emissions offer another potentially promising approach. n154 While all of these measures are primarily forward-looking, given the level of turnover and new development, they could have very strong effects on emissions by mid-century. n155 The key point is that states have open to them a wide variety of measures that could [\*829] reduce GHG emissions; a state inventory and planning requirement would force them to confront the challenge of GHG emissions while encouraging experimentation and allowing adjustment to local social and economic conditions.

States are better than the federal government – can pursue a unique and relevant “diversity” in approaches to solving

David E. Adelman (Associate Professor of Law, University of Arizona James E. Rogers College of Law), Kirsten H. Engel (Professor of Law, University of Arizona)2008**, “**SYMPOSIUM: Reorienting State Climate Change Policies to Induce Technological Change” Arizona Law Review, 50 Ariz. L. Rev. 835, lexis-nexis

State-level policies also have certain advantages over their federal counterparts. While a federal standard can reach a much greater number of potential technology adopters, multiple state-level measures can mitigate problems with tunnel vision, pork barrel politics, and picking the wrong technology that can compromise technology programs. n89 For instance, the rise in federal support for biofuels, particularly ethanol produced from corn, is the most glaring example of interest-group politics overtaking sound policy. n90 Despite the enthusiasm among legislators, the benefits of biofuels are shockingly small. n91State programs can generate a diversity of approaches by virtue of their multiplicity and differing mixes of socioeconomic, environmental, and political factors. n92 For example, within the field of renewable energy, some states require that solar power constitute a specific share of an electricity provider's portfolio, while others emphasize wind or geothermal resources. n93 Similarly, states such as West Virginia and Ohio, both of which have large supplies of coal, are supporting innovation directed at clean coal technology, n94 whereas Texas, with its abundant wind resources, has focused on developing power wind turbines. n95 Other states, such as New Jersey, have been driven by a mix of the potential threats and adopted [\*852] a more integrated strategy. n96 The constellation of state-level programs thus reflects the diversity of conditions present in the states. n97

“Double-Counting” with federal action that preempts existing state policy results in counter-effective limits or credits

David E. Adelman (Associate Professor of Law, University of Arizona James E. Rogers College of Law), Kirsten H. Engel (Professor of Law, University of Arizona)2008**, “**SYMPOSIUM: Reorienting State Climate Change Policies to Induce Technological Change” Arizona Law Review, 50 Ariz. L. Rev. 835, lexis-nexis [brackets added]

Federal preemption is nevertheless a significant risk for state technology portfolio standards. While express federal preemption is unlikely, Congress recently toyed with what we term "structural preemption" of state [Renewable Portfolio Standard] RPS programs. Until it was amended in response to strong opposition, the House of Representatives' 2007 comprehensive energy bill would have enabled electricity suppliers located in states with existing RPS programs to "double count" renewable energy credits by using them to meet both the federal and state standards. n256 This would have allowed suppliers to sell any surplus created by more rigorous state RPSs to suppliers in other states to enable those suppliers to satisfy the weaker federal RPS. If double-counting were sanctioned by a federal law, it would effectively nullify more stringent state RPSs, converting a federal minimum RPS in effect to a federal maximum.

States are empirically modeled by the federal government on environmental policies – and new policies will provide experience for the feds

Michael Northrop (Program Director for Sustainable Development at the Rockefeller Brothers Fund) & David Sassoon (runs SolveClimate.com, a Web site dedicated to debating and advancing solutions to global warming) June 3, 2008,“States Take the Lead on Climate” Yale Environment 360, <http://e360.yale.edu/content/feature.msp?id=2015>

The states’ record of fostering groundbreaking environmental policies that ultimately evolve into national law is well established. State innovation was, for example, at the heart of the battle against acid rain. State laws served as models for the federal Clean Air Act, Clean Water Act, and legislation creating Superfund sites. In addition to the cap-and-trade program that will be launched in September by the ten Eastern states in the Regional Greenhouse Gas Initiative (RGGI), two other regional groupings of states are working to establish carbon trading — the Western Climate Initiative and the Midwestern Governors Association. They have rolled up their sleeves, convened key stakeholders, and are hammering out the actual details of how to establish and implement an effective cap-and-trade mechanism. This is wisdom that would go a long way in Washington as lawmakers debate Lieberman-Warner, which would create a national cap-and-trade program. One important element of the debate on Capitol Hill concerns the formula for allocating or auctioning carbon credits, and a number of states have developed valuable expertise on this issue. A RGGI expert working group, for instance, conducted an in-depth analysis on the subject, and many states have already made the crucial choice to auction 100% of carbon credits under RGGI trading. Under this system, northeastern utilities would purchase credits, or allowances, permitting them to emit CO2 at current levels, with requirements for steady reductions. As the utilities lower CO2 emissions, they can sell the credits to utilities that have made slower cutbacks. The RGGI auction proceeds would be used to help vulnerable citizens defray higher energy costs, to support energy efficiency programs, and to invest in renewable energy projects — all preferable to offering free emission allocations to major polluters. As it now stands, Lieberman-Warner calls for doling out a significant percentage of free emissions permits to major emitters of greenhouse gases. But the states have far more to offer. They also have approved a host of energy-efficiency measures affecting all sectors of the economy. For example, one set of policies provides both emissions reductions and substantial economic savings from the building sector through improved building codes, insulation and weatherization programs, and lighting retrofits. From the waste management sector, waste reduction and recycling programs yield similar two-pronged benefits. These policies go hand-in-hand with others mandating that an increasing percentage of a state’s energy come from renewable sources, such as solar and wind power. Many states — chief among them California — have shown similar national leadership by significantly toughening auto emissions standards, leading Congress to increase national vehicle standards last December and the Environmental Protection Agency (EPA) to challenge the states in court.

A/T: Race to the Bottom

States don’t, empirically proven

Jonathan H. Adler (JD, Professor of Law and Co-Director, Center for Business Law and Regulation, Case Western Reserve University School of Law), 2007, “ARTICLE: WHEN IS TWO A CROWD? THE IMPACT OF FEDERAL ACTION ON STATE ENVIRONMENTAL REGULATION” The Harvard Environmental Law Review, 31 Harv. Envtl. L. Rev. 67, via Lexis Nexis

State regulatory choices are also influenced by the actions of other states. The "race to the bottom" theory posits that states will be discouraged from adopting the optimal level of environmental protections due to interjurisdictional competition with other states. n46 The theory asserts that states seeking to encourage economic investment and industrial development will be locked into a "race" to lower existing environmental standards (or fail to adopt optimal measures) in an effort to attract investment. Furthermore, the theory states that any resulting economic gains will fail to offset the welfare losses from suboptimally lax environmental regulations. n47 Though possible, empirical evidence demonstrating a race to the bottom in environmental policy is generally lacking. n48 There is evidence that state policy-makers consider the impact of environmental regulations on their states' economic competitiveness. n49 Nonetheless, most empirical studies have failed to find any evidence that such pressures result in a systematic lowering of state-level environmental measures. n50

States spillover to greater environmental protection, not race to the bottom

Jonathan H. Adler (JD, Professor of Law and Co-Director, Center for Business Law and Regulation, Case Western Reserve University School of Law), 2007, “ARTICLE: WHEN IS TWO A CROWD? THE IMPACT OF FEDERAL ACTION ON STATE ENVIRONMENTAL REGULATION” The Harvard Environmental Law Review, 31 Harv. Envtl. L. Rev. 67, via Lexis Nexis

States can also be encouraged to adopt greater levels of environmental protection by the actions of their neighbors. Insofar as one state is successful at addressing a given environmental problem in a cost-effective manner, other states become more likely to follow suit as they learn from competing jurisdictions. This hypothesis has some empirical support in studies showing that state decisions to adopt specific regulatory measures are influenced by the decision of neighboring jurisdictions to adopt similar measures. n52 These studies find stronger evidence for this positive "contagion" effect than for a negative "race to the bottom." n53

State regulation best- local environmental knowledge

JONATHAN H. ADLER (Associate Professor of Law and Associate Director of the Center for Business Law and Regulation, Case Western Reserve University School of Law) “JURISDICTIONAL MISMATCH IN ENVIRONMENTAL FEDERALISM,” 2006 New York University Environmental Law Journal Symposium, <http://www3.law.nyu.edu/journals/envtllaw/issues/vol14/1/v14_n1_adler.pdf>

In addition to allowing for a closer fit between local ecological conditions and environmental policies, a suitably decentralized regulatory system provides several other advantages.18 First, the ecological and economic diversity of the nation requires local knowledge and expertise that is often unavailable at the federal level.19 A more decentralized system is better able to overcome this “knowledge problem,”20 and ensure that regulatory measures take account of local conditions.21 Second, decentralization, and the resulting policy experimentation and interjurisdictional competition, can encourage policy innovation as policymakers seek to meet the economic, environmental and other demands of their constituents.22 As a result of such competition, states are able to learn from each others successes and failures.23 In this way, states are able to act as environmental “laboratories”24 developing new and improved ways of addressing environmental concerns.

States employ bottom up decision making and are greater stakeholders

Robert B. McKinstry, Jr. (JD, Attorney at Ballard Spahr Andrews & Ingersoll) & Thomas D. Peterson (Founder of the Center for Climate Strategies and Adjunct Law Professor at PSU-Dickenson School of Law) 2007 “[The Implications of the New “Old” Federalism in Climate-Change Legislation: How to Function in a Global Marketplace When States Take the Lead](http://www.climatestrategies.us/ewebeditpro/items/O25F17685.pdf)” Pacific McGeorge Global Business & Development Law Journal, <http://www.climatestrategies.us/ewebeditpro/items/O25F17683.pdf>

One of the principal advantages of having the states take the lead in designing strategies arises from the fact that bottom up decision making is frequently employed by these state processes and can function best at a local level. Such processes at these levels allow greater stakeholder involvement in receiving and transmitting information and in formulating policy. This results in greater buy-in by stakeholders, who become more aware of the constraints and goals and have greater confidence in the decision making process and the information used in that process. It can also often improve the quality of the information used in policy formulation. The stakeholders frequently can provide more detailed, relevant information about what can actually be achieved.43 This is particularly important for businesses, whose particularized needs and capabilities may not be adequately considered at the federal level. Indeed, at the federal level, businesses frequently work through trade organizations that are forced to represent the lowest common denominator of the business and are less able to represent the needs and capabilities of individual businesses who may get a voice in state level stakeholder processes.

States are more narrowly focused

Robert B. McKinstry, Jr. (JD, Attorney at Ballard Spahr Andrews & Ingersoll) & Thomas D. Peterson (Founder of the Center for Climate Strategies and Adjunct Law Professor at PSU-Dickenson School of Law) 2007 “[The Implications of the New “Old” Federalism in Climate-Change Legislation: How to Function in a Global Marketplace When States Take the Lead](http://www.climatestrategies.us/ewebeditpro/items/O25F17685.pdf)” Pacific McGeorge Global Business & Development Law Journal, <http://www.climatestrategies.us/ewebeditpro/items/O25F17683.pdf>

A second advantage of state-based programs is the ability to develop more narrowly drawn targets that are appropriate for the region and the industries. For example, strategies aimed at smart growth to reduce miles driven are best targeted in growing areas. Various agricultural and sequestration strategies may vary according to the predominant type of agriculture or soil and rainfall patterns.

States have flexibility and a greater ability to innovate

Robert B. McKinstry, Jr. (JD, Attorney at Ballard Spahr Andrews & Ingersoll) & Thomas D. Peterson (Founder of the Center for Climate Strategies and Adjunct Law Professor at PSU-Dickenson School of Law) 2007 “[The Implications of the New “Old” Federalism in Climate-Change Legislation: How to Function in a Global Marketplace When States Take the Lead](http://www.climatestrategies.us/ewebeditpro/items/O25F17685.pdf)” Pacific McGeorge Global Business & Development Law Journal, <http://www.climatestrategies.us/ewebeditpro/items/O25F17683.pdf>

Third, since states are smaller than the federal government, they can have somewhat more flexibility. They may be better able to change strategies if a selected strategy is ineffective or more costly. Fourth, as suggested by Justice Brandeis, states may be better able to innovate. An innovation in a particular state that fails will have less of an impact on the national economy than a federal experiment that fails. Innovative state programs can provide examples of what to do or what not to do. Indeed there is a typical pattern of upward evolution of national policy through states in the United States. As noted earlier, most national environmental laws, for instance, have origins in state actions, including the Clean Air Act, Clean Water Act, and Surface Mining Reclamation Act.44 This pattern is again likely to occur in the area of climate change policy. In 2005 the U.S. Senate debated two major pieces of legislation to advance a national GHG policy. These included a vote on the McCain-Lieberman Climate Security Act of 2003 that failed by a short margin,45 and hours later a majority vote in favor of a resolution46 introduced by Senator Bingaman to establish a mandatory GHG control policy in the United States.47 The juxtaposition of these two votes suggests that support for mandatory national action to control GHG emissions is growing, but the Congress as yet has not settled on a specific approach. States may provide an important input to this debate by demonstrating policies that reduce emissions in a politically and economically acceptable manner.

States are not subject to federal limitations

Robert B. McKinstry, Jr. (JD, Attorney at Ballard Spahr Andrews & Ingersoll) & Thomas D. Peterson (Founder of the Center for Climate Strategies and Adjunct Law Professor at PSU-Dickenson School of Law) 2007 “[The Implications of the New “Old” Federalism in Climate-Change Legislation: How to Function in a Global Marketplace When States Take the Lead](http://www.climatestrategies.us/ewebeditpro/items/O25F17685.pdf)” Pacific McGeorge Global Business & Development Law Journal, <http://www.climatestrategies.us/ewebeditpro/items/O25F17683.pdf>

Finally, states are not subject to certain limitations on federal power. Federal powers to effect social and economic policy are primarily founded upon the spending clause and the commerce clause. Relying on the spending clause requires that the federal government spend money and that each state agree to accept that money and implement the program. Relying on the commerce clause may limit the ability to influence actions that have no interstate nexus. While efforts to control climate change should, per se, establish the requisite nexus, states are not subject to these constraints and are free to regulate all manner of actions without the need to appropriate funds.

Governors are united in pursuing alternative energy now and are comparatively better than any federal action

Bill Loveless and Jean Chemnick, 3/3/08 “Governors press for ‘clean energy’, even as some acknowledge strain”, Inside Energy (Magazine), accessed via LexisNexis

The National Governors Association used its winter meeting in Washington last week to heighten its call for adoption of "clean" alternatives to oil, natural gas and coal to strengthen US energy security and reduce carbon emissions. But worries among coal states over the impact of such policies on their economies were evident throughout the three-day conference. "Governors and states are stepping forward to lead an energy revolution that will 'Americanize' our energy production in order to improve our national security, our economic well-being and our quality of life," NGA Chairman and Minnesota Governor Tim Pawlenty said at the opening of the meeting. Pawlenty, who last year made "Securing a Clean Energy Future" the theme of his one-year term with the association, called on his colleagues to support a diversified list of options for making the US more energy secure, from coal and nuclear energy to alternative fuels and energy efficiency. His and other states have surpassed Washington in setting standards for electricity from renewable energy and for reducing greenhouse gas emissions. "Governors are already making strides in this area," he said. Toward that end, NGA announced guidelines to promote use of biofuels and an agreement by Wal-Mart to provide energy audits of state office complexes. The association also sent a letter to Congress requesting the extension of tax incentives for renewable energy and energy efficiency.5

States are leaders on climate change policy

Pew Center on Global Climate Change, January 2009, “Climate Change 101: State Action” <http://www.pewclimate.org/docUploads/Climate101-State-Jan09_0.pdf>

Two trends are apparent with regard to state and regional efforts to address climate change: 1) more states are taking action and 2) they are adopting more types of policies. In this way, states and regions are acting as both leaders and innovators of climate change policy. State and regional efforts are wide ranging, including high-profile policies such as cap-and-trade programs, renewable portfolio standards, and climate action plans. In this way, the states and regions are acting as “policy laboratories,” developing initiatives that can serve as models for federal action, as well as for other states. Since many individual states are major sources of greenhouse gas (GHG) emissions, state-level policies have the potential to produce significant reductions. Texas, for example, emits twice the amount of GHGs as Spain, while California’s emissions exceed those of Italy.1 As state-level policies proliferate, so too do the climate benefits associated with these actions. Moreover, state actions are important because state governments have decision-making authority over many issues and economic sectors—such as power generation and agriculture—that are critical to addressing climate change.

SOLVENCY: STATES SOLVE BETTER BECAUSE THEY CAN BE UNIQUE

States should drive policy implementation because each state and locality faces different environmental needs (especially climate change)

Holly Doremus, Professor of Law, University of California, Berkeley & W. Michael Hanemann, Chancellor’s Professor, Agricultural and Resource Economics, University of California Berkeley 2008, “SYMPOSIUM: Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework Is Useful for Addressing Global Warming” Arizona Law Review 50 Ariz. L. Rev. 799 (lexis-nexis)

Mandatory state planning not only takes advantage of state resources and energies, it allows policy choices to respond to local variation in challenges and opportunities. n144 There is considerable variation in the ways that states contribute to [\*827] climate change, as well as in the relative economic costs and social disruption that would be associated with various emission reduction measures. n145 For example, a higher proportion of emissions in California are attributable to transportation than in many other states, n146 because vehicle miles traveled per capita are high while winter heating needs are low. Even where emissions are traceable to a single general sector, such as electricity generation, the uses of electricity, and consequently the costs associated with reducing generation, can be very different. In California, the water use cycle, including conveyance, treatment, storage, and wastewater treatment and disposal, is the largest energy user, responsible for 19% of the state's electricity consumption, 30% of its non-power generation natural gas use, and the burning of 88 billion gallons of diesel fuel every year. n147 Water conveyance from the wet northern portion of the state to the dry but populous south accounts for the largest proportion of that energy use. n148 Politically responsible decisionmakers in California, rather than utility company officers or federal bureaucrats, should decide whether those numbers suggest that promoting water conservation in southern California offers a prime opportunity to reduce GHG emissions, or instead that electricity conservation should be sought in other sectors in order to protect the state's ability to move water to communities that need it. There is no objectively right or wrong answer to those sorts of questions. The point is that, just as for criteria pollutants, the details of how to reach a given level of GHG emission reduction can be enormously important to states and localities. n149 Those decisions, therefore, should be made locally to the extent feasible.

States, through their “diversity of approaches” are better catalysts for implementing new technology and approaches (especially on climate)

David E. Adelman (Associate Professor of Law, University of Arizona James E. Rogers College of Law), Kirsten H. Engel (Professor of Law, University of Arizona), 2008, **“**SYMPOSIUM: Reorienting State Climate Change Policies to Induce Technological Change” Arizona Law Review50 Ariz. L. Rev. 835, lexis-nexis

The case for state action on climate is bolstered further by the diseconomies of scale endemic to technological change. In particular, whereas meaningful reductions in GHG emissions require coordinated large-scale action, technological change occurs most readily at small geographic scales. n98 Broad consensus exists that innovation is enhanced in geographic clusters (e.g., the Silicon Valley phenomenon) because spatial concentrations allow inventors to access knowledge externalities that reduce the costs of research, development, and commercialization. n99 These externalities are dominated by "tacit knowledge," which is "vague, difficult to codify and often only serendipitously recognized," and thus by definition cannot be formalized or written down. n100 These characteristics, the Internet notwithstanding, limit the spread of tacit knowledge to the kinds of frequent face-to-face interactions that occur most efficiently in small geographic areas. n101 States clearly have a role to play in promoting technological change. To the extent that market size matters, state programs will be inferior to federal regulation. However, while state-level regulation may provide weaker overall incentives, its compensating virtue is the diversity of approaches and experimentation that are a hallmark of state policies. Moreover, where innovation is subject to substantial uncertainties, diversity is often more important than the coordination and large scale found in federal programs. n102 These competing factors reveal important tradeoffs between federal and state programs, particularly as they apply to research and development. By contrast, inducing technology adoption, which is insensitive to the size of the market being regulated, is less constrained by these tradeoffs. Finally, states are arguably in a better position to establish geographically concentrated centers of innovation that can boost development of new technologies.

States best for environmental regulations – they flexibly respond to local needs

Thomas D. Peterson (Founder of the Center for Climate Strategies and Adjunct Law Professor at PSU-Dickenson School of Law) and Adam Z. Rose (PhD in Economics and Professor of Geography at Penn State Univ) March 2006 “Reducing conflicts between climate policy and energy policy in the US: The important role of the states” Energy Policy, Volume 34, Issue 5, , Pages 619-631, via ScienceDirect

Individual states provide a smaller and more manageable scale for policy development, and a greater combined diversity of policy needs than the US as a whole, thereby providing more effective policy development opportunities with fewer intractable conflicts. The large number of state entities provides numerous opportunities for experimentation in designing policy.2 It also facilitates differentiating policies to meet special geographic needs, a critical issue given the substantial differences between state greenhouse gas (GHG) trends and profiles. Historically, state actions have preceded and guided many national environmental (and other) policies by identifying effective and politically viable pathways for action (Peterson, 2004; McKinstry, 2004). Finally, even federal policies are likely to be delegated to or otherwise implemented at the state and local levels, and may even be more effective if designed there. States have important powers, including the freedom to go beyond federal authority for GHG controls, as well as the power of the purse in funding or structuring incentives for implementation programs.

States are policy laboratories—their policies are models for federal action

Pew Center on Global Climate Change, May 2008 “Learning from State Action on Climate Change” <http://www.pewclimate.org/docUploads/States%20Brief%20(May%202008).pdf>

States often function as “policy laboratories,” developing initiatives that serve as models for federal action. This has been especially true with environmental regulation—most federal environmental laws have been based on state models. In addition, state actions can have a significant impact on emissions, because many individual states emit high levels of greenhouse gases. Texas, for example, emits more than France, while California’s emissions exceed those of Brazil. State actions are also important because states have primary jurisdiction over many areas—such as electric generation, agriculture, and land use—that are critical to addressing climate change.

WORKABILITY: STATES ARE ALREADY SUCCESSFUL AT ENVIRONMENTAL POLICY

A. Tax Incentives

States have experience offering tax incentives

Greg Dierkers (National Governor’s Association (NGA), Environmental energy and natural energy division), May 7, 2007, “Recent Actions Promoting Alternative Energy” National Governors Association, <http://www.nga.org/Files/pdf/0705ALTENERGY.PDF>

In addition to direct funding for energy efficiency programs, states also rely on using loans, grants, tax credits and incentives to support the financing of new energy efficiency and renewable energy programs. In some cases, governors are creating public-private partnerships –agreements that use public resources to attract private capital – as a means to finance energy efficiency and renewable energy programs.

B. Alternative Energy

States Leading in legislation for solar power and alternative energy

Susan Gouchoe October 2006 “State Solar Incentives – News from DSIRE” IREC 2006: Updates & Trends, Interstate Renewable Energy Council, <http://www.dsireusa.org/documents/PolicyPublications/DSIRE%20update_IREC2006AnnualReport.pdf>

Over the past year, we’ve seen a number of states respond to escalating energy prices, concerns about climate change, and other energy challenges with wide-ranging legislation to foster the use of biofuels, green building practices, and renewable energy technologies. This article highlights some of the new policy developments specifically designed to advance solar electric and solar thermal markets. California and New Jersey made big news with aggressive new solar policies. New Jersey is ratcheting up its Renewable Portfolio Standard (RPS) and solar set-aside to support about 1,500 MW of new PV capacity by 2021, and California announced a $3+ billion initiative to add 3,000 MW of solar capacity by 2017. Three states (New Mexico, Arizona, and South Carolina) created new tax credits to piggyback with the 30% federal solar tax credits that kicked in back in January. Three other states (Oregon, Hawaii, and New York) raised the maximum allowable incentive on their existing tax credits to better support solar photovoltaics. A new solar rebate and other renewable energy incentives emerged in Florida this year, while incentives were revived in California, Maryland, Illinois, Vermont, and Ohio after running out of money earlier this year or last year in the face of overwhelming interest that outpaced solar budgets. Many states have reduced their rebate levels to adapt to the mushrooming demand for solar, and the Maine and Pennsylvania Sustainable Development Fund programs are now fully subscribed. The map below illustrates the status of solar PV tax credits, rebates, and production incentives as of September 2006. Note that in addition to these programs, 16 states (most of which also offer PV rebates) provide grants for larger renewable energy or distributed energy projects, including PV. On the net metering front, the public utilities commissions of four states (Colorado, Louisiana, North Carolina, and Pennsylvania) adopted net-metering rules, while around 30 states have initiated proceedings to "consider" net metering, as required by the federal Energy Policy Act of 2005. The federal requirement presents states with an opportunity to adopt new net metering rules or expand existing rules, and many are acting accordingly. In addition, three states (California, Vermont, and Washington) increased the limit on aggregate net metering capacity; and one state (Washington) raised the capacity limit for an individual system eligible to net meter.

C. Cap and Trade

States have implemented Cap and Trade programs already and national policy will be built on these state pilot projects

Lisa Weinzimer June 16, 2008 “Schwarzenegger adviser says states, regions will take lead on climate programs” Electric Utility Week, , via Lexis-Nexis

Terry Tamminen, who advises other governors, including those of Florida and Minnesota, said in an interview that since California passed its climate law in 2006, the number of states which either have finalized or are finishing a comprehensive climate plan has jumped from three to 33. 20 of these states are part of three regional cap-and-trade programs, one of which, the Regional Greenhouse Gas Initiative in the Northeast, will start trading in September. The Western Climate Initiative is following close behind, he added. Tamminen serves as executive director for Seventh Generation Advisors, a public policy firm. He served in an official capacity as a top energy and environmental advisor to Schwarzenegger from 2003 to September 2006. His comments came the same week that federal legislation to curb US industries' carbon dioxide emissions was defeated with minimal debate (EUW, 9 June, 1). WCI is a regional cap-and-trade program among California and six other US western states and the Canadian provinces of British Columbia, Quebec and Manitoba. It plans to issue a market-based plan in August. All of these efforts in the US, Tamminen said, are being linked with existing carbon trading activities in Europe, through the International Carbon Action Partnership. So, even without federal action he predicted that by next year "what states and regions are doing will be so ingrained that a federal program will have to build on what states are doing."

D. Renewable Portfolio Standard (RPS)

States are implementing RPS systems now

Energy Efficiency and Renewable Energy Office of the Department of Energy, June 16 2009 “States with Renewable Portfolio Standards” <http://www.eere.energy.gov/states/maps/renewable_portfolio_states.cfm>

A renewable portfolio standard is a state policy that requires electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date. Currently there are 24 states plus the District of Columbia that have RPS policies in place. Together these states account for more than half of the electricity sales in the United States. Four other states, Illinois, Missouri, Virginia, and Vermont, have nonbinding goals for adoption of renewable energy instead of an RPS.

E. Enforcement Powers

States historically enforce strong environmental regulations

Franz T. Litz, (Esq., Senior Fellow @ World Resources Institute), June 2008, “Toward a Constructive Toward Federal and State Roles in U.S Climate Change policy”, Pew Center on Global Climate Change, http://www.pewclimate.org/docUploads/StateFedRoles.pdf

Just as some states have been the first to move on many environmental issues, they have also been among the first to insist that policies be strengthened even after the federal government has acted. The acid rain issue presents such an example. Although Congress acted to adopt the 1990 Amendments to the Clean Air Act, which established the Title IV Acid Rain cap-and-trade program, it was not long before it became clear to many of the states in the Northeast that the reductions required under the Amendments were not sufficient to adequately reduce acid rain in their region. New York proceeded to adopt a statewide cap-and-trade program that dramatically reduced sulfur emissions from power plants in the state. New York’s program demonstrated that much more dramatic reductions were not only possible, but affordable. The federal EPA later implemented similar reductions in sulfur emissions under its Clean Air Interstate Rule.

States are better climate change regulators than the USFG

Franz T. Litz, (Esq., Senior Fellow @ World Resources Institute), June 2008, “Toward a Constructive Toward Federal and State Roles in U.S Climate Change policy”, Pew Center on Global Climate Change, http://www.pewclimate.org/docUploads/StateFedRoles.pdf

States have the regulatory institutions and experience to carry out climate change programs in those areas where they have been the primary or sole regulators. Thus, in areas such as land use and smart growth, electricity resource planning, and building codes, states have more regulatory experience than the federal government. In deciding which level of government should occupy these areas in a future federal climate change policy, this experience is clearly relevant.

A-SPEC: COURTS

By Matthew Baker

SOLVENCY

Courts are unable to ensure their decisions are implemented

Dr. Gerald N. Rosenberg (PhD from Yale University, JD from the University of Michigan, and law professor at the University of Chicago) 2008, “The Hollow Hope,” 2nd Edition, [Google Books] p. 281-282

“Perhaps the most important problem created by the implementation constrain is the courts’ inability to insure that their decisions are implemented. “By itself, announcing rights does not protect rights” (Melnick 1983, 297). Courts, as proponents of the Constrained Court view point out, lack most of the necessary tools for implementation. This problem is exacerbated with environmental protection because its effects are widely felt. Courts, as well as the EPA, need political support to implement environmental decisions and regulations. But “standards that seem excessively demanding to state and local administrators, congressmen and presidents, and members of the public directly affected” are hard to enforce (Melnick 1983, 297). This means that agencies, when faced with court decisions requiring action they deem unworkable, “often have better reasons than mere timidity” for dragging their feet; they may lack the “technical, administrative, and political resources to carry out” the court order (Melnick 1983, 378).

Historical precedent: NEPA litigation failed to force government agencies to accept environmental criteria

Dr. Gerald N. Rosenberg (PhD from Yale University, JD from the University of Michigan, and law professor at the University of Chicago) 2008, “The Hollow Hope,” 2nd Edition, [Google Books] p. 277

“Overall, then, environmentalists’ litigation under NEPA did not achieve the goals sought. There is a virtual consensus that litigation under NEPA did not succeed in forcing the government to take the substantive concerns of NEPA seriously. In other words , NEPA litigation failed to force recalcitrant government agencies to accept environmental criteria. Procedural consideration is one thing; substantive acceptance is quite another.”

The success of courts as actors depends on the implementing federal agencies

Dr. Gerald N. Rosenberg (PhD from Yale University, JD from the University of Michigan, and law professor at the University of Chicago) 2008, “The Hollow Hope,” 2nd Edition, [Google Books] p. 282.

“This last point provides a convenient place to switch from the constraints of the legal system per se to the broader political system in which courts operate. For if courts generally defer to the greater expertise of federal agencies, the success of environmental action largely depends on the attitudes those agencies take. As one commentator put it, “the ultimate impact of NEPA” depended “to a large extent on the attitude the agencies took” (Trubek 1978, 170).”

Enunciation of principles may produce little in terms of results

Dr. Gerald N. Rosenberg (PhD from Yale University, JD from the University of Michigan, and law professor at the University of Chicago) 2008, “The Hollow Hope,” 2nd Edition, [Google Books] p. 282

Melnick finds that in the environmental area the celebrated judicial independence of the Dynamic Court view is “essentially a negative quality” (Melnick 1983, 372). It leads courts to ignore the possible in favor of the principled. And, while the enunciation of principles is a noble undertaking, it may produce little in the way of results. As Melnick cleverly puts it, “one cannot help but wonder whether state and federal regulators have sometimes though, ‘the NRDC and the courts have their standard, now let them enforce it’” (Melnick 1983, 281).”

DISADVANTAGES

A) Environmental Damage

Court orders force regulatory agencies to reallocate scarce resources away from other environmental protection programs

Dr. Gerald N. Rosenberg (PhD from Yale University, JD from the University of Michigan, and law professor at the University of Chicago) 2008, “The Hollow Hope,” 2nd Edition, [Google Books] p. 280-81.

“The third constraint on courts involves implementation. In the environmental area this constrain is manifested in a number of ways, including the complexity of environmental litigation (Ohio v. Wyandotee Chemicals Corp. 1971, 504; Wald 1985, 3), the piece-meal picture of the problem that ligation affords (Bowman 1976, 656; Melnick 1983, 345, 366, 367) and courts’ lack of resources. Focusing on the latter, courts are not usually aware of the constraints under which implementing agencies operate. Even when courts order agencies to take specific steps or meet certain deadlines, the agencies may lack sufficiently trained personal, the money, or the political resources necessary to comply. O’Leary, examining over 2,000 environmental decisions in the federal courts found only one instance where Congress provided EPA with additional staff or funds to comply with a court order (O’Leary 1989, 23). In the area of air quality, Melnick notes that “EPA has missed most of the deadlines set by courts, claiming that Congress has not provided it with enough money or trained personal.” And, as Melnick points out, the “Court cannot appropriate more money” (Melnick 1983, 61). In addition, agencies often are forced to make choices about where to invest limited resources. When courts order agencies to invest more resources in a given program, compliance leads to another program being deprived of resources. Thus, the best-intentioned judicial decisions may hurt rather than help the environment.”

B) Liberty eroded

Liberty undermined if the power of the judge is not separated from legislative and executive power

US Senator Jeff Sessions (ranking member on the Senate Judiciary Committee), June 21, 2009, “What is the role of the a federal judge?: Judicial power is limited to interpreting the law,” The Washington Times, <http://www.washingtontimes.com/news/2009/jun/21/what-is-the-role-of-a-federal-judge/>

“The judiciary has no power to make law or enforce it. In Federalist No. 47, James Madison cites the Constitution of Massachusetts, which decrees: "The judicial shall never exercise the legislative and executive powers, or either of them: to the end it may be a government of laws and not of men." The Founders knew that the courts could not fairly judge laws if they had a hand in making them, nor could they be counted on to curb the excesses of legislative and executive power if they shared in it. In Federalist No. 78, Alexander Hamilton quotes the French philosopher Montesquieu: "There is no liberty if the power of judging be not separated from the legislative and executive powers."

C) Public Backlash

69% believe judges should interpret law as it is written

Rasmussen Reports, May 20, 2008, “Toplines: Supreme Court Justices Survey of 800 Likely Voters,” <http://www.rasmussenreports.com/public_content/politics/general_politics/general_politics_toplines/toplines_supreme_court_justices_may_19_20_2008>

“Others say that judges should interpret the law as it is written. Do you agree or disagree?

* 69% Agree
* 20% Disagree
* 11% Not sure”

Judges are the least trusted mechanism to decide important issues

Rasmussen Reports, May 20, 2008, “Toplines: Supreme Court Justices Survey of 800 Likely Voters,” <http://www.rasmussenreports.com/public_content/politics/general_politics/general_politics_toplines/toplines_supreme_court_justices_may_19_20_2008>

“Who do you trust most to decide important issues facing the country—judges, elected officials, or voters?

* 11% Judges
* 16% Elected officials
* 61% Voters
* 12% Not sure

CON: ACID RAIN

By Matthew Baker

INHERENCY

Acid rains are less corrosive BUT they are falling on soils that are more fragile

Dr. Gene Likens (Director of the Cary Institute of Ecosystems Studies with a PhD from the University of Wisconsin Madison), May 25, 2009, “Acid Rain: The Once and Future Issue,” <http://dsc.discovery.com/earth/my-take/acid-rain.html>

“Nevertheless, no one expected that acid rain would have significant impacts on forest soils, but it did. It is now known that acid rain has depleted significant amounts of these elements, particularly calcium. Consequently, the rains, though overall less corrosive than at their peak, are falling on forests and soils that are more fragile than ever before. The loss of these elements from the soil, carried away primarily in drainage water, as well as the increase in dissolved aluminum in soil and drainage waters have severely impacted forest vegetation.”

Problem of acid rain may be much more severe today than it was 19 years ago

Dr. Gene Likens (Director of the Cary Institute of Ecosystems Studies with a PhD from the University of Wisconsin Madison), May 25, 2009, “Acid Rain: The Once and Future Issue,” <http://dsc.discovery.com/earth/my-take/acid-rain.html>

“Most Americans are unaware that the serious and widespread environmental problem of acid rain continues and, in fact, may be much more severe than it was thought to have been some 19 years ago when the 1990 Amendments to the Clean Air Act were enacted.”

Acid rain still a huge problem: haven’t gotten to point where recovery can begin

David Handelman, April 18, 2009, “A deadly rain: Clean-air laws’ impact on acid rain has limited effect on Adirondack lakes,” Observer-Dispatch (Newspaper of Utica, New York), <http://www.uticaod.com/homepage/x1092973882/A-deadly-rain-Clean-air-laws-impact-on-acid-rain-has-limited-effect-on-Adirondack-lakes>

“In the last 20 years, legislation has been passed to help curb the problem, but some experts still question if conditions in the Adirondacks are improving.  “Acid rain is still a huge problem, and we need to continue to push for further reductions,” said Brian Houseal, executive director of the Adirondack Council. “The levels of acidity are dropping, but we still haven’t gotten to a stage where recovery can begin.”

1990 Laws not sufficient to cause biological recovery

David Handelman, April 18, 2009, “A deadly rain: Clean-air laws’ impact on acid rain has limited effect on Adirondack lakes,” Observer-Dispatch (Newspaper of Utica, New York), <http://www.uticaod.com/homepage/x1092973882/A-deadly-rain-Clean-air-laws-impact-on-acid-rain-has-limited-effect-on-Adirondack-lakes>

“Gregory Lawrence, a research hydrologist at the New York Water Science Center at the U.S. Geological Survey, said acid rain also has caused great harm to the ground, not simply water bodies.   “Reductions resulting from the 1990 amendments have not been sufficient to cause enough improvements for biological recovery,” Lawrence said.”

Only 14 out of 51 Adirondack lakes have healthly lake pH levels

David Handelman, April 18, 2009, “A deadly rain: Clean-air laws’ impact on acid rain has limited effect on Adirondack lakes,” Observer-Dispatch (Newspaper of Utica, New York), <http://www.uticaod.com/homepage/x1092973882/A-deadly-rain-Clean-air-laws-impact-on-acid-rain-has-limited-effect-on-Adirondack-lakes>

“For 15 years, John Evans of Eagle Bay led guided horse pack trips through the Adirondacks. But now that has stopped.  “The brook trout fishing just fell off,” Evans said. “Acid rain is still doing damage, and anyone who doesn’t think so is clueless.”   Of the 51 lakes monitored by the Adirondack Lakes Survey Corp., 14 had pH levels higher than 6 last year, which generally signifies a healthy lake. Eleven were recorded with pH levels under 5, which means the lake is generally uninhabitable for wildlife.  The lakes with pH levels between 5 and 6 vary in levels of healthiness.”

Status of lakes in the Adirondacks mixed: A lot of work needs to be done

David Handelman, April 18, 2009, “A deadly rain: Clean-air laws’ impact on acid rain has limited effect on Adirondack lakes,” Observer-Dispatch (Newspaper of Utica, New York), <http://www.uticaod.com/homepage/x1092973882/A-deadly-rain-Clean-air-laws-impact-on-acid-rain-has-limited-effect-on-Adirondack-lakes>

“The Adirondack Lakes Survey Corp. began its research in 1984.   In its ongoing study of 51 Adirondack water bodies, the nonprofit agency found the percentage of acidified lakes has increased from 45 to 51 percent since the early 1990s.  Still, 15 of the lakes showed demonstrable improvement, the research found.  “The lakes are getting better, but there is still a lot of work to be done,” said Jerry Jenkins, a researcher with the Wildlife Conservation Society and co-author of the book “Acid Rain in the Adirondacks.”

“Research shows acid deposition have contributed to decline of red spruce and sugar maple trees”

Dr. Charles T. Driscoll (PhD in Environmental Engineering from Cornell University), Kathy Fallon Lambert (Masters of Forest Science from Yale and founder of ecological consulting company), and Limin Chen (Wate Resources and Environmental Engineer at Systech Engineering), 2006, “Acidic Deposition: Sources and Ecological Effects” Acid in the Environment, Eds. Dr. Gerald Visgilo and Diana Whilelaw. [Google Books]

“There have been significant efforts to reduce emissions of acidic and acidifying substances in North America and Europe over the past three decades. Although regulatory controls have decreased emissions, levels remain compared to background conditions.”

Thousands of streams are acidic and 90% in the New Jersey Pine Barrens

The Environmental Protection Agency, December 1, 2008, “Effects of Acid Rain- Surface Waters and Aquatic Animals,” <http://www.epa.gov/acidrain/effects/health.html>

“Streams flowing over soil with low buffering capacity are as susceptible to damage from acid rain as lakes. Approximately 580 of the streams in the Mid-Atlantic Coastal Plain are acidic primarily due to acidic deposition. In the New Jersey Pine Barrens, for example, over 90 percent of the streams are acidic, which is the highest rate of acidic streams in the nation. Over 1,350 of the streams in the Mid-Atlantic Highlands (mid-Appalachia) are acidic, primarily due to acidic deposition.”

SIGNIFICANCE

Acid research shows acid remain have contributed to decline of red spruce and sugar maple trees

Dr. Charles T. Driscoll (PhD in Environmental Engineering from Cornell University), Kathy Fallon Lambert (Masters of Forest Science from Yale and founder of ecological consulting company), and Limin Chen (Wate Resources and Environmental Engineer at Systech Engineering), 2006, “Acidic Deposition: Sources and Ecological Effects” Acid in the Environment, Eds. Dr. Gerald Visgilo and Diana Whilelaw. [Google Books]

“Although it is difficult to separate the effects of air pollution from other stresses, recent research shows that acidic deposition appears to have contributed to the decline of red spruce trees throughout eastern North America and sugar maple trees in central and western Pennsylvania in the United States. Symptoms of tree decline include poor crown condition, reduced tree growth, and unusually high levels of tree mortality.”

Adirondacks prove acidic deposition is harmful to aquatic life

Dr. Charles T. Driscoll (PhD in Environmental Engineering from Cornell University), Kathy Fallon Lambert (Masters of Forest Science from Yale and founder of ecological consulting company), and Limin Chen (Wate Resources and Environmental Engineer at Systech Engineering), 2006, “Acidic Deposition: Sources and Ecological Effects” Acid in the Environment, Eds. Dr. Gerald Visgilo and Diana Whilelaw. [Google Books]

One of the most highly impacted areas in North America is the Adirondack region of New York. A comprehensive survey of Adirondack lakes greater than 0.2 ha in surface area was conducted between 1984-87 to obtain detailed information on the acid-base status of waters in this region (Kretser et al. 1980). Of the 1469 lakes surveyed, 24% had summer pH values below 5.0 Also 27% of the lakes surveyed were chronically acidic (i.e., ANC < 0 ueq/L) and an additional 21% were suspectible to episodic acification (i.e., ANC between 0 and 50 ueq/L; see Box 3.4) Note that 54% of these acid sensitive lakes (733 lakes) are characterized by relatively low concentrations of dissolved organic carbon (i.e., < 6 mg C/L). The chemical composition of these lakes suggests that their acidity was largely derived from inputs of sulfate associated with acidic deposition (Driscoll et al. 2003). In contrast, 46% of the lakes are characterized by high concentrations of dissolved organic carbon (i.e., > 6 mg C/L) and naturally occurring organic acids. These lakes are probably naturally acidic. While the contribution of naturally occurring acidity is greater in these lakes, sulfate was the dominant anion; the acidity of these lakes has been clearly enhanced by acidic deposition. Decreases in pH and elevated concentrations of dissolved inorganic aluminum have reduced the species diversity and abundance of aquatic life in many streams and lakes in acid-sensitive areas (Table 3.2). Fish have received the most attention to date, but entire food webs are often adversely affected (Baker et al. 1990). Decreases in pH and increases in dissolved inorganic aluminum concentrations have diminished the species diversity and abundance of plankton, invertebrates, and fish in acid-impacted waters. For example, in the Adirondacks a significant positive relationship exists between pH and ANC levels in lakes and the number of fish species present in those lakes (see Figure 3.8). Adirondack Lakes Survey showed that 24% of lakes (i.e., 346) in this region do not support fish. These lakes had consistently lower pH and ANC, and higher concentrations of dissolved inorganic aluminum than lakes that contained one or more species of fish. Experimental studies and field observations demonstrate that even acid-tolerant fish species such as brook trout have been eliminated from some waters. Although chronically high acid levels stress aquatic life, acid episodes are particularly harmful because abrupt, large changes in water chemistry allow fish few areas of huge (see Box 3.4). High concentrations of dissolved inorganic aluminum are directly toxic to fish and pulses of dissolved inorganic aluminum during acid episodes are a primary cause of fish mortality (Baker et al. 1996; van Sickle et al. 1996). High acidity and dissolved inorganic aluminum levels disrupt the salt and water balance in a fish’s blood causing red blood cells to rupture and blood viscosity to increase (MacAvoy and Bulger 1995), Studies show that the viscous blood strains the fish’s heart, resulting in a lethal heart attack.

Pollutants that cause acid rain pose a health risk to humans

The Environmental Protection Agency, May 13, 2009, “Effects of Acid Rain- Human Health,” <http://www.epa.gov/acidrain/effects/health.html>

“The harm to people from acid rain is not direct. Walking in acid rain, or even swimming in an acid lake, is no more dangerous than walking or swimming in clean water. However, the pollutants that cause acid rain—sulfur dioxide (SO2) and nitrogen oxides (NOx)—do damage human health. These gases interact in the atmosphere to form fine sulfate and nitrate particles that can be transported long distances by winds and inhaled deep into people's lungs. Fine particles can also penetrate indoors. Many scientific studies have identified a relationship between elevated levels of fine particles and increased illness and premature death from heart and lung disorders, such as asthma and bronchitis.”

Acid rain damages monuments and buildings

The Environmental Protection Agency, June 8, 2007, “Effects of Acid Rain- Surface Waters and Aquatic Animals,” <http://www.epa.gov/acidrain/effects/health.html>

“Acid rain and the dry deposition of acidic particles contribute to the corrosion of metals (such as bronze) and the deterioration of paint and stone (such as marble and limestone). These effects significantly reduce the societal value of buildings, bridges, cultural objects (such as statues, monuments, and tombstones), and cars. Dry deposition of acidic compounds can also dirty buildings and other structures, leading to increased maintenance cost.”

Acid rain harms fish

The Environmental Protection Agency, December 1, 2008, “Effects of Acid Rain- Surface Waters and Aquatic Animals,” <http://www.epa.gov/acidrain/effects/health.html>

“Acid rain causes a cascade of effects that harm or kill individual fish, reduce fish population numbers, completely eliminate fish species from a waterbody, and decrease biodiversity. As acid rain flows through soils in a watershed, aluminum is released from soils into the lakes and streams located in that watershed. So, as pH in a lake or stream decreases, aluminum levels increase. Both low pH and increased aluminum levels are directly toxic to fish. In addition, low pH and increased aluminum levels cause chronic stress that may not kill individual fish, but leads to lower body weight and smaller size and makes fish less able to compete for food and habitat.”

CON: ALTERNATIVE ENERGY SUBSIDIES

By Nicholas Bruno

SOLVENCY

Subsidies haven’t made fuels competitive in the past

Jerry Taylor (Senior Fellow at CATO Institute and among the most widely cited and influential critics of federal energy and environmental policy in the nation), 2 April 2008, “Oil Subsidies in the Dock”, CATO Institute, <http://www.cato-at-liberty.org/2008/04/02/oil-subsidies-in-the-dock/>

If renewable energy is economically competitive, it doesn’t need the subsidy, and if it’s not economically competitive now – with energy prices setting records across the board – then what makes anyone think that federal subsidies will make any difference? After all, they never have in the past. Ethanol has been lavished with government subsidy for 30 years, yet ethanol is still about $1.20 per gallon [more expensive](http://www.energyinstitution.org/publication/pub-detail.php?id=24" \t "_blank) than conventional gasoline on wholesale markets last week after we adjust for the differential in energy content between the two. Nuclear energy has lived off a plethora of federal subsidies for five decades now, yet rather than being “too cheap to meter,” [it’s still more expensive](http://www.cato.org/pub_display.php?pub_id=8792" \t "_blank) than any other conventional source of electricity once we account for the cost associated with building the reactor.

Subsidies promote uneconomical fuels

Sheldon Richman (senior fellow at The Future of Freedom Foundation), April 2008, “GOP Statists”, The Future of Freedom Foundation, <http://www.fff.org/freedom/fd0804b.asp>

Government-backed fuels, however, will not be subject to free-market pricing. Politicians, ever eager to dispense favors to their patrons, will manipulate the tax and regulatory system to give their pet energy products a price advantage over alternatives. Any fuel that needs government help to make it in the marketplace is uneconomical and represents corruption. Take ethanol. The only reason anyone is making it is that the tax system treats it more favorably than gasoline. A special interest — the corn farmers supported by the food processor Archer Daniels Midland — favors the creation of this artificial market. There’s no other reason for it. Ethanol doesn’t save energy, once you account for how much energy is required to make it, and it has its own environmental drawbacks

Subsidies enrich small groups at the expense of the rest of the country

[Pete Geddes](mailto:pgeddes@free-eco.org) (Executive Vice President of FREE), 4 January 2006, “The Perils of Energy Subsidies”, Foundation for Research on Economics and the Environment (FREE), <http://www.free-eco.org/articleDisplay.php?id=486>

When we subsidize things that trade in the market, we benefit the well off and well organized at the expense of the most vulnerable members of society. This holds true whether in Bozeman, Boston, or Birmingham. Princeton Ph.D. George Will said it well: “The world is divided between those who do and do not understand that activist, interventionist, regulating, subsidizing government is generally a servant of the strong and entrenched against the weak and aspiring.” For a primer on how this process works, I recommend the late Mancur Olson’s book, *[The Logic of Collective Action](http://www.amazon.com/gp/product/0674537513/qid=1136390592/sr=8-1/ref=pd_bbs_1/104-3132342-6762338?n=507846&s=books&v=glance" \t "_blank)*. Olson examines how political forces derail the greater good. His explanation is straightforward: small, wealthy, well-connected groups easily organize into cohesive, effective units. They then use the political process to reap huge benefits while dispersing the costs over 290 million citizens.

Low tax bills and inability to get loans make subsidies ineffective

Martin LaMonica (senior writer for CNET's Green Tech blog and former executive editor at IT publication InfoWorld), 23 January 2009, “A Dickensian view of clean-tech financing”, CNet News, <http://news.cnet.com/8301-11128_3-10148927-54.html>

The credit crisis and recession also have combined to make the current tax-based renewable energy subsidies [ineffective](http://news.cnet.com/8301-11128_3-10146968-54.html) in serving their purpose, investors said. Current renewable energy subsidies rely on a tax credit, but with fewer corporations expecting a big tax bill, that means less money is available for clean energy. As a result, projects in an otherwise fast-growing wind and solar power business are being slowed or scrapped. "It's a very, very difficult market to get things built," said Scott Brown, the CEO of New Energy Capital, which finances renewable energy projects mainly in wind and biomass these days. "We're only looking at a very, very conservative class of projects." And because banks are reluctant to loan money, any project with technology risk is a tougher sell. That means it's unlikely that many new technologies from the throngs of clean-tech start-ups will make it out of the labs and into the ground in the upcoming months.

Tax credits useless because corporations don’t foresee having a hefty tax bill

Martin LaMonica (senior writer for CNET's Green Tech blog and former executive editor at IT publication InfoWorld), 23 January 2009, “A Dickensian view of clean-tech financing”, CNet News, <http://news.cnet.com/8301-11128_3-10148927-54.html>

The overall slumping economy is taking its toll on clean-energy projects in a perhaps unforeseen way. Right now, investors in renewable energy receive a 30 percent federal tax credit. But because so many more corporations don't foresee having a hefty tax bill in the coming years, [sources of "tax equity" have all but dried up](http://news.cnet.com/8301-11128_3-10146968-54.html), said investors.

CON: ANWR

By Nicholas Bruno

SOLVENCY

Opening ANWR will reduce prices by $1.44 a barrel in best-case scenario

Jacob Leibenluft (writer from Washington D.C.), 12 August 2008, “What's the Deal With Offshore Drilling?”, Slate Magazine (daily magazine on the Web owned by Washington Post company), <http://www.slate.com/id/2197283/>

“For similar reasons, the EIA predicts opening up the Arctic National Wildlife Refuge would lower oil prices by about $1.44 a barrel in the best-case scenario.”

ANWR drilling cannot break the cartel (aka OPEC)

Jerry Taylor (most widely cited and influential critics of federal energy and environmental policy in the nation), 12 October 2001, “Don't Worry About Energy Security“ CATO Institute, <http://www.cato.org/pub_display.php?pub_id=3867>

It's doubtful, however, whether drilling in ANWR would do much to bring down oil prices. Industry's best estimate is that ANWR could produce about 1 million barrels of oil per day at its peak. That's a 1.25 percent increase in global production that, all things being equal, would reduce world oil prices from $20 per barrel to about $18. That's not inconsequential. But it 's not a cartel-breaker either.

No way to get natural gas from ANWR into the market

M. Lynne Corn (Specialist in Natural Resources Policy Resources, Science, and Industry Division), Bernard A. Gelb (Specialist in Industry Economics Resources, Science, and Industry Division), and Pamela Baldwin (Legislative Attorney American Law Division), 7 July 2006, “Arctic National Wildlife Refuge (ANWR): Controversies for the 109th Congress”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=51484>

Large quantities of natural gas are also estimated to be in the 1002 area. Being able to sell this gas probably would enhance development prospects of the 1002 area and the rest of the North Slope — oil as well as gas. However, there currently is no way to deliver the gas to market. “

DISADVANTAGES:

Opening ANWR could put birthing areas for species at risk

Robin Nixon (Special Livescience), 25 June 2008, " Oil Drilling: Risks and Rewards”, Livescience (chronicles the daily advances and innovations made in science and technology), <http://www.livescience.com/environment/080625-oil-drilling.html> [brackets added]

However, any development of the Arctic National Wildlife Refuge (ANWR) for drilling, as President Bush has long advocated for, could have a greater impact. [Polar bears](http://www.livescience.com/environment/080514-ap-polar-bear-listing.html), caribou and other animals trek across this unique area to give birth, said [Charles] Clusen [director of National Parks and Alaska Projects for the Natural Resources Defense Council]. Birth is the most vulnerable time in a species’ life cycle and disrupting it will lead to diminished populations, he explained.”

CON: AIR POLLUTION

By Matthew Baker

INHERENCY

Over the last 30 years there has been an increase in aerosols or airborne pollution

Science Daily, May 13, 2009, “Air Pollution: Clear Sky Visibility Over Land Has Decreased Globally, Indicative of Increased Particulate Matter,” <http://www.sciencedaily.com/releases/2009/03/090312140850.htm>

“A University of Maryland-led team has compiled the first decades-long database of aerosol measurements over land, making possible new research into how air pollution changes affect climate change. Using this new database, the researchers show that clear sky visibility over land has decreased globally over the past 30 years, indicative of increases in aerosols, or airborne pollution. Their findings are published in the journal *Science.”*

Ozone levels have doubled in the Midwest and are predicted to rise another 25% globally by 2050

Patrick Lynch, May 27, 2009, “Satellite Measurements Help Reveal Ozone Damage to Important Crops,” NASA, <http://www.nasa.gov/topics/earth/features/soybeans_prt.htm> [Brackets added]

“Since the early twentieth century, surface ozone levels in rural areas in the Midwest have doubled, [Jack] Fishman [Research scientist at NASA’s Langley Research Center] said. The U.N.’s Intergovernmental Panel on Climate Change (IPCC) predicts that surface ozone concentrations will rise another 25 percent by 2050.”

PM pollution worsened in 12 of the 25 most affected cities

Laurence O’Sullivan (Bachelors degree in Information Technology), May 13, 2009, “American Air Pollution Levels Continue to Rise,” Pollution Control, <http://pollution-control.suite101.com/article.cfm/american_air_pollution_levels_continue_to_rise>

“The annual average level of particulate matter pollution worsened in 12 of the 25 most affected cities with Bakersfield, CA and Pittsburgh, PA topping the table.”

According to NAS the majority of most affected cities experienced increased levels of ozone pollution

Laurence O’Sullivan (Bachelors degree in Information Technology), May 13, 2009, “American Air Pollution Levels Continue to Rise,” Pollution Control, <http://pollution-control.suite101.com/article.cfm/american_air_pollution_levels_continue_to_rise> [brackets added]

“The report [published by the American Lung Association] notes that while some of the most ozone polluted cities, such as Los Angeles and Houston have actually improved their levels, the majority (16) of the 25 most polluted cities experienced much worse ozone levels since last year, including cities such as Phoenix, Las Vegas and Cincinnati.”

The Number of Americans exposed to unhealthly levels of ozone increased since 2008

Laurence O’Sullivan (Bachelors degree in Information Technology), May 13, 2009, “American Air Pollution Levels Continue to Rise,” Pollution Control, <http://pollution-control.suite101.com/article.cfm/american_air_pollution_levels_continue_to_rise> [brackets added]

“Figures from *State of the Air 2009* [published by the American Lung Association] show that the number of Americans exposed to unhealthy levels of ozone rose from less than 95 million in the 2008 report to over 175 million now.”

SIGNIFICANCE

6 out 10 Americans live in regions with unhealthful levels of ozone or particle pollution

American Lung Association, 2009, “Executive Summary,” <http://www.stateoftheair.org/2009/key-findings/executive-summary.html>

“Six out of ten people (61.7%) in the United States population lives in counties that have unhealthful levels of either ozone or particle pollution. Almost 186.1 million Americans live in the 525 counties where they are exposed to unhealthful levels of air pollution in the form of either ozone or short-term or year-round levels of particles.”

Air pollution damages not just lungs but also the heart and blood vessels

Science Daily, August 14, 2008, “Air Pollution Damages More Than Lungs: Heart And Blood Vessels Suffer Too,” <http://www.sciencedaily.com/releases/2008/08/080813183554.htm>

“According to an article published in the August 26, 2008, issue of the Journal of the American College of Cardiology (JACC), air pollution has both short- and long-term toxic effects that injure the heart and blood vessels, increase rates of hospitalization for cardiac illness, and can even cause death. "We used to think air pollution was a problem that primarily affects the lungs. We now know it is also bad for the heart," said Robert A. Kloner, M.D., Ph.D., director of research at the Heart Institute of the Good Samaritan Hospital, and a professor of medicine at the Keck School of Medicine, University of Southern California, both in Los Angeles.”

Air pollution can be dangerous even at levels that are within accepted quality standards

Science Daily, August 14, 2008, “Air Pollution Damages More Than Lungs: Heart And Blood Vessels Suffer Too,” <http://www.sciencedaily.com/releases/2008/08/080813183554.htm>

"There doesn't have to be an environmental catastrophe for air pollution to cause injury," said Boris Z. Simkhovich, M.D., Ph.D, a senior research associate at the Heart Institute of the Good Samaritan Hospital, and an assistant professor of research medicine at the Keck School of Medicine, University of Southern California. "We're talking about very modest increases. Air pollution can be dangerous at levels that are within the accepted air quality standards."

2 million Americans face increased cancer risks from air pollution

Robin Bravender, June 24, 2009, “2M Americans Face Heightened Cancer Risks From Air Pollution, EPA Says,” The New York Times. <http://www.nytimes.com/gwire/2009/06/24/24greenwire-2m-americans-face-heightened-cancer-risks-from-54131.html>

“Two million Americans face increased cancer risks of greater than 100 in a million from exposure to toxic air pollution, according to a U.S. EPA report released today. EPA estimates that all 285 million U.S. residents have an increased cancer risk of greater than 10 in a million from exposure to air toxics. The average cancer risk, based on 2002 pollution levels, is 36 in a million. The agency has asserted that levels above a 100-in-a-million risk level are generally unacceptable.”

PARTICULATE MATTER (PM)

92.7 million Americans live in areas with unhealthily levels of particle emissions

American Lung Association, 2009, “Executive Summary,” <http://www.stateoftheair.org/2009/key-findings/executive-summary.html>

“Roughly three out of ten people in the United States live in an area with unhealthful short-term levels of particle pollution, an increase from the last report. Over 92.7 million Americans live in 134 counties that experienced too many days with unhealthy spikes in particle pollution, an increase from the last report. Short-term spikes in particle pollution can last from hours to several days and can increase the risk of heart attacks, strokes and emergency-room visits for asthma and cardiovascular disease, and most importantly, can increase the risk of early death.”

Exposure to particle pollution kills thousands

American Lung Association, 2009, “Health Risks (Particle Pollution),” <http://www.stateoftheair.org/2009/key-findings/executive-summary.html>

“First and foremost, short-term exposure to particle pollution can kill. Peaks or spikes in particle pollution can last for hours to days. Deaths can occur on the very day that particle levels are high, or within one to two months afterward. Particle pollution does not just make people die a few days earlier than they might otherwise—these are deaths that would not have occurred if the air were cleaner.[18](http://www.stateoftheair.org/2009/health-risks/footnotes.html#F18) Researchers from Harvard University recently tripled the estimated risk of premature death following a review of the newer evidence from fine particle monitors (PM2.5) in 27 US cities.[19](http://www.stateoftheair.org/2009/health-risks/footnotes.html#F19) As mentioned earlier, scientists at the California Air Resources Board also tripled their estimate of the number of deaths occurring each year from particle pollution. They now put the range between 5,600 to 32,000 deaths a year in that state alone.”

OZONE

175.4 million Americans live in areas with unhealthful levels of ozone

American Lung Association, 2009, “Executive Summary,” <http://www.stateoftheair.org/2009/key-findings/executive-summary.html>

“Roughly six out of ten people in the United States— 58 percent—live in areas with unhealthful levels of ozone. This reflects the much lower threshold for unhealthy ozone as well as warmer temperatures in much of the eastern U.S. Counties that were graded F for ozone levels have a combined population of 175.4 million.”

Ozone causing 3,700 deaths annually

American Lung Association, 2009, “Health Risk (Ozone),” <http://www.stateoftheair.org/2009/health-risks/health-risks-ozone.html>

“Scientists have studied the effects of ozone on health for decades. Hundreds of research studies have confirmed that ozone harms people at levels currently found in the United States. In the last few years, we’ve learned that it can also be deadly. Breathing ozone may shorten your life. Strong evidence arrived late in 2004, when two large multi-city investigations documented that short-term exposure to ozone can shorten lives, building on numerous earlier studies. One of them looked at 95 cities across the United States over a 14-year period. That study compared the impact of ozone on death patterns during several days after the ozone measurements.  Even on days when ozone levels were low, the researchers found that the risk of premature death increased with higher levels of ozone. They estimated that over 3,700 deaths annually could be attributed to a 10-parts-per-billion increase in ozone levels.[52](http://www.stateoftheair.org/2009/health-risks/footnotes.html#F52)”

Rising surface Ozone levels are damaging nearly $2 billion in US soybean crops

Soya Tech (Soybean Industry Publication), May 28, 2009, “Rising Ozone Levels Causing $2 Billion Annually in Soybean Crop Damage: NASA Research,” <http://www.soyatech.com/news_story.php?id=14017>

“Rising surface ozone concentrations are damaging nearly $2 billion in annual U.S. soybean crops, a NASA study of satellite measurements indicates. The study, headed by NASA Langley Research Center in Hampton, Va., was presented at the American Geophysical Union Joint Assembly meeting, May 24 in Toronto and looked at five years of soybean yields, surface ozone and satellite measurements of troposphere ozone levels in three Midwest states. Indiana, Illinois and Iowa are three of the biggest soybean producers in the U.S. and had peak crop damage in the hundreds of millions -- part of more than $2 billion nationwide.”

Elevated summer ozone levels responsible for 4,000 deaths annually in the US

Patrick Lynch, May 27, 2009, “Satellite Measurements Help Reveal Ozone Damage to Important Crops,” NASA, <http://www.nasa.gov/topics/earth/features/soybeans_prt.htm>

“At the ground level, too much ozone causes respiratory problems in humans. Research attributes as many as 4,000 deaths per year in the U.S. to elevated ozone levels in the summer.

Ozone negatively affects plants

Patrick Lynch, May 27, 2009, “Satellite Measurements Help Reveal Ozone Damage to Important Crops,” NASA, <http://www.nasa.gov/topics/earth/features/soybeans_prt.htm>

“Ozone similarly affects plants. The compound enters plants through pore-like openings in their leaves and then reacts with surfaces inside the plant to cause oxidizing damage through tissue destruction. The result is depressed photosynthesis, stunted growth and, for sensitive crops such as soybeans, reduced yield.”

CON: BIODIESEL

By Stephen Menesick

SOLVENCY

Biodiesel producers susceptible to more major fluctuations than gasoline

Don Looper and Aaron Ball (members of Looper Reed & McGraw) 2007,“FEATURE: FEEL THE HEAT: BIOFUELS ARE A HOT INVESTMENT, BUT DON'T GET BURNED...” The Houston Lawyer, January/February, 2007, 44 Houston Lawyer 22 via Lexis Nexis

“Unlike the general correlation between crude prices and the price of gasoline (the so-called "gas crack"), the price of feedstock does not necessarily correlate to biodiesel prices. This is because producers are taking an agricultural commodity and selling it into the energy market. As a result, producers are highly susceptible to fluctuations in each market that may be wholly unrelated. “

Biodiesel Congeals in cold weather, can’t use it for 5 months of the year

Kate Galbraith, December 26, 2008, “Winter Cold Puts a Chill On Energy Renewables” The New York Times, via Lexis Nexis

In January 2007, a bus stalled in the middle of the night on Interstate 70 in the Colorado mountains. The culprit was a 20 percent biodiesel blend that congealed in the freezing weather, according to John Jones, the transit director for the bus line, Summit Stage. (Biodiesel is a diesel substitute, typically made from vegetable oil, that is used to displace some fossil fuels.) The passengers got out of that situation intact, but Summit Stage, which serves ski resorts, now avoids biodiesel from November to March, and uses only a 5 percent blend in the summertime, when it can still get cold in the mountains. ''We can't have people sitting on buses freezing to death while we get out there trying to get them restarted,'' Mr. Jones said.

DISADVANTAGES

Biodiesel costs more to develop

Don Looper and Aaron Ball (members of Looper Reed & McGraw) 2007,“FEATURE: FEEL THE HEAT: BIOFUELS ARE A HOT INVESTMENT, BUT DON'T GET BURNED...” The Houston Lawyer, January/February, 2007, 44 Houston Lawyer 22 via Lexis Nexis

Biodiesel generally costs more to manufacture than conventional petroleum diesel. n55 The feedstock cost of the seed oil or grease used to make biodiesel is the largest component of production cost. It takes about 7.3 pounds of soybean oil, which costs about 21-24 cents per pound, to produce a gallon of biodiesel. n56 Feedstock costs are at least $ 1.50 per gallon of soy biodiesel. n57 Fats and greases cost less and produce less expensive biodiesel, but their supply is more limited and localized. The difference between the cost of biodiesel and the cost of petroleum diesel has narrowed due to increased crude oil prices in recent months, which have outpaced those of the feedstocks used to make biodiesel. Before tax, the national average price of biodiesel in March 2006 was $ 3.05/gallon for B100, $ 2.14/gallon for B20, and $ 1.93/gallon for B2. By comparison, # 2 diesel fuel ran $ 1.91/gallon. n58

Biodiesel has many unique cost drivers that uniquely raise price

Don Looper and Aaron Ball (members of Looper Reed & McGraw) 2007,“FEATURE: FEEL THE HEAT: BIOFUELS ARE A HOT INVESTMENT, BUT DON'T GET BURNED...” The Houston Lawyer, January/February, 2007, 44 Houston Lawyer 22 via Lexis Nexis

The biofuels market in general is decentralized, with sources of feedstock spread all over the country. As a result, transportation is a substantial cost of producing biodiesel. Further, limited harvesting periods create the need for storage, yet another cost. n53 Capital costs to operate a biodiesel plant can be high and cash flow restrictions inherent in this subsidy-driven business severe. Biodiesel hits the marketplace with the blender's credit already embedded in the price. Downstream sellers, however, must wait 100 days for that credit to return in the form of real cash flow. n54

CON: BIODIESEL (ALGAE)

By Stephen Menesick

SOLVENCY

No proof algae can be used on a large scale

Biopact (Bioenergy News Source), “An in-depth look at biofuels from algae” Jan. 19, 2007, <http://biopact.com/2007/01/in-depth-look-at-biofuels-from-algae.html>

Over the past few years, several companies have issued press releases about technologies they have developed to produce biofuels from algae. The claims in these stories are that algae yield 'enormous' amounts of biomass that can be turned into liquid fuels at low cost. Most of the projects involve the use of closed photobioreactors, in which the micro-organisms are grown in a controlled manner by feeding them CO2 and nutrients. Sadly, after decades of development, none of those projects have ever demonstrated the technology on a large scale, let alone over long periods of time. This is why it is time to have a look at the possible reasons as to why algae biofuels are being talked about, but don't seem to get off the ground.

Algae Biodiesel won’t be viable for at least 30 years

Dr. Krassen Dimitrov, Nanobiotech Expert Queensland U, Australia, 2007, Interviewed in “Scientist skeptical of algae-to-biofuels potential – interview” Biopact July 18, 2007 <http://news.mongabay.com/bioenergy/2007/07/scientist-skeptical-of-algae-to.html>

“There is no question that microalgae have the potential for high productivity per area, albeit with all associated high cultivation costs. In certain Malthusian scenarios of the future one can envision that land becomes so expensive that humans will need to highly optimize its use, for animal feed, for example. In terms of making significant contribution to energy in the next 20-30 years, though, the answer is a sound 'no', and if somebody wants to bet me on that, I would gladly take that bet.”

Amazing Algae Cultivation is a myth in mother nature

Dr. Krassen Dimitrov, Nanobiotech Expert Queensland U, Australia, 2007, Interviewed in “Scientist skeptical of algae-to-biofuels potential – interview” Biopact July 18, 2007 <http://news.mongabay.com/bioenergy/2007/07/scientist-skeptical-of-algae-to.html>

The reason algae are always quoted as the 'perfect' feedstock is that they can grow extremely fast in optimal conditions. In Mother Nature, however, 'fast' is not always a winner, or else the entire biosphere would have been overtaken by bacteria, which can divide every twenty minutes. Fast proliferation is usually at the expense of rigour and adaptability. Plants do not grow as quickly as algae, however, they have elaborate mechanisms that allow them to survive and grow in various conditions, so they require less care and lower expenses for cultivation. Therefore, with algae one has to always consider the trade-off between high growth rates and how expensive it is to maintain conditions that would allow them. The other very important boundary is imposed by thermodynamics - the yield is limited by the amount of energy (sunlight) available – so improving the cultivating conditions follows the law of diminishing returns, as every percentage of yield that one can wrestle out becomes harder and harder as one approaches the theoretical limit.

Biodiesel from Algae is costly and wastes land

Gail Edmondson & Adam Aston “HERE COMES POND SCUM POWER” Business Week, Pg. 65 Vol. 4061 December 3, 2007, via Lexis Nexis

Bringing down the cost of producing algae oil in commercial volumes—billions of gallons—is still a big challenge. "The scale required to grow algae to a meaningful dimension is staggering just one field requires 15,000 acres, and to supply the nation, 100’s of these fields are required,” says Bill Green, managing partner at VantagePoint Venture Partners. But biodiesel from other plants is already a robust market. In Europe, refiners are producing 1.4 billion gallons a year from rapeseed, soy, and other plants. In all, the world consumed $1.7 billion worth of biodiesel last year. That should grow to $26 billion by 2020, says market researcher Global Insight. Producing this biodiesel is not practical yet and is not economic friendly.

Algae production takes a lot of land

Biopact (Bioenergy News Source), “An in-depth look at biofuels from algae” Jan. 19, 2007, <http://biopact.com/2007/01/in-depth-look-at-biofuels-from-algae.html>

In the end, the ASP decided to take the latter route, and abandoned photobioreactor research alltogether. Instead, it started designing open ponds, to be located in the open air, in sunny deserts and other locations that receive a lot of sunshine (like Hawaii). From then on, the argument that algae take up "less space to grow" than ordinary crops, no longer held.

The growth of algae for biodiesel is costly and the algae requires a lot of care

David Holzman, June 2008, “The Carbon Footprint of Biofuels: Can We Shrink It Down to Size in Time?” Environmental Health Perspectives Volume 116 Number 6, <http://www.ehponline.org/members/2008/116-6/focus.html>

The technology faces a variety of challenges, many of which come down to costs. Algal production systems will need lots of land (sprawling shallow pools give more algae greater access to the sunlight it needs to photosynthesize) and lots of water near a carbon source. Sitting will be important, too: Algae can be grown in open waters or in closed systems, but in open shallow ponds in, say, the desert Southwest where there is plenty of sunlight, evaporation and replacement of water would be an issue. Closed systems, on the other hand, would have high capital costs. Another challenge with algae is that they tend to produce the most oil when starved (this is a way of storing energy when hard times are anticipated), which has negative consequences for reproduction. Algae may ultimately need to be genetically engineered for best results—and plenty of research is going on in this area. But organisms that are engineered for production of a particular product are no longer optimal for survival, and even in closed systems would have to somehow be protected from wild competitors—something Darzins says "nobody knows anything about." There are many disagvantages to growing algae for biodiesel – mostly the amount of care they require.

Biodiesel from Algae Still costs around $20/gallon

Sanjida O'Connell, The Daily Telegraph (London), January 13, 2009 “Could; this slimy scum; be our saviour?” Via Lexis Nexis

Whatever the method employed, the extraction procedure can be costly and complicated, and further processing is still required before the algae can be turned into vehicle fuel. The cost of this has dropped dramatically: to make algae biodiesel in the lab 25 years ago cost $3,000 per gallon; today it is less than $20. However, in the US, petrol costs $2 per gallon and $2diesel .70 - to be competitive, algae biodiesel would need to be around the $2 mark, too. As Thurmond admits, "It's the last yard that's hard.''

Practically impossible to produce algae biodiesel on a large scale now

Chris Ladd, Popular Mechanics, 2008 “Algae Startups Confront Promise of Miracle Fuel With Big Summer” May 29, 2008 <http://www.popularmechanics.com/science/earth/4266137.html?series=19>

But after all the hype—and there's been plenty of it—the fact remains that nobody has yet proven they can cheaply and reliably transform the stuff from a thick, green slurry to a finished fuel capable of making a dent in America's 870 million–gallon-per-day petroleum habit. "I get a lot of people telling me that they've got thousands of gallons, but when I actually ask for a sample I can get maybe two," says Jennifer Holmgren, director of the UOP renewable energy and chemicals division, which is working to refine jet fuel from feedstocks that include algae. "Google some of the numbers, and you've got people claiming that right now they're producing 35,000 gallons per acre per year, and they'll be producing 100,000 gallons—and that's just impossible," says Solix Biofuels lead scientist Bryan Wilson, a veritable grandfather with two successful years in the fledgling algae industry. "There's probably not more than a few barrels floating around right now."

CON: BIOFUELS

By Stephen Menesick

SOLVENCY

Clearance of land for biofuels creates major emissions that dwarf biofuels benefits

Elizabeth Rosenthal, 2008 “Studies Conclude That Biofuels Are Not So Green”, International Herald Tribune, Feb. 7 2008, <http://www.iht.com/articles/2008/02/07/healthscience/biofuel.php>

Plant-based fuels were originally billed as better than fossil fuels because the carbon released when they are burned is balanced by the carbon absorbed when the plants grow. But even that equation proved overly simplistic because the process of turning plants into fuel causes it own emissions - through refining and transport, for example. The land-use issue makes the balance sheet far more problematic: The clearance of grassland releases 93 times the amount of greenhouse gas that would be saved by the fuel made annually on that land, said Joseph Fargione, the lead author of the other study and a scientist at the Nature Conservancy. "So for the next 93 years, you're making climate change worse, just at the time when we need to be bringing down carbon emissions." The United Nations Intergovernmental Panel on Climate Change has said that the world has to reverse the increase of greenhouse gas emissions by 2020 to avert disastrous environmental consequences. Together, the two studies offer sweeping conclusions: It doesn't matter if it is rain forest or scrub land that is cleared, although the former releases more emissions than the latter. Taken globally, the production of almost all biofuels resulted in such clearing, directly or indirectly, intentionally or not.

By planting biofuels on forestland it will take 75 years to realize an emissions benefit

Science Daily, April 15, 2009 “Biofuels Could Hasten Climate Change” <http://www.sciencedaily.com/releases/2009/04/090414120452.htm>

A new study finds that it will take more than 75 years for the carbon emissions saved through the use of biofuels to compensate for the carbon lost when biofuel plantations are established on forestlands. If the original habitat was peatland, carbon balance would take more than 600 years.

DISADVANTAGES

A) Hunger

Link: Growth of the Biofuels industry stresses food markets and drives up food prices

C. Ford Runge, (Distinguished McKnight University Professor of Applied Economics and Law and Director of the Center for International Food and Agricultural Policy at the University of Minnesota) and Benjamin Senauer (PhD, Professor of Applied Economics and Co-director of the Food Industry Center at the University of Minnesota) 2007 “How Biofuels Could Starve the Poor,” Foreign Affairs, May/June 2007 <http://www.foreignaffairs.org/20070501faessay86305-p10/c-ford-runge-benjamin-senauer/how-biofuels-could-starve-the-poor.html>

With the price of raw materials at such highs, the biofuel craze would place significant stress on other parts of the agricultural sector. In fact, it already does. In the United States, the growth of the biofuel industry has triggered increases not only in the prices of corn, oilseeds, and other grains but also in the prices of seemingly unrelated crops and products. The use of land to grow corn to feed the ethanol maw is reducing the acreage devoted to other crops. Food processors who use crops such as peas and sweet corn have been forced to pay higher prices to keep their supplies secure -- costs that will eventually be passed on to consumers. Rising feed prices are also hitting the livestock and poultry industries. According to Vernon Eidman, a professor emeritus of agribusiness management at the University of Minnesota, higher feed costs have caused returns to fall sharply, especially in the poultry and swine sectors. If returns continue to drop, production will decline, and the prices for chicken, turkey, pork, milk, and eggs will rise. A number of Iowa's pork producers could go out of business in the next few years as they are forced to compete with ethanol plants for corn supplies.

Link: Corn Ethanol diverts it from traditional feed uses causing a rise in food prices generally

James A. Duffield, (Ph.D. is an agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.), Irene Xiarchos, (Ph.D. is also an agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.) & Steve A. Halbrook, (Ph.D. is Vice President of Farm Foundation, Oak Brook, Illinois, and a member of the District of Columbia Bar), 2008 “ARTICLE: ETHANOL POLICY: PAST, PRESENT, AND FUTURE” South Dakota Law Review, 2008, 53 S.D. L. REV. 425, via Lexis Nexis

Of course not everyone is happy about ethanol. While on the aggregate the U.S. farm sector has benefited from ethanol growth, the benefits have been mostly realized in the crop sector. On the other hand, livestock producers have major concerns with ethanol production driving up their animal feed costs. Higher corn prices related to ethanol growth and other economic factors are raising livestock feed costs. Although most of the livestock industry is currently doing well due to the recent boom in export demand, there is fear that higher feed costs may soon slow meat production down and raise consumer prices. n122 Beef, hog, poultry, and dairy producers all use corn in their feed rations and will face the challenge of dealing with higher feed costs over the next several years. Future meat prices could be higher if the supply of meat products does not keep up with expected increases in demand. This may already be happening in the dairy industry where growth in milk production per cow declined in 2007. n123 With domestic and export demand outpacing supply, the prices of cheese, butter, nonfat dry milk, and whey were all up sharply in 2007. There is also concern that using corn for fuel production is diverting it away from traditional food uses, causing a general rise in food prices. The consumer price index (CPI) for all food has been increasing for the past ten years. n124 In 2008, moreover, the CPI for all food is expected to jump as much as 4.5 percent, as retailers "pass on higher commodity and energy costs to consumers in the form of moderately higher retail prices." n125

Link: Cellulosic Ethanol raises food prices

Mindy L. Baker (Iowa State University, Department of Economics), Dermot J. Hayes (PhD, Professor of Agribusiness at Iowa State University), and Bruce A. Babcock (Professor of economics and the director of the Center for Agricultural and Rural Development at Iowa State University) in 2008 “Crop-Based Biofuel Production under Acreage Constraints and Uncertainty” Presentation at the American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008 <http://ageconsearch.umn.edu/bitstream/6352/2/467340.pdf>

Land allocations under the EISA RFS shift toward crops that produce fuels mandated at a high level. Incentives provided to “greener” fuels diffuse through the economy and cause a shift in land allocation patterns. The mandate results in much higher commodity prices than in the baseline. If the cellulosic mandates are designed to avoid the feed-versus-fuel trade-off, our results suggest it may actually exacerbate the situation by inducing even higher feedstuff costs than under the regime with only corn ethanol in production. With a fixed amount of land, it is impossible to increase the amount of each crop devoted to energy and maintain the same level of consumption of each commodity for food uses such as feeding livestock.

Uniqueness: Fool Prices have peaked and are falling in the Status Quo

MATTHEW SALTMARSH, The International Herald Tribune, June 18, 2009 “Gradual rise expected for farm commodities; Downturn will delay price increases for a few more years, report says” via Lexis Nexis

Prices of agricultural commodities should continue to slip during the next few years from their recent peaks, then start to recover after the global downturn has played out, the O.E.C.D. and the U.N. Food and Agriculture Organization said Wednesday. Before the global economic downturn began in 2008, there was widespread concern that consumers might have to adjust permanently to higher food prices because of factors including droughts, increased demand by consumers in emerging markets and increased competition for crops by biofuel plants. The surge in prices led to riots in some countries and caused some governments to try to control the prices of food staples. In Argentina, for example, the government increased export taxes last year on some crops in an effort to encourage farmers to sell more at home. Higher prices also pushed the issue of food security up the political agenda, leading to the first summit meeting by agriculture ministers from the Group of 8 countries. But so far this year, the report noted, agricultural prices have been falling - along with those of many other commodities - as the economic downturn has moderated demand and as more land has been put into crop production. World cereal inventories, which reached lows in recent years, have started to rebuild.

Impact: Low income countries significantly effective by food price hikes

James A. Duffield, (Ph.D. is an agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.), Irene Xiarchos, (Ph.D. is also an agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.) & Steve A. Halbrook, (Ph.D. is Vice President of Farm Foundation, Oak Brook, Illinois, and a member of the District of Columbia Bar), 2008 “ARTICLE: ETHANOL POLICY: PAST, PRESENT, AND FUTURE” South Dakota Law Review, 2008, 53 S.D. L. REV. 425, via Lexis Nexis

While most U.S. consumers can [\*445] afford to pay slightly higher prices for their food, some lower income countries may find it more difficult. For example, the San Francisco Chronicle reported that the price of corn tortillas had risen significantly in Mexico. [n126](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.158964.3665850752&target=results_DocumentContent&reloadEntirePage=true&rand=1246329052141&returnToKey=20_T6868740109&parent=docview" \l "n126) Corn tortillas are a staple of the Mexican diet, and a higher price significantly increases food costs for the low-income people who depend on it as their basic food. [n127](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.158964.3665850752&target=results_DocumentContent&reloadEntirePage=true&rand=1246329052141&returnToKey=20_T6868740109&parent=docview" \l "n127) Also, the Chinese press reported that the government there was backing off its aggressive ethanol program because of recent price hikes in the food market. [n128](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.158964.3665850752&target=results_DocumentContent&reloadEntirePage=true&rand=1246329052141&returnToKey=20_T6868740109&parent=docview" \l "n128) “

B) Ecosystem Destruction

*Editors Note: See the brief on Pro Biodiversity for additional impact analaysis*

Link: Demand for land for crops may lead to natural land conversion threatening ecosystems

Vincent Barbera (J.D. Candidate, 2009, Villanova University School of Law) 2009 **“**COMMENT: TOMORROW TODAY? CELLULOSIC ETHANOL: HOW IT'S DONE, WHO'S GETTING IT DONE, AND ITS ENVIRONMENTAL IMPACT” Villanova Environmental Law Journal, 2009, 20 Vill. Envtl. L.J. 27, via Lexis Nexis

It has also been posited that the increased use of energy crops may lead to more displacement of natural land cover, which would likely result in "a loss of ecosystem functions and reduced biodiversity." [n107](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.259337.3642756459&target=results_DocumentContent&reloadEntirePage=true&rand=1246329082587&returnToKey=20_T6868740187&parent=docview" \l "n107) As the demand for raw cellulosic biomass products increases, the economic incentive for private investors to buy and convert natural lands for the growth of energy crops may result in the disruption of many fragile ecosystems. [n108](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.259337.3642756459&target=results_DocumentContent&reloadEntirePage=true&rand=1246329082587&returnToKey=20_T6868740187&parent=docview" \l "n108)

Impact: Loss of biodiversity threatens human existence

MICHAEL VINEY, 2002, “Biodiversity is the spice of life” The Irish Times, WEEKEND; Pg. 56, July 27, 2002, via Lexis Nexis

Such pleasure is probably the least important reason why biodiversity is a good thing: human survival is more to the point. Conservationists insist that biodiversity is basic to the Earth's life-support system and that the progressive loss of species - as in the current destruction of natural forest - could help destabilise the very processes by which the planet services our presence and wellbeing.

C) Invasive Species

Huge invasive species risk from second-generation biofuels crops

Elisabeth Rosenthal, 2008 “New Trend in Biofuels Has New Risks” New York Times, May 21, 2008, <http://www.nytimes.com/2008/05/21/science/earth/21biofuels.html>

In the past year, as the diversion of food crops like corn and palm to make biofuels has helped to drive up food prices, investors and politicians have begun promoting newer, so-called second-generation biofuels as the next wave of green energy. These, made from non-food crops like reeds and wild grasses, would offer fuel without the risk of taking food off the table, they said. But now, biologists and botanists are warning that they, too, may bring serious unintended consequences. Most of these newer crops are what scientists label invasive species — that is, weeds — that have an extraordinarily high potential to escape biofuel plantations, overrun adjacent farms and natural land, and create economic and ecological havoc in the process, they now say. At a United Nations meeting in Bonn, Germany, on Tuesday, scientists from the Global Invasive Species Program, the Nature Conservancy and the International Union for Conservation of Nature, as well as other groups, presented a paper with a warning about invasive species. “Some of the most commonly recommended species for biofuels production are also major invasive alien species,” the paper says, adding that these crops should be studied more thoroughly before being cultivated in new areas. Controlling the spread of such plants could prove difficult, the experts said, producing “greater financial losses than gains.” The International Union for Conservation of Nature encapsulated the message like this: “Don’t let invasive biofuel crops attack your country.”

Internal Link: non-native species result in extinction

Kevin Mayhood, The Columbus Dispatch, 2008 “Politics of Protection” March 18, 2008, <http://www.dispatch.com/live/content/science/stories/2008/03/18/sci_delist.ART_ART_03-18-08_B4_S69KJ7Q.html>

The most common cause of species decline has been human activity that destroyed or degraded natural habitats, scientists say. But more recently, more than 40 percent of species listed as threatened or endangered are at risk of becoming extinct because of non-native invasive species crowding or wiping them out, a 2004 Cornell University study said.

Brink / Impact: Many species are already at the tipping point and biodiversity is key to human survival

Steve Connor, The Independent / UK, July 20, 2006 “Earth Faces 'Catastrophic Loss of Species'” <http://www.commondreams.org/headlines06/0720-08.htm>

They say: "There is growing recognition that the diversity of life on earth, including the variety of genes, species and ecosystems, is an irreplaceable natural heritage crucial to human well-being and sustainable development. There is also clear scientific evidence that we are on the verge of a major biodiversity crisis. Virtually all aspects of biodiversity are in steep decline and a large number of populations and species are likely to become extinct this century.

Impact: Invasive species already cost the US billions and have resulted the deaths of hundreds

Union of Concerned Scientists, December 18, 2006, “Screening for Invasive Species Could Save US Billions Study Suggests,” <http://www.ucsusa.org/news/press_release/screening-for-invasive.html>

“Invasive plants spread for decades and their economic and environmental costs are severe and increasing," said biologist David M. Lodge of the University of Notre Dame, one of the study's authors. "Even when we only considered very straightforward costs, it's clear that screening benefits both the economy and the environment. Screening is the next step in improving U.S. policy and completely consistent with our international trade obligations." Often, the costs of invasives species are borne by taxpayers, as in the Great Lakes, where the U.S. and Canadian governments together have spent about $15 million annually since 1956, controlling sea lampreys. In 2003, Federal and state agencies spent more than $14 million to slow the spread of European gypsy moths along a ten state line. And West Nile Virus has killed hundreds of Americans, sickened thousands of others, and affected more than 200 species of native birds. Altogether, invasive plant and animal species have caused billions in economic harm in the U.S.”

D) Subsidies

Link: Neither major biofuel (biodiesel & ethanol) is competitive without government subsidies

Don Looper and Aaron Ball (members of Looper Reed & McGraw) 2007,“FEATURE: FEEL THE HEAT: BIOFUELS ARE A HOT INVESTMENT, BUT DON'T GET BURNED...” The Houston Lawyer, January/February, 2007, 44 Houston Lawyer 22 via Lexis Nexis

Annual ethanol production between 1980 and 2005 rose from about 175 million to 3.9 billion gallons. The growth in biodiesel production, while at a much smaller pace, rose between 1999 and 2005 from 0.5 million to 75 million gallons, with estimated 2006 production at 150 million gallons. n23 Federal and state incentive programs are directly related to the increase in production for each fuel. Based on changes in the law and the influence of a Democrat-controlled Congress, the industry likely will experience similar [\*25] growth through the next presidential election in 2008. Neither biofuel was cost competitive in 2005 without subsidies. Producing biodiesel costs 55 cents a liter (20 percent more than ethanol). Wholesale gasoline prices in 2005 averaged 44 cents a liter (4 percent less than ethanol). n34 Biodiesel, however, receives a subsidy that is 45 percent more than ethanol. n35

Impact: Price supports hurt farmers in the long run

Thomas Richard Poole (2007 J.D. candidate at the William & Mary School of Law) 2006 “Silly Rabbit, Farm Subsidies Don't Help America” William and Mary Environmental Law and Policy Review, Fall, 2006, 31 Wm. & Mary Envtl. L. & Pol'y Rev. 183, via Lexis Nexis

Continuing price supports will hurt U.S. farmers n20 and further injure the land upon which farmers rely for their future prosperity. n21 The public at large has been sold a "bill of goods" n22 which asserts that farmers cannot survive without price supports, and that therefore the United States cannot survive without price supports. n23 This argument fails to recognize the real result of price supports and, more importantly, it fails to recognize the ingenuity and productivity that is responsible for making U.S. agriculture the global powerhouse n24 that it is. n25 Instead of encouraging farmers to grow unprofitable crops through price supports, the United States should embark on a journey to re-empower the agricultural sector by incentivizing crops that not only provide answers to some of the most [\*186] pressing concerns facing the country, but that do so in an environmentally sound way. n26

E) Biodesel and Ethanol

Link: The two major types of biofuels are ethanol and biodiesel

Enrique Rene de Vera (JD Candidate in 2008), Chicago Journal of International Law Winter, 2008 “DEVELOPMENT: The WTO and Biofuels: The Possibility of Unilateral Sustainability Requirements” 8 Chi. J. Int'l L. 661 via Lexis Nexis

“Biofuels consist primarily of two different types: biodiesel and ethanol.”

CON: CAFÉ STANDARDS

By Michael Bixby

INHERENCY

Empirically markets will respond to high oil prices by increasing fuel economy of vehicles when necessary

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“Since the passage of CAFE standards, the fuel efficiency of new cars has nearly doubled. Much of this increase, however, is due not to the standards but to the auto market’s response to rising oil prices. For example, in the years immediately following CAFE’s enactment, new-car fuel economy increased to levels even higher than those required by statute, as consumers, faced with steadily rising gasoline prices, demanded far more fuel-efficient cars than they had in the past. Only in the mid- 1980s and later, when gas prices first stabilized and then actually began to decline, did CAFÉ itself exert a real effect on car design and on the mix of models available. The drop in gas prices, however, meant that conservation had become a less pressing need. Similarly, during the post-Katrina increase in gasoline prices, from late 2005 through the summer of 2006, sales of large SUVs declined drastically while smaller SUVs and hybrids boomed in popularity. These changes took place far more quickly than anything that the CAFE program might have accomplished.”

Americans buy more fuel efficient cars when oil prices rise

US Congressman John D. Dingell (J.D. from Georgetown Law School, Chairman Emeritus of the Committee on Energy and Commerce in the House), June 11, 2008, “Plug-In Electric Vehicles 2008: What Role for Washington?” Remarks As Prepared for Delivery for the Brookings, <http://www.brookings.edu/events/2008/~/media/Files/events/2008/0611_plugin_vehicles/0611_plugin_dingell.pdf>

“I’ve been around long enough to have the burden of memory. In 1976, gas was selling for sixty cents a gallon. In 1979, when the Shah of Iran fell, gas prices began an inexorable rise. In 1981, Americans were shocked when gasoline prices exceeded one dollar per gallon for the first time. Ultimately, that year the average gasoline price would reach $1.35 per gallon. How did we respond? Between Model Years 1979 and 1980, Corporate Average Fuel Economy jumped by three miles per gallon – a 15 percent increase in just one year. It wasn’t because of any government requirement. It was because consumers went out and bought more efficient vehicles. Last year, for the first time, gasoline prices, adjusted for inflation, exceeded what Americans paid in 1981. Once again, the consumer is responding. Last month marked the first month since December of 1992 that a car – not a truck – was the country’s top-selling vehicle. The cars we’re buying are more fuel-efficient. There is now a shortage of batteries for today’s hybrid cars. We’re taking mass transit and we’re driving less – Americans drove 11 billion fewer miles in March compared to a year earlier.”

SOLVENCY

Reduced emissions offset by more driving

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“Proponents of higher CAFE standards claim that that the standards will reduce the threat of global warming. Fuel-efficient cars do emit less carbon dioxide per mile traveled, but this effect will be diminished by the program’s stimulus to increase driving. Moreover, new vehicles constitute a miniscule source of overall carbon dioxide emissions.”

Fuel efficiency standards do not impact our dependence on foreign oil

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“Despite the CAFE program, oil imports currently account for 60 percent of U.S. oil consumption, as compared with 35 percent in 1975.4 Half of those imports, however, come from other Western Hemisphere nations, and our single largest foreign source of oil is Canada.5 America’s dependence on foreign oil is essentially determined not by the fuel economy of our cars, but by world oil prices. Our domestic oil sources are relatively high cost in nature.”

CAFÉ encourages a heavily weighted fleet of vehicles with poor fuel economy

Dr. Mark R. Jacobsen (Assistant Professor of Economics at University of California, Ph.D. in Economics from Stanford, Faculty Research Fellow at the National Bureau of Economic Research), April 2008, “Evaluating U.S. Fuel Economy Standards In a Model with Producer and Household Heterogeneity” University of California Department of Economics, <http://econ.ucsd.edu/~m3jacobs/Jacobsen_CAFE.pdf>

“The gradual effect of the standard on the used car fleet can be seen in the decomposition of fuel economy improvements among new and used cars. Interestingly, the used fleet will never fully reflect improvements in new car fleet fuel economy due to changing scrap rates. This is because higher prices for large vehicles, induced by their relative shortage under CAFE, result in lower scrap rates over time. This creates a used car fleet weighted more heavily toward large vehicles, and with a correspondingly low average fuel economy relative to new cars.”

DISADVANTAGES

A) Highway Fatalities

CAFÉ kills 1,000 a year and may be the deadliest regulatory program

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Compettitive Enterprise Institute http://cei.org/cei\_files/fm/active/0/EnvironmentalSource\_EnergyAuto.pdf

“Most important, the program’s fuel savings have imposed a human toll that proponents refuse to acknowledge: CAFE standards kill people. They cause new cars to be downsized— that is, to be made smaller and lighter. Smaller cars generally get more miles per gallon than larger cars, but they are also less crashworthy. The result is that the CAFE program has increased traffic fatalities by 1,000 or more deaths per year. Given that this program has been in effect for over a quarter of a century, the cumulative death toll may well make it the federal government’s deadliest regulatory program.”

Vehicle downsizing is one of the most effective means of improving fuel economy

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“Vehicle downsizing is one of the most effective means of increasing fuel economy. Downsized vehicles, however, are less crashworthy than similarly equipped large cars in practically every type of accident. As a result, the CAFÉ program increases highway fatalities. A 1989 Harvard–Brookings Institute study calculated that the CAFE program’s 500-pound downsizing effect on new cars caused a 14 to 27 percent increase in occupant fatalities—or 2,200 to 3,900 additional traffic deaths per year.1 More recently, a 2002 National Academy of Sciences study estimated that the program’s downsizing effect contributed to between 1,300 and 2,600 additional deaths per year.”

Fatalities increased with fuel economy

Ben Lieberman (Senior Policy Analyst at Heritage, Specialist in energy & environmental issues, J.D. from George Washington University, Certified Public Accountant) December 5, 2007, “The Compromise Energy Bill: Harmful Regulation, Not Affordable Energy” The Heritage Foundation Web Memo <https://www.policyarchive.org/bitstream/handle/10207/13165/wm_1721.pdf?sequence=1>

“Beyond costs, in order to meet the tough new CAFE standard, cars and trucks will need to be lighter, which makes them less safe in collisions. A National Academy of Sciences study concluded that vehicle downsizing costs 1,300 to 2,600 lives per year.2 A tougher fuel economy standard would likely add to the death toll from vehicle crashes.”

A/T Technology: Increased fuel efficiency standards will always result in downsizing weight

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“Proponents of higher CAFE standards argue that new technologies have replaced downsizing as means of enhancing fuel economy. The CAFE program, however, imposes a safety tradeoff on vehicles regardless of how technologically sophisticated they may be. Take the most high-tech car imaginable: if you then make it larger and heavier, it will be safer, but it will also be less fuel efficient. Because the CAFE program prevents such cars from being “upsized,” it continues to impose its lethal effect.”

B) Environment

CAFÉ keeps old cars on the road longer increasing air pollution

Sam Kazman (J.D. from New York at Buffalo, General Counsel at the CEI, and he has a record of testimony before congress), 2008, “Automobile Fuel Economy Standards” Competitive Enterprise Institute <http://cei.org/cei_files/fm/active/0/EnvironmentalSource_EnergyAuto.pdf>

“As for pollutants, all vehicles are subject to the same U.S. Environmental Protection Agency emissions standards in terms of allowable grams per mile. In this respect, cars with high fuel economy and cars with low fuel economy perform the same. More important, most vehicle emissions come not from new cars but from older ones. Because the CAFE program results in these cars being kept on the road even longer, the result may well be more—rather than less— air pollution.”

C) Economy

Domestic firms will loose profit with fuel economy hikes while foreign firms profit

Dr. Mark R. Jacobsen (Assistant Professor of Economics at University of California, Ph.D. in Economics from Stanford, Faculty Research Fellow at the National Bureau of Economic Research), April 2008, “Evaluating U.S. Fuel Economy Standards In a Model with Producer and Household Heterogeneity” University of California Department of Economics, <http://econ.ucsd.edu/~m3jacobs/Jacobsen_CAFE.pdf>

“Second, I find that heterogeneity among firms causes the profit impacts of an increment in CAFE to fall almost exclusively on domestic firms. I also find that equilibrium responses, driven by firm heterogeneity, are responsible for the relatively small effects of the policy on final gasoline consumption. The policy impacts are divided along the lines I established in Section 2. Ford, GM, and Chrysler were shown to be constrained by the regulation: when the stringency of the standard is increased they alter prices to remain in compliance and bear substantial losses in profit. The group of firms who are unconstrained by the standard, which includes Honda and Toyota, are able to increase profits 3 percent by increasing their market share in classes of vehicles that are larger, heavier, or more powerful. A set of competing effects enters for the group of high-end European firms that pay fines for violation. These are discussed in more detail above, but I find that they, too, experience slight increases in profit by taking advantage of increased residual demand for low fuel economy vehicles.”

American firms would generally produce cars that fall below CAFÉ standards

Dr. Mark R. Jacobsen (Assistant Professor of Economics at University of California, Ph.D. in Economics from Stanford, Faculty Research Fellow at the National Bureau of Economic Research), April 2008, “Evaluating U.S. Fuel Economy Standards In a Model with Producer and Household Heterogeneity” University of California Department of Economics, <http://econ.ucsd.edu/~m3jacobs/Jacobsen_CAFE.pdf>

“The third, and arguably most important, category includes firms that are constrained by CAFE. These are firms that, in the absence of regulation, would choose to produce a fleet that falls below the CAFE standard, but alter their fleet such that it just meets the standard when regulation is introduced. Implicitly, this means that the cost of the penalty associated with violating the standard is larger than the forgone profits from compliance. I show below that the big three domestic auto producers, Ford, GM, and Chrysler, fall into this category. These firms will differ from the other groups in their response to changes in the regulation, acting in accordance with a set of shadow costs related to the CAFE constraint.”

Increase car prices under fuel economy hikes will fall disproportionately on the poor

Dr. Mark R. Jacobsen (Assistant Professor of Economics at University of California, Ph.D. in Economics from Stanford, Faculty Research Fellow at the National Bureau of Economic Research), April 2008, “Evaluating U.S. Fuel Economy Standards In a Model with Producer and Household Heterogeneity” University of California Department of Economics, <http://econ.ucsd.edu/~m3jacobs/Jacobsen_CAFE.pdf>

“Third, I conclude that the long run effects of increments in fuel economy standards are not progressively distributed among income groups as might be expected. A common argument maintains that since CAFE affects new car producers, it will have a greater impact on wealthier households who purchase a disproportionate share of new vehicles. By including used car markets and simulating effects through time, however, I find that increased prices and changes in fleet composition for used cars lead to substantial welfare losses for low income households. Specifically, in the tenth year of the policy low income households bear about three times more burden, relative to income, than the wealthiest group.”

Stricter CAFÉ standards will require manufactures to spend more to produce vehicles (this will be passed to consumers)

Dr. John Heywood (Professor of Mechanical Engineering at MIT, Ph.D. from MIT, member of the Energy Laboratory Internal Advisory Committee at MIT), May 23, 2007 “Market can fuel energy solutions” The Boston Globe, <http://www.boston.com/news/globe/editorial_opinion/oped/articles/2007/05/23/market_can_fuel_energy_solutions/>

“Breaking this trend now through stricter CAFE standards will not be free. Tighter standards would require manufacturers to increase spending to reduce vehicle fuel consumption. The question is whether consumers are willing to pay more for that. Even at today's gasoline prices, there is little indication that consumers are demonstrating a sustained preference for fuel economy over vehicle performance.”

Increased vehicle costs will outweigh energy savings through higher MPG

Ben Lieberman (Senior Policy Analyst at Heritage, Specialist in energy & environmental issues, J.D. from George Washington University, Certified Public Accountant) December 5, 2007, “The Compromise Energy Bill: Harmful Regulation, Not Affordable Energy” The Heritage Foundation Web Memo <https://www.policyarchive.org/bitstream/handle/10207/13165/wm_1721.pdf?sequence=1>

“In theory, consumers can save at the pump by being made to switch to more efficient vehicles, and at the same time reduce greenhouse gas emissions and oil imports. But doing so will raise sticker prices, and the costs could more than negate the energy savings.”

CON: CAP AND TRADE

By Nicholas Bruno

INHERENCY:

President Obama supports cap and trade program

[Mondaq Business Briefing](http://www.articlearchives.com/mondaq-business-briefing/2290213-1.html) (global coverage of all legal analysis from reputable firms), 1 December 2008, President-Elect Barack Obama's Energy and Environmental Policies, <http://www.articlearchives.com/energy-utilities/renewable-energy-solar/2300100-1.html>

The Obama-Biden Energy Plan mandates an 80% reduction in greenhouse gas emissions by 2050. It also requires the country to reach 1990 emission levels by 2020. Obama supports a market-based, economy-wide cap-and-trade program with 100% of pollution credits distributed through auctions.

SOLVENCY

Waxman-Markey will only have minimal impacts on global temperatures because other country still emit CO2

Ben Lieberman (Senior Policy Analyst for Energy and Environment at The Heritage Foundation), 23 June 2009, “The Waxman-Markey Global Warming Bill: Is the Economic Pain Justified by the Environmental Gain?”, The Heritage Foundation, <http://www.heritage.org/Research/EnergyandEnvironment/tst062309a.cfm>

But even assuming global warming is a problem, how much of it is being alleviated by Waxman Markey? Proponents of this cap-and-trade bill scare us with the usual gloom and doom litany: sea level rise, more storms, more disease. But even if one accepts that litany, how much of it will go away thanks to Waxman-Markey? Proponents of the bill never really address this question, and for good reason. Globally speaking, Waxman-Markey would have a trivial impact on future concentrations of greenhouse gases. The bill only binds the U.S., and the trends in the rest of the world show clearly that emissions are rising. China alone now out-emits the U.S., and it hasn't just inched ahead, it has raced ahead with emissions rising six times faster than ours. A similar story is true of other rapidly developing nations.

China will not necessarily follow the US lead

Ben Lieberman (Senior Policy Analyst for Energy and Environment at The Heritage Foundation), 23 June 2009, “The Waxman-Markey Global Warming Bill: Is the Economic Pain Justified by the Environmental Gain?”, The Heritage Foundation, <http://www.heritage.org/Research/EnergyandEnvironment/tst062309a.cfm>

The notion that if we bind ourselves first that China will be more inclined to follow our lead is most likely the opposite of the truth, the opposite of what usually happens in international negotiations. I should also add that, until the recent recession came along, many Western European and other nations that had signed on to the Kyoto Protocol global warming treaty had been seeing their emissions rise as well.

Only 0.1-0.2 C reduction in temperature by 2100 by Waxman-Markey

Ben Lieberman (Senior Policy Analyst for Energy and Environment at The Heritage Foundation), 23 June 2009, “The Waxman-Markey Global Warming Bill: Is the Economic Pain Justified by the Environmental Gain?”, The Heritage Foundation, <http://www.heritage.org/Research/EnergyandEnvironment/tst062309a.cfm>

Taking all this into account, climate scientist Chip Knappenberger of New Hope Environmental Services, in a series of blog posts for [www.masterresource.org](http://www.masterresource.org/" \t "_blank) that was turned into a paper for the Science and Public Policy Institute, calculates that Waxman-Markey would reduce the earth's future temperature by 0.1 to 0.2 degree C by 2100, an amount too small to even notice. And I have yet to see a decent refutation of the assertion that the temperature impact would be inconsequential.

Historical Precedent: emissions have increased faster in countries with cap-and-trade

Ben Lieberman (Senior Policy Analyst for Energy and Environment at The Heritage Foundation), 23 June 2009, “The Waxman-Markey Global Warming Bill: Is the Economic Pain Justified by the Environmental Gain?”, The Heritage Foundation, <http://www.heritage.org/Research/EnergyandEnvironment/tst062309a.cfm>

We also need to look at how well carbon cap and trade has fared. Here Gabriel Calzada's analysis of Spain, which like the rest of Western Europe has had a cap-and-trade program in place since 2005, is extremely valuable. Spain, as with most of the rest of Western Europe, has higher unemployment and energy costs than America, and yet has seen its carbon dioxide emissions increasing anyway. In fact, European emissions have been rising more quickly than those in the U.S. That's right: Many nations with cap and trade have had faster rates of emissions growth than the U.S. has had without it.

DISADVANTAGES

A) Oil Refineries

Oil Refineries do not have enough CO2 allowances under cap-and-trade plan

Tom Doggett, 9 July 2009, “Shell says U.S. oil refiners need more CO2 permits”, International Business Times, <http://www.ibtimes.com/articles/20090709/shell-sayss-oil-refiners-need-more-co2-permits.htm>

Major oil company Royal Dutch Shell urged the U.S. Senate on Wednesday to give oil refiners a bigger share of free pollution permits under a cap-and-trade plan to fight global warming than the House of Representatives provided in its climate change legislation. U.S. oil refineries received only 2 percent of the allowances, or pollution permits, in the House bill passed last month, even though they account for much more of the total carbon dioxide emissions produced by the United States.

Oil refining sector’s allowances less than other sectors

Tom Doggett, 9 July 2009, “Shell says U.S. oil refiners need more CO2 permits”, International Business Times, <http://www.ibtimes.com/articles/20090709/shell-sayss-oil-refiners-need-more-co2-permits.htm>

"Shell is particularly concerned that the current allowance value allocated to the U.S. refining sector in the (House) bill does not cover direct emissions as fully as other sectors are covered," Steven Fries, the company's chief economist, said at a Senate Foreign Relations subcommittee hearing on climate change.

Impact: Waxman-Markety will force some refineries to close, increase dependence on foreign oil, and raise consumer prices

Ben Casselman and Susan Daker, May 21, 2009, “Oil Refiners Predict Higher Gas Prices,” Wall Street Journal, <http://online.wsj.com/article/SB124286463332441389.html> [brackets added]

“Refiners, already under pressure as the recession cuts U.S. demand for gasoline, say the bill [Waxman-Markey] will raise prices for consumers, force some refineries to close and increase foreign imports from countries that don't have to abide similar rules. The added cost of buying allowances would likely be passed on to consumers in the form of higher gasoline prices, which could rise 28 cents to 54 cents a gallon by 2030, according to analysts at the National Commission on Energy Policy, a Washington-based bipartisan group.”

B) Economy

Waxman-Markey will cost US economy $161 billion in 2020

Wall Street Journal, 26 June 2009, “The Cap and Tax Fiction” ,<http://online.wsj.com/article/SB124588837560750781.html>

When the Heritage Foundation did its analysis of Waxman-Markey, it broadly compared the economy with and without the carbon tax. Under this more comprehensive scenario, it found Waxman-Markey would cost the economy $161 billion in 2020, which is $1,870 for a family of four. As the bill's restrictions kick in, that number rises to $6,800 for a family of four by 2035.

Average family in Britain is paying $1,300 a year from green taxes on carbon-cutting programs

Wall Street Journal, 26 June 2009, “The Cap and Tax Fiction” ,<http://online.wsj.com/article/SB124588837560750781.html>

The reality is that cost estimates for climate legislation are as unreliable as the models predicting climate change. What comes out of the computer is a function of what politicians type in. A better indicator might be what other countries are already experiencing. Britain's Taxpayer Alliance estimates the average family there is paying nearly $1,300 a year in green taxes for carbon-cutting programs in effect only a few years.

Three studies found devastating economic effects of cap and trade

Nicolas D. Loris (Research Assistant in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation), 20 July 2009, “Cap and Trade: A Comparison of Cost Estimates”, The Heritage Foundation, <http://www.heritage.org/research/energyandenvironment/wm2550.cfm>

The U.S House of Representatives passed, by a narrow margin, a massive energy bill that most notably includes a cap-and-trade program to reduce carbon dioxide emissions and allegedly curb global warming. A number of groups, including The Heritage Foundation, have estimated the costs of the bill introduced by Representatives Henry Waxman (D-CA) and Ed Markey (D-MA). The Heritage Foundation, the Brookings Institution and the National Black Chamber of Commerce all found that the bill will have devastating economic impacts. All three studies project significant losses in employment and gross domestic product (GDP), the chief measure of economic activity. The Congressional Budget Office (CBO) and the Environmental Protection Agency (EPA) estimate significantly lower costs; however, these two only partially analyze microeconomic "cash only" effects, not the full macroeconomic impacts of cap and trade reported in the other studies.

Waxman-Markey will result in loss in personal consumption of $1-2 trillion

Nicolas D. Loris (Research Assistant in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation), 20 July 2009, “Cap and Trade: A Comparison of Cost Estimates”, The Heritage Foundation, <http://www.heritage.org/research/energyandenvironment/wm2550.cfm>

**The Brookings analysis of the Waxman-Markey bill finds** loss in personal consumption of $1-2 trillion in present value. The more stringent carbon targets in subsequent years produce even higher costs. Brookings projects that an additional 8 percent cut in carbon dioxide emissions increases costs 45 percent. GDP in the United States would be lower by 2.5 percent in 2050, and unemployment would be 0.5 percent higher (1.7 million fewer jobs[[2]](http://www.heritage.org/research/energyandenvironment/wm2550.cfm" \l "_ftn2" \o ")) in the first decade below the baseline or without cap and trade.

2.3-2.7 million fewer jobs through 2030 because of Waxman-Markey

Nicolas D. Loris (Research Assistant in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation), 20 July 2009, “Cap and Trade: A Comparison of Cost Estimates”, The Heritage Foundation, <http://www.heritage.org/research/energyandenvironment/wm2550.cfm>

The National Black Chamber of Commerce found the following adverse effects from Waxman-Markey: In 2015, GDP would be 1 percent ($170 billon) below the "no cap-and-trade bill" baseline. In 2030, GDP will be 1.3 percent ($350 billon) below the baseline, and by 2050 the study projects a reduction in GDP of 1.5 percent ($730 billion). The study also projects higher unemployment of 2.3-2.7 million jobs in each year of the policy through 2030--after accounting for "green job" creation.

C) Higher utility prices

Cap and Trade will raise power costs ($27 a month extra for consumers)

Jay Yarow (covers green tech for The Business Insider), 12 May 2009, “Cap And Trade Will Raise Electric Bills By $27 A Month”, The Business Insider, <http://www.businessinsider.com/cap-and-trade-will-raise-electric-bills-by-27-a-month-2009-5>

The [Electricity Reliability Council of Texas](http://www.ercot.com/) ran an analysis of the likely effects from a cap and trade program, on behalf of the Public Utility Commission of Texas. The results of their analysis aren't very promising for cap and trade advocates or consumers. For its reference case, ERCOT found that reducing carbon emissions to 2005 levels by 2013, a carbon permit will have to cost between $40 and $60 a ton. That means wholesale power costs will increase $10 billion and a typical consumer pays $27 a month extra.

Cap-and-trade could raise utility rates by up to 63%

Rick Romell (Reporter at the Journal Sentinel), 1 April 2009, “Cap-and-trade program would raise electricity prices, utility study says”, Journal Sentinel, <http://www.jsonline.com/business/42281387.html>

Proposed federal efforts to reduce greenhouse gas emissions through "cap-and-trade" programs would raise electricity prices for Wisconsin customers, a group of Midwestern utilities said Wednesday. Under one scenario, rates could jump by as much as 63% from 2012 to 2030, said Midwest Consumer Utilities, a group that includes Madison Gas and Electric Co. and WPPI Energy, which serves 50 customer-owned electric utilities providing power in Wisconsin, Upper Michigan and Iowa.

Cap-and-Trade can result in $609 million to $2.1 billion more for utilities in Wisconsin in 2012

Rick Romell (Reporter at the Journal Sentinel), 1 April 2009, “Cap-and-trade program would raise electricity prices, utility study says”, Journal Sentinel, <http://www.jsonline.com/business/42281387.html>

Auction-based cap-and-trade programs would cost Wisconsin consumers the most, Midwest Consumer Utilities says. If emission allowances were sold through auctions and none of the money were used to reduce utility rates, prices here could rise by 19% to 63% from 2012 through 2030, according to the study. That would mean extra payments by Wisconsin customers totaling $609 million to $2.1 billion in 2012 alone. By 2030, the study says, the annual extra costs could total $5.7 billion.

D) Masking

Cap-and-trade undermines key requirements for long-term solutions to innovation

Ben Lieberman (Senior Policy Analyst for Energy and Environment at The Heritage Foundation), 23 June 2009, “The Waxman-Markey Global Warming Bill: Is the Economic Pain Justified by the Environmental Gain?”, The Heritage Foundation, <http://www.heritage.org/Research/EnergyandEnvironment/tst062309a.cfm>

Any sensible approach to global warming has to center on technological innovation as it applies to energy production and use. Innovation is really what we want. And we know from long experience that free economies innovate better than centrally planned ones. Cap and trade introduces a significant element of central planning and thus stifles innovation. We also know that strong economies innovate better than weak ones, but cap and trade weakens economies. Stable economies innovate better than unstable ones, especially for something like energy where the investments are great and the payoffs play out over decades. But cap and trade adds instability, and indeed in Europe we have seen wild swings in the price of carbon allowances, and companies less interested in long-term investment and more interested in short-term gaming of the system.

CON: CLEAN COAL

By Nicholas Townes

SOLVENCY

Carbon capture and sequestration is decades away and the switch would cost trillions

Ben Elgin, June 19, 2008 “The Dirty Truth About Clean Coal,” Business Week, <http://www.businessweek.com/magazine/content/08_26/b4090055452749.htm>

“Corporations and the federal government have tried for years to accomplish "carbon capture and sequestration." So far they haven't had much luck. The method is widely viewed as being decades away from commercial viability. Even then, the cost could be prohibitive: by a conservative estimate, several trillion dollars to switch to clean coal in the U.S. alone.”

For Carbon Capture and Storage to be commercially viable, 25 years and $20 billion in R&D are required

[Fred Pearce](http://www.newscientist.com/search?rbauthors=Fred+Pearce), March 2008, “Can coal live up to its clean promise?” New Scientist, <http://www.newscientist.com/article/mg19726491.500-can-coal-live-up-to-its-clean-promise.html> [brackets added]

“A study by the Massachusetts Institute of Technology called The Future of Coal, published last year, suggests that the first commercial [Carbon Capture and Storage] CCS plants won't be on stream until 2030 at the earliest. Thomas Kuhn of the Edison Electric Institute, which represents most US power generators, half of whose fuel is coal, takes a similar line. In September, he told a House Select Committee that commercial deployment of CCS for emissions from large coal-burning power stations will require 25 years of R&D and cost about $20 billion.”

Carbon Capture and Storage cannot be deployed fast enough to prevent climate change

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“[Carbon Capture and Storage] CCS cannot deliver in time to avoid dangerous climate change. The earliest possibility for deployment of CCS at utility scale is not expected before 2030.1 To avoid the worst impacts of climate change, global greenhouse gas emissions have to start falling after 2015, just seven years away.”

Technology breakthroughs still needed to make clean coal technologically feasible

Sarah Lozanova (MBA in sustainable management from the Presidio School of Management and co-founder of Trees Across the Miles, an urban reforestation initiative)**,** October 9th, 2008 “[5 Dirty Aspects of “Clean” Coal](http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/)”, Clean Technica, <http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/>

“[A study](http://cleantechnica.com/2008/08/22/new-study-says-commercial-carbon-capture-unlikely-by-2020/#more-923) from Australian energy consultancy ACIL Talisman states that [Carbon Capture and Storage] CCS will not be available in the short-term to generate electricity with low carbon emissions and that technology breakthroughs are still needed to make this technology feasible. The study does however find that concentrated solar, geothermal, and wind energy already are or will be in commercial use by 2020.”

No economical way to capture and sequester carbon under the status quo

[Bryan Walsh](javascript:void(0)), Jan. 10, 2009, “Exposing the Myth of Clean Coal Power,” Time Magazine, <http://www.time.com/time/health/article/0,8599,1870599,00.html>

The "clean coal" campaign was always more PR than reality — currently there's no economical way to capture and sequester carbon emissions from coal, and many experts doubt there ever will be.

No commercial scale example of clean coal technology exists

[Sarah Lozanova](http://greenoptions.com/author/sarahlozanova) (MBA in sustainable management from the Presidio School of Management and co-founder of Trees Across the Miles, an urban reforestation initiative)**,** October 9th, 2008 “5 Dirty Aspects of “Clean” Coal”, Clean Technica, <http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/>

No commercial scale examples exist. The FutureGen plant in Illinois was to be the showcase for clean coal technology. A total of $50 million was spent, $40 million of which was federal funded. The price tag for the [$1.8 billion plant](http://www.nytimes.com/2008/05/30/business/30coal.html?_r=1&ref=todayspaper&pagewanted=all&oref=slogin) had nearly doubled. The government pulled support for the project due to concern that costs would continue to climb.”

30% more energy (coal) is required to pump carbon underground

[Sarah Lozanova](http://greenoptions.com/author/sarahlozanova) (MBA in sustainable management from the Presidio School of Management and co-founder of Trees Across the Miles, an urban reforestation initiative), October 9th, 2008 “[5 Dirty Aspects of “Clean” Coal](http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/)”, Clean Technica, <http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/>

“[30% more energy](http://www.sciencenews.org/view/generic/id/35181/title/Carbon_sequestration_frustration) is required to pump carbon underground for carbon capture and sequestration (CCS). The captured carbon dioxide has to be compressed to 100 times the atmospheric pressure, transferred to an underground storage reservoir and then pumped in the ground. All of this requires large amounts of energy, thus the coal plant must burn an additional 30% more coal to generate the same amount of usable electricity.”

CCS would use 10-40% more energy and 90% more freshwater to generate electricity

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“Capturing and storing carbon uses lots of energy, anywhere from 10-40% of a power station’s capacity.16 An energy penalty of just 20% would require the construction of an extra power station for every four built.17 These reductions in efficiency will require more coal to be mined, transported, and burned, for a power station to produce the same amount of energy as it did without CCS. CCS will also use more precious resources. Power stations with capture technology will need 90% more freshwater than those without. This will worsen water shortages, already aggravated by climate change.18 Overall, wide-scale adoption of CCS is expected to erase the efficiency gains of the last 50 years, and increase resource consumption by one third.19”

6,000 CCS project would need to be built and its unclear whether there are enough storage sites

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“The IEA estimates that for [Carbon Capture and Storage] CCS to deliver any meaningful climate mitigation effects by 2050, 6000 projects each injecting a million tonnes of CO2 per year into the ground would be required.20 At the moment, it is not clear that it will be technically feasible to capture and bury this much carbon, i.e. whether there are enough storage sites, or that they will be located close enough to power plants. Transport of CO2 over distances greater than 100 kilometres is likely to be prohibitively expensive.21

DISADVANTAGES

A) Deaths

Coal mining and coal use kill thousands

Jeff Biggers, March 2, 2008, “Clean Coal? Don’t Try to Shovel That,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/29/AR2008022903390.html>

“Coal ain't clean. Coal is deadly. More than 104,000 miners in America have died in coal mines since 1900. Twice as many have died from black lung disease. Dangerous pollutants, including mercury, filter into our air and water. The injuries and deaths caused by overburdened coal trucks are innumerable.”

B) Ecosystems

60% of coal comes from strip mines

Jeff Biggers, March 2, 2008, “Clean Coal? Don’t Try to Shovel That,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/29/AR2008022903390.html>

“Above ground, millions of acres across 36 states have been dynamited, torn and churned into bits by strip mining in the last 150 years. More than 60 percent of all coal mined in the United States today, in fact, comes from strip mines.”

Strip mining has produced environmental devastation in Appalachia

Jeff Biggers, March 2, 2008, “Clean Coal? Don’t Try to Shovel That,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/29/AR2008022903390.html>

“In the "United States of Coal," Appalachia has become the poster child for strip mining's worst depravations, which come in the form of mountaintop removal. An estimated 750,000 to 1 million acres of hardwood forests, a thousand miles of waterways and more than 470 mountains and their surrounding communities -- an area the size of Delaware -- have been erased from the southeastern mountain range in the last two decades. Thousands of tons of explosives -- the equivalent of several Hiroshima atomic bombs -- are set off in Appalachian communities every year.”

Deaths, Water pollution, and Destroyed Ecosystems

[Sarah Lozanova](http://greenoptions.com/author/sarahlozanova) (MBA in sustainable management from the Presidio School of Management and co-founder of Trees Across the Miles, an urban reforestation initiative), October 9th, 2008 “[5 Dirty Aspects of “Clean” Coal](http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/)”, Clean Technica, <http://cleantechnica.com/2008/10/09/5-dirty-aspects-of-clean-coal/>

“The US averages [30 coal mining deaths](http://www.minesandcommunities.org/article.php?a=1155) annually, while China averages a staggering 8,000. Mountaintop removal mining, a method that is common in Appalachia, destroys ecosystems and has permanently buried over [1,200 miles of streams](http://www.sierraclub.org/MTR/). Coal Mining causes [water pollution](http://www.usgs.gov/newsroom/article.asp?ID=1597) and lowers the quality of drinking water in neighboring communities. Unfortunately, clean coal technology does not address the many negative impacts of coal mining and could even require large amounts of coal to be mined because of the additional energy needed to sequester carbon emissions.”

C) Earthquakes

Carbon sequestration can cause earthquakes

Ben Elgin, June 19, 2008 “The Dirty Truth About Clean Coal,” Business Week, <http://www.businessweek.com/magazine/content/08_26/b4090055452749.htm>

“Then there are the safety questions. One large, coal-fired plant generates the equivalent of 3 billion barrels of CO2 over a 60-year lifetime. That would require a space the size of a major oil field to contain. The pressure could cause leaks or earthquakes, says Curt M. White, who ran the U.S. Energy Dept.'s carbon sequestration group until 2005 and served as an adviser until earlier this year. ‘Red flags should be going up everywhere when you talk about this amount of liquid being put underground.’"

D) Cancer

Coal remains a highly polluting source of electricity possibly leading to cancer

Ben Elgin, June 19, 2008 “The Dirty Truth About Clean Coal,” Business Week, <http://www.businessweek.com/magazine/content/08_26/b4090055452749.htm>

“After Kingston, coal may be considered many things — but it's hard to see how "clean" could be one of them. That's because, even putting aside climate change–accelerating carbon dioxide, coal remains a highly polluting source of electricity that has serious impacts on human health, especially among those who live near major plants. Take coal ash, a solid byproduct of burned coal. A draft report last year by the Environmental Protection Agency (EPA) found that the ash contains significant levels of carcinogens, and that the concentration of arsenic in ash, should it contaminate drinking water, could increase cancer risks by several hundred times. A 2006 report by the National Research Council had similar findings. "This is hazardous waste, and it should be classified as such," says Thomas Burke, an environmental risk expert at Johns Hopkins University who has studied the health effects of coal ash.”

E) Costs

CCS would double plant prices and increase the cost of electricity 21-91%

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“[Carbon Capture and Storage] CCS is expensive. It could lead to a doubling of plant costs, and an electricity price increase of 21-91%.4 Money spent on CCS will divert investments away from sustainable solutions to climate change.”

F) Leaks

Risk leak as long as CO2 is in geological sites; a 1% leakage rate would cancel all benefits

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“As long as CO2 is in geological sites, there is a risk of leakage. While it is not currently possible to quantify the exact risks, any CO2 release has the potential to impact the surrounding environment; air, groundwater or soil. Continuous leakage, even at rates as low as 1%, could negate climate mitigation efforts.22 Remediation may be possible for CO2 leaks, but there is no track record or cost estimates for these measures.23”

Impact: Empirical example- CO2 leaks killed thousands in Cameroon in 1986

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“A natural example of the danger of CO2 leakage occurred at Lake Nyos, Cameroon in 1986. Following a volcanic eruption, large quantities of CO2 that had accumulated on the bottom of the lake were suddenly release, killing 1700 people and thousands of cattle over a range of 25 km.24”

G) Masking

Spending money on CSS diverts funding from superior renewable energy

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“Spending money on [Carbon Capture and Storage] CSS is diverting urgent funding away from renewable energy solutions for the climate crisis. Even assuming that at some stage carbon capture becomes technically feasible, commercially viable, capable of long-term storage and environmentally safe, it would still only have a limited impact and would come at a high cost. In contrast, as Greenpeace’s Futu[r]e Investment report shows, investing in a renewable energy future would save US$180 billion annually and cut CO2 emissions in half by 2050.31”

Investing in highly speculative technology such as CCS risks locking the world in inevitable climate change

Emily Rochon (Lead Author), May 2008, “False Hope: Why Carbon Capture and Storage Won’t Save the Climate,” Greenpeace, <http://www.greenpeace.org/raw/content/international/press/reports/false-hope.pdf> (brackets added)

“Investment in [Carbon Capture and Storage] CCS risks locking the world into an energy future that fails to save the climate. Those technologies with the greatest potential to provide energy security and reduce emissions, and to provide renewable energy and energy efficiency, need to be prioritised. Greenpeace’s Energy [R]evolution blueprint shows how renewable energy, combined with greater energy efficiency, can cut global CO2 emissions by almost 50%, and deliver half the world’s energy needs by 2050.40 The renewable energy market is booming; in 2007, global annual investment in renewables exceeded US$100 billion.41 Decades of technological progress have seen renewable energy technologies such as wind turbines, solar photovoltaic panels, biomass power plants and solar thermal collectors move steadily into the mainstream. The same climate decision-makers who were sceptical about CCS believed far more in the ability of renewable technologies to deliver reductions in greenhouse gas emissions: 74% expressed confidence in solar hot water, 62% in offshore wind farms, and 60% in onshore wind farms.42 Many nations have recognised the potential of these true climate solutions and are pressing ahead with ambitious plans for energy revolutions within their borders. New Zealand plans to achieve carbon neutrality by midcentury. Renewable energy and energy efficiency, not CCS, are leading the way. New Zealand already obtains 70% of its electricity from renewable resources and aims to increase it to 90% by 2025.43 In Germany, renewable energy use has increased 300% in the past 10 years. In the US, over 5,200 megawatts (MW) of wind energy were installed in 2007, accounting for 30% of new power installed that year; an increase of 45% in one year.44 The urgency of the climate crisis means solutions must be ready for large-scale deployment in the short-term. CCS simply cannot deliver in time. The technology is highly speculative, risky and unlikely to be technically feasible in the next twenty years. Letting CCS be used as a smokescreen for building new coal-fired power stations is unacceptable and irresponsible. “Capture ready” coal plants pose a significant threat to the climate.”

CON: CLIMATE CHANGE: CO2 HARMFUL

By Matthew Baker

Four problems with CO2 alarmism

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“Radiation theory thus accepted, there remain four problems with turning an increase in atmospheric carbon dioxide into global warming alarmism. First, the relationship between increasing carbon dioxide and increasing temperature is logarithmic, which lessens the forcing effect of each successive increment of carbon dioxide (Figure 4). Second, in increasing from perhaps 280 ppm in pre-industrial times to 380 ppm now, carbon dioxide should already have produced 75 per cent of the theoretical warming of ~1°C that would be caused by a doubling to 560 ppm (Lindzen, 2006); as we move from 380 to 560 ppm, at most a trivial few tenths of a degree of warming remain in the system. Claims of greater warming, such as those of the IPCC (2001), are based upon arbitrary adjustments to the lambda value in the Stefan-Boltzmann equation, and untested assumptions about positive feedbacks from water vapour. Third, the ice core data show conclusively that, during natural climate cycling, changes in temperature precede changes in carbon dioxide by an average 800 years or so (Fischer *et al*, 1999; Indermuhle *et al*, 2000; Mudelsee, 2001; Caillon *et al*, 2003); similarly, temperature change precedes carbon dioxide change, in this case by five months, during annual seasonal cycling (Kuo, Lindberg and Thomson, 1990). And, fourth, Boucot, Xu and Scotese (2004) have shown that over the Phanerozoic little relationship exists between the atmospheric concentration of carbon dioxide and necessary warming, including that extensive glaciation occurred between 444 and 353 million years ago when atmospheric carbon dioxide was up to 17 times higher than today (Chumakov, 2004).”

Warmer temperatures have historically preceded higher levels of CO2 by 800 years

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

Al Gore likes to display graphs of temperature and CO2 concentrations over the past million years or so4, showing that when CO2 rises, the temperature also rises. Doesn’t this prove that the temperature is driven by CO2? Absolutely not! If you look carefully at these records, you find that first the temperature goes up, and then the CO2 concentration of the atmosphere goes up. There is a delay between a temperature increase and a CO2 increase of about 800 years. This casts serious doubt on CO2 as a climate driver because of the fundamental concept of causality. A cause must precede its effect.

CO2 is not a pollutant or a poison

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“CO2 is not a pollutant and it is not a poison and we should not corrupt the English language by depriving “pollutant” and “poison” of their original meaning. Our exhaled breath contains about 4% CO2. That is 40,000 parts per million, or about 100 times the current atmospheric concentration. CO2 is absolutely essential for life on earth.5 Commercial greenhouse operators often use CO2 as a fertilizer to improve the health and growth rate of their plants. Plants, and our own primate ancestors evolved when the levels of atmospheric CO2 were about 1000 ppm, a level that we will probably not reach by burning fossil fuels, and far above our current level of about 380 ppm. We try to keep CO2 levels in our US Navy submarines no higher than 8,000 parts per million, about 20 time current atmospheric levels. Few adverse effects are observed at even higher levels.”

Increased atmospheric levels of CO2 play no small part in the green revolution

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“We are all aware that “the green revolution” has increased crop yields around the world. Part of this wonderful development is due to improved crop varieties, better use of mineral fertilizers, herbicides, etc. But no small part of the yield improvement has come from increased atmospheric levels of CO2.”

CO2 is not causing global warming: warming began in 1800 before the widespread use of fossil fuel

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“But the climate is warming and CO2 is increasing. Doesn’t this prove that CO2 is causing global warming through the greenhouse effect? No, the current warming period began about 1800 at the end of the little ice age, long before there was an appreciable increase of CO2. There have been similar and even larger warmings several times in the 10,000 years since the end of the last ice age. These earlier warmings clearly had nothing to do with the combustion of fossil fuels. The current warming also seems to be due mostly to natural causes, not to increasing levels of carbon dioxide. Over the past ten years there has been no global warming, and in fact a slight cooling.2 This is not at all what was predicted by the IPCC models.”

CON: CLIMATE CHANGE: EXISTENCE OF GLOBAL WARMING

By Matthew Baker

No Scientific Consensus on Global Warming

Christopher Booker (Columnist at the Telegraph), 27 December 2008, “2008 was the year man-made global warming was disproved”, The Telegraph, <http://www.telegraph.co.uk/comment/columnists/christopherbooker/3982101/2008-was-the-year-man-made-global-warming-was-disproved.html>

Secondly, 2008 was the year when any pretence that there was a "scientific consensus" in favour of man-made global warming collapsed. At long last, as in the Manhattan Declaration last March, hundreds of proper scientists, including many of the world's most eminent climate experts, have been rallying to pour scorn on that "consensus" which was only a politically engineered artefact, based on ever more blatantly manipulated data and computer models programmed to produce no more than convenient fictions.

Temperatures are dropping all over the world – canceling most of the net rise in 20th century

Christopher Booker (Columnist at the Telegraph), 27 December 2008, “2008 was the year man-made global warming was disproved”, The Telegraph, <http://www.telegraph.co.uk/comment/columnists/christopherbooker/3982101/2008-was-the-year-man-made-global-warming-was-disproved.html>

First, all over the world, temperatures have been dropping in a way wholly unpredicted by all those computer models which have been used as the main drivers of the scare. Last winter, as temperatures plummeted, many parts of the world had snowfalls on a scale not seen for decades. This winter, with the whole of Canada and half the US under snow, looks likely to be even worse. After several years flatlining, global temperatures have dropped sharply enough to cancel out much of their net rise in the 20th century.

Corrected for volcanic cooling and El Nino the best data set (MSU) shows no significant warming

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“Accepting the 1860 - 2006 temperature record used by the IPCC (2007; Climate Research Unit, University of East Anglia) as a best measure, we find that there has been no significant increase in surface global temperature since the peak El Nino year of 1998 (Figure 8). This result is confirmed by the two most reliable records of average tropospheric temperature, drawn from weather balloon radiosondes (since 1958) and satellite-mounted microwave sounding units (MSU; since 1979). Of all these datasets, the MSU record is accepted to be the most accurate and globally representative. Once the effects of El Nino warmings and volcanic coolings are allowed for, this record shows no significant warming since its inception in 1979 (Gray, 2006) (Figure 9). This conclusion is robust.”

No available dataset shows significant warming

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“Though several other global temperature datasets exist, and though the MSU record has been subject to repeated corrections in interpretation, none of the available datasets document significant recent greenhouse warming.”

Ground temperature upswings of 1 degree C may not exceed the true margin of error

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“One is forced to the conclusion that – despite their preeminence in the public debate, and despite the laborious statistical analysis involved in compiling them – the historic temperature records reconstructed from ground thermometer data are of little value. Changes of less than 1°C/century displayed on such curves may not exceed the true error bars of the average temperature estimates.”

Sediment cores, ice cores and tree rings are of the most value and show no untoward warming

Therefore, the climate records that are of most value for estimating 20th century climate change in true context are those from high-quality proxies such as sediment cores, ice cores or tree rings. Many such proxies show no untoward warming at the end of the 20th century, and that they usually represent local or regional rather than global climate change is no reason to discount them.”

Five flaws in the ground temperature measures from the IPCC

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“First, the temperature measurement sites are located non-randomly, more than 90 per cent being on land despite about 70 per cent of the earth’s surface being represented by ocean. Second, over time many of the measurement sites have experienced changes in their surroundings that impact on local temperature (eg new buildings, trees cut down or planted, ageing paint on sun enclosures), introducing a warming bias into the measurements; studies suggest that both urban heat island and rural land-clearing effects have a material influence (Christy *et* *al*, 2006; Pielke *et al*, in press; Ren *et al*, 2007). As one example,1881 - 2004 temperature data from Europe reveal a warming rate of 0.67°/century for urban meteorological stations as opposed to 0.37°/century for rural stations (Janssens, 2007). Third, the number of measurement sites used varies dramatically through time, starting in 1850 at 200 sites, building to more than 14 000 in 1965 and then declining to about 5000 by 2000 AD. Fourth, the temperature at each site is constructed using the statistically doubtful historic method of averaging the maximum and minimum temperatures measured once each day at the site. Fifth, and finally, the data used to construct the version of the global surface temperature used by the IPCC is not released to the public; the curve is therefore unreproduceable in the sense that it cannot be checked independently (eg McIntyre, 2007; see also Addendum).”

A/T Consensus: Consensus is not scientific its political

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf> (Ellipses in original)

“Argument based on consensus is not usual in science, for reasons that have been summarised by writer Michael Crichton: ‘Let’s be clear: the work of science has nothing whatever to do with consensus. Consensus is the business of politics. Science, on the contrary, requires only one investigator who happens to be right, which means that he or she has results that are verifiable by reference to the real world. In science consensus is irrelevant. What is relevant is reproducible results. The greatest scientists in history are great precisely because they broke with the consensus …’ It would be hard to write a more accurate statement about the way that science works than Crichton’s pithy summary. It can be noted in support that we do not usually say that ‘there is a consensus that the sun will rise tomorrow’. Instead, the confident statement that ‘the sun will rise tomorrow’ rests on repeated empirical testing and the understanding conferred by Copernican and Newtonian theory. Therefore, statements such as ‘there is a consensus that dangerous global warming will occur’ convey sociological rather than scientific information. Individuals, organisations and governments that espouse such views signal mainly that they have a political agenda.”

A/T Consensus: No consensus on impending climate crisis

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“Secondly, I do not think there is a consensus about an impending climate crisis. I personally certainly don’t believe we are facing a crisis unless we create one for ourselves, as Benjamin Rush did by bleeding his patients. Many others, wiser than I am, share my view. The number of those with the courage to speak out is growing. There may be an illusion of consensus. Like the temperance movement one hundred years ago the climate-catastrophe movement has enlisted the mass media, the leadership of scientific societies, the trustees of charitable foundations, and many other influential people to their cause.”

A/T Consensus: Consensus is often wrong

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“First, what is correct in science is not determined by consensus but by experiment and observations. Historically, the consensus is often wrong, and I just mentioned the incorrect consensus of modelers about the age of the earth and the sun. During the yellow fever epidemic of 1793 in Philadelphia the medical consensus was that you could cure almost anything by bleeding the patient.”

General Circulation Computer Models are flawed

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf> [brackets added]

“To summarise, empirical computer projections of 21st century cooling are more consistent with the available data than the greenhouse warming projected by [General circulation computer models] GCMs. Though deterministic GCMs are a valuable heuristic tool, they all rest upon the Kelvin fallacy, ie the assumption that the physics of the system is fully known. In essence, GCMs do not produce accurate climate predictions and they are therefore unsuitable for direct use in policy making (Khandekar, 2004).”

CON: CLIMATE CHANGE: HARMFUL IMPACT

By Mathew Baker

KRITIK LINK

Global warming solutions normally = more government regulation and wealth transfers

Dr. James S. Robbins (Professor of International Relations at the National Defense University with a PhD from the Fletcher School of Law and Diplomacy), August 8, 2006, “Hooray for Global Warming,” The National Review, <http://article.nationalreview.com/?q=ZTJmNWI4N2Y2NTBmY2E3ZTIzZjcxM2IzM2ZjNjRkYWI>=

“Which leads to my third issue, which is that the solutions to the global-warming problem usually take the form of government regulations, restrictions, and of course massive wealth transfers to pay for the whole thing.”

A/T HARMS

A) SEA LEVEL RISES

Problem of inland flooding not primarily caused by climate but by poor public policy

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen), January 2009, “The True Cost of Kyoto,” CNBCEB News, <http://cnbceb.com/alternative-energy-environment/the-true-cost-of-kyoto/859/>

“An incredible amount of the damage caused by the weather is actually the result of poor public policy. Take the case of inland flooding – this is a problem not mainly caused by climate but lack of smart policies, excessive levees and a lack of wetlands. We could respond most effectively by managing people and wealth on flood plains. We could improve public planning, inform people better about flood risks, cancel public subsidies to settlements in flood plains, use levees more sparingly and allow flood plains to do their job and flood to provide buffers to other land.”

UN IPCC estimates of sea rise is entirely manageable as historical precedent proves

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen), January 2009, “The True Cost of Kyoto,” CNBCEB News, <http://cnbceb.com/alternative-energy-environment/the-true-cost-of-kyoto/859/>

“The United Nations’ panel of climate change scientists, the IPCC, expects temperature increases of 3 to 7 degrees Fahrenheit by the end of this century. Where campaigners like former US vice-president Al Gore have warned of a 10-metre wall of water that will drown low-lying cities, the IPCC’s scientists conclude that sea levels will rise between 15cm and 60cm over this century. This is entirely manageable. How do we know? Because it is not dissimilar to the rise of about one foot that we experienced during the past 150 years.”

Possible warming Antarctic seas = more snowfall which will counteract sea level rise

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“It is also possible that the warming seas around Antarctica will cause more snowfall over the continent and will counteract the sea-level rise.”

B) RAIN FOREST DESTROYED

CO2 increases have resulted in rainforest expansion

Dr. Jay Lehr (PhD in Ground Water Hydrology from the University of Arizona and Science Director of the Heartland Institute) and Professor Samuel Aldrich (Professor Emeritus of Soil Fertility Extension at the University of Illinois), July 2006, “Unmasking the Flaw in Sustainability Thinking,” The Heartland Institute, <http://www.heartland.org/policybot/results/19339/Unmasking_the_Flaw_in_Sustainability_Thinking.html>

“Additionally, the increase of carbon dioxide in the atmosphere produced by man has led to an increase, instead of a decline, in plant growth in the Amazon. J. Grace reported in *Science* (1995) that Amazonian rainforests are increasing their vegetation by about two tons of biomass per acre per year. A Finnish research group measured a 25 percent increase in growth in the Amazon forests from 1971 to 1990, which they, like Grace, believed was due at least in part to higher concentrations of carbon dioxide in the air.”

SOLVENCY BARRIERS

5 barriers to significant reductions in greenhouse gas emissions

Bruce Pardy (Associate Professor of Law at Queens University, Canada), October 2007, “Climate Change Charades: False Environmental Pretences of Statist Energy Governance,” Queen's Business Law Symposium Conference Paper, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1029662> [SSRN]

“Five obstacles stand in the way of achieving significant reduction in global annual greenhouse gas emissions: industrialism, international development, the tragedy of the commons, the clash between developed and developing world on defining environmental limits, and incremental accumulation.”

Developing countries will continue to significantly increase emissions

Bruce Pardy (Associate Professor of Law at Queens University, Canada), October 2007, “Climate Change Charades: False Environmental Pretences of Statist Energy Governance,” Queen's Business Law Symposium Conference Paper, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1029662> [SSRN]

“Developing countries, especially emerging economies with the largest and fastest growing level of GHG emissions such as China and India, have stated on numerous occasions that their priority is development, not reductions in emissions.20 They may take steps to increase their energy efficiency, but ambitious targets for economic growth suggest their annual emissions will continue to increase at a significant rate.21 China is currently the world’s second largest carbon emitter behind the United States, and is projected to become the leader in the near future. Its per capita emissions may soon rival those of developed nations.”

China accounted for 2/3rds of the growth in greenhouse-gas in 2007

Dr. Edwin J. Feulner (PhD from the University of Edinburgh, MBA from the University of Pennsylvania’s Wharton School of Business, and President of the Heritage Foundation), July 28, 2008, “Kyoto Treaty: Pointless Promises,” The Heritage Foundation, <http://www.heritage.org/press/commentary/ed072808d.cfm>

“China's CO2 emissions rose 8 percent last year, after jumping more than 11 percent in each of the two previous years. According to a Dutch study, China alone accounted for two-thirds of the growth in global greenhouse-gas emissions in 2007, and its current lead over the United States in such emissions is only expected to grow.”

If China doesn’t address emissions from coal we can’t address climate change in a serious way

H. Josef Hebert, June 19, 2009, “Path to Climate Solutions: Reduce Emissions,” The Huffington Post, <http://www.huffingtonpost.com/2009/06/19/path-to-climate-solution-_n_217842.html> [brackets added]

“Together, the U.S. and China account for 20 percent of the world's carbon dioxide from coal burning power plants, said [Ernest] Moniz [Director of the MIT Energy Initiative]. If China doesn't address emissions from its coal plants "we really can't address the climate issue in a serious way."

Without cooperation from other nations there is no way to reduce greenhouse gases

US Representative Ed Whitfield (member of the House Committee on Energy and Commerce), May 10, 2007, “Letter to the Editor,” <http://whitfield.house.gov/news/press.aspx?id=195>

“The Chinese continue to add coal-fired generation at an unprecedented pace. They are estimated to be building 500 megawatts of coal fired power plants every four days. As China surpasses the United States in coal production, they too will inevitably emit more greenhouse gases into the atmosphere than the United States. Therefore, any proposal to reduce greenhouse gases must be comprehensive and include all developing nations not just the United States. Without cooperation from other nations, such as China, there is no feasible way to reduce the worlds greenhouse gases.”

If China fails to act, climate change mitigation will fail

Mutsuyoshi Nishimura ( Special Advisor on Climate Change to the Cabinet of the Government of Japan ) June 2008,International Institute for Strategic Studies-JIIA Conference, Tokyo, Japan, Second Session - Asian Environmental Nightmare,"Climate Change and Asia" <http://www.iiss.org/conferences/asias-strategic-challenges-in-search-of-a-commonagenda/conference-papers/second-session-asian-environmental-nightmares/climate-change-and-asia-mutsuyoshi-nishimura/>

“Therefore, in a nutshell, without acquitting all the other major emitters, including Japan, from responsibility, the climate and energy actions of the US and China will determine the fate of the planet. These two countries are to bear major responsibilities in saving the planet. If these two nations act to curb emissions, the rest of the world can more easily coalesce on a global plan. If either fails to act, the mitigation strategies adopted by the rest of the world will fall far short of averting disaster.”

Head of the EPA: US action alone will not impact CO2 levels

Fox News, July 7, 2009, “Al Gore Compares Fight Against Global Warming to Struggle Against Nazi Germany,” <http://www.foxnews.com/story/0,2933,530503,00.html>

“The head of the Environmental Protection Agency is admitting that an EPA study shows U.S. efforts to cut greenhouse gas emissions will have no impact on the climate unless China and India do the same. Lisa Jackson told a Senate hearing today: "I believe the central parts of the [EPA] chart are that U.S. action alone will not impact world CO2 levels, but the race is on for us to enter into a clean energy future." The chart shows relatively no change in CO2 levels unless other large energy-producing countries make changes.”

China “adamantly refused” to agree to any controls

Ben Lieberman (a specialist in energy and environmental issues, Senior Policy Analyst at The Heritage Foundation's Roe Institute for Economic Policy Studies, - additional credentials at end of brief) September 27, 2007 “Whole New World?” <http://www.heritage.org/Press/Commentary/ed092707d.cfm>

The U.S. was easily the biggest emitter during the 20th century, but future carbon-dioxide emissions will come less from American sources, and more from Chinese ones. Even if the U.S. saddled itself with economy-damaging energy constraints, it would barely begin to offset China's projected increases. But so far, China has adamantly refused to agree to any controls, arguing that economic growth is their top priority. Other fast-growing developing nations have said the same thing.

Must Address farming and nitrogen fertilizer to solve global warming

Peter Aldhous, January 5, 2008, “Could new GM crops please the greens?,” The New Scientist <http://www.newscientist.com/article/mg19726372.900-could-new-gm-crops-please-the-greens.html>

“In fact, farming contributes more to global warming than all the world's cars, trains, ships and planes put together. And the single biggest problem with farming is not carbon but nitrogen. From the maize fields of Kansas to the emerald rice paddies of China, today's bountiful harvests depend on generous applications of nitrogen fertiliser. Although only a tiny proportion escapes into the atmosphere as nitrous oxide, it is an extremely potent greenhouse gas.”

SOLVENCY- TIMELINE

If we don’t reverse global warming trends by 2020 we may have fail

The Global Humanitarian Forum (An independent and impartial platform for international collaboration on humanitarian concerns lead by Kofi Annan former Director General of the UN) 2009, “The Anatomy of a Silent Crisis,” p. iii, <http://ghfgeneva.org/Portals/0/pdfs/human_impact_report.pdf> [Note the Global Humanitarian Forum supports the existence of Global Warming and its negative effects]

“If we do not reverse current trends by close to 2020, however, we may have failed. Global warming will pass the widely acknowledged danger level of two degrees, since there is an approximately 20 year delay between emission reductions and the halting of their warming effect.”

Have to cut emissions 80% before 2050 to avoid global temperature increases

Joseph Romm (senior fellow at the Center for American Progress), July 10, 2008, “Two Takes: The U.S. Needs to End Its Energy Dependence,” <http://www.usnews.com/articles/opinion/2008/07/10/two-takes-the-us-needs-to-end-its-energy-dependence.html>

“Emissions of heat-trapping carbon dioxide have us on track to raise global temperatures 10 degrees above preindustrial levels by century's end. Such warming would melt the world's ice, raising sea levels and destroying inland glaciers that provide water to a billion people. It could turn one third of the planet into desert and make the U.S. Southwest a dust bowl. It would wipe out most species and leave oceans hot, acidified, and largely lifeless. Avoiding this grim fate means rich countries must cut carbon dioxide emissions 80 percent by 2050 to keep the increase in global temperatures under 4 degrees. The deepest reductions will come from curtailing the use of oil and coal, which burn inefficiently and produce a lot of carbon.”

Atmospheric Temperatures will not drop significantly for 1,000 years even after emissions stop

Dr. Susan Solomon (PhD in Chemistry from UC Berkley with specialty in atmospheric chemistry), Dr. Gian-Kasper Plattners (PhD in Natural Science from the University of Bern), Dr. Reto Knutti (PhD from the University of Bern and Assistant Professor in Climate Physics at the Institute for Atmospheric and Climate Science at ETH Zurich), and Dr. Pierre Friedlingstein (PhD from the University of Brussels with a Research Speciality in the Global Carbon Cycle), February 10, 2009, “Irreversible climate change due to carbon dioxide emissions,” Proceedings of the National Academy of Sciences, vol. 106, no. 6, p. 1704-1709, <http://www.pnas.org/content/106/6/1704.full.pdf+html>

“This paper shows that the climate change that takes place due to increases in carbon dioxide concentration is largely irreversible for 1,000 years after emissions stop. Following cessation of emissions, removal of atmospheric carbon dioxide decreases radiative forcing, but is largely compensated by slower loss of heat to the ocean, so that atmospheric temperatures do not drop significantly for at least 1,000 years.”

The inertia of the climate system makes substantial climate change inevitable

Dr. Daniel P Schrag (Professor of Earth and Planetary Sciences and Director of the Laboratory for Geochemical Oceanography at Harvard University with a PhD in Geology from the University of California Berkley), February 12, 2009, “Testimony of Professor of Daniel P Schrag, Harvard University before the Energy and Environmental Subcommittee of the House Committee on Energy and Commerce US House of Representatives,” <http://energycommerce.house.gov/Press_111/20090212/testimony_schrag.pdf>

“Another important point in assessing the risk of catastrophic climate change is the large inertia in our climate system. CO2 resides in the atmosphere and surface ocean for centuries, only slowly taken up by the deep ocean. If we were to reduce our emissions to zero immediately, it would take more than 200 years for terrestrial and oceanic uptake of carbon to restore the atmosphere to its preindustrial condition. Even if we could stabilize CO2 levels immediately, the current atmosphere with more than 380 ppm may be too warm to allow the ice sheets on Greenland or West Antarctica to survive. In addition, the oceans will continue to warm for decades even if emissions were halted. Thus, there is great inertia in the climate system, in the heat capacity of the oceans, in ice sheets, and in the residence time of carbon dioxide in the atmosphere (and in the lifetime of our energy infrastructure), all of which make substantial climate change inevitable.”

SOLVENCY- INFRASTRUCTURE

$45 trillion potentially needed to prevent global warming & energy shortages from undermining economic growth

James Kanter, June 6, 2008, “International Energy Agency says $45 trillion may be needed to battle carbon emissions,” The New York Times, <http://www.nytimes.com/2008/06/06/business/worldbusiness/06iht-emit.4.13536144.html>

“In one of the strongest warnings so far about the world's thirst for energy, the International Energy Agency said Friday that investment totaling $45 trillion might be needed over the next half-century to prevent energy shortages and greenhouse gas emissions from undermining global economic growth. The executive director of the agency, Nobuo Tanaka, called for "immediate policy action and technological transition on an unprecedented scale." Tanaka said the world needed to "completely transform the way we produce and use energy." The IEA report said that the combination of growing demand for energy, especially in countries like China and India, the dangers of climate change and the scarcity of resources was going to require huge shifts in the way the global economy was organized. To meet those challenges, it said, nations would have to overcome objections to building nuclear power plants and storing large amounts of carbon dioxide underground or beneath the ocean floor. "I am very pleased the International Energy Agency has put such a high figure on the cost of making this transition," said Pierre Noël, an energy expert and senior policy fellow at the European Council on Foreign Relations. "It is high time we got rid of the myth that we can decarbonize our economies on the cheap," he said.

Energy revolution and $45 trillion needed to half carbon emissions by 2050

Leo Lewis, June 7, 2008, “International Energy Agency says World Faces $45 trillion push to halve carbon output,” The Times (UK Newspaper), <http://business.timesonline.co.uk/tol/business/industry_sectors/natural_resources/article4083090.ece>

“The world must undergo a “new global energy revolution” and faces a huge bill of $45 trillion (£22 trillion) if it is to halve carbon dioxide emissions by 2050, the International Energy Agency (IEA) says.The agency adds that the coming revolution will depend on sweeping changes to the electricity and motor industries, with 215 million sq m of solar panels needing to be “planted” across the globe and a billion electric or hybrid cars required.”

Unless we deal with their coal plants, China and India will significantly exaceberate global warming

Dr. Charles D. Ferguson ( adjunct assistant professor in the School of Foreign Service at Georgetown University and an adjunct lecturer at the Johns Hopkins University; formerly scientist-in-residence at the Center for Nonproliferation Studies of the Monterey Institute of International Studies), April 2007, Nuclear Energy - Balancing Benefits and Risks, COUNCIL ON FOREIGN RELATIONS, [www.cfr.org/content/publications/attachments/NuclearEnergyCSR28.pdf](http://www.cfr.org/content/publications/attachments/NuclearEnergyCSR28.pdf)

“Both Beijing and New Delhi are planning for a far greater use of coal-fired power plants because coal provides an indigenous, abundant, and cheap fuel. Over the next ten years, China and India are expected to build as many as 560 and 210 coal-fired plants, respectively.8 Coal-fired plants now provide about 80 percent of China’s and 70 percent of India’s electricity needs. These percentages would likely grow under Beijing and New Delhi’s current plans. Thus, in the absence of efforts to build more efficient coal-fired plants and to capture greenhouse gases from these plants, China and India will significantly exacerbate global warming.”

SOLVENCY- SEA LEVEL

No sign of acceleration in sea level rise and its an allusion to believe limiting CO2 will stop it

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“The sea level is indeed rising, just as it has for the past 20,000 years since the end of the last ice age.13Fairly accurate measurements of sea level have been available since about 1800. These measurements show no sign of any acceleration. The rising sea level can be a serious local problem for heavily-populated, low-lying areas like New Orleans, where land subsidence compounds the problem. But to think that limiting CO2 emissions will stop sea level rise is a dangerous illusion.”

IMPACT TURNS

A) BIODIVERSITY

Warmer, Wetter world could = more rainforests, biodiversity, better whale habitats, etc.

Dr. James S. Robbins (Professor of International Relations at the National Defense University with a PhD from the Fletcher School of Law and Diplomacy), August 8, 2006, “Hooray for Global Warming,” The National Review, <http://article.nationalreview.com/?q=ZTJmNWI4N2Y2NTBmY2E3ZTIzZjcxM2IzM2ZjNjRkYWI>=

“A warmer wetter world could very well mean more rain forests — hence more biodiversity! We are supposed to value that for some reason, right? And if the ice caps melt and we get more ocean, well that just means more habitat for whales doesn’t it?”

Arctic glaciers retreat and walruses thrive

Dr. John Blatchford (PhD in Marine Biology and a Chartered Fellow of the Institute of Biology), December 23, 2008, “Atlantic Walrus Benefits from Global Warming: Climate Change Improves Walrus Feeding Grounds,” http://marine-life.suite101.com/article.cfm/atlantic\_walrus\_benefits\_from\_global\_warming

“As Arctic glaciers retreat the Atlantic Walrus Population is Recovering. Walruses almost became extinct in the Atlantic due to whaling. They are now doing well, and climate changes seem to suit them. Retreating coastal glaciers leave rich clam beds, which walruses adore.”

In Greenland, warmer weather = more vegetables and productive forests

Sarah Lyall, October 28, 2007, “Warming Revives Flora and Fauna in Greenland,” The New York Times, <http://www.nytimes.com/2007/10/28/world/europe/28greenland.html?_r=2&ref=science&oref=slogin>

“Except for potatoes, the only vegetables most Greenlanders ever eat — to the extent that they eat vegetables at all — are imported, mostly from Denmark. But now that the climate is warming, it is not just old trees that are growing. A Greenlandic supermarket is stocking locally grown cauliflower, broccoli and cabbage this year for the first time. Eight sheep farmers are growing potatoes commercially. Five more are experimenting with vegetables. And Kenneth Hoeg, the region’s chief agriculture adviser, says he does not see why southern Greenland cannot eventually be full of vegetable farms and viable forests. “If it gets warmer, a large part of southern Greenland could be like this,” Mr. Hoeg said, walking through Qanasiassat, a boat ride from Narsarsuaq, a tiny southern community notable mostly for having an international airport. Two and a half acres near here of imported pines, spruces, larches and firs are plunked in the midst of the scrubby, rocky hillside next to the fjord, as startling as a mirage. “If it gets a little warmer, you could talk about a productive forest with enough wood for logs,” Mr. Hoeg said.”

Rising Greenland Temps = more time to grow crops, more cod, fatter lambs, & a bright future

Sarah Lyall, October 28, 2007, “Warming Revives Flora and Fauna in Greenland,” The New York Times, <http://www.nytimes.com/2007/10/28/world/europe/28greenland.html?_r=2&ref=science&oref=slogin>

“Between 1961 and 1990, the average annual temperature was 33 degrees; in 2006, it was 35 degrees, according to the Danish Meteorological Institute. Winter is coming later and leaving earlier. That means there is more time to leave sheep in the mountains, more time to grow crops, more time to work outdoors, more opportunity to travel by boat, since the fjords freeze later and less frequently. Cod, which prefer warmer waters, have started appearing off the coast again. Ewes are having fatter lambs, and more of them every season. The growing season, such as it is, now lasts roughly from mid-May through mid-September, about three weeks longer than a decade ago. “Now spring is coming earlier, and you can have earlier lambings and longer grazing periods,” said Eenoraq Frederiksen, 68, a sheep farmer whose farm, near Qassiarsuk, is accessible by a harrowing drive across a rudimentary road plowed in the hillside. “Young people now have a lot of possibilities for the future.”

B) ARABLE LAND

Global warming = habitable and cultivatable Canadian land where resource extraction is easier

Dr. James S. Robbins (Professor of International Relations at the National Defense University with a PhD from the Fletcher School of Law and Diplomacy), August 8, 2006, “Hooray for Global Warming,” The National Review, <http://article.nationalreview.com/?q=ZTJmNWI4N2Y2NTBmY2E3ZTIzZjcxM2IzM2ZjNjRkYWI>=

“Consider the large landmasses in the northern hemisphere, say north of 55 degrees. These are very extreme climates for human habitation. A population distribution map of Canada shows most people live in a belt running along the southern border with the United States. But add global warming and vast regions would become comfortably habitable. As well, there would be more land available for cultivation. Resources would be easier to extract. True, there might be some dislocations as crops shifted northward, but so what? Economies change all the time. And imagine the land boom up the coastlines as people rushed on up for beachfront property. If global warming is real it is creating the investment opportunity of a lifetime.”

C) LIVES

For 200 more years, lives saved by warmer temperatures will surpass those lost

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen), January 2009, “The True Cost of Kyoto,” CNBCEB News, <http://cnbceb.com/alternative-energy-environment/the-true-cost-of-kyoto/859/>

“When heatwaves strike during the summer, campaigners for drastic carbon emission cuts point out that more lives will be lost as temperatures rise. Indeed, researchers conclude that climate change will mean about 400,000 more heat-related deaths globally by 2050. However, there is another side to this story. Rising temperatures will reduce the number of cold spells. The cold is a much bigger killer than the heat. Climate change will result in 1.8 million fewer cold-related deaths each year, according to the first peer-reviewed global estimate published in Ecological Economics. The number of saved lives will surpass the increase in heat-related deaths for nearly two hundred years.”

D) AGRICULTURE

CO2 is good for plants and moderate warming will bring overall benefit to mankind due to agricultural yields

Dr. William Happer (PhD and Professor of Physics at Princeton University and former Director of Energy Research at the Department of Energy who has published over 200 peer viewed papers ), February 25, 2009, “Before the US Senate Environment & Public Works Committee,” <http://scienceandpublicpolicy.org/images/stories/papers/reprint/happer_testimony.pdf>

“Plants photosynthesize more carbohydrates when they have more CO2. Plants are also more drought-tolerant6 with more CO2, because they need not “inhale” as much air to get the CO2 needed for photosynthesis. At the same time, the plants need not “exhale” as much water vapor when they are using air enriched in CO2. Plants decrease the number of stomata or air pores on their leaf surfaces in response to increasing atmospheric levels of CO2. They are adapted to changing CO2 levels and they prefer higher levels than those we have at present. If we really were to decrease our current level of CO2 of around 400 ppm to the 270 ppm that prevailed a few hundred years ago, we would lose some of the benefits of the green revolution. Crop yields will continue to increase as CO2 levels go up, since we are far from the optimum levels for plant growth. Commercial greenhouse operators are advised to add enough CO2 to maintain about 1000 ppm around their plants. Indeed, economic studies like those of Dr. Robert Mendelsohn at Yale University project that moderate warming is an overall benefit to mankind because of higher agricultural yields and many other reasons.”

DISADVANTAGES

Any attempt to reduce CO2 would severally harm economic growth costing trillions and hundreds of thousands of jobs

Ben Lieberman (specialist in energy and the environment at the Heritage foundation, CPA with a BS in accounting from the University of Maryland, and a JD from George Washington University) and Nicolas Loris (Research Assistant at The Heritage Foundation's Roe Institute for Economic Policy Studies), April 23, 2009, “Five Reasons the EPA Should Not Attempt to Deal with Global Warming,” The Heritage Foundation, <http://www.heritage.org/research/energyandenvironment/wm2407.cfm>

“Above anything else, any attempt to reduce carbon dioxide would be poison to an already sick economy. Even when the economy does recover, the EPA's proposed global warming policy would severely limit economic growth. Since 85 percent of the U.S. economy runs on fossil fuels that emit carbon dioxide, imposing a cost on CO2 is equivalent to placing an economy-wide tax on energy use. The Heritage Foundation's Center for Data Analysis study of the economic effects of carbon dioxide cuts found cumulative gross domestic product (GDP) losses of $7 trillion by 2029 (in inflation-adjusted 2008 dollars), single-year GDP losses exceeding $600 billion in some years (in inflation-adjusted 2008 dollars), energy cost increases of 30 percent or more, and annual job losses exceeding 800,000 for several years. Hit particularly hard is manufacturing, which will see job losses in some industries that exceed 50 percent**.”**

If stellar growing seasons created by global warming on the American plains were every disputed we would face a worldwide crisis

Jon Markman (financial analyst for MSN money), 3/6/2008, “Could we really run out of food,” MSN Money, [Brackets added], <http://articles.moneycentral.msn.com/Investing/SuperModels/CouldWeReallyRunOutOfFood.aspx>

“Now the really bad news is that we might actually have been lucky in the past few years, as global warming has lengthened growing seasons in the American Plains, sometimes called the Saudi Arabia of corn. BMO's [Jon] Coxe notes that the U.S. Midwest has enjoyed 17 straight years without significant crop failure, the longest winning streak on record. If this fortunate run ends soon, we'll likely face a worldwide crisis.”

Stabilizing global climate changing emissions will cost at least $350 trillion

Ananth P. Chikkatur and Ambuj D. Sagar (Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University) Dec 2007, "Cleaner Power in India: Towards a Clean-Coal-Technology Roadmap" <http://belfercenter.ksg.harvard.edu/files/Chikkatur_Sagar_India_Coal_Roadmap.pdf> (brackets added)

“The economics of GHG [green-house gas] mitigation are clearly the dominating issue, given that the costs of meeting the appropriate stabilization targets may be substantial (with the exact cost depending on the specific pathway): reaching a stabilization target of 550 ppmv [parts per million by volume] is estimated to be between 100 and 800 trillion dollars over the next century; reaching a tighter stabilization target of 450 ppmv—a level most likely required to avoid dangerous climate change—could cost between 350 and 1750 trillion dollars (IPCC, 2001).”

CON: CLIMATE CHANGE: HUMAN CAUSED

By Matthew Baker

ALTERNATE CASUALITY

Melting Mars ice caps support Russian Scientist’s theory that warming is caused solar irradiance

Kate Ravilious, February 28, 2007, “Mars Melt Hints at Solar, Not Human, Cause for Warming, Scientist Says,” National Geographic News, <http://news.nationalgeographic.com/news/2007/02/070228-mars-warming.html>

“In 2005 data from NASA's Mars Global Surveyor and Odyssey missions revealed that the carbon dioxide "ice caps" near Mars's south pole had been diminishing for three summers in a row. Habibullo Abdussamatov, head of space research at St. Petersburg's Pulkovo Astronomical Observatory in Russia, says the Mars data is evidence that the current global warming on Earth is being caused by changes in the sun. "The long-term increase in solar irradiance is heating both Earth and Mars," he said. Abdussamatov believes that changes in the sun's heat output can account for almost all the climate changes we see on both planets. Mars and Earth, for instance, have experienced periodic ice ages throughout their histories. "Man-made greenhouse warming has made a small contribution to the warming seen on Earth in recent years, but it cannot compete with the increase in solar irradiance," Abdussamatov said.”

Warming on Mars, Pluto, and other planets indicates to some scientists that the sun is causing warming

Ker Tahm **(**LiveScience Staff Writer), 12 March 2007, “Sun Blamed for Warming of Earth and Other Worlds”, LiveScience, <http://www.livescience.com/environment/070312_solarsys_warming.html>

Earth is heating up lately, but so are Mars, Pluto and other worlds in our solar system, leading some scientists to speculate that a change in the sun’s activity is the common thread linking all these baking events. Others argue that such claims are misleading and create the false impression that rapid global warming, as Earth is experiencing, is a natural phenomenon.”

Climate change is a naturally occurring phenomenon

Bart Frazier (program director at The Future of Freedom Foundation), 26 November 2008, “Global Warming, Central Planning, and the Free Market”, <http://www.fff.org/freedom/fd0808g.asp>

There were other less dramatic temperature increases in the history of our planet, but the point is that climate change is a naturally occurring phenomenon with the Earth cooling some of the time and warming at others. It has changed in the past, and it is going to change in the future, with or without us.

EXPERTS

It has yet to be demonstrated whether humans have a measurable influence eon climate

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“Whether human activities have a measurable global influence on natural climate trends has yet to be demonstrated. And, depending upon the balance of the mechanisms (eg aerosols versus greenhouse gases), the overall human effect could in the end turn out to be one of either warming or cooling (cf IPCC, 2007, Figure SPM-2). That we don’t yet know which is, of course, a reflection of the small size of the human signal and of the fact that it is deeply buried in the noise of the natural climate system.”

DISADVANTAGE

Masking: human-caused GW hysteria masks natural climate change problems

Dr. Robert M. Carter (PhD in Palaeontology from the University of Cambridge and Professor at the Marine Geophysical Laboratory at James Cook University), May 3, 2007, “The Myth of Dangerous Human-Caused Climate Change,” <http://icecap.us/images/uploads/200705-03AusIMMcorrected.pdf>

“The current human-caused global warming hysteria –promulgated by the media – is especially dangerous because it is causing governments to neglect the much more real (though long-term) dangers of natural climate change. Even worse, it is causing profound damage to the use of science as an impartial arbiter in public affairs.”

CON: DDT

By Josh Craddock

INHERENCY

DDT is permitted in developing countries to fight malaria

R. Wigle (Professor at the Department of Economics at Wilfrid Laurier University), 2008, “Economic Benefits of Increased Health through DDT Use in Treating Malaria,” Wilfred Laurier University, <http://info.wlu.ca/~wwwsbe/faculty/rwigle/IP611/w09/DDT-briefing.pdf>

“The use of DDT for disease vector control is permitted under the Stockholm Convention and advocated by the WHO. However, any country using DDT as part of its disease control must report their use to regulators empowered through the Stockholm Convention. This reporting process involves a questionnaire that requires countries to disclose how much DDT they are producing, distributing (through international trade), and using. They must also report on the seriousness and extent of malaria in the area that they are using DDT.”

There is no global ban on DDT

Aaron Swartz, September/October 2007, “Rachel Carson, Mass Murderer?” Fairness and Accuracy in Reporting, <http://www.fair.org/index.php?page=3186>

“For one thing, there is no global DDT ban. DDT is indeed banned in the U.S., but malaria isn’t exactly a pressing issue here. If it ever were, the ban contains an exception for matters of public health. Meanwhile, it’s perfectly legal—and indeed, used—in many other countries: 10 out of the 17 African nations that currently conduct indoor spraying use DDT.”

Alternatives to DDT are being used globally to fight Malaria

World Health Organization, May 6, 2009, “Countries move toward more sustainable ways to roll back malaria,” <http://www.who.int/mediacentre/news/releases/2009/malaria_ddt_20090506/en/index.html>

“The United Nations Environment Programme and the World Health Organization, in partnership with the Global Environment Facility, today announced a rejuvenated international effort to combat malaria with an incremental reduction of reliance on the synthetic pesticide DDT. Ten projects, all part of the global programme “Demonstrating and Scaling-up of sustainable Alternatives to DDT in Vector Management”, involving some 40 countries in Africa, the Eastern Mediterranean and Central Asia are set to test non-chemical methods ranging from eliminating potential mosquito breeding sites and securing homes with mesh screens to deploying mosquito-repellent trees and fish that eat mosquito larvae. The new projects follow a successful demonstration of alternatives to DDT in Mexico and Central America. Here pesticide-free techniques and management regimes have helped cut cases of malaria by over 60 per cent.”

DDT alternative projects to be expanded

World Health Organization, May 6, 2009, “Countries move toward more sustainable ways to roll back malaria,” <http://www.who.int/mediacentre/news/releases/2009/malaria_ddt_20090506/en/index.html>

“Projects are now going global with several new, five year regional demonstrations of sustainable alternatives to DDT launched, or set to be launched over the next 12 months. These include one involving Eritrea, Ethiopia and Madagascar and a larger regional initiative with Djibouti; Egypt; Jordan, Morocco; the Islamic Republic of Iran, Sudan, Syria and Yemen.”

Other highly effective techniques exist to fight malaria

Aaron Swartz, September/October 2007, “Rachel Carson, Mass Murderer?” Fairness and Accuracy in Reporting, <http://www.fair.org/index.php?page=3186>

“The pro-DDT line is a vast distraction. There are numerous other techniques for dealing with malaria: alternative insecticides, bed nets and a combination of drugs called artemisinin-based combination therapy, or ACT. ACT actually kills the malaria parasite fast, allowing the patient a quick recovery, and has a success rate of 95 percent (World Health Organization, 2001). Rollouts of ACT in other countries have slashed malaria rates by 80 to 97 percent (Washington Monthly, 7/06).”

DDT ban did not cause a resurgence of malaria or other diseases in the US

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“Since the nationwide ban took effect, there has been a gradual decline in DDT levels in humans and in wildlife. There has been no resurgence of malaria or any of the other diseases that DDT was used to fight in the United States. Moreover, farmers have found effective alternative means to control insect pests.”

Malaria resurgence is caused by alternate factors, not the ban of DDT

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“The resurgence of malaria in certain regions of the developing world has been related to many factors, such as increases in international travel, population growth and ecosystem shifts that bring people more into contact with mosquitoes, and growing resistance of the malaria parasites to medicines. Most important, there have been widespread decreases in funding for the public health measures that had successfully controlled malaria earlier, including tracking and treating malaria cases, educating people on mosquito-avoidance measures and implementing integrated mosquito management plans.”

SOLVENCY

Mosquitoes are becoming resistant to DDT

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“To attribute the resurgence in malaria to a failure to use one specific pesticide is not only misleading, it's incorrect. Prior to the bans on DDT in the U.S., Europe and other developed countries, mosquitoes were already becoming increasingly resistant to DDT. As a result, mosquito control experts in those countries were already searching for more effective alternative pesticides and other mosquito-control measures. Recent articles in Science magazine document that mosquitoes throughout the developing world are also now increasingly resistant to DDT. Thus, its effectiveness is limited, and its use will not accomplish public health goals in the absence of a comprehensive pest management program.”

DDT will be ineffective at stopping West Nile

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“No pesticide will completely stop West Nile virus. Unlike malaria, whose parasite only lives in mosquitoes and humans, the West Nile virus lives mainly in bird species, which carry the virus with them as they migrate. For that reason, it is far more complicated to control the West Nile virus, particularly because there is no way to treat the disease in birds. While a public health program involving human diagnosis, case tracking, treatment and mosquito control was able to essentially eradicate malaria in this country, more-aggressive mosquito-control measures (such as use of DDT) will not prove effective for long-term control of West Nile because birds will continue to spread the disease. A vaccine, if it can be developed, will be more effective in preventing human disease, and will avoid widespread ecological damage. Not only would aerial spraying of DDT be ineffective in limiting spread of the West Nile virus, but it would also harm still more birds beyond the massive numbers that have died from the West Nile virus, and would also expose a new generation of humans to this bio-accumulating toxin.”

DDT safety regulations are poorly enforced

R. Wigle (Professor at the Department of Economics at Wilfrid Laurier University), 2008, “Economic Benefits of Increased Health through DDT Use in Treating Malaria,” Wilfred Laurier University, <http://info.wlu.ca/~wwwsbe/faculty/rwigle/IP611/w09/DDT-briefing.pdf>

“The Stockholm Convention also has safety regulations that enforce proper production, storage, transport and application of DDT. However, in many countries which still produce and use DDT (central and west Africa, China, India) proper safety regulations are often too expensive or difficult to be carried out. This results in much needless human exposure and environmental contamination. (DDT-EG2, 2004, Pg. 8) In addition to some regulation non-compliance it is the opinion of DDT experts working within the Stockholm Convention that there is a large amount of DDT produced, traded and used in the world that is not reported. This is troubling because scientists don’t know how much DDT is in the environment. Furthermore, there is no way to enforce proper safety regulations when production and use of DDT is not reported. Legally made DDT often crosses porous borders in Africa and India for undocumented use. (DDT-EG2, 2004, Pg. 8) Increasingly, poor people with access to DDT are using it for purposes other than disease vector control, such as crop pesticides, which results not only in higher levels of contamination, but also increased disease vector resistance to DDT.”

DISADAVANTAGES

A) Human Health

DDT linked to premature birth and low birth weight and maybe cancer

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“Chronic low dose DDT exposure has been shown to be associated with premature birth and low birthweight in babies who were exposed before birth, and with decreased duration of milk supply in nursing mothers. Most of what we know about DDT's toxicity to humans (as with many chemicals) is derived from laboratory-animal studies, which have demonstrated that DDT is likely to cause cancers and other health problems. Although recent studies have not established a link between DDT exposure and breast cancer in adults, they do not address whether prenatal or early childhood exposures to DDT cause breast cancer or other cancers in later life.”

Prenatal exposure to DDT associated with decreased cognitive skills in preschoolers

Respiratory and Environmental Health Research Unit and the Department of Environmental Chemistry (Núria Ribas-Fitó, Maties Torrent, Daniel Carrizo, Laura Muñoz-Ortiz, Jordi Júlvez, Joan O. Grimalt and Jordi Sunyer), September 12, 2006, “In Utero Exposure to Background Concentrations of DDT and Cognitive Functioning among Preschoolers” [American Journal of Epidemiology](http://aje.oxfordjournals.org/), [Volume 164, Number 10](http://aje.oxfordjournals.org/content/vol164/issue10/index.dtl), Pp. 955-962, <http://aje.oxfordjournals.org/cgi/content/abstract/164/10/955>

“Results showed that DDT cord serum concentration at birth was inversely associated with verbal, memory, quantitative, and perceptual-performance skills at age 4 years. Children whose DDT concentrations in cord serum were >0.20 ng/ml had mean decreases of 7.86 (standard error, 3.21) points in the verbal scale and 10.86 (standard error, 4.33) points in the memory scale when compared with children whose concentrations were <0.05 ng/ml. These associations were stronger among girls. Prenatal exposure to background, low-level concentrations of DDT was associated with a decrease in preschoolers' cognitive skills. These results should be considered when evaluating the risk and benefits of spraying DDT during antimalaria and other disease-vector campaigns.”

Studies on safety of DDT do not account for high exposure due to indoor residual spraying

Science Daily, May 9, 2009, “Unprecedented Use Of DDT Concerns Experts,” <http://www.sciencedaily.com/releases/2009/05/090504122058.htm>

"Any studies conducted up to now on the human health effects from DDT exposure may not be relevant to the populations currently exposed to the pesticide through indoor residual spraying," said Eskenazi, who has published research on the negative impact of DDT exposure to a child's neurodevelopment. Moreover, most of the studies on DDT and human health were done in developed countries where the pesticide was banned in the 1970s, the researchers said.

B) Birds

DDT has long-term reproductive problems for birds

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“While not immediately toxic to birds, DDT causes long-term reproductive problems by causing eggshells to weaken and crack, threatening the survival of many bird species. Because of its chemical nature, once DDT is applied in a field or other environment, it remains in an active form for decades. People throughout the United States still carry DDT and its metabolites in their bodies, 30 years after the pesticide was banned in this country.”

Milloy and Edwards ignore massive body of evidence linking DDT to eggshell thinning

Brian Seasholes, June 1, 2007, “The Bald Eagle, DD T, and the Endangered Species Act,” Reason Foundation, Policy Brief No. 63, <http://reason.org/files/d40314fbefcf4e491538f1d6613103e5.pdf>

“The DDT ban also spawned a separate group of denials, claiming that DDT had nothing to do with eggshell thinning and, hence, reproductive failure. Led by Steve Milloy and the late Gordon Edwards, these denials conveniently ignore the massive body of peer-reviewed literature on the link between DDT, eggshell thinning and reproductive failure in raptors and pelicans.12

C) Biodiversity

DDT ban key to preventing extinction of multiple species

Environmental Defense Fund (a national nonprofit organization representing more than 500,000 members, led by more than 380 scientists, attorneys, Ph.D. scientists and economists), December 28, 2006, “The U.S. Ban on DDT: A Continuing Success Story,” <http://www.edf.org/article.cfm?contentID=4407>

“The DDT ban is one of the very few actions directly responsible for the recovery of species once in danger of extinction, including the peregrine falcon, the bald eagle and the brown pelican. It also has clearly helped other bird species that were not yet endangered but whose populations were declining due to DDT. As Russell Train, chairman emeritus of the World Wildlife Fund put it, "The banning of DDT was one of the most important legal victories ever won for wildlife."”

DDT ban was the key to the bald eagle’s recovery

Brian Seasholes, June 1, 2007, “The Bald Eagle, DD T, and the Endangered Species Act,” Reason Foundation, Policy Brief No. 63, <http://reason.org/files/d40314fbefcf4e491538f1d6613103e5.pdf>

“The banning of the pesticide DDT in 1972, not the passage of the ESA in 1973, is widely acknowledged as the paramount reason for the bald eagle’s recovery. “Nearly everyone agrees that the key to the eagle’s resurgence—even more so than the Endangered Species Act—was the banning of the use of the insecticide DDT in this country in 1972,” admits the National Audubon Society.”

CON: DOMESTIC OIL

By Nicholas Bruno

SOLVENCY

Drilling will not provide significant reductions in oil prices

Jacob Leibenluft (writer from Washington D.C.), 12 August 2008, “What's the Deal With Offshore Drilling?”, Slate Magazine (daily magazine on the Web owned by Washington Post company), <http://www.slate.com/id/2197283/>

Even that high estimate probably won't have much of an effect on gas prices. Oil is traded on a global market, and adding 1 million barrels per day would increase global production by slightly more than 1 percent. A standard model of oil markets suggests the 1 percent change would reduce gas prices by about 3 percent over the long term—assuming that OPEC or other oil producers don't cut their own supply in order to maximize profits.

With rising global demand, US domestic production will not make a difference on the supply side

Bryan Walsh, 18 June 2008, “Will More Drilling Mean Cheaper Gas?”, Time Magazine, <http://www.time.com/time/business/article/0,8599,1815884,00.html>

Offshore territories and public lands like ANWR that don't allow drilling may contain up to 75 billion barrels of oil, according to the EIA. That may sound like a lot, but it's not enough to make a significant difference in a world where global oil demand is expected to rise 30% by 2030, to nearly 120 million barrels a day. At best, greatly expanding domestic drilling might eventually lower the proportion of oil the U.S. imports — currently about 60% of its total supply — but petroleum is a global commodity, and the world market would soak up any additional American production.

DISADVANTAGES

A) Masking

Drilling may prolong petroleum usage and slow the transition to alternative energy

Jacob Leibenluft (writer from Washington D.C.), 12 August 2008, “What's the Deal With Offshore Drilling?”, Slate Magazine (daily magazine on the Web owned by Washington Post company), <http://www.slate.com/id/2197283/>

The bigger danger from the push for drilling—or more exactly, the arguments used on its behalf—may be how it affects our own behavior. If we pretend that offshore drilling is a fail-safe means of lowering oil prices (or even a likely means), we may hold on to rosy and unreasonable expectations for future gas prices. (In this respect, the Lantern thinks Obama has been most honest than McCain.) That will in turn change the calculations we make when it comes to long-term decisions like whether to shell out extra cash for a more fuel-efficient car or a home with access to mass transit. As long as we're counting on gas prices to go down, those green lifestyle choices won't seem as attractive. We may well be surprised once again that we're paying so much at the pump, without having done anything about it.

B) Environment

Water contamination in drilling areas more prevalent than EPA asserts

Abrahm Lustgarten (reporter for Pro Publica, former staff writer and contributor for Fortune, and has written for Salon, Esquire, the Washington Post and the New York Times), 13 November 2008, “Buried Secrets: Is Natural Gas Drilling Endangering U.S. Water Supplies?”, Pro Publica, <http://www.propublica.org/feature/buried-secrets-is-natural-gas-drilling-endangering-us-water-supplies-1113>

An investigation by ProPublica, which visited Sublette County and six other contamination sites, found that water contamination in drilling areas around the country is far more prevalent than the EPA asserts. Our investigation also found that the 2004 EPA study was not as conclusive as it claimed to be. A close review shows that the body of the study contains damaging information that wasn't mentioned in the conclusion. In fact, the study foreshadowed many of the problems now being reported across the country.

.001% problems can be harmful to vincinity

Jennifer Horton (B.S. in environmental studies), 11 August 2008, “Why is offshore drilling so controversial?”, How Stuff Works (award-winning source of credible, unbiased, and easy-to-understand explanations of how the world actually works. Founded by North Carolina State University Professor Marshall Brain in 1998), <http://science.howstuffworks.com/offshore-drilling-controversy2.htm>

And while the 99.999 percent safety record sounds nice, that 0.001 percent can be pretty horrific for people living in the vicinity. A 1969 accident at a Santa Barbara, Calif., well spewed oil all over the beaches and into the water, effectively making any chances of future access to that state's offshore areas highly unlikely. Likewise, the effects of the infamous Exxon Valdez spill back in 1989 are still seen today.

300 to 500 spills a year from drilling

Robin Nixon (Special Livescience), 25 June 2008, " Oil Drilling: Risks and Rewards”, Livescience (chronicles the daily advances and innovations made in science and technology), <http://www.livescience.com/environment/080625-oil-drilling.html> [Brackets added]

Even so, says Clusen [director of National Parks and Alaska Projects for the Natural Resources Defense Council], there are 300 to 500 spills every year, a number which will grow with increased production. "And once you have a spill, you are pretty much screwed," NOAA's Short said. That's because oil spreads on water at a rate of one-half a football field per second. Recovery can take decades. After 20 years of natural weathering, Prince William Sound — the area affected by the Exxon-Valdez spill — appears completely recovered to the casual observer, said Short, but animals high up on the food chain are just now starting to re-colonize.

CON: ENDANGERED SPECIES ACT

By Jared Rixstine

Inherency

Obama represents a shift from Bush when it comes to protecting endangered species

US House Committee on Natural Resources, March 3, 2009 "Rahall Statement on Restoration of Key Endangered Species Act Requirement" US House Committee on Natural Resources <http://resourcescommittee.house.gov/index.php?option=com_content&task=view&id=511&Itemid=70>

"House Natural Resources Committee Chairman Nick J. Rahall (D-WV) today released the following statement after President Barack Obama announced, during a visit to the Interior Department, that his Administration will change course on a Bush Administration regulation that would have allowed federal agencies to decide on their own whether or not to comply with the consultation requirement of the Endangered Species Act (ESA), one of the Nation's landmark conservation laws:” I wholeheartedly support the President's proposal to restore the protections for endangered species that the Bush Administration spent so many years trying to undermine. It is one more indication that the new Administration truly represents change for the better and is committed to the protection of our natural resources and our environment.'"

Solvency

There is a waiting list for Endangered Species candidates

Margot Roosevelt (Los Angeles Times Staff Writer) July 05, 2007 “The Nation – Endangered species list jeopardized, critics say” Los Angeles Times <http://articles.latimes.com/2007/jul/05/nation/na-species5>

“In the last six years, the Bush administration has added fewer species to the endangered list than any other since the law was enacted in 1973. The slowdown has resulted in a waiting list of 279 candidates that are near extinction, according to government scientists, from California's Yosemite toad to Puerto Rico's elfin-woods warbler.”

Endangered Species face other threats besides humans

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php>

“But there is a more subtle effect that may be at work here. Some species are under threat from other non-human species or from climate-forced habitat change, rather than from assaults by landowners. The best long-term hope for these species may be proactive assistance (e.g., control of exotic species) from the owners of the land on which they reside. As Wilcove and Chen (1998) noted, “maintenance-dependent” species such as these can disappear without the landowner ever lifting a finger. In fact, they may disappear precisely because of landowner inaction—inaction the owner may find attractive if a private recovery program undertaken by the owner would invite intrusion by the Fish and Wildlife Service.”

Future political pressure sabotages conservation efforts (flying squirrel)

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events.) August 28, 2008 "Bush Administration Ignores Science, Removes W.Va. Northern Flying Squirrel From Endangered Species List" <http://www.ewire.com/display.cfm/Wire_ID/4970> [brackets added]

“The administration’s decision to remove protection for the West Virginia flying squirrel flies in the face of the science on the species,” [director of Maryland Based conservation group Judy]Rodd said. “Clearly, this is a political move to allow more destruction of the squirrel’s forest habitats by logging, mining, and development.”

Recovery plans not followed (flying squirrel)

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events.) August 28, 2008 "Bush Administration Ignores Science, Removes W.Va. Northern Flying Squirrel From Endangered Species List" <http://www.ewire.com/display.cfm/Wire_ID/4970>

"The administration’s failure to follow the squirrel’s recovery plan was noted in a 2008 report by the U.S. Government Accountability Office. “The West Virginia northern flying squirrel offers an example of a species proposed for delisting even though the recovery criteria have not been met,” the report stated."

1,800 species have been on the ES list, only 40 have been de-listed (success rate of 2.2%)

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University of Virginia Law School News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm> [Brackets Added]

“Since the ESA was adopted in 1973, over 1,800 species domestic and foreign have been listed as either threatened or endangered. Now, as of several months ago, only 40 have been de-listed,” he [Professor Jonathan Adler Director of Case Western Reserve University School of Law Center for Business Law and Regulation] said.”

ESA is not responsible for the few success stories of animals that came off the list

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University of Virginia Law School News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm> [Brackets added]

“So, in 35 years, a few dozen species have come off the list from being threatened or endangered.” Some of those species have been removed because of miscalculations or because they have become extinct, and the Endangered Species Act is not responsible for the few success stories, [Professor Jonathan] Adler [Director of Case Western Reserve University School of Law Center for Business Law and Regulation] said. One reason several endangered bird species recovered and were removed from the list, he said, was the banning of widespread use of the synthetic pesticide DDT in 1972 — a year before the Endangered Species Act was adopted.

Lack of an ecosystem focus, vagueness, interest groups, and landowner action prevent ESA from working

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“Both opponents and supporters are concerned that the ESA, as currently implemented, may be ineffective at halting or reversing the decline of endangered species. Constraints on its effectiveness arise from the ESA’s species-level rather than ecosystem-level focus, vague or contradictory legislative rulings, interest group pressures that warp listing decisions, and landowner actions that preemptively harm species and their habitat in order to avoid regulatory burdens (for an economist’s perspective, see Brown and Shogren; for a biologist’s perspective, see Wilcove et al. 1993).”

Not a single example of a species saved by ESA section 9

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University of Virginia Law School News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm> [Brackets added]

“[Professor Jonathan] Adler [Director of Case Western Reserve University School of Law Center for Business Law and Regulation] said there is not a single example of a species that has been saved by the ESA’s section 9, the provision that limits the modification of an endangered species’ habitat without government approval. “Why is that a big deal? The only reason that’s a big deal is because the vast majority of endangered species rely upon private land for some or all of their habitat. If we don’t save them on private land, we’re not going to save them,” Adler said.”

Of the 24 de-listed, 16 were done because of extinction or false original data!

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“ESA opponents also point to the paucity of delisted species as evidence of the ESA’s failure (e.g., Mann and Plummer; Gordon et al. 1997). Of the twenty-four delisted U.S. species, sixteen were delisted because they went extinct or because the original data were in error.”

No evidence listed species fare better than counterfactual unlisted species

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“The decision to list or fund a species is contentious, involving complex tradeoffs of scientific, political and financial concerns. Further, the selection process is affected by observable characteristics of species and the relative importance of these characteristics has changed over time. After controlling for selection bias through several different means, we find no evidence that listed species fare any better than their counterfactual unlisted species on average. In fact, listed species that receive little or no federal and state funding do worse on average than their counterfactual unlisted species.”

Without funding a species, listing is detrimental to recovery

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“We demonstrate how state-of-the-art statistical methods can be used to select such a control group and thereby estimate how species listed under the ESA would have fared had they not been listed. Our results show that listing a species under the ESA is, on average, detrimental to species recovery if not combined with substantial government funds.”

Listing without funding results in worse outcomes

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“However, in line with theoretical predictions (Brown and Shogren 1998; Innes 1997; Polasky and Doremus 1998), we find that species that are listed with little or no funding experience substantially worse outcomes than the comparison group.”

Funding is what is so important, listing is not effective

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“In terms of policy, the results of our empirical analyses indicate that the rancorous debate over listing more species under the ESA may be missing the point. Our analysis suggests that it is not listing that is effective, but rather high levels of expenditures for recovery combined with listing. Simply listing a species in the absence of such expenditures actually leads to a decline.”

Disadvantages

A) ENDANGERED SPECIES HARMED

i) General

ESA actually harms the species it tries to help

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php> [brackets added]

“The Endangered Species Act (ESA) has been hotly debated for 40 years. Supporters call it the “crown jewel” of American environmental legislation, essential to biodiversity preservation. Opponents argue that the ESA imposes high costs on society while delivering few benefits. New research brings important evidence to bear on this debate. Ferraro, McIntosh, and Ospina (2007) [published in the Journal of Environmental Economics and Management] find that the ESA has, in fact, failed to protect endangered species. Indeed, their evidence indicates that for a large majority of the species studied, listing under the ESA has actually harmed the species’ chances of recovery.”

ESA is harmful for most endangered species

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php>

“The ESA does not merely fail to provide widespread species protection; it is positively harmful for most endangered species. Given the widely acknowledged costs of the ESA, perhaps it is time to change the way we think about—and behave toward—species conservation.”

For Most species, the ESA harmed survival chances

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php>

“For the 25 percent of the listed species that garner about 95 percent of all government recovery funding, the ESA seems to have produced improvements in the chances of recovery. But for the other 75 percent of species, those that are largely ignored by the funding process, the ESA has sharply reduced species’ viability, compared to unlisted species that are otherwise similar except for listing status. Thus, for most of the species studied, the ESA has had perverse consequences, reducing rather than enhancing survival chances.”

Compared to unlisted similarly species, listing decreases chances of recovery

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php>

“The results are striking: For the overwhelming majority of listed species—those that receive little funding for recovery—listing under the ESA markedly reduces the species’ chances of recovery, compared to their unlisted twins.”

ii) Perverse Incentive

ESA imposes perverse incentives on private landowners

Dr. Paul J. Ferraro (PhD from Cornell University and assistant professor of Economics at Georgia State University), Dr. Craig McIntosh (PhD from UC Berkeley in Agricultural and Resource Economics), and Dr, Monica Ospina (PhD in Economics from Georgia State University) 2006 “The effectiveness of the U.S. Endangered Species Act: An econometric analysis using matching methods” Published by the Environmental Journal of Economics and Management Vol. 54, Issue #3, Pages 245-261 <http://cmbc.ucsd.edu/content/1/docs/Ferraro-optional-2006.pdf>

“The most plausible explanation for the negative effect of listing alone is that, because the ESA imposes perverse incentives on private landowners, it causes them to undertake pre-emptive actions to eliminate listed species from their land (the so-called ‘shoot, shovel, and shut up’ response)”

Property owners may attempt to rid their property of the species on the list to avoid government restrictions

Professor Daniel K. Benjamin (senior fellow at the Property and Environment Research Center and Professor at Clemson University)“Tangents,” investigates policy implications of recent academic research.) September 2008 “Species Protection” Property and Environment Research Center, PERC Reports: Volume 26, No. 3 <http://www.perc.org/articles/article1079.php>

“It may seem odd that a law ostensibly designed to protect species could end up harming them. Yet there are at least two mechanisms through which this may occur. First, there is the well-known “shoot, shovel, and shut up” response to the ESA: When species on private land are listed, property owners may attempt to rid themselves of the species to avoid government restrictions on the use of their land.”

Examples: Landowners cut timber prematurely to avoid RCW and regulation

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University of Virginia Law School News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm> [Brackets added]

“Further, “[Professor Jonathan] Adler [Director of Case Western Reserve University School of Law Center for Business Law and Regulation] said section 9 isn’t just failing — it’s actually causing harm because it disregards the importance of incentives. He quoted Sam Hamilton, former Fish and Wildlife Service administrator of Texas, who said: “If I have a rare metal on my property, its value goes up. But if a rare bird occupies the land, its value disappears.” Adler said some landowners will do anything they can to keep endangered species off their land so the government will not interfere and regulate the use of their property. He cited a study that indicates the presence of the red-cockaded woodpecker has induced timber owners to cut their timber prematurely. The reason they did this, he said, is because the woodpecker lives in old trees.”

Landowners manage land to prevent Endangered species from living there (RCW proves)

Dr. Shibu Jose (PhD in Forest Science from Purde University and Professor of Forest Ecology at the University of Florida in Gainesville) Dr. Eric Jon Jokela (PhD and professor of Silviculture and Forest Nutrition at the University of Florida) and Dr. Deborah L. Miller, (Associate Professor of Wildlife at the University of Florida in Milton) 2006 “The Longleaf Pine Ecosystem,” Springer Series on Environmental Management, p. 407 [Google Books][brackets added]

“For example, Lancia et al. (1989) round that the opportunity cost of providing foraging habitat for RCW’s [Red-cockaded woodpeckers] can be as high as $155 per acre. This cost is an incentive for landowners to manage their land in a way that prevents RCW’s from inhabiting their property.”

Example of someone who did all he could to discourage “endangered” species from being on his property

Dr. Shibu Jose (PhD in Forest Science from Purde University and Professor of Forest Ecology at the University of Florida in Gainesville) Dr. Eric Jon Jokela (PhD and professor of Silviculture and Forest Nutrition at the University of Florida) and Dr. Deborah L. Miller, (Associate Professor of Wildlife at the University of Florida in Milton) 2006 “The Longleaf Pine Ecosystem,” Springer Series on Environmental Management, p. 407 [Google Books] [brackets added]

“A well-publicized example often touted by those seeking reform is Ben Cone, a private Landowner in North Carolina. Ben Cone owns large tracks of longleaf pine in North Carolina. He managed his land using longer harvesting rotations and frequent low-intensity fires. The management regime gave him a stream of income from quail hunting leases and timber harvests as well as creating a habitat for [Red-cockaded woodpecker] RCW’s. In 1991 the U.S. Fish and Wildlife Service prevented Cone from harvesting timber on more than 1,500 acres of his land in order to protect 29 RCW’s that resided on his property. Cone now clear cuts around the restricted RCW habitat not allowing any trees to mature to an age that would attract more woodpeckers. He claims that he is motivated to prevent further RCW’s from inhabiting his land to prevent further regulation of his property. Thus, while the ESA is efficient in protecting the existing RCWs on private property, it is also creating a perverse incentive discouraging the production of more habitat.”

ESA did not help Preble mouse due to landowners chopping down trees

Professor Terry Lee Anderson (Professor of Economics at Montana State University) and Laura E. Huggins (MS in public policy from Utah State University and Research fellow at the Hoover Institution and director of development at PERC), 2008, “Greener Than Thou,” p. 30 [Google Books]

“In another study, University of Michigan scientists concluded that the 1998 listing of the Preble’s Meadow jumping mouse prompted a backlash against the species. Their survey of affected landowners in Colorado and Wyoming discovered a disturbing trend: for every acre of private land managed to help the mouse, an acre was denuded or otherwise altered to drive the mouse away. More than half the respondents said they had not or would not let biologists survey their property, greatly hampering the collection of data needed to help the species. “So far, listing the Preble’s under ESA not appear to have enhanced its survival prospects on private land,” the researchers reported in the December 2003 issue of Conservation Biology. “Our results suggest that landowners’ detrimental actions canceled out the efforts of landowners seeking to help the species. As more landowners become aware that their land contains Preble’s habitat, it is likely that the impact ton the species may be negative.”

iii) Scientists Blocked

Landowners have even prohibited scientists from coming on their land!

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University of Virginia Law School News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm> [Brackets added]

“[Professor Jonathan] Adler [Director of Case Western Reserve University School of Law Center for Business Law and Regulation] said this fear of regulation has caused an increasing number of landowners to prohibit scientists from coming onto their land to study or search for endangered species because of the fear that they might actually find them.”

B) FOREST FIRES

Endangered Species protections have hamstrung CA from clearing the dry brush that fuels wildfires

John Berlau (director of the Center for Investors and Entrepreneurs at the [Competitive Enterprise Institute](http://www.cei.org/" \t "_blank)) October 26, 2007 “CNN Uses California Fires to Promote Themselves” Human Events <http://www.humanevents.com/article.php?id=23049>

“But ironically, much of the reason California is in peril is due not to climate change, but to the very environmental policies championed by Cooper’s documentary and our new Nobel laureate, Al Gore. While, in its statement praising Gore, the Nobel Committee said that global warming may “threaten the living conditions of much of mankind,” the current wildfires show that the more immediate threat comes from the champions of the gnatcatcher, kangaroo rat, and the Delhi Sands Flower-Loving fly. Environmental mandates have made fire safety for humans take a back seat to the well-being of the aforementioned California creatures, as well as that of every bug and rat lucky enough to be listed as an “endangered species” under federal and state law. For over a decade, environmentalists have hamstrung Californians in their efforts to clear the dry brush that is providing the fuel for this massive fire. If any of these endangered or even “threatened” species are found in shrubs or bushes on public or private property, it becomes very difficult to give this vegetation even the slightest haircut.”

Species protection prevents ordinary fire precautions

John Berlau (director of the Center for Investors and Entrepreneurs at the [Competitive Enterprise Institute](http://www.cei.org/" \t "_blank)) October 26, 2007 “CNN Uses California Fires to Promote Themselves” Human Events <http://www.humanevents.com/article.php?id=23049>

“The core problem is that species protection prohibits many ordinary fire precautions,” wrote California radio talk show host Hugh Hewitt, who is also a real estate attorney, in a Weekly Standard article just after deadly fires broke out in the state in 2003. “You cannot clear coastal sage scrub, no matter how dense, if a gnatcatcher nests within it -- unless the federal government provides a written permission slip which is extraordinarily difficult to obtain.”

Habitat preservation and environmental protection have conflicted with safe fire planning

John Berlau (director of the Center for Investors and Entrepreneurs at the [Competitive Enterprise Institute](http://www.cei.org/" \t "_blank)) October 26, 2007 “CNN Uses California Fires to Promote Themselves” Human Events <http://www.humanevents.com/article.php?id=23049>

“In 2004, Gov. Arnold Schwarzenegger’s Blue Ribbon Fire Commission, whose members included Sen. Dianne Feinstein (D-Calif.) as well as state legislators of both parties, concluded that “habitat preservation and environmental protection have often conflicted with sound fire safe planning.””

C) PROPERTY VALUES DECLINE

ESA restrictions can significantly reduce the value of the land as proven by the RCW

Dr. Shibu Jose (PhD in Forest Science from Purde University and Professor of Forest Ecology at the University of Florida in Gainesville) Dr. Eric Jon Jokela (PhD and professor of Silviculture and Forest Nutrition at the University of Florida) and Dr. Deborah L. Miller, (Associate Professor of Wildlife at the University of Florida in Milton) 2006 “The Longleaf Pine Ecosystem,” Springer Series on Environmental Management, p. 407 [Google Books] [brackets added]

“The restriction placed on private land use through the ESA to protect RCW’s [Red-cockaded woodpecker] can be costly to the landowner. For example, around each cavity tree at least 60 acres of foraging habitat must be maintained within a half mile of the tree. In addition, there are restrictions placed on the harvesting of large pines, pesticide use, and road construction within a 200-foot radius of a cavity tree. These restrictions can significantly reduce the value of the land to the landowner.”

D) ECONOMY

ESA has cost billions

The Small Business & Entrepreneurship Council, March 2, 2006, “Senate ESA Coalition Letter,” <http://www.sbsc.org/content/display.cfm?ID=1409>

“Failure comes at a steep price under the ESA. Not only have species populations suffered, but the Act has cost billions of dollars and deprived landowners of the use of their land and, often, their savings.”

Protecting the spotted owl cost 30,000 jobs as Americans went to Canada for replacement timber

US Senator Gordon Smith, February 13, 2007, “Continuing Appropriations, <http://www.govtrack.us/congress/record.xpd?id=110-s20070213-10>

“But the ethic in the United States has changed as it relates to the harvesting of trees and the extraction of natural resources. The spotted owl was held up as an emblem that its survival was imperiled by the harvesting of trees. After 15 years of the Endangered Species Act listing of the spotted owl, it has now become clear the threat to the spotted owl was not logging; it was, in fact, the barred owl, which is not native to Oregon but which eats the spotted owl. In addition to that because timber harvest was ended on public lands, we now suffer extraordinary nonhistoriclike wildfires that consume millions of acres, destroying spotted owl habitat. But in all of this, through the decade of the 1990s, President Clinton generously recognized the forest policies he had implemented were doing great harm to rural communities, to timber-dependent towns, so we established the Secure Rural School and Community Self-Determination Act. In establishing that, it made up the difference, a bandaid, if you will, until we could write Federal timber policy in a way that would allow for these communities to survive in the interim. President Bush was elected to office. He has tried mightily, through the Healthy Forest Initiative, through supporting and, for the first time, funding the Northwest Forest Act, to try to free up timber so the funds are not necessary. But despite his best efforts, the courts and the laws of Congress have prevented that from occurring. So with the expiration of this act, we desperately need its continuance, its reenactment, as we continue to work to rebalance the environmental and economic equation. The irony is we are losing spotted owls through natural predation and through catastrophic wildfire. And all of the 30,000 jobs lost in my State--family wage jobs--those have not been replaced and Americans still need timber. So where do we get our timber? We get it from Canada. Canada has spotted owls as well. But what Canada does to fill the void America created for American consumers is to overcut its lands without near the environmental protections we have on our own forest lands.”

E) BUDGET DEFICIT

In one year alone there was $160 million just on one salmon species

Zachary A. Goldfarb( Financial reporter for the Washington Post) February 16, 2006 “The True Cost of Protection” The Washington Post <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/15/AR2006021502356.html>

“In 2004, federal and state governments spent more than $160 million to preserve that salmon species, commonly known as Chinook -- listed by the federal government as endangered in the early 1990s. And that doesn't include the millions spent on other kinds of salmon, such as Sockeye, Coho and Chum.”

In 2004, the US fish/wildlife service spent $1.4 billion on Endangered species

Zachary A. Goldfarb( Financial reporter for the Washington Post) February 16, 2006 “The True Cost of Protection” The Washington Post <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/15/AR2006021502356.html>

“In all, according to a recent report by the U.S. Fish and Wildlife Service, the government spent more than $1.4 billion protecting endangered species in 2004 -- 17 percent more than in 2003.”

ESA has cost $9.7 billion just to enforce

Professor Terry Lee Anderson (Professor of Economics at Montana State University) and Laura E. Huggins (MS in public policy from Utah State University and Research fellow at the Hoover Institution and director of development at PERC), 2008, “Greener Than Thou,” p. 30 [Google Books]

“The Endangered Species Act (ESA), for example, has preserved a few species but cost billions of dollars. Since 1989, the first year Congress required a report, the US Fish and Wildlife Service has spent $9.7 billion enforcing the ESA.”

CON: EPA EFFECTIVENESS

By Alexandra Hebdon

WORKABILITY BARRIERS

A) Understaffed

EPA is understaffed

Bradford Plumer, August 26, 2008, "Will Obama's Climate Promises Come to Naught?", The New Republic (a journal of politics and the arts), <http://blogs.tnr.com/tnr/blogs/environmentandenergy/archive/2008/08/26/would-obama-go-around-congress.aspx>

”The EPA is understaffed as is, and doesn't have much experience regulating carbon—plopping broad new authority on its lap would be unwieldy.”

EPA is critically understaffed to investigate environmental crimes

MSNBC, December 10, 2008, "Eco-criminals get their own most-wanted list", <http://www.msnbc.msn.com/id/28157690/>

“The launch of the most-wanted list comes as EPA's criminal enforcement has ebbed. In fiscal 2008, the EPA opened 319 criminal enforcement cases, down from 425 in fiscal 2004. And criminal prosecutors charged only 176 defendants with environmental crimes, the fewest in five years. EPA officials defend the agency's record, saying the agency has focused on bigger cases with larger environmental benefits.But Walter D. James III, an environmental attorney based in Grapevine, Texas, says the EPA is critically understaffed to investigate environmental crimes. While the budget for the division has increased by $11 million since 2000, there are only 135 criminal investigators, far fewer than the 200 Congress authorized in 1990.”

B) Dependent on the DOJ

EPA does not have ultimate control over enforcement outcomes (DOJ has ultimate control)

US Government Accountability Office, September 18, 2008, “Environmental Enforcement: EPA Needs to Improve the Accuracy and Transparency of Measures Used to Report on Program Effectiveness”, United States Government Accountability Office, <http://www.gao.gov/new.items/d081111r.pdf>

EPA’s process for achieving annual results in terms of penalties, estimated value of injunctive relief, and amounts of pollution reduction is influenced by many other factors. While the following list is not comprehensive, it describes some of the significant aspects of the legal and policy environment that could affect the outcomes:

• The Department of Justice (DOJ), not EPA, is primarily responsible for prosecuting and settling civil judicial and criminal enforcement cases. The Attorney General is charged by statute with conducting and supervising litigation to which the United States, or its departments or agencies, is a party, including cases referred by EPA.11 Once cases are referred, EPA officials stated that they continue to participate in all civil and many criminal cases. For each case, DOJ must weigh the litigation risks that affect the likely outcome at trial in making its decisions on whether or how to settle. Consequently, DOJ officials said EPA’s proposed penalty estimates do not govern DOJ’s decisions. DOJ, like EPA, considers applying penalties as described in the relevant environmental statutes. EPA and DOJ officials say they cooperate and reach mutually agreeable decisions on civil judicial cases. For example, DOJ officials said both agencies sign the settlement agreements. However, EPA does not have ultimate control over the enforcement outcomes.

C) Inappropriate Political Influence

EPA is blinded by politics and incapable of handling important decisions

Minnesota Daily (newspaper published on the Twin Cities campus of the University of Minnesota), December 4, 2006, "EPA struggles to protect environment", <http://www.mndaily.com/2009/02/22/epa-struggles-protect-environment>

Reform, however, is needed. The EPA has turned into a powerful political tool, and this has negatively affected its ability to function. In 2005, the EPA delayed the release of a study revealing that car fuel efficiency had worsened over the last decade. The delay coincided with a legislative vote on the 2005 energy bill, which largely ignored fuel efficiency. The EPA needs to be separated from politics to become more effective. The organization should be run by scientists, not politicians nominated by the executive branch. At this time, the American people can only hope that the Supreme Court will make the important decisions that our current EPA seems incapable of handling.

EPA is now a political tool has lost its effectiveness and failed to implement regulations

Minnesota Daily (newspaper published on the Twin Cities campus of the University of Minnesota), December 4, 2006, "EPA struggles to protect environment", <http://www.mndaily.com/2009/02/22/epa-struggles-protect-environment> <http://www.mndaily.com/2009/02/22/epa-struggles-protect-environment>

“As a landmark case is brought against the Environmental Protection Agency, it is impossible not to ask where we went wrong or, rather, where the EPA went wrong. Of course, government often has dysfunctional tendencies, but the EPA began its life with incredible purpose and an air of hope. The organization is now just a shell of its ambitions, and adjectives such as apathetic and ineffective would not be unfair descriptors. The EPA has transformed into a political tool and has lost its effectiveness. Currently, a group of 12 states are suing the EPA over their failure to regulate the emission of carbon dioxide. Suing the EPA for shirking its duties is familiar territory for many states. In 2005, nine states sued the EPA over its decision to exempt electric utilities from a Clean Air Act provision requiring installation of strict mercury controls. The EPA's ruling flew in the face of mercury's well-documented health effects and the EPA's own admission that coal power plants are the largest source of mercury pollution.

D) Legal Uncertainty

EPA allows hundreds of potential violations to occur because of legal uncertainty

US Government Accountability Office, September 18, 2008, “Environmental Enforcement: EPA Needs to Improve the Accuracy and Transparency of Measures Used to Report on Program Effectiveness”, United States Government Accountability Office, <http://www.gao.gov/new.items/d081111r.pdf>

Unclear legal standards, as illustrated in the following examples, have hindered EPA’s enforcement efforts. Agency officials told us a 2006 Supreme Court decision, Rapanos v. United States, generally made it more difficult for EPA to take enforcement actions because the legal standards for determining what is a “water of the United States” were not clear. This uncertainty required EPA to gather significantly more evidence to establish Clean Water Act jurisdiction in those cases where alleged violators discharged to waters of the United States. In a March 2008 memorandum, EPA’s Assistant Administrator for Enforcement and Compliance Assurance said the Court decision and EPA’s resulting guidance “negatively affected approximately 500 enforcement cases.” For example, the official said EPA’s regions decided not to pursue formal enforcement in about 300 instances where there were potential violations because of jurisdictional uncertainty.

E) Faulty Information

When regulating Pesticides, the EPA frequently relies on industry studies

Pesticide Action Network, 2006, “Pesticide Regulation in the U.S.,” <http://www.panna.org/ops/regulations>

“Even when EPA finds risks of concern to workers, it rarely bans use of the substance or imposes restrictions that are adequate to prevent the harm. For example, with the OP pesticide azinphos-methyl (AZM), the EPA will allow the product to be used for four more years under circumstances that it knows will put workers at risk of harm. **Industry generates data:** EPA relies almost exclusively on studies conducted by the pesticide industry or its paid consultants. Studies conducted by independent scientists are frequently ignored.”

EPA’s relies on information from regulated companies to monitor chemicals that might be harmful to kids

Environmental Working Group, January 24, 2009, “EPA a failure on chemicals, audit finds,” <http://www.ewg.org/node/27540>

“Earlier in 2008, the Journal Sentinel revealed that the EPA's Voluntary Children's Chemical Evaluation Program, which **relies** on companies to provide **information** about the dangers of the chemicals they produce, is all but dead. And it disclosed that the agency's program to screen chemicals that damage the endocrine system had failed to screen a single chemical more than 10 years after the program was launched.”

EPA relies on chemical tests provided by industry

David Pollard, August 30, 2006, “Self-Experimentation Update (Continued): The Hundred-Year Lie, A Stress Management Program, and Questions on Probiotics,” Salon, <http://blogs.salon.com/0002007/2006/08/30.html>

“Last year the US Government Accountability Office cited the EPA for abject failure to protect people from tens of thousands of toxic chemicals. But they have no authority to rectify the problem. The EPA relies totally on tests provided by industry itself, and even those biased test results have only been forthcoming for 15% of the chemicals industry has introduced in the last generation.”

EPA has no capacity to test or demand information

David Pollard, August 30, 2006, “Self-Experimentation Update (Continued): The Hundred-Year Lie, A Stress Management Program, and Questions on Probiotics,” Salon, <http://blogs.salon.com/0002007/2006/08/30.html>

“The FDA and EPA have no capacity to test or demand information, very limited authority and resources to take legal or other action, a desperate shortage of inspectors and staff, and indifference and even animosity from anti-regulation governments put in power by donations from these industries. Government can't protect us.”

F) Lack of Transparency

Shortcomings in EPA reporting hamper transparency

US Government Accountability Office, September 18, 2008, “Environmental Enforcement: EPA Needs to Improve the Accuracy and Transparency of Measures Used to Report on Program Effectiveness”, United States Government Accountability Office, <http://www.gao.gov/new.items/d081111r.pdf>

While EPA’s reported outcomes of enforcement efforts help inform Congress, the public, and EPA management about EPA’s progress in prosecuting those who violate federal environmental laws, certain aspects of how EPA reports the data may undermine the transparency and accuracy of its reported outcomes and cause EPA to both over and under-report its enforcement achievements. Taken as a whole, these various shortcomings hamper the transparency and accuracy of EPA’s reporting and create the potential for Congress and the public to misunderstand the agency’s enforcement outcomes.”

G) Ignores Own Standards

EPA has a long history of scientific malpractice and ignored its on standards in regards to second had smoke

Edmund Contoski (former director of planning for an internationally renowned environmental consulting firm), October 14, 2006, “More Fraud, Misconduct at EPA” American Liberty, <http://www.amlibpub.com/liberty_blog/2006/10/more-fraud-misconduct-at-epa.html>

“EPA has a long history of scientific malpractice. Both the General Accounting Office and the Congressional Research Service have been severely critical of EPA's policies and procedures on a variety of issues. EPA has violated its own risk assessment guidelines and debased scientific standards regarding secondhand smoke. It was found guilty of violating six federal statutes for using harassment and intimidation to try to compel employee support for its policy on secondhand smoke. It has fraudulently misrepresented the findings of other scientists in order to make it appear they supported conclusions EPA favored.”

A/T: EPA DATA ON EFFECTIVENESS

Internal Agency Reports Suspect: Agencies trying to look good to Congress and the President

Sidney A. Shapiro (Uninersity Distinguished Chair in Law at Wake Forest University) and Rena Steinzor (the Jacob A. France Research Professor of Law at the University of Maryland), 2008, "Capture, Accountability, and Regulatory Metrics", Texas Law Review, Vol. 86: 1741, [*http://www.utexas.edu/law/journals/tlr/assets/archive/v86/issue7/shapiro\_steinzor.pdf*](http://www.utexas.edu/law/journals/tlr/assets/archive/v86/issue7/shapiro_steinzor.pdf) [brackets added] GPRA [Government Performance and Results Act] has generated a mind-boggling whirlwind of reassuring statistics, cheerful narrative, and assurances that all is well at whichever regulatory agency is justifying its performance. Probe beneath the numbers, however, and these assurances lose their credibility. We provide two case studies to illustrate these phenomena. The first, involving growing paralysis in EPA’s Superfund toxic-waste cleanup program, has garnered remarkably little public attention. The second, involving FDA’s failure to police the safety of Vioxx after its approval as a new drug, was front-page news for weeks. As these case studies will demonstrate, GPRA has failed as a result of its own mixed messages. The statute asks agencies to indicate the constraints under which they operate and how these constraints may affect their performance, but agencies compelled to function in an antiregulatory, even hostile, political atmosphere are predictably reluctant to tell the truth to power. Instead, their goal has become convincing congressional and White House overseers that they are performing well despite budgets that are inadequate for effective implementation of their missions. The result is a set of optimistic statistics designed to reassure the agency’s overseers that they are doing fine, rather than a frank discussion of the real causes of regulatory failure.

EPA’s reports of pollution reduction and injuctive relief *are only estimates, not actual achievements*

US Government Accountability Office, September 18, 2008, “Environmental Enforcement: EPA Needs to Improve the Accuracy and Transparency of Measures Used to Report on Program Effectiveness”, United States Government Accountability Office, <http://www.gao.gov/new.items/d081111r.pdf> (Ellipses in original)

“In reviewing the value of injunctive relief and pollution reduction amounts reported by EPA, we identified several shortcomings in how EPA calculates and reports these outcomes that may inhibit the accuracy and transparency of EPA’s reporting. The following shortcomings are manifested in EPA reports to Congress and the public, such as (1) annual accomplishments reports on enforcement performance and accountability, and (2) reports comparing EPA’s goals and accomplishments under the Government Performance and Results Act:6

• EPA calculates estimated rather than actual amounts of pollution reduction based on a 1-year period in the future at the anticipated time of full compliance, and the value of injunctive relief based on the monetary value of an alleged violator’s estimated future investments to come into compliance. However, the agency’s reports do not always make it clear that these amounts have not been achieved. For example, EPA’s fiscal year 2007 accomplishment report on enforcement referred to the largest civil enforcement actions for just three priority areas alone that “…achieved more than 400 million pounds of pollutant reductions and more than $7 billion in injunctive relief and supplemental environmental projects.”7 However, for the most part, those amounts were estimates of future anticipated results, such as an estimated defendant’s future costs over several years, and do not represent actual accomplishments. Similarly, EPA’s annual performance and accountability report, referring to total pollution reduction, states “EPA has reduced, treated or eliminated 890 million pounds of pollution through enforcement actions in fiscal year 2007.” However, not all of those pollution reductions actually occurred in 2007.”

CON: ETHANOL

By Stephen Menesick

SOLVENCY

A) Corn Ethanol

Not enough corn resources to make ethanol

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

Since almost all future production of ethanol is currently based on corn, it is unlikely that ethanol can make the United States energy independent. President Bush's plan to reduce gasoline consumption by 20% in ten years is simply not feasible through corn ethanol. n109 The current ethanol program uses about 15% of U.S. corn supplies and makes up about 3% of gasoline consumption. n110 According to a study by the GAO, this small percentage of gasoline displacement has not significantly enhanced U.S. energy security. n111Ethanol from corn does not currently contribute much to energy security and is not likely to do so in the future. According to Hill et al., using all the corn produced in the United States in 2005 for ethanol production would only offset 12% of gasoline and diesel demand. n112 Dias de Oliveira et al. calculate that all available cropland in the United States would have to be used for corn production if all vehicles are to run on E85. By 2048, the entire country would need to be filled with corn plantations. n113 The maximum amount of ethanol that can be produced from corn supplies is about 15 to 16 billion gallons, which is equivalent to approximately 9% of conventional motor gasoline supplied in 2005. n114 Due to projected increases in the demand for gasoline, the EIA estimates that ethanol will actually likely account for only 7.6% of total gasoline use in 2030. n115 Neither the president's plan, nor any other large-scale plan to introduce corn ethanol, is likely to have a dramatic impact on the type of fuel used by most domestic vehicles.”

Ethanol requires dedicated pipelines to prevent water infilltration

Robert E. Hogfoss, Hunton & Williams LLP, Atlanta “Increased US ethanol production requires dedicated pipelines” Oil & Gas Journal, September 17, 2007, via Lexis Nexis

Pipelines are the safest, most efficient, and most cost effective mode of transport for ethanol. Whether the infrastructure exists or warrants the significant investment necessary to establish it, however, remains an open question. The need to maintain quality control and avoid cross contamination of product prevents ethanol from being effectively batched with petroleum products in pipeline transport. Ethanol's solubility in water further requires that dedicated ethanol pipelines prevent water infiltration. Petroleum products, by contrast, tolerate water infiltration with little problem, any contact water from infiltration or condensation being removable at tankage facilities. Blends of ethanol and petroleum products are only marginally more flexible for transportation than pure ethanol, the degree to which this is the case depending on the proportion of ethanol being piped.

The production of ethanol is resource intensive using large amounts of electricity, natural gas, and water

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) 2008 “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

“The production of ethanol is also resource-intensive, using large amounts of electricity, natural gas, and an average of 4.7 gallons of water per gallon of ethanol. n13 As corn prices increase, corn production will move to marginal lands that will require more fertilizer use to make it arable, causing more emissions.”

The Production of corn has significant environmental costs

Zachary R. F. Schreiner (JD Candidate, 2009, University of Tulsa College of Law) 2009 “COMMENT FRANKENFUEL: GENETICALLY MODIFIED CORN, ETHANOL, AND CROP DIVERSITY” Energy Law Journal, 2009, 30 Energy L. J. 169, via Lexis-Nexis

“U.S. corn production has significant environmental costs. Corn cultivation requires a significantly greater amount of energy, water, and fertilizers as opposed to other crops. n13 For example, corn requires more nitrogen fertilizer than any other crop. n14 The high volume of chemicals required to sustain the nation's corn crop erode the topsoil, in turn requiring more chemicals to make up for the nutrients lost through erosion.”

B) Cellulosic Ethanol

Cellulosic ethanol supply small: Corn based ethanol will be the main source of US renewable energy

Zachary R. F. Schreiner (JD Candidate, 2009, University of Tulsa College of Law) 2009 “COMMENT FRANKENFUEL: GENETICALLY MODIFIED CORN, ETHANOL, AND CROP DIVERSITY” Energy Law Journal, 2009, 30 Energy L. J. 169, via Lexis-Nexis

Clearly, under both of these projections, corn based ethanol will be the main source of renewable and alternative fuel produced in the United States. n157 Behind these statistics lies a fact that the federal government has recognized: the technology to produce ethanol from cellulosic biomass is not fully developed for large-scale commercial operation. n158 In October of 2006, there was only one plant in North America producing ethanol from cellulosic biomass, and that plant only produces approximately one million gallons a year. n159 Although several companies have announced that they intend on building plants capable of producing ethanol from cellulosic biomass none have moved out of research and pre-construction planning phases. n160

Cannot Fiat Technology: Development is supply-side led and government programs fail

Peter Z. Grossman (Clarence Efroymson Professor of Economics at Butler University) “ARTICLE: IF ETHANOL IS THE ANSWER, WHAT IS THE QUESTION?” Drake Journal of Agricultural Law, Spring, 2008, 13 Drake J. Agric. L. 149, Lexis-Nexis

It is important to consider just what assumption the government is making (at least implicitly) when it issues a technology mandate. In all the above cases, the government was necessarily taking a position on the nature of technological innovation. Most importantly, a technology mandate assumes that innovation is demand-led. That is, if consumers want something that is not physically impossible to produce (such as a perpetual motion machine), then entrepreneurs will produce it, provided the incentives are correct. If they are not correct, then there is a "market failure" that must be corrected by government intervention. n35[\*156] Or, to put it more concretely, consumers have wanted a substitute for foreign oil. Synfuels should have provided that substitute, but for some reason entrepreneurs were not developing it. Perhaps they saw the investment as too risky, or they felt they could not capture the tremendous gains that society would enjoy from this new technology. n36 But since the market was not providing consumers with what they demanded, government had to step in to correct this market failure to deliver. Some scholars over the years have argued that innovation may be demand-led, n37 but in general the evidence overwhelmingly points to a supply-side explanation. Innovation occurs not because consumers want a new technology. The way the process actually works is: first, innovation occurs in a way that is not generally predictable; and second, the market determines whether people want the result of that innovation at the price entrepreneurs will offer it. As one of the leading historians of technology Nathan Rosenberg has argued, scientific knowledge evolves if not randomly, at least unevenly, and its employment in the creation of marketable products is unpredictable. n38 Thus, it cannot actually be said that there was a market failure in the case of alternative energy technology, or that the market had in fact underprovided what consumers had demanded. Rather, the converse appears to be more likely. That is, there was an unrealistic expectation that government would be able to substitute not only for market interaction but also for knowledge acquisition and its consequent development. As the discussion of past governmental efforts suggests, government programs simply have not produced marketable energy products. Arguably in fact, technology policy has revealed not the existence of market failures but rather the persistence of government failures. n39

Technology for cellulosic ethanol is years away

Vincent Barbera (J.D. Candidate, 2009, Villanova University School of Law) 2009 **“**COMMENT: TOMORROW TODAY? CELLULOSIC ETHANOL: HOW IT'S DONE, WHO'S GETTING IT DONE, AND ITS ENVIRONMENTAL IMPACT” Villanova Environmental Law Journal, 2009, 20 Vill. Envtl. L.J. 27, via Lexis Nexis

While technology currently enables the production of cellulosic ethanol, Representative Collin Peterson, chairman of the House Agricultural Committee, opined that it is "optimistic" to think that the United States will be able to move from corn-based to cellulosic ethanol by 2012. n82 Peterson estimated that "it will be at least a decade before technological breakthroughs allow ethanol fuel to be produced commercially from farm and forest wastes." n83 Others remain more optimistic, suggesting that "commercial production of economically viable cellulosic ethanol may only be three to five years away." n84

Barring major tech breakthrough the production of even 22 billion gallons of Cellulosic ethanol is unlikely

Peter Z. Grossman (Clarence Efroymson Professor of Economics at Butler University)2008 “ARTICLE: IF ETHANOL IS THE ANSWER, WHAT IS THE QUESTION?” Drake Journal of Agricultural Law, Spring, 2008, 13 Drake J. Agric. L. 149, Lexis-Nexis

The ethanol mandate of 36 billion gallons presupposes technological progress on cellulosic ethanol, which would be made from woodchips, switch grass and cornstalks, among other sources. n114 The process, basically the large scale application of enzymes to break down cellulose into sugars, has been demonstrated at a cost that shows the technology is not yet close to economic viability. n115 In his State of the Union Address in 2007, President Bush suggested that breakthroughs in cellulosic ethanol were near, n116 but even proponents of this technology see its economic viability by 2012 as feasible with at best "plausible technology developments." n117 Most observers are far less optimistic, even if the technology does in principle bring costs down to economically viable levels - at least at modest-sized production. To reach the mandate in the fifteen year timetable, an area the size of Kentucky will have to be planted with switch grass (or some other feed stock), and a huge infrastructure of distilleries, storage facilities and so on need be constructed. n118 Moreover, no one knows what kind of environmental impacts the technology will create. The process will entail utilization of thousands of tons of organic compounds which will need handling and disposal. It is considered highly unlikely that, barring a major technological breakthrough, the United States will produce anything close to 22 billion gallons of cellulosic ethanol by 2022. n119

Difficult to find suitable locations for cellulosic ethanol biorefineries

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

Biorefineries can’t be built just anywhere – very few sites could be found to build switchgrass plants in all of South Dakota (Wu 1998). Much of the state didn’t have enough water or adequate drainage to build an ethanol factory. The sites had to be on main roads, near railroad and natural gas lines, out of floodplains, on parcels of at least 40 acres to provide storage for the residues, have electric power, and enough biomass nearby to supply the plant year round.

Relying on switchgrass is heavily flawed

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

Farmers won’t grow switchgrass until there’s a switchgrass plant. Machines to harvest and transport switchgrass efficiently don’t exist yet (Barrionuevo 2006). The capital to build switchgrass plants won’t materialize until there are switchgrass farmers. Since "ethanol production using switchgrass required 50% more fossil energy than the ethanol fuel produced" (Pimentel 2005), investors for these plants will be hard to find.

Even if farmers do grow, they won’t sell enough residue to make cellulose competitive

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

Harvesting of stover on the scale needed to fuel a cellulosic industry won’t happen because farmers aren’t stupid, especially the ones who work their own land. Although there is a wide range of opinion about the amount of residue that can be harvested safely without causing erosion, loss of soil nutrition, and soil structure, many farmers will want to be on the safe side, and stick with the studies showing that 20% (Nelson, 2002) to 30% (McAloon et al., 2000; Sheehan, 2003) at most can be harvested, not the 75% agribusiness claims is possible. Farmers also care about water quality (Lal 1998, Mann et al, 2002). And farmers will decide that permanent soil compression is not worth any price (Wilhelm 2004). As prices of fertilizer inexorably rise due to natural gas depletion, it will be cheaper to return residues to the soil than to buy fertilizer.

A plausible 2% increase in sunlight absorption could negates the “green” benefits of cellulosic ethanol

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

"How much the sun warms our climate depends on how much sunlight the land reflects (cooling us), versus how much it absorbs (heating us). A plausible 2% increase in the absorbed sunlight on a switch grass plantation could negate the climatic cooling benefit of the ethanol produced on it. We need to figure out now, not later, the full range of climatic consequences of growing cellulose crops" (Harte 2007).

DISADVANTAGES

A) Costs

Ethanol Costs more than Oil to produce

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) 2008 “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

Increasing the production of ethanol is likely to be costly relative to gasoline. On an energy basis, ethanol typically costs more than oil, and is also more costly to distribute in the United States. n12 In addition, one needs to take into account the deadweight costs of government programs aimed at promoting ethanol, such as the tax credit.

B) Soil Erosion

Link: Cellulose ethanol collapses the soil

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

Fertile soil will be destroyed if crops and other "wastes" are removed to make cellulosic ethanol. "We stand, in most places on earth, only six inches from desolation, for that is the thickness of the topsoil layer upon which the entire life of the planet depends" (Sampson 1981). Loss of topsoil has been a major factor in the fall of civilizations (Sundquist 2005 Chapter 3, Lowdermilk 1953, Perlin 1991, Ponting 1993). You end up with a country like Iraq, formerly Mesopotamia, where 75% of the farm land became a salty desert. Fuels from biomass are not sustainable, are ecologically destructive, have a net energy loss, and there isn’t enough biomass in America to make significant amounts of energy because essential inputs like water, land, fossil fuels, and phosphate ores are limited.

Link: Corn ethanol also causes soil erosion

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

In addition, the production of ethanol from corn is likely to cause environmental degradation through soil erosion and the use of pesticides and fertilizers, contributing to water and air pollution. n83 Environmental concerns also exist regarding the impacts on wildlife and biodiversity, especially if land that has been set aside for conservation purposes is used in corn production. n84 Some analysts also worry about the high amount of water that ethanol plants require, limiting their expansion in cities such as Tampa Bay, Florida; Pipestone, Minnesota; and Chesapeake, Virginia that could not guarantee water availability. n85 According to the Department of Agriculture, water use for ethanol plants ranged between 1 gallon to 11 gallons per gallon of ethanol, with an average of 4.7 gallons of water per gallon of ethanol. n86 Some see potential water shortages as the biggest setback to corn ethanol as a viable renewable resource, dubbing it as the "Achilles heal." n87

Impact: Soil erosion degrades the water supply

Alice Friedmann, (Freelance Journalist), 2007 “Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America” Culture Change, April 10, 2007 <http://www.culturechange.org/cms/index.php?option=com_content&task=view&id=107&Itemid=1>

Soil erosion is a serious source of water pollution, since it causes runoff of sediments, nutrients, salts, eutrophication, and chemicals that have had no chance to decompose into streams. This increases water treatment costs, increases health costs, kills fish with insecticides that work their way up the food chain (Troeh 2005). Ethanol plants pollute water. They generate 13 liters of wastewater for every liter of ethanol produced (Pimentel March 2005)

C) GM CROPS

Link: US Corn grown from GM Crops

Zachary R. F. Schreiner (JD Candidate, 2009, University of Tulsa College of Law) 2009 “COMMENT FRANKENFUEL: GENETICALLY MODIFIED CORN, ETHANOL, AND CROP DIVERSITY” Energy Law Journal, 2009, 30 Energy L. J. 169, via Lexis-Nexis

Much of U.S. corn has been grown from hybridized or genetically modified seeds in order to make the plant more viable in colder climates, increase yields, resistant to drought, and resistant to insects. n18 Corn production has been made more lucrative through these advances. n19 However, the use of genetically modified corn within the current U.S. corn crop, and projected increases due to ethanol production, present serious obstacles to maintaining crop diversity.

Internal Link: GM crops blend and infiltrate wild ones with large scale crop cultivation

Zachary R. F. Schreiner (JD Candidate, 2009, University of Tulsa College of Law) 2009 “COMMENT FRANKENFUEL: GENETICALLY MODIFIED CORN, ETHANOL, AND CROP DIVERSITY” Energy Law Journal, 2009, 30 Energy L. J. 169, via Lexis-Nexis

Gene flow from genetically modified crops into wild, native, and organic varieties, potentially eliminating those varieties, n30 is the primary long-term consequence of increased genetically modified corn cultivation for ethanol production. This issue became visible when it was reported in 2001 that corn genetically modified in the United States was discovered among native maize varieties around Oaxaca, Mexico-hundreds of miles from the U.S. border. n31 The speculation as to how the modified corn arrived in the area centered on legally imported animal feed planted illegally in the region. n32 But, this is just one method by which genetically modified crops can commingle with native varieties; others are much more mundane.

Impact: Intermixing of crops poses health risks and poses legal issues

Zachary R. F. Schreiner (JD Candidate, 2009, University of Tulsa College of Law) 2009 “COMMENT FRANKENFUEL: GENETICALLY MODIFIED CORN, ETHANOL, AND CROP DIVERSITY” Energy Law Journal, 2009, 30 Energy L. J. 169, via Lexis-Nexis

Current levels of U.S. corn production, specifically the percentage stemming from genetically modified sources, have already presented national and international legal issues. With the United States being the world's largest exporter of corn, maintaining a seventy percent share of the world market, n42 it is surprising more incidents have not occurred. Examples of future issues, stemming from gene flow, or other methods, revolve around the mixing of genetic traits. Corn engineered to resist a certain kind of pest in corn, which is only approved for use in animal feed, mixing with corn that is to be consumed by humans could have potential health and safety implications. n43 The presence of genes known to be allergens, such as those in varieties of nuts, in plants where the gene is not normally expected could prove to be harmful to the person who has those food allergies. n44 Farmers could be harmed in multiple ways by the increased cultivation of genetically modified corn. The organic farmer may have a cause of action when his corn crop is rendered valueless through the infiltration of genetically modified corn from a neighboring farm. n45 Another cause of action could arise when a farmer's corn crop is only approved only for human consumption is pollinated by corn only approved for feedstock. n46

A/T: ETHANOL REDUCES AIR POLLUTION

Aside from GHGs, ethanol may be worse environmentally than gasoline

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) 2008 “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

In general, many studies focus on the greenhouse gas emissions associated with ethanol use, but ignore some of the other environmental impacts including resource depletion, ozone depletion, acidification, human and ecological health, and smog formation. n78 Aside from greenhouse gas emissions, several scholars believe that the overall environmental effects of ethanol are no better than gasoline, and in some cases, may actually be worse. [n79](http://www.lexisnexis.com.libproxy.lib.unc.edu/us/lnacademic/frame.do?tokenKey=rsh-20.174651.1596438647&target=results_DocumentContent&reloadEntirePage=true&rand=1246329037829&returnToKey=20_T6868738467&parent=docview" \l "n79) Hill et al. find potentially greater human health impacts due to ethanol use because of increased numbers of other air pollutants, such as nitrogen oxides, in line with other studies. n80 [\*448] Niven finds that ethanol may increase smog formation. n81 A recent study by Jacobson concludes that a fleet of vehicles running on E85 (85% ethanol blend) is not likely to improve air quality and may cause more health risks than a fleet of gasoline vehicles. n82

Since it has been recently incorporated, it is difficult to tell what role ethanol has played in the RFG success

James A. Duffield, (Ph.D. is an agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.), Irene Xiarchos, (Ph.D. and agricultural economist with the Office of Energy Policy and New Uses, United States Department of Agriculture.) & Steve A. Halbrook, (Ph.D. and Vice President of Farm Foundation, Oak Brook, Illinois, and a member of the District of Columbia Bar), 2008 “ARTICLE: ETHANOL POLICY: PAST, PRESENT, AND FUTURE” South Dakota Law Review, 2008, 53 S.D. L. REV. 425, via Lexis Nexis

Reformulated gasoline, combined with other industrial and transportation controls, is responsible for the long-term downward trend in U.S. smog. n153 Using RFG reduces toxic pollutants by about twenty-four thousand tons per year, the equivalent of eliminating the toxic emissions from over thirteen million vehicles. In addition, Phase I of the RFG program has reduced cancer risk by about twelve percent, and Phase II that began in 2000 is expected to reduce cancer risk by nineteen percent. n154 However, ethanol has not been a major part of the RFG program until recently, so it's difficult to measure the contribution it has made to that program's success over the past ten years. “

Ethanol emissions are potentially more harmful than those in gasoline harming health

Vincent Barbera (J.D. Candidate, 2009, Villanova University School of Law) 2009 **“**COMMENT: TOMORROW TODAY? CELLULOSIC ETHANOL: HOW IT'S DONE, WHO'S GETTING IT DONE, AND ITS ENVIRONMENTAL IMPACT” Villanova Environmental Law Journal, 2009, 20 Vill. Envtl. L.J. 27, via Lexis Nexis

A Stanford University study [\*42] found that "ethanol was unlikely to improve air quality and that if all cars ran on ethanol by 2020, there would be an increase in certain air pollutants, such as acetaldehyde and formaldehyde, that would cause a rise in asthma and other respiratory illnesses." n115 Other studies show that "ethanol, especially at higher concentrations in gasoline, also produces more smog-causing pollutants than gasoline per unit of energy burned." n116 Again, because ethanol has not yet been used in large quantities in transportation in the United States, there is considerable ongoing debate about the actual effects of ethanol use on air pollution. n117

Ethanol may actually increase GHG emissions

Robert W. Hahn (co-founder and executive director of the AEI-Brookings Joint Center and a scholar at AEI) “Symposium: Creating a Legal Framework for Sustainable Energy: Ethanol: Law, Economics, and Politics” Stanford Law & Policy Review, 2008, 19 Stan. L. & Pol'y Rev 434, via Lexis Nexis

Another problem is that many studies do not adequately take into account the impact that lower U.S. corn exports could have on corn production elsewhere. The decrease in corn exports may cause other countries to convert previously unused, marginal lands, for example, into farm lands, which will also increase global emissions of greenhouse gases. n75 Some scholars, such as Hill et al., acknowledge that the small reduction in greenhouse gas emissions associated with ethanol use may not be robust to alternate assumptions. n76 One of the greatest challenges to the greenhouse gas reductions attributed to ethanol is from a recent study led by Nobel Prize winner Paul Crutzen. The study finds that the amount of nitrous oxide, a greenhouse gas, emitted through agriculture was previously underestimated. Accounting for the increase in nitrous oxide emissions actually results in net increases in greenhouse gases from the production and use of biofuels such as ethanol. If correct, this study could drastically alter the perception of the greenhouse gas benefits of ethanol. n77

CON: FORESTS

By Matthew Baker

INHERENCY

North American forests are as big as 100 years ago & have grown in the last 10 years

Dr. Patrick Moore (PhD in Ecology from the Institute of Animal Resource Ecology at the University of British Columbia and co-founder of Greenpeace), August 29, 2007, “An inconvenient fact,” The Vancouver Sun, <http://www2.canada.com/vancouversun/news/editorial/story.html?id=67623834-a1af-42e4-91cb-28492a462651&p=2>

“North Americans are the world's largest per-capita wood consumers and yet our forests cover approximately the same area of land as they did 100 years ago. According to the United Nations, our forests have expanded nearly 100 million acres over the past decade.”

Forests have re-grown in many parts of the US in the wake of massive losses in the 19th century

Dennis Avery (former senior agricultural analyst for the U.S. Department of State), September 1, 2007, “Forests are Expanding Worldwide, Aided by High-Yield Farming Practices,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/21821/Forests_Are_Expanding_Worldwide_Aided_by_HighYield_Farming_Practices.html>

“In America, a huge surge of timber harvest and farming expansion between 1850 and 1910 denuded 190 million acres of forest, says *Proceedings* article co-author Jesse Ausubel of Rockefeller University. Since then, however, high-yield crops and livestock have permitted forests to re-grow in New England, West Virginia, the Ozarks, and other marginal farming areas.”

Tree plantations will significantly lower the % of wood cut from natural forests by 2050

Dennis Avery (former senior agricultural analyst for the U.S. Department of State), September 1, 2007, “Forests are Expanding Worldwide, Aided by High-Yield Farming Practices,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/21821/Forests_Are_Expanding_Worldwide_Aided_by_HighYield_Farming_Practices.html>

“The researchers for the article say expanded tree plantations are expected to lower the percentage of wood cut from natural forests from 67 percent today to 25 percent by 2050. Article co-author Paul Waggoner of the University of Connecticut notes more of today's U.S. wood harvest is coming from Southern forests that can grow twice as fast as Northern ones, and from tree plantations where species selection, fertilizer, and weed suppression hasten tree growth.”

French and Asian forests expanding

Dennis Avery (former senior agricultural analyst for the U.S. Department of State), September 1, 2007, “Forests are Expanding Worldwide, Aided by High-Yield Farming Practices,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/21821/Forests_Are_Expanding_Worldwide_Aided_by_HighYield_Farming_Practices.html>

“French forest cover expanded from about 7 percent to 25 percent of the nation's geographic area over the past century as wheat yields surged from less than 2 tons per hectare in 1950 to more than 7 tons per hectare with greater use of fertilizer, better seeds, and fungicides. In Asia, 792,000 hectares of forest were cleared between 1990 and 2000--but reforestation programs in China and India added more than 1 million hectares of forests between 2000 and 2005. There are good reasons to believe the big Asian countries have now gotten rich enough to value trees and forests.”

US, Canadian, European, European Russian, Chinese, and Indian forests are growing

Dennis Avery (former senior agricultural analyst for the U.S. Department of State), September 1, 2007, “Forests are Expanding Worldwide, Aided by High-Yield Farming Practices,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/21821/Forests_Are_Expanding_Worldwide_Aided_by_HighYield_Farming_Practices.html>

“The countries with growing forest assets include the United States, Canada, much of Europe, European Russia, China, and India. This growth has been enabled by high-yield farms, which grow more food per acre on the best-quality land and leave marginal land to trees; high-yield tree plantations with faster-growing trees; wood imports from the world's faster-growing warm-climate forests; and the continuing rural-urban migration that substitutes kerosene for firewood in Third World cooking and heating.”

SIGNIFICANCE

Cutting down OLD trees does not result in more CO2 since sequestration has basically halted

Dr. Patrick Moore (PhD in Ecology from the Institute of Animal Resource Ecology at the University of British Columbia and co-founder of Greenpeace), August 29, 2007, “An inconvenient fact,” The Vancouver Sun, <http://www2.canada.com/vancouversun/news/editorial/story.html?id=67623834-a1af-42e4-91cb-28492a462651&p=2>

“There is a misconception that cutting down an old tree will result in a net release of carbon. Yet wooden furniture made in the Elizabethan era still holds the carbon fixed hundreds of years ago. Berman, a veteran of the forestry protest movement, should by now have learned that young forests outperform old growth in carbon sequestration. Although old trees contain huge amounts of carbon, their rate of sequestration has slowed to a near halt.”

Deforestation is only responsible for 20% of global CO2 emissions

Dr. Patrick Moore (PhD in Ecology from the Institute of Animal Resource Ecology at the University of British Columbia and co-founder of Greenpeace), August 29, 2007, “An inconvenient fact,” The Vancouver Sun, <http://www2.canada.com/vancouversun/news/editorial/story.html?id=67623834-a1af-42e4-91cb-28492a462651&p=2>

“Deforestation, primarily in tropical forests, is responsible for about 20 per cent of global carbon dioxide emissions. This is occurring where forests are permanently cleared and converted to agriculture and urban settlement.”

DISADVANTAGES

A) Global Warming

Removing all the world’s trees could actually cool the planet

The Economist, April 12, 2007, “Trees may warm the Earth,” <http://www.economist.com/science/displaystory.cfm?story_id=8998216>

“One of them, that planting trees will make the world cooler than it would otherwise be, is the subject of a newly published study by Govindasamy Bala, of the Lawrence Livermore National Laboratory, in California, and his colleagues. Dr Bala has found, rather counter-intuitively, that removing all of the world's trees might actually cool the planet down. Conversely, adding trees everywhere might warm it up.”

Complete Deforestation could cool the planet by a net 0.3 degrees C

The Economist, April 12, 2007, “Trees may warm the Earth,” <http://www.economist.com/science/displaystory.cfm?story_id=8998216>

“Thus, Dr [Govindasamy] Bala [of the Lawrence Livermore National Laboratory]’s model can be told to replace all the world's forests with shrubby grasslands, and left alone to work out how such a change would alter greenhouse-gas concentrations and how that, in turn, would influence the temperature in different places. When Dr Bala ordered global clearcutting, the model calculated that the atmosphere's carbon-dioxide levels would roughly double by 2100. This is a much greater increase than happens in a business-as-usual simulation, but it would, paradoxically, make for a colder planet. That is because brighter high latitudes would reflect more sunlight in winter, cooling the local environment by as much as 6°C. The tropics would warm up, since they would be less cloudy, but not by enough to produce a net global heat gain. Overall, Dr Bala's model suggests that complete deforestation would cause an additional 1.3°C temperature rise compared with business as usual, because of the higher carbon-dioxide levels that would result. However, the additional reflectivity of the planet would cause 1.6°C of cooling. A treeless world would thus, as he reports in the Proceedings of the National Academy of Sciences, be 0.3°C cooler than otherwise.”

B) Hunger

Deforestation clears land for food

Dr. Nathalie Fiset (MD and environmental commentator), March 27, 2007, "Benefits of Deforestation." Ezine@Articles, <http://ezinearticles.com/?Benefits-of-Deforestation&id=504455>

“As stated above, arable land is valuable, and the act of deforestation to clear a place for farm land provides a much needed additional food source for man. More often than not, the soil in a forest is much richer than that of regular farm lands because of the wide variety of life it supports. This new land area grants a much needed place to grow a food supply to deal with the planet's steadily expanding population of humanity.”

CON: GAS TAX

By Phillip Mayer

SOLVENCY

No Reduction in Emissions

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

The second problem is that an increase in gasoline taxes would have very little effect on aggregate tailpipe emissions. That’s because consumers will primarily respond to a fuel tax over the long run by purchasing more fuel efficient vehicles, not by driving less. And for every incremental increase of automotive fuel efficiency, a 20 percent increase in vehicle miles traveled follows, and this increase in driving will greatly reduce the emissions reductions that we might otherwise see in response to the tax. Economist J. Daniel Khazoom, for instance, calculates that doubling the gasoline tax under the current regulatory regime would only reduce tailpipe emissions by 6 percent over the long run.

Gas taxes alone do not alleviate congestion as UK proves

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

The futility of taxing gasoline as a second best policy to tackle congestion is well illustrated by policy in London. Gasoline taxes in the United Kingdom are $2.80 per gallon, more than seven times higher than they are in the United States (where they average 38 cents per gallon). Yet, high U.K. taxes have not alleviated congestion in urban areas like London. When the municipal government in London imposed congestion-based tolls, however, to charge drivers for using inner-city streets, congestion was greatly diminished. When congestion charges were imposed in Stockholm in 2006, traffic likewise decreased 22 percent and exhaust emissions decreased by 14 percent.

Gas Tax would not Improve Transportation

Mary Peters (U.S. Secretary of Transportation) Maria Cino (Former Deputy to the Secretary of Transportation) and Rick Geddes (A Cornell University Professors who served as a senior staff economist in the Bush administration on the President’s Council of Economics) December 2007 Report of the National Surface Transportation Policy and Revenue Commission “Minority Views of Secretary Mary Peters, Commission Chair; Commissioner Maria Cino; and Commissioner Rick Geddes” <http://transportationfortomorrow.org/final_report/pdf/volume_1_minority_views.pdf>

The fact that the public has overwhelmingly opposed an increase in Federal fuel taxes since 1993 represents a lack of investor confidence in current transportation policy. The public correctly understands that increased fuel taxes will not remedy the woefully inadequate transportation system performance they so frequently experience today. Accordingly, neither Congress nor successive Administrations have supported increases in gas taxes, despite the obvious and rapid deterioration in transportation system performance.

No Increase in National Security

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

To summarize, we find little reason to believe that America’s national security is jeopardized to any great extent by oil consumption or that gasoline taxes could reduce whatever problems may exist.

No Oversight of Gas Tax Funds

Robert Puentes (Senior Fellow at the Brookings Institution) August 2007 “Don’t Raise that Gas Tax…Yet” The Brookings Institution <http://www.brookings.edu/opinions/2007/0822gastax_puentes.aspx>

The gas tax feeds the highway trust fund which is distributed to states without any kind of purpose, oversight or accountability. Nor are the funds tied to any goals such as keeping bridges in good repair, reducing congestion, improving air quality, or connecting workers to jobs and education. It is as close to sending states a blank check as you can get. Unfortunately, when it comes to transportation most states have not proven themselves to be good stewards of the public dollar.

Increasing Tax would be Wasteful without Accountability

Mary Peters (U.S. Secretary of Transportation) Maria Cino (Former Deputy to the Secretary of Transportation) and Rick Geddes (A Cornell University Professors who served as a senior staff economist in the Bush administration on the President’s Council of Economics) December 2007 Report of the National Surface Transportation Policy and Revenue Commission “Minority Views of Secretary Mary Peters, Commission Chair; Commissioner Maria Cino; and Commissioner Rick Geddes” <http://transportationfortomorrow.org/final_report/pdf/volume_1_minority_views.pdf>

Raising fuel taxes in the existing financial and planning environment would be wasteful because our current transportation infrastructure system is neither performance driven nor accountable. Only a handful of States currently utilize benefit-cost analysis and rampant earmarking at the Federal level has continued to erode the returns on U.S. highway investments.

Fuel Tax Increase must be combined with Reforms

The National Surface Transportation Policy and Revenue Study Commission (Comprised of 12 members, representing: Federal, state and local governments; metropolitan planning organizations; transportation-related industries; and public interest organizations) December 2007 “Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission” <http://transportationfortomorrow.org/final_report/vol_1_chapter_1.aspx>

Immediate action is required to prevent Highway Trust Fund balances from going negative; action is required over the next 20 years to finance improvements needed to enhance surface transportation system conditions and performance; and actions will be required after 20 years to replace the fuel tax with a more sustainable revenue source. As articulated in the previous pages, the Commission recognizes that the financing question does not stand alone but is fundamentally tied to the underlying policy questions. Simply raising the Federal fuel tax and putting more money into the same programs will not be acceptable. The Commission strongly believes that, before Federal financial support for surface transportation is increased, the Nation’s surface transportation programs must be fundamentally reformed.

Gas Tax Ineffective at Internalizing Externalities

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

The third problem with a federal gasoline tax designed to internalize environmental externalities is that the environmental and health-related damages imposed by air emissions vary by location. Air sheds have variable carrying capacities and the harms caused by emissions are largely determined by background ambient concentration and the marginal impact of additional loads. Accordingly, a given amount of hydrocarbon tailpipe emissions will have a greater negative impact in Los Angeles, California, than in Sioux City, Iowa. Uniform national environmental externality taxes will be inefficient and wrong all the time—too low in some areas and too high in others.

Ineffective and Unfair Regulatory Instrument

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

Gasoline taxes represent a “second-best” means of internalizing the externalities associated with motor vehicle travel. Unfortunately, federal gasoline taxes, no matter how carefully constructed, always send the wrong signals to motorists. When addressing road construction and maintenance costs, for example, they overcharge motorists in low-maintenance, low-construction locations and undercharge those in high-maintenance, high-growth areas. When addressing pollution costs, they overcharge rural motorists and undercharge many urban motorists. When addressing congestion, they overcharge non-peak road users and undercharge peak road use.

More Funds Needed for Transportation

Robert Puentes (Senior Fellow at the Brookings Institution) August 2007 “Don’t Raise that Gas Tax…Yet” The Brookings Institution <http://www.brookings.edu/opinions/2007/0822gastax_puentes.aspx>

The other problem with increasing federal revenues is that the states simply use the new federal money for funds they otherwise would have had to raise themselves. The U.S. Government Accountability Office found that this "substitution effect" means there may not actually be more money spent on transportation and the federal government, as a result, winds up funding a tax relief program for the states. Congress can dedicate funds for transportation but it cannot tell the states to do the same.

DISADVANTAGES

A. Families Hurt

Enormous Economic Pitfalls

Charles Krauthammer (Writer for the Weekly Standard) January 2009 The Weekly Standard “Serve the Nation: Do a Gas Tax Right” <http://www.nypost.com/seven/01192009/postopinion/opedcolumnists/serve_the_nation__do_a_gas_tax_right_150814.htm?page=2>

With $4 gas still fresh in our memories, the psychological impact of a tax that boosts the pump price to near $3 would be far less than at any point in decades. Indeed, an immediate $1 tax would still leave the price more than one-third below its July peak. The rub, of course, is that this is a time of severe recession. Not only would the cash-strapped consumer rebel against a gas tax. The economic pitfalls would be enormous.

Economic Damage, without Decreasing Consumption

Sucheera Pinijparakarn (Writing for The Nation) May 2009 The Nation “Fuel tax hike may hurt economy” <http://www.nationmultimedia.com/2009/05/07/business/business_30102168.php>

“The government's move to raise excise taxes on fuel products may not lead to lower consumption, but could have a negative impact on the economy, said Manoon Siriwan, an oil industry analyst. He said that as raising excise taxes would amount to higher retail prices, this would affect various local industries of which energy cost accounts for a substantial part of their operating costs.”

Gas tax increase of $2 could cost family $1,600 a year

Michael Levine (A law professor at New York University School of Law) Mark Roe (A law professor at Harvard Law School) July 2009 The Financial Times “How Obama could introduce a petrol tax” <http://www.ft.com/cms/s/0/362c2a02-6a59-11de-ad04-00144feabdc0.html>

Here is how it would work: Suppose you are the average driver, driving 12,000 miles a year in a 15 miles-per-gallon car. A $2 per gallon tax would cost you $1,600 a year.

Impact: Recession Deepened

The Post Journal June 2009 “Increase In Gas Taxes Would Deepen Recession” [http://www.post-journal.com/page/content.detail/id/532250.html?nav=5010](../../../AppData/Local/Temp/”%20http:/www.post-journal.com/page/content.detail/id/532250.html?nav=5010)

At a time when many Americans are worried about the price of gasoline, Congress seems poised to increase it dramatically. We cannot conceive of an action by federal government more likely to deepen the current recession.

B. Economy Damaged

Americans are Especially Dependent on Auto Travel

Phil Davies (A Senior Writer for The Federal Reserve Bank of Minneapolis) December 2008 Federal Reserve Bank of Minneapolis “How to Save Gas” <http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=4122>

However, raising the federal fuel tax or introducing a carbon tax is likely to face staunch political opposition. One argument against motor fuel taxes is that they are regressive, unfairly burdening low-income households. Also, motorists have a loud voile in Congress; Americans of all income levels depend on auto travel to a much greater extent than Europeans and Japanese, who have readier access to mass transit.

Middle and Lower Class Families Damaged

The Dallas Morning News January 2008 ”Study: Toll roads alone won’t pay for U.S. highway needs” <http://www.dallasnews.com/sharedcontent/dws/news/dmn/stories/011608dnmettransportationstudy.2502f256.html>

Sen. Kay Bailey Hutchison, R-Texas, also rejected the idea of raising the federal gas tax. "With Americans paying more than $3 per gallon at the pump and the economy teetering on a recession, we should be providing tax relief, not imposing a tax that has the greatest impact on lower- and middle-class families," her spokesman Matt Mackowiak said.

Taxpayers can’t Handle Paying More in a Recession

Richard Simon (Writer for the Los Angeles Times) February 2009 “Commission Recommends Federal Gas Tax Increase” L.A. Times <http://articles.latimes.com/2009/feb/27/nation/na-gas-tax27>

"We must be mindful that American families are already struggling during this economic crisis," Sen. James M. Inhofe of Oklahoma, the top Republican on the Senate Environment and Public Works Committee, said Thursday. "The last thing we need to do is place a large tax increase on them at the pump."

Impact: Lower Class Devastated

Rep. Tom Latham(A ranking member of the House Appropriation Subcommittee on Transportation and Housing and Urban Development) February 2009 Roll Call “Steer Clear of Major Tax Increases” [http://www.rollcall.com/features/Transportation\_Infrastructure\_Infrastructure-2009/tandi/32458-1.html](http://www.rollcall.com/features/Transportation_Infrastructure_Infrastructure-2009/tandi/32458-1.html%20)

“Fuel taxes and road tolls often hit low-income Americans the hardest. This is particularly true in rural states, where lower-income citizens tend to commute farther distances to their places of employment. Given that they are also likely to be operating older, less fuel-efficient vehicles, it is logical to conclude that regressive toll or tax increases could be devastating to rural and low-income Americans.”

C. Traffic Deaths

Link: Consumers will buy more Fuel Efficient Cars

Jerry Taylor (director of natural-resource studies at the Cato Institute) and Peter Van Doren (Senior Fellow at the Cato Institute and editor of Cato’s Regulation magazine)August 2007 “Don’t Increase Federal Gasoline Taxes—Abolish Them” Policy Analysis <http://www.cato.org/pubs/pas/pa-598.pdf>

The second problem is that an increase in gasoline taxes would have very little effect on aggregate tailpipe emissions. That’s because consumers will primarily respond to a fuel tax over the long run by purchasing more fuel efficient vehicles, not by driving less.

Link: Fuel Efficient Cars are Small

Jayne O’Donnel and James R. Healey (Writing for USA Today) May2009 “Safety could suffer if we boost mileage by making cars smaller” USA Today <http://www.usatoday.com/money/autos/2009-05-19-auto-safety-small-cars_N.htm>

Even though the standards were updated in recent years to reduce the incentive for automakers to sell more small cars by allowing different fuel-economy targets for different vehicles, the fastest way to make cars more fuel-efficient is to make them smaller.

Impact: Decreased Safety

Jayne O’Donnel and James R. Healey (Writing for USA Today) May2009 “Safety could suffer if we boost mileage by making cars smaller” USA Today <http://www.usatoday.com/money/autos/2009-05-19-auto-safety-small-cars_N.htm>

The National Academy of Sciences, Insurance Institute for Highway Safety, Congressional Budget Office and National Highway Traffic Safety Administration have separately concluded in multiple studies dating back about 20 years that fuel-economy standards force automakers to build more small cars, which has led to thousands more deaths in crashes annually.

Impact: Smaller Cars, like the Smart Car, are Less Safe

Sam Kazman (General Counsel of the Competitive Enterprise Institute) April 2009 The Wall Street Journal “Small Cars are Dangerous Cars” <http://online.wsj.com/article/SB123993371229527975.html>

The super-high efficiency minicar has become the Holy Grail for many environmentalists. But on Tuesday, a new study on minicar safety tossed some cold water on the dream. The Insurance Institute for Highway Safety (IIHS) reported that in a series of test crashes between minicars and midsize models, minis such as the Smart car provided significantly less protection for their passengers.

Impact: Lighter cars empirically kill (Fatalities from CAFÉ alone are 46,000 people)

*Editor’s Note: Additional Evidence on this argument can be found in the CON CAFÉ brief.*

Ryan Balis (policy analyst for The National Center for Public Policy Research), July 2006, “CAFÉ Standards Kill: Congress’ Regulatory Solution to Foreign Oil Dependence Comes at a Steep Price,” National Center for Public Policy Research, <http://www.nationalcenter.org/NPA546CAFEStandards.html>

“According to a 2003 NHTSA study, when a vehicle is reduced by 100 pounds the estimated fatality rate increases as much as 5.63 percent for light cars weighing less than 2,950 pounds, 4.70 percent for heavier cars weighing over 2,950 pounds and 3.06 percent for light trucks. Between model years 1996 and 1999, these rates translated into additional traffic fatalities of 13,608 for light cars, 10,884 for heavier cars and 14,705 for light trucks.12 A 2001 National Academy of Sciences panel found that constraining automobile manufacturers to produce smaller, lighter vehicles in the 1970s and early 1980s "probably resulted in an additional 1,300 to 2,600 traffic fatalities in 1993."13    \* An extensive 1999 USA Today analysis of crash data found that since CAFE went into effect in 1978, 46,000 people died in crashes they otherwise would have survived, had they been in bigger, heavier vehicles. This, according to a 1999 USA Today analysis of crash data since 1975, roughly figures to be 7,700 deaths for every mile per gallon gained in fuel economy standards.14”

CON: GENETICALLY MODIFIED ORGANISMS

By Matthew Baker

SIGNIFICANCE

A) General

International consensus that GM crops are not solutions for poverty, hunger, or climate change

Greenpeace, April 2008, “Facts and figures about genetically modified organisms,” <http://www.greenpeace.org/raw/content/eu-unit/press-centre/policy-papers-briefings/facts-and-figures-about-GMOs.pdf>

“Meanwhile, various scientific studies have concluded serious and valid concerns on the effects of these crops on ‘non-target’ organisms such as butterflies and predators of the target pests. Recently, the International Assessment of Agricultural Science and Technology for Development5 brought together 400 scientists, UN agencies, governments, non-governmental organisations, industry and farmer associations across the globe for a four-year scientific project. This is the equivalent for agriculture as is the IPCC report for climate change. The Synthesis Report, endorsed by 60 governments, concludes that genetically modified crops are not a solution for poverty, hunger or climate change.”

B) Crop Yields

GM actually cuts crop productivity 10% according to new study

Geoffrey Lean (consulting editor for the environment at the Daily Telegraph), April 20, 2008, “Exposed: the great GM crops myth,” The Independent (major UK paper), <http://www.independent.co.uk/environment/green-living/exposed-the-great-gm-crops-myth-812179.html>

“Genetic modification actually cuts the productivity of crops, an authoritative new study shows, undermining repeated claims that a switch to the controversial technology is needed to solve the growing world food crisis. The study – carried out over the past three years at the University of Kansas in the US grain belt – has found that GM soya produces about 10 per cent less food than its conventional equivalent, contradicting assertions by advocates of the technology that it increases yields.”

GM not a solution to world hunger

Geoffrey Lean (consulting editor for the environment at the Daily Telegraph), April 20, 2008, “Exposed: the great GM crops myth,” The Independent (major UK paper), <http://www.independent.co.uk/environment/green-living/exposed-the-great-gm-crops-myth-812179.html>

“Last week the biggest study of its kind ever conducted – the International Assessment of Agricultural Science and Technology for Development – concluded that GM was not the answer to world hunger. Professor Bob Watson, the director of the study and chief scientist at the Department for Environment, Food and Rural Affairs, when asked if GM could solve world hunger, said: "The simple answer is no."

GM crops have not increased food security and none are modified for increased yield potential

Dr. Juan Lopez Villar (PhD in Environmental Law and Programme Coordinator for Friends of the Earth) and Bill Freese (Science Policy analysis with the Center for Food Safety) (main authors), “The World largest grassroots environmental organization), January 2008, “Who Benefits from GM Crops?,” Friends of the Earth International, <http://www.centerforfoodsafety.org/pubs/FoE%20I%20Who%20Benefits%202008%20-%20Exec%20Sum%20FINAL.pdf>

“GM crops have not increased food security for the world’s poor. None of the GM crops on the market are modified for increased yield potential and research continues to focus on new pesticide-promoting varieties that tolerate application of one or more herbicides.”

Alternative factors (favorable better, improved seeds, innovative cultivation techniques) may have resulted in higher yields from GM crops like Bt cotton

Dr. Juan Lopez Villar (PhD in Environmental Law and Programme Coordinator for Friends of the Earth) and Bill Freese (Science Policy analysis with the Center for Food Safety) (main authors), “The World largest grassroots environmental organization), January 2008, “Who Benefits from GM Crops?,” Friends of the Earth International, <http://www.centerforfoodsafety.org/pubs/FoE%20I%20Who%20Benefits%202008%20-%20Exec%20Sum%20FINAL.pdf>

“Industry often claims that Bt cotton has boosted overall cotton yields in all countries where it has been planted with the exception of Australia. However, close examination of these claims reveals a disturbing pattern of dishonesty. Inmost cases, it appears that the yield increases were not due to the “Bt factor,” but rather to favorable weather conditions, a shift from dry land to irrigated acreage, the introduction of improved conventional seeds, or innovative cultivation techniques. In other cases, Bt cotton appeared to fare worse than, or the same as, conventional cotton.”

C) Pesticides

81% of GM crops are HT which create herbicide-resistant weeds that = more pesticides

Dr. Juan Lopez Villar (PhD in Environmental Law and Programme Coordinator for Friends of the Earth) and Bill Freese (Science Policy analysis with the Center for Food Safety) (main authors), “The World largest grassroots environmental organization), January 2008, “Who Benefits from GM Crops?,” Friends of the Earth International, <http://www.centerforfoodsafety.org/pubs/FoE%20I%20Who%20Benefits%202008%20-%20Exec%20Sum%20FINAL.pdf>

“Pesticides are chemicals that target weeds (herbicides), insects (insecticides) or other pests. HT versions of soya, corn, cotton and canola represent 4 of every 5 hectares (81%) of GM crops worldwide. HT crops are ‘pesticide-promoting’ – that is they encourage the development of herbicide-resistant weeds, which in turn lead to yet more pesticide use. HT crops allow farmers to spray a particular herbicide more frequently and indiscriminately without fear of damaging the crop. They also allow larger, wealthier farmers to cultivate more acres with less labor, advancing the world-wide trend towards fewer and bigger industrial-style farms. Pesticide-promoting HT crops have spawned an epidemic of herbicide-resistant weeds in the U.S., Argentina and Brazil, thereby encouraging still greater use of chemicals to control them. Pesticides have adverse health and environmental impacts that GM agriculture is exacerbating.”

Indian study indicates GM crops did not reduce pesticide use

Dr. Juan Lopez Villar (PhD in Environmental Law and Programme Coordinator for Friends of the Earth) and Bill Freese (Science Policy analysis with the Center for Food Safety) (main authors), “The World largest grassroots environmental organization), January 2008, “Who Benefits from GM Crops?,” Friends of the Earth International, <http://www.centerforfoodsafety.org/pubs/FoE%20I%20Who%20Benefits%202008%20-%20Exec%20Sum%20FINAL.pdf>

“In 2007, the Agro-Economic Research Centre of Andhra University published a new study on pesticide use on GM cotton during the 2004-05 season in the Indian State of Andhra Pradesh. The study concludes that Bt cotton farmers apply the same quantity of pesticides, and spend the same amount on them, as conventional cotton farmers.”

D) Health

Study indicates that GM foods may eventually produce infertility

Greenpeace, November 14, 2008, “GM food, potential threat to fertility: New study will Dr. Ramadoss act now?,” <http://www.greenpeace.org/india/news/gm-food-potential-threat-to-f>

“A study published this week by the Austrian government identified serious health threats of genetically engineered (GE) crops. In one of the very few long-term feeding studies ever conducted with GE crops, the fertility of mice fed with GE maize was found to be severely impaired, with fewer offspring being produced than by mice fed on natural crops. Considering the severity of the potential threat to human health and reproduction, Greenpeace is demanding a recall of all GE food and crops from the market, worldwide. The study, sponsored by the Austrian Ministries for Agriculture and Health, was presented at a scientific seminar in Vienna, Austria. Prof. Dr. Jürgen Zentek, Professor for Veterinary Medicine at the University of Vienna and lead author of the study, summarized the findings: Mice fed with GE maize had less offspring in the third and fourth generations, and these differences were statistically significant. Mice fed with non-GE maize reproduced more efficiently. They concluded that this effect could be attributed to the difference in the food source. GE food appears to be acting as a birth control agent, potentially leading to infertility – if this is not reason enough to close down the whole biotech industry once and for all, I am not sure what kind of disaster we are waiting for,” said Dr. Jan van Aken, GE expert at Greenpeace International.”

AAEM: GM foods cause infertility, immune problems, accelerated aging, and changes in major organ systems

Institute for Responsible Technology, May 20, 2009, “Genetically Modified Foods Pose Huge Health Risk,” <http://www.opposingviews.com/articles/opinion-genetically-modified-foods-pose-huge-health-risk>

“This week, the American Academy of Environmental Medicine (AAEM) called on “Physicians to educate their patients, the medical community, and the public to avoid GM (genetically modified) foods when possible and provide educational materials concerning GM foods and health risks.” They called for a moratorium on GM foods, long-term independent studies, and labeling. AAEM’s position paper stated, “Several animal studies indicate serious health risks associated with GM food,” including infertility, immune problems, accelerated aging, insulin regulation, and changes in major organs and the gastrointestinal system. They conclude, “There is more than a casual association between GM foods and adverse health effects. There is causation,” as defined by recognized scientific criteria. “The strength of association and consistency between GM foods and disease is confirmed in several animal studies.”

Livestock and rat studies show that GM foods cause birth problems and may produce infertility

Institute for Responsible Technology, May 20, 2009, “Genetically Modified Foods Pose Huge Health Risk,” <http://www.opposingviews.com/articles/opinion-genetically-modified-foods-pose-huge-health-risk>

“The experience of actual GM-fed experimental animals is scary. When GM soy was fed to female rats, most of their babies died within three weeks—compared to a 10% death rate among the control group fed natural soy. The GM-fed babies were also smaller, and later had problems getting pregnant. When male rats were fed GM soy, their testicles actually changed color—from the normal pink to dark blue. Mice fed GM soy had altered young sperm. Even the embryos of GM fed parent mice had significant changes in their DNA. Mice fed GM corn in an Austrian government study had fewer babies, which were also smaller than normal. Reproductive problems also plague livestock. Investigations in the state of Haryana, India revealed that most buffalo that ate GM cottonseed had complications such as premature deliveries, abortions, infertility, and prolapsed uteruses. Many calves died. In the US, about two dozen farmers reported thousands of pigs became sterile after consuming certain GM corn varieties. Some had false pregnancies; others gave birth to bags of water. Cows and bulls also became infertile when fed the same corn.”

Case Studies show that GM crops (specifically Bt Cotton) has killed large numbers of aniamls

Institute for Responsible Technology, May 20, 2009, “Genetically Modified Foods Pose Huge Health Risk,” <http://www.opposingviews.com/articles/opinion-genetically-modified-foods-pose-huge-health-risk>

“In India, animals graze on cotton plants after harvest. But when shepherds let sheep graze on Bt cotton plants, thousands died. Post mortems showed severe irritation and black patches in both intestines and liver (as well as enlarged bile ducts). Investigators said preliminary evidence “strongly suggests that the sheep mortality was due to a toxin. . . . most probably Bt-toxin.” In a small follow-up feeding study by the Deccan Development Society, all sheep fed Bt cotton plants died within 30 days; those that grazed on natural cotton plants remained healthy. In a small village in Andhra Pradesh, buffalo grazed on cotton plants for eight years without incident. On January 3rd, 2008, the buffalo grazed on Bt cotton plants for the first time. All 13 were sick the next day; all died within 3 days. Bt corn was also implicated in the deaths of cows in Germany, and horses, water buffaloes, and chickens in The Philippines. In lab studies, twice the number of chickens fed Liberty Link corn died; 7 of 20 rats fed a GM tomato developed bleeding stomachs; another 7 of 40 died within two weeks. Monsanto’s own study showed evidence of poisoning in major organs of rats fed Bt corn, according to top French toxicologist G. E. Seralini.”

CON: GROWTH IMPROVES THE ENVIRONMENT

By Matthew Baker

Kuznet Curve applies to air pollution but if its out of sight out of mind EKC doesn’t apply

Andrew Leonard, August 22, 2006, “Outsourcing Pollution,” Salon, <http://www.salon.com/tech/htww/2006/08/22/kuznets/> [brackets added]

“There is clear evidence that airborne particulate matter declines steadily with income growth, and pretty good evidence that pollutants like NO2, carbon monoxide and sulfur dioxide fit neatly into [the Environmental Kuznets Curve] EKC models. But the correlation is much less clear when investigating things like deforestation or carbon dioxide emissions. The quick and dirty rule seems to be that if you can't see it or smell it in your local urban neighborhood, then, no matter how rich you are, you aren't going to do much about it.”

Environmental gains in the developed world due to economic growth have come at the cost of third world environment

Andrew Leonard, August 22, 2006, “Outsourcing Pollution,” Salon, <http://www.salon.com/tech/htww/2006/08/22/kuznets/> [brackets added]

“Second, the early work demonstrating supposed [Environmental Kuznets Curve] EKC relationships did not take into account the impact of globalization. The industrialized world may have succeeded in cleaning up its own act (relatively speaking) simply by exporting the dirtiest industries abroad. So, in a global context, nothing really improved: The impact of pollution was simply outsourced. This holds just as true for Taiwan as it does for the United States. If there has been improvement in Taipei's air quality over the past decade, it just happened to come at precisely the period during which Taiwan moved most of *its* nastiest manufacturing industries across the Taiwan Straits to China.”

Environmental Kuznets Curve is a fragile concept

Professor Marzio Galeotti (Professor of Economics at the University of Milan), Dr. Matteo Manera (Ph.D. in Economics, European University Institute, San Domenico di Fiesole, Firenze), and Dr. Alessandro Lanza (Ph.D. in Economics at the University College of London), 2006, “On the Rubustness of Robustness Checks of the Environmental Kuznets Curve,” <http://www.statistica.unimib.it/utenti/WorkingPapers/WorkingPapers/20060501.pdf>

“Initially, after the seminal contributions, additional work aimed to extend the investigation to new pollutants and to verify the existence of an inverted-U shape as well as assessing the value of the turning point. The following phase focused instead on the robustness of the empirical relationship, particularly with respect to the omission of relevant explanatory variables other than GDP, alternative datasets, functional forms, and grouping of the countries examined. The most recent line of investigation criticizes the Environmental Kuznets Curve on more fundamental grounds, in that it stresses the lack of sufficient statistical testing of the empirical relationship and questions the very existence of the notion of Environmental Kuznets Curve. Attention is in particular drawn on the stationarity properties of the series involved – per capita emissions or concentrations and per capita GDP – and, in case of presence of unit roots, on the cointegration property that must be present for the Environmental Kuznets Curve to be a well-defined concept. Only at that point can the researcher ask whether the long-run relationship exhibits an inverted-U pattern. On the basis of panel integration and cointegration tests for sulphur, Stern (2002, 2003) and Perman and Stern (1999, 2003) have presented evidence and forcefully stated that the Environmental Kuznets Curve does not exist. In this paper we ask whether similar strong conclusions can be arrived at when carrying out tests of fractional panel integration and cointegration. As an example we use the controversial case of carbon dioxide emissions. The results show that more EKCs come back into life relative to traditional integration/cointegration tests. However, we confirm that the EKC remains a fragile concept.”

Economic growth is the most significant factor underlying CO2 emissions growth

Energy Information Administration, 2009, “International Energy Outloock 2009,” <http://www.eia.doe.gov/oiaf/ieo/emissions.html>

“Economic growth is the most significant factor underlying the projections for growth in energy-related carbon dioxide emissions in the mid-term, as the world continues to rely on fossil fuels for most of its energy use. Accordingly, projections of world carbon dioxide emissions are lower in the *IEO2009* low economic growth case and higher in the high economic growth case.”

Worldwide demand for consumer goods will increase environmental pollution

International Development Research Centre, 2006, “Environmental Pollution,” <http://www.idrc.ca/uploads/user-S/12317854281env.pdf>

“Global economic growth encourages rapid industrialization of most developing countries. Worldwide production of environmental pollutants will continue to rise as demand for consumer goods and food increases. Climate change will further add pressure on ecosystems already made vulnerable by environmental pollution. These large-scale forces generate conditions that limit food, livelihood, and health choices for poor households in developing countries.”

Prince Charles: unlimited economic growth is unsustainable and could bankrupt the environment

Peter Griffiths, July 9, 2009, “Nature can’t take unrestrained economic growth: Prince Charles,” Reuters News, <http://www.reuters.com/article/environmentNews/idUSTRE5677CO20090709>

“The quest for unlimited economic growth is unsustainable and could bankrupt the environment through climate change and depleted natural resources, Britain's Prince Charles said Wednesday. Charles, next-in-line to succeed Queen Elizabeth, said a new economic model must be found because the Earth can no longer support the demands of a growing "consumerist society" where growth is an end in itself. People must realize they are not "the masters of creation," rather just one part of a fragile natural world, he added.”

Current development model has failed to solve major world problems and are unstainable

Peter Griffiths, July 9, 2009, “Nature can’t take unrestrained economic growth: Prince Charles,” Reuters News, <http://www.reuters.com/article/environmentNews/idUSTRE5677CO20090709>

“Consumption has grown so much in the last 30 years that demands on natural resources now exceed the planet's capacity for renewal by a quarter each year, he added. By 2050, the world's population will swell to about 9 billion people, from more than 6 billion currently, and a higher proportion will expect Western levels of consumption. Modern farming methods that use fertilizers and pesticides that have helped feed a growing population have taken a "huge and unsustainable" toll on ecosystems, he added. "Our current model of progress was not designed of course to create all this destruction," Charles said. "However, given the overwhelming evidence from so many quarters, we have to ask ourselves if it any longer makes sense or whether it is actually fit for purpose." Economic growth has failed to end poverty, stress, ill health and social tensions, he added. A reformed economy must give more weight to the environment and local communities.”

Economic growth has created environmental devastation in China

Paul Sussman, June 6, 2007, “China: Economic growth, environmental destruction,” CNN News, <http://edition.cnn.com/2007/TECH/science/06/04/china.environment/>

“According to environmental monitoring group the Worldwatch Institute, China now boasts 16 of the world's 20 most polluted cities. As much as 70 percent of the country's water is suffering from pollution, with an estimated 300 million people drinking contaminated water on a daily basis, and 190 million drinking water that is so contaminated it effects their health. Crop returns are decreasing both in terms of quality and quantity as a result of polluted land; while approximately 400,000 people in China die annually from respiratory infections directly attributable to air pollution. "The sheer scale of the economic activity in China means that pollution is as probably bad as it has ever been anywhere in the world, ever," Lester Brown, head of Washington-based Earth Policy Institute, told CNN. "Such is the pollution haze in many of the cities that you can't even see the sun. "A lot of the rivers are so dirty their water can't now be used for irrigation, while some of the soil is so badly contaminated with cadmium and mercury that there is a question as to whether food grown in those soils is safe to eat." Nor is the cost just human and environmental. Ironically given that it is China's bullish economic growth that is fueling such high levels of pollution, that same pollution is proving increasingly detrimental to the country's economic well being, with the China's economy losing an estimated $200 billion annually due to the effects of pollution and global warming, almost 10 percent of its GDP.”

Chinese pollution is reducing economic growth 5.8% a year according to the World Bank

Jela De Franceschi, August 13, 2007, “How China Is Reorganizing World Economy,” Voice of American News, <http://www.voanews.com/english/archive/2007-08/china2007-08-13-voa55.cfm?moddate=2007-08-13>

“The Chinese government has calculated that the effects of pollution wiped out $67 billion, or 3 percent, of the nation's GDP in 2004. The World Bank calculates that pollution costs China about 5.8 percent of GDP every year.”

CON: HYDROGEN

By Alexandra Hebdon

INHERENCYDOE giving billions to auto companies to develop hydrogen-powered autos

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

Despite these inconvenient facts, the U.S. Department of Energy has continued to hand out billions of dollars of the taxpayers’ money to major auto companies and their fuel-cell development partners to produce hydrogen-powered auto-show display vehicles.”

$8,000-$4,000 tax credit available on purchase of hydrogen car until 2014

Maryland Energy Administration (advises the Governor of Maryland on directions, policies, and changes in the various segments of the energy market and prepares the State government to respond to the chaning dynamics of the energy industry), October 2006, "Straight Answers on Alternative Fuels", Hydrogen and Fuel Cell Vehicles, <http://energy.maryland.gov/incentives/transportation/factsheets/Hydrogen.pdf>

"Section 1341 of the Energy Policy Act of 2005 provides a base tax credit of $8,000 for the purchaser light-duty fuel cell vehicles (<8,501 lb GVWR). The $8,000 credit is valid until December 31, 2009. After that, the credit is $4,000. To qualify, the vehicles must meet at least Bin 5 Tier II emission levels. Base tax credits are also available for medium- and heavy-duty fuel cell vehicles. The credit is available until December 31, 2014. For tax-exempt entities, the credit can be passed back to the vehicle seller. Section 1342 of the Energy Policy Act of 2005 provides a tax credit equal to 30% of the cost of the alternative fuel refueling property, up to $30,000 for business property. The credit expires in 2014. Buyers of residential refueling equipment can receive a $1,000 tax credit. For non-tax-paying entities, the credit can be passed back to the equipment seller.

SOLVENCY

A) Hydrogen Made with Fossil Fuels

Over 95% of US hydrogen is made from natural gas

Dr. Joseph Romm (PhD in Physics from M.I.T.; senior fellow at American Progress and former acting assistant secretary at the U.S. Dept of Energy), June 23, 2008, "Hydrogen cars and hot air", The Guardian, <http://www.guardian.co.uk/commentisfree/2008/jun/23/automotive.usa>

Most egregious: Where, exactly, does the Times think hydrogen comes from? Santa Claus? More than 95% of US hydrogen is made from natural gas, so running a car on hydrogen doesn't reduce net carbon dioxide emissions compared with a hybrid like the Prius running on gasoline. OK, you say, can't hydrogen be made from carbon-free sources of power, like wind energy or nuclear? Sure, but so can electricity for electric cars. And this gets to the heart of why hydrogen cars would be the last car you would ever want to buy: they are wildly inefficient compared with electric cars.

Hydrogen is often made from fossil fuels

The Scientific American, July 3, 2008, "Looking at Hydrogen to Replace Gasoline in Our Cars", <http://www.scientificamerican.com/article.cfm?id=can-hydrogen-replace-gas>

But right now 95 percent of the hydrogen available in the U.S. is either extracted from fossil fuels or made using electrolytic processes powered by fossil fuels, thus negating any real emissions savings or reduction in fossil fuel usage. Only if renewable energy sources—solar, wind and others—can be harnessed to provide the energy to process hydrogen fuel can the dream of a truly clean hydrogen fuel be realized.

B) Infrastructure

Refueling infrastructure needed and will cost $700,000 to $1,500,000 a piece

Anup P. Bandivadekar (Ph.D. candidate in Technology, Management and Policy at M.I.T.) February 2008, "Evaluating the Impact of Advanced Vehicle and Fuel Technologies in U.S. Light-Duty Vehicle Fleet", Ph.D. thesis submitted to the Engineering Systems Division of the Massachussetts Institute of Technology (MIT), <http://web.mit.edu/mitei/research/spotlights/bandivadekar_thesis_final.pdf>

There are currently about 175,000 refueling stations serving gasoline across US. A large number of these refueling stations are also capable of serving diesel fuel. According to the Alternative Fuels Data Center maintained by the Department of Energy, there were 1154 refueling stations for E-85, 444 stations for electricity, and 31 stations serving hydrogen as of June 2007. The prospect of getting stranded due to lack of fuel availability, coupled with the limited range of several alternatively fueled vehicles severely limits the market penetration of such vehicles. Vehicle manufacturers are therefore reluctant to produce alternatively fueled vehicles. On the other hand, the capital cost of building a hydrogen refueling station based on centralized hydrogen production model is estimated to be between 0.7-1.5 Million dollars (Padro and Putsche, 199]. Thus large scale investment in fuel infrastructure may not be worthwhile unless a number of alternatively fueled vehicles are already on the road. This is popularly know as the Chicken-and-Egg dilemma.

Replacing cars would cost $2 trillion and fuel production and would cost $8 trillion

United Nations Environment Programme Energy Branch, 2006, The Hydrogen Economy, p. 20-21 [Google Books]

The total cost of building hydrogen infrastructure would depend on timing, the pact of unit-cost reductions and the extent to which hydrogen replaces existing energy systems. All these factors are very uncertain. Even if hydrogen were to replace only conventional automotive fuels, the eventual investment cost worldwide along the entire fuel-supply chain - over and above what would have been invested anyway - would certainly run to trillions of dollars, even on optimistic cost assumptions. Fuel-cell vehicles would probably account for a large part of the cost. If all of the estimated 800 million vehicles on the world's roads today were eventually replaced with fuel-cell models, the incremental production cost alone would be $2 trillion, on the hypothetical assumption each fuel-cell vehicle costs on average $2,500 more than a conventional vehicle. The cost of building pipelines to supply hydrogen refueling stations and hydrogen plants would also be very large. For example, on current costs, building enough centralised hydrogen plants to supply the fuel needed to run all the cars, trucks and buses in use in the world today would require a staggering $8 trillion in investment - not including the cost of carbon capture. This sum is equal to almost half the total cumulative investment in the entire energy sector that the International Energy Agency estimates will be needed worldwide over the next quarter of a century (IEA, 2005a).

Chicken & Egg: No demand for cars w/o infrastructure & no infrastructure w/o demand for cars

Dr. Joseph Romm (PhD in Physics from M.I.T.; senior fellow at American Progress and former acting assistant secretary at the U.S. Dept of Energy), June 23, 2008, "Hydrogen cars and hot air", The Guardian, <http://www.guardian.co.uk/commentisfree/2008/jun/23/automotive.usa>

And who, exactly, is going to buy a car that can't easily find fuel? On the other hand, who is going to build tens of thousands of fuelling stations - price tag $2m apiece or more - until the cars are wildly successful? That is the so-called chicken-and-egg problem, which is especially acute for hydrogen. After all, why should oil companies spend tens of billions of dollars building a hydrogen fuelling infrastructure, which at best will take away business from their tremendously profitable gasoline sales, and at worst will be a complete business loss, assuming, as now seems likely, that hydrogen cars never catch on?

C) Transportation

The cost and weight of trucks needed to ship hydrogen gas is hopeless economically

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

As an alternative, one could use high pressure pumps to compress the hydrogen as gas instead of liquefying it for transport. This would only require wasting about 20 percent of the energy in the hydrogen. The problem is that safety-approved, steel compressed-gas tanks capable of storing hydrogen at 5,000 psi weigh approximately 65 times as much as the hydrogen they can contain. So to transport 200 kilograms of compressed hydrogen, roughly equal in energy content to just 200 gallons of gasoline, would require a truck capable of hauling a 13-ton load. Think about that: an entire large truckload delivery would be needed simply to transport enough hydrogen to allow *ten* people to fill up their cars with the energy equivalent of 20 gallons of gasoline each. Instead of steel tanks, one could propose using (very expensive) lightweight carbon fiber overwrapped tanks, which only weigh about ten times as much as the hydrogen they contain. This would improve the transport weight ratio by a factor of six. Thus, instead of a 13-ton truck, a mere two-ton truckload would be required to supply enough hydrogen to allow a service station to provide fuel for ten customers. This is still hopeless economically, and could probably not be allowed in any case, since carbon fiber tanks have low crash resistance, making such compressed hydrogen transport trucks deadly bombs on the highway.

Hydrogen would leak in pipelines and deteriorate the pipelines

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

In principle, a system of pipelines could, at enormous cost, be built for transporting gaseous hydrogen. Yet because hydrogen is so diffuse, with less than one-third the energy content per unit volume as natural gas, these pipes would have to be very big, and large amounts of energy would be required to move the gas along the line. Another problem with this scheme is that the small hydrogen molecules are brilliant escape artists. Hydrogen can not only penetrate readily through the most minutely flawed seal, it can actually diffuse right through solid steel itself. The vast surface area offered by a system of hydrogen pipelines would thus afford ample opportunity for much of the hydrogen to leak away during transport. As hydrogen diffuses into metals, it also embrittles them, causing deterioration of pipelines, valves, fittings, and storage tanks used throughout the entire distribution system. These would all have to be constantly monitored and regularly inspected, tested, and replaced. Otherwise the distribution system would become a continuous source of catastrophes.

Local production at stations: high initial costs and ongoing costs to produce

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

The idea of producing hydrogen via water electrolysis locally at filling stations is equally preposterous. To see this, consider the following. A kilogram of hydrogen has about the same energy content as a gallon of gasoline, so the owner of a filling station could only expect to obtain the same net income from a kilogram of hydrogen as from a gallon of gas. A reasonable figure for this might be $0.20 per kilogram. To obtain a modest net income of $200 per day from hydrogen sales would therefore require selling 1,000 kilograms per day. Since hydrogen requires about 163,000 kJ/kg to produce via electrolysis (assuming an 85 percent efficient electrolyzer), this means that 163,000,000 kJ = 45,278 kW-hr per day would be required by the station. At current grid power costs of $0.06/kW-hr, this would run the station an electric bill of $2,717 per day. If the electrolysis unit ran around the clock, it would need to be supplied with 1,900 kilowatts of electricity (about a thousand times the power draw of a typical house). This power would need to be supplied by the utility over special heavy-duty lines, and then transformed and rectified into direct current on site for use in the electrolyzer. Electrolyzers use high amp-low voltage power. In this case, at least several hundred thousand amps would be required. And the 1,900-kilowatt electrolyzer would not be cheap either. At current prices such a unit would cost the station owner over $10 million, which mortgaged over thirty years would cost him about $100,000 per month, assuming it lasted that long. (No one would want to do this, of course, since the same $10 million invested in five percent bonds would return $500,000 per year, or seven times the $200 per day hydrogen sales income under discussion, with no work and no risk.) Then the station owner would still need to buy and operate either a 5,000 psi explosion-proof compressor pump or a cryogenic refrigerator, and build and accept liability for high-pressure or cryogenic hydrogen storage facilities on his properties. Having paid for all that, there would then be the little matter of insurance. This, as should be obvious, is economic insanity. For just $6,000 per day, plus insurance costs, you could make $200, provided you can find fifty customers every day willing to pay triple the going price for automobile fuel. I don’t know about you, but if I were running a 7-11, I’d find something else to sell.

D) Timeline

Toyota: "It will be difficult to see the spread of fuel cells in 10 years"

Edward Taylor and Mike Spector, March 5, 2008, "GM, Toyota Doubtful on Fuel Cells' Mass Use", Wall Street Journal, <http://online.wsj.com/article/SB120468405514712501.html?mg=com-wsj>

At a separate event at the show, Toyota President Katsuaki Watanabe echoed the concern about the high costs of fuel cells and noted the lack of an infrastructure to produce and distribute hydrogen fuel to a wide swath of consumers. These factors leave him with the impression that "it will be difficult to see the spread of fuel cells in 10 years' time," Mr. Watanabe said.”

Full production and mass market adaption = 50 years awa

Anup P. Bandivadekar (Ph.D. candidate in Technology, Management and Policy at M.I.T.) February 2008, "Evaluating the Impact of Advanced Vehicle and Fuel Technologies in U.S. Light-Duty Vehicle Fleet", Ph.D. thesis submitted to the Engineering Systems Division of the Massachussetts Institute of Technology (MIT), <http://web.mit.edu/mitei/research/spotlights/bandivadekar_thesis_final.pdf>

As these supply side constraints suggest, the timescales by which new technologies can have an impact on fleet fuel use are rather long. Schafer et al. [2006] split this timetable in roughly three stages as shown in Table 16.**Table 16** Times-Scales for Technology Impact [Adapted from Schafer et al, 2006]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vehicle Technology** | | | | | |
| **Implementat-ion Stage** | Gasoline Direct Injection Turbocharged | High Speed Diesel with Particulate Trap, NOx Catalyst | Gasoline Engine/Battery-Motor Hybrid | Gasoline Engine/Battery-Motor Plug-In Hybrid | Fuel Cell Hybrid with on board Hydrogen Storage |
| Market competitive vehicle | ~ 2-3 years | ~ 3 years | ~ 3 years | ~ 8-10 years | ~ 12-15 years |
| Penetration across new vehicle production | ~10 years | ~15 years | ~15 years | ~ 15 years | ~ 20-25 years |
| Major fleet penetration | ~ 10 years | ~ 10-15 years | ~ 10-15 years | ~15 years | ~ 20 years |
| **Total Time Required** | **~ 20 years** | **~ 25 years** | **25-30 years** | **~ 30-35 years** | **~ 50 years** |

DISADVANTAGES

DA 1) COST

The initial purchase price of a hydrogen vehicle 30-75% more than gas car

Anup P. Bandivadekar (Ph.D. candidate in Technology, Management and Policy at M.I.T.) February 2008, "Evaluating the Impact of Advanced Vehicle and Fuel Technologies in U.S. Light-Duty Vehicle Fleet", Ph.D. thesis submitted to the Engineering Systems Division of the Massachussetts Institute of Technology (MIT), <http://web.mit.edu/mitei/research/spotlights/bandivadekar_thesis_final.pdf>

The initial purchase price of the vehicle plays a large role in consumers' choice while selecting a new vehicle, since it typically represents the largest component of the life-cycle cost of owning and operating a vehicle. Table 13 lists the retail price increment for different vehicles over a comparable 2035 ICE gasoline vehicle [Kromer and Heywood, 2007]. The retail prices for vehicles are assumed to be 1.4 times the estimated orginal manufacturer (OEM) costs or twice the manufacturing costs [Vyas et al. 2000]. **Table 13** Estimated Incremental Retail Price over 2035 ICE Gasoline Vehicle

|  |  |
| --- | --- |
| Propulsion System | Estimated Retail Price Increment in 2007 Dollars |
| Turbocharged Gasoline ICE Vehicle | 700-850 |
| Diesel ICE Vehicle | 1700-2100 |
| Gasoline Hybrid Vehicle (HEV) | 2600-3300 |
| Gasoline Plug-In Hybrid Vehicle (PHEV) | 5200-6000 |
| Hydrogen Fuel Cell Vehicle (FCV) | 5000-7000 |
| Battery Electric Vehicle (BEV) | 9500-14000 |

Purchasing a PHEV, FCV or BEV could entail a cost premium as large as 35-70%, thereby greatly reducing the number of consumers willing to consider these vehicles at the time of purchase.

Even automakers say hydrogen is too costly to be a viable option

Edward Taylor and Mike Spector, March 5, 2008, "GM, Toyota Doubtful on Fuel Cells' Mass Use", Wall Street Journal, <http://online.wsj.com/article/SB120468405514712501.html?mg=com-wsj> [Brackets added]

"If we get lithium-ion to 300 miles, then you need to ask yourself, Why do you need fuel cells?" Mr. Lutz told reporters. He [Robert Lutz, Vice Chairman of GM] added that fuel-cell vehicles are still far too expensive to be considered for the mass market. "We are nowhere [near] where we need to be on the costs curve," he said.

The cost of hydrogen fuel cell about $500,000 - $1,000,0000 per car

Wayne Freedman (Masters Degree in Journalism from the University of Missouri; reporter), April 1, 2008, "Hydrogen fuel cars: The expensive truth", ABC7 (local ABC news channel for San Francisco, CA), <http://abclocal.go.com/kgo/story?section=news/environment&id=6055885>

Hydrogen fuel cell cars sure sound like a good idea. After all, it's the most plentiful stuff in the universe. Theres just one problem: the cars will be extremely expensive. "The real number we have to pay attention to is half a million to a million dollars a car," says Dr. Alex Farrell PhD of UC Berkeley. Farrell is so much of an energy expert that on Tuesday, he addressed a room filled with them at Lawrence Livermore Lab. "There is no one answer.There's a lot of things that are going to be the answer.Efficiency is part of the answer. Electric is part of the answer. Bio fuels is part of the answer. And maybe hydrogen, too," says Farrell.

Hydrogen cars cost may never drop below $100,000 apiece

Dr. Joseph Romm (PhD in Physics from M.I.T.; senior fellow at American Progress and former acting assistant secretary at the U.S. Dept of Energy), June 23, 2008, "Hydrogen cars and hot air", The Guardian, <http://www.guardian.co.uk/commentisfree/2008/jun/23/automotive.usa>

Other than the traditional media, and some presidential candidates, who are as distracted by shiny new objects as my 16-month-old daughter, nobody should get terribly excited when a car company rolls out its wildly impractical next-generation hydrogen car. Too many miracles are required for it to be a marketplace winner. Take Honda's new FCX Clarity. As the New York Times reported, "the cars cost several hundred thousand dollars each to produce," although Honda's president Takeo Fukui "said that should drop below $100,000 in less than a decade as production volumes increase."But why would production volumes increase for a car that delivers no real value to the consumer and has no significant societal benefit to motivate government support? Answer: they wouldn't, so prices may never drop below $100,000.

The hydrogen fuel systems alone due to the massive amounts of platinum cost $500,000 - $1,000,000

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

There are many kinds of fuel cells, including alkaline, phosphoric acid, and molten carbonate systems, but for purposes of motor vehicle use the only kind that is suitable and being pursued for development is the proton exchange membrane fuel cell (PEMFC). These, for example, are the kind used by all vehicle fuel cell engines manufactured by the Ballard Power company, of Vancouver, British Columbia, which for the past decade has produced nearly 80 percent of all fuel cell engines worldwide. PEMFCs use a platinum catalyst, which is very expensive, and despite billions of dollars of R&D efforts to reduce the amount required, it has proven impossible to cut the cost of such systems below about $7,000/kW. This is very unfortunate, because an electric car with a 100-horsepower motor needs about 75 kilowatts of electricity to make it go. At this price, the cost for just the fuel cell stack powering the car would be about half a million dollars. Actual costs for complete Ballard fuel cell engine systems have been well over a million dollars each. Then there’s still the rest of the car to pay for, although with the propulsion system costing this much, the additional cost would seem like a rounding error.

The cost of hydrogen fuel is exorbitant

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

The spokesmen for the hydrogen hoax claim that hydrogen will be manufactured from water via electrolysis. It is certainly possible to make hydrogen this way, but it is very expensive—so much so, that only four percent of all hydrogen currently produced in the United States is produced in this manner. The rest is made by breaking down hydrocarbons, through processes like pyrolysis of natural gas or steam reforming of coal. Neither type of hydrogen is even remotely economical as fuel. The wholesale cost of commercial grade liquid hydrogen (made the cheap way, from hydrocarbons) shipped to large customers in the United States is about $6 per kilogram. High purity hydrogen made from electrolysis for scientific applications costs considerably more. Dispensed in compressed gas cylinders to retail customers, the current price of commercial grade hydrogen is about $100 per kilogram. For comparison, a kilogram of hydrogen contains about the same amount of energy as a gallon of gasoline. This means that even if hydrogen cars were available and hydrogen stations existed to fuel them, no one with the power to choose otherwise would ever buy such vehicles. This fact alone makes the hydrogen economy a non-starter in a free society.

DA 2) Pollution

Hydrogen would increase GHG emissions

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

And even if you are among those willing to sacrifice freedom and economic rationality for the sake of the environment, and therefore prefer hydrogen for its advertised benefit of reduced carbon dioxide emissions, think again. Because hydrogen is actually made by reforming hydrocarbons, its use as fuel would not reduce greenhouse gas emissions at all. In fact, it would greatly increase them.”

Hydrogen is produced with fossil fuel and even using alternatives would = increased CO2 emissions

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

“As discussed above, hydrogen is actually produced commercially using fossil fuel energy, much of which is lost in the process, meaning that more fossil fuels need to be burned, and thus more carbon dioxide produced, to provide a vehicle with a given amount of energy using hydrogen than if the vehicle were allowed to burn fossil fuels directly. Even if we ignore costs completely and generate hydrogen for vehicle fuel using water electrolysis, that would also *increase* pollution, since most electricity is actually generated by burning coal and natural gas. Even if the electricity in question came from nuclear, hydro, wind, or solar power, wasting it on hydrogen generation would still increase overall carbon dioxide emissions relative to the alternative of simply putting the power into the grid.”

DA 3) Safety

Because of the nature of hydrogen, it is very difficult to detect leaks

George Andrew Olah, PhD (renowned chemistry Nobel Laureate, PhD from the Technical University of Budapest), Alain Goeppert, Ph.D. (Research Associate at the Loker Hydrocarbon Institute; PhD from the Universite Louis Pasteur in Strasbourg), and G.K. Surya Prakesh, PhD (Professor and Olah Nobel Laureate Chair in Hydrocarbon Chemistry at the USC at Los Angeles, CA; PhD from the University of Southern California (USC)), 2006, Beyond oil and gas: the methanol economy (290 pages book published by Wiley-VCH), <http://books.google.com/books?id=xH_JyuL08K4C&pg=PA153&lpg=PA153&dq=cell+phones+can+cause+hydrogen+to+ignite&source=bl&ots=rSwyWvDEpC&sig=ye79DVsNKtibXuNXBkVrTQlcJ-8&hl=en&ei=svFhSpSNN5SxtgeC3MH1Dw&sa=X&oi=book_result&ct=result&resnum=8>

Due to its unique physical properties compared to liquid and gaseous hydrocarbon fuels, the safety issues associated with the use of hydrogen are quite specific since, being small and light, hydrogen is a most leak-prone gas. Hydrogen itself is non-toxic, but it is explosive and flammable. Moreover, being colorless, odorless and tasteless, it is difficult to detect leaks. In the case of natural gas, which is also odorless, colorless and tasteless, sulfur compounds are added to make leaks readily detectable, but the addition of such odorants is impractical in the case of hydrogen. In addition, the odorants would leak at different rates compared to the extremely small hydrogen molecule. Consequently, it is necessary to use sensors for hydrogen detection, though even these have been found to be relatively ineffective. Additives could also contaminate and poison the hydrogen fuel cells.

Even a cell phone can cause hydrogen to ignite in the right conditions

George Andrew Olah, PhD (renowned chemistry Nobel Laureate, PhD from the Technical University of Budapest), Alain Goeppert, Ph.D. (Research Associate at the Loker Hydrocarbon Institute; PhD from the Universite Louis Pasteur in Strasbourg), and G.K. Surya Prakesh, PhD (Professor and Olah Nobel Laureate Chair in Hydrocarbon Chemistry at the USC at Los Angeles, CA; PhD from the University of Southern California (USC)), 2006, Beyond oil and gas: the methanol economy (290 pages book published by Wiley-VCH), <http://books.google.com/books?id=xH_JyuL08K4C&pg=PA153&lpg=PA153&dq=cell+phones+can+cause+hydrogen+to+ignite&source=bl&ots=rSwyWvDEpC&sig=ye79DVsNKtibXuNXBkVrTQlcJ-8&hl=en&ei=svFhSpSNN5SxtgeC3MH1Dw&sa=X&oi=book_result&ct=result&resnum=8>

Hydrogen is flammable over a wide range of concentrations in air (from 4 to 75%), and the minimum energy gas and gasoline. Common electronic devices such as a cell phone or even the friction of simply sliding over a motor car seat can cause ignition if the correct concentration of hydrogen in air is present [89,95]. Hydrogen burns with scarcely, almost invisible, slightly bluish flame, which means that a person could actually step unknowingly into hydrogen flames. Hydrogen, as mentioned earlier, can also cause many metals (including steel) to become brittle over time, raising the risk of cracks and fractures that would result in failures with possible catastrophic consequences, especially in high-pressure systems. Hence, specialized materials or/and liners would be necessary for hydrogen storage.

Hydrogen liable to explode in confined spaces

Anup P. Bandivadekar (Ph.D. candidate in Technology, Management and Policy at M.I.T.) February 2008, "Evaluating the Impact of Advanced Vehicle and Fuel Technologies in U.S. Light-Duty Vehicle Fleet", Ph.D. thesis submitted to the Engineering Systems Division of the Massachussetts Institute of Technology (MIT), <http://web.mit.edu/mitei/research/spotlights/bandivadekar_thesis_final.pdf>

Thermal runaways are the main concerns for the safety point of view in the PHEV and BEV. Development of more stable cathode materials and electrolytes will likely resolve that concern in the future. With respect to the fuel cell vehicles (FCVs), the safety concern is in the area of fueling and storage of hydrogen. Unlike gasoline vapor, gaseous hydrogen is prone to auto-ignite with even small amount of static electricity. Hydrogen is also liable to explode in confined spaces such as enclosed garages and tunnels. Hence, preventing leaks of hydrogen from fueling stations and on-board storage tanks will be of paramount importance. Unless new scientific breakthroughs are realized, the storage of hydrogen is likely to be in high pressure (700 bar) tanks. Safe handling and storage of hydrogen under such conditions will require not just development of codes and standards, but also consumer awareness and education [NRC, 2004].

Hydrogen could easily explode, making hydrogen cars very dangerous

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

The Queen in Lewis Carroll’s Through the Looking Glass says that she could believe “six impossible things before breakfast.” Such an attitude is necessary to discuss the hydrogen economy, since no part of it is possible. Putting aside the intractable issues of fundamental physics, hydrogen production costs, and distribution show stoppers, let us proceed to discuss the problems associated with the hydrogen cars themselves. In order for hydrogen to be used as fuel in a car, it has to be stored in the car. As at the station, this could be done either in the form of cryogenic liquid hydrogen or as highly compressed gas. In either case, we come up against serious problems caused by the low density of hydrogen. For example, if liquid hydrogen is the form employed, then storing 20 kilograms onboard (equivalent in energy content to 20 gallons of gasoline) would require an insulated cryogenic fuel tank with a volume of some 280 liters (70 gallons). This cryogenic hydrogen would always be boiling away, which would create concerns for those who have to leave their cars parked for any length of time, and which would also turn the atmospheres in underground or otherwise enclosed parking garages into explosive fuel-air mixtures. Public parking garages containing such cars could be expected to explode regularly, since hydrogen is flammable over concentrations in air ranging from 4 to 75 percent, and the minimum energy required for its ignition is about one-twentieth that required for gasoline or natural gas. Compressed hydrogen is just as unworkable as liquid hydrogen. If 5,000 psi compressed hydrogen were employed, the tank would need to be 650 liters (162 gallons), or eight times the size of a gasoline tank containing equal energy. Because it would have to hold high pressure, this huge tank could not be shaped in an irregular form to fit into the vehicle’s empty space in some convenient way. Instead it would have to be a simple shape like a sphere or a domed cylinder, which would make its spatial demands much more difficult to accommodate, and significantly reduce the usable vehicle space within a car of a given size. If made of (usually) crash-safe steel, such a hydrogen tank would weigh 1,300 kilograms (2,860 pounds)—about as much as an entire small car! Lugging this extra weight around would drastically increase the fuel consumption of the vehicle, perhaps doubling it. If, instead of steel, a lightweight carbon fiber overwrapped tank were employed to avoid this penalty, the car would become a deadly explosive firebomb in the event of a crash.

The safety measures necessary for wide public use of hydrogen would be costly and hard to ensure

George Andrew Olah, PhD (renowned chemistry Nobel Laureate, PhD from the Technical University of Budapest), Alain Goeppert, Ph.D. (Research Associate at the Loker Hydrocarbon Institute; PhD from the Universite Louis Pasteur in Strasbourg), and G.K. Surya Prakesh, PhD (Professor and Olah Nobel Laureate Chair in Hydrocarbon Chemistry at the USC at Los Angeles, CA; PhD from the University of Southern California (USC)), 2006, Beyond oil and gas: the methanol economy (290 pages book published by Wiley-VCH), <http://books.google.com/books?id=xH_JyuL08K4C&pg=PA153&lpg=PA153&dq=cell+phones+can+cause+hydrogen+to+ignite&source=bl&ots=rSwyWvDEpC&sig=ye79DVsNKtibXuNXBkVrTQlcJ-8&hl=en&ei=svFhSpSNN5SxtgeC3MH1Dw&sa=X&oi=book_result&ct=result&resnum=8>

Until now, the good safety record of hydrogen use in industry has been largely due to the numerous precautions, codes and standards required for hydrogen handling by trained professionals. It is also related to the fact that most hydrogen is produced on-site and so is not transported over long distances in large quantities. However, if hydrogen were to be handled by the wider public and by people with no formal training or awareness of its potential danger, then it would be vital that strict new safeguards be introduced. Such safety measures would most likely be very costly to introduce, and public compliance difficult to ensure.

DA 4) Increased Weight/Size of Engines

Compressed hydrogen increases the weight of a car potentially decreasing fuel economy

Dr. Robert Zubrin, PhD (PhD in nuclear engineering; a senior fellow at the Foundation for Defense of Democracies, and the president of Pioneer Astronautics, an aerospace engineering R&D firm; 2007 book on energy policy, Energy Victory: Winning the War on Terror by Breaking Free of Oil), Winter 2007, "The Hydrogen Hoax", The New Atlantis, Number 15, <http://www.thenewatlantis.com/publications/the-hydrogen-hoax>

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CON: KYOTO PROTOCOL

By Matthew Baker

INHERENCY

A growing list of major US cities representing 44 million Americans have “signed” Kyoto

The Earth Policy Institute, May 12, 2006, “US Mayors pledge to cut greenhouse gases while Bush administration takes no action,” <http://www.citymayors.com/environment/usmayors_kyoto.html>

“By signing the US Mayors Climate Protection Agreement, these mayors - representing some 44 million Americans - have committed their cities to meet or beat the US emissions reduction target in the Kyoto Protocol, despite the federal government's refusal to ratify that treaty.  This grassroots political revolution, spearheaded by Greg Nickels, Mayor of Seattle, Washington, and endorsed by the US Conference of Mayors, responds to the mounting concerns of the American people. It calls for reducing greenhouse gas emissions to seven per cent below 1990 levels by 2012. As Burlington, Vermont, Mayor Peter Clavelle noted: "We can't wait for this vacuum of leadership to fill."  Since 16 February 2005, when the Kyoto Protocol came into effect for the 141 ratifying countries, 227 US cities, including New York, Los Angeles, and Chicago, have joined the mayors' agreement. The Northeast, the Great Lakes Region, and the West Coast are particularly well represented, and the list keeps growing.”

Even without Kyoto US is slowing the growth of CO2 emissions faster than Europe

Christopher C. Horner (senior fellow at the competitive enterprise institute with a JD from Washington University), February 1, 2007, “Kyoto Hypocrisies,” Competitive Enterprise Institute, <http://cei.org/gencon/019,05744.cfm>

“The speech that Mr. Bush should have given would assert the America's leadership position relative to major economies. Pick any year since the Kyoto Protocol was agreed to in 1997, Mr. Bush should have said, and the U.S. CO2 emission performance is superior to that of all major Kyoto parties, including and most notably Europe (CO2 being the focus of the many pending legislative proposals). One would never know this from reading European Union press releases, most any media account or even White House statements on the issue. The latter fact is deeply troubling given the political and diplomatic capital lost over public misunderstanding of this matter, and also the traction that proposals to mimic Europe's failed approach are gaining in Congress. In truth, Europe's CO2 emissions are rising twice as fast as those of the U.S. since Kyoto, three times as fast since 2000. This figure balloons to more than five times as fast when one tallies the individual country average of the EU-15.”

SOLVENCY

Emissions from Kyoto signers increased 2.6% between 2000 and 2005

Dr. Edwin J. Feulner (PhD from the University of Edinburgh, MBA from the University of Pennsylvania’s Wharton School of Business, and President of the Heritage Foundation), July 28, 2008, “Kyoto Treaty: Pointless Promises,” The Heritage Foundation, <http://www.heritage.org/press/commentary/ed072808d.cfm>

“That 1997 agreement requires the 37 countries that signed it to slash emissions by a combined 5.2 percent below 1990 levels by 2012. But the treaty is a pipe dream. Instead of falling, the U.N. reported that such emissions are nearing "an all-time high." Greenhouse gas emissions from the Kyoto signers increased 2.6 percent between 2000 and 2005.”

Europeans having trouble meeting their Kyoto obligations (even with $6 gas)

Dr. Marlo Lewis, Jr. (Ph.D. in Government from Harvard University and Senior Fellow at the Competitive Enterprise Institute specializing in energy policy and global warming) , November 2, 2006, “The Snowe-Rockefeller Road to Kyoto,” The Competitive Enterprise Institute, <http://cei.org/gencon/019,05587.cfm>

 ”With a few exceptions like Great Britain, European countries are having trouble meeting their Kyoto targets. For example, Kyoto aims to reduce European Union (EU) emissions by 8% below 1990 levels during 2008-2012. However, even with European gasoline prices exceeding $6.00 a gallon, EU transport sector emissions are 24% above 1990 levels.”

Broken Promises: Kyoto countries Canada, Austria, & New Zealand increased emissions from 1990

Dr. Edwin J. Feulner (PhD from the University of Edinburgh, MBA from the University of Pennsylvania’s Wharton School of Business, and President of the Heritage Foundation), July 28, 2008, “Kyoto Treaty: Pointless Promises,” The Heritage Foundation, <http://www.heritage.org/press/commentary/ed072808d.cfm>

“Signing Kyoto may allow a country to claim it's a good "global citizen," but many of those citizens aren't keeping their promises. The U.N. reports Kyoto signers Austria, New Zealand and Canada have all increased their emissions over 1990 levels -- by 14, 23 and 54 percent, respectively.”

13 of the 15 original European signatories will likely be unable to meet emissions targets by 2010

Pete du Pont, 3/28/2006, “Kyoto? No Go.,” National Center for Policy Analysis, <http://environment.ncpa.org/commentaries/kyoto-no-go>

“Thirteen of the original 15 European signatories will likely miss the 2010 emission reduction targets. Spain will miss its target by 33 percentage points and Denmark by 25 points. Targets aside, Greece and Canada have seen their emissions rise by 23% and 24%, respectively, since 1990. As for America, our emissions have increased 16%, so we are doing better than many of the Kyoto nations.”

Tony Blair: China and India are not going to start negotiating another Kyoto treaty

Dr. Robert L. Bradley Jr. (PhD in political economy from the International College, Los Angeles and President of the Institute for Energy Research) September 1, 2007, “History Shows Carbon Caps a Failed Policy,” The Heartland Institute, <http://www.heartland.org/policybot/results/21814/History_Shows_Carbon_Caps_a_Failed_Policy.html>

“The failure of Kyoto is an open secret. "My thinking has changed in the past three or four years," British Prime Minister Tony Blair said of the treaty at a climate conference hosted by former U.S. President Bill Clinton. "No country is going to cut its [emissions] growth." Pointing to fast-growing China and India, which refused to be part of the protocol, Blair added, "They are not going to start negotiating another treaty like Kyoto." Given Kyoto's expiration date of 2012, and in light of its largely unfulfilled targets, United Nations negotiators are already scrambling to save face.”

Kyoto will have almost no effect on overall emissions

Ian Murray (MBA from the University of London and Senior Fellow in Energy, Science and Technology at the Competitive Enterprise Institute) and Dr. H. Sterling Burnett (PhD from Bowling Green State University and Senior Fellow and the lead analyst of the NCPA E-Team on energy and the environment), June 2009, “10 Cool Global Warming Policies,” National Center for Policy Analysis, p. 8, <http://www.ncpa.org/pdfs/st321.pdf>

**“**Kyoto and more recent proposals would have almost no effect on overall emissions since they do not include fast-growing developing countries, such as China (now the No. 1 CO2 emitter). The United Nations projects that these countries will produce the vast majority of future CO2 emissions.”

By exempting 9 of the top 20 emitters, Kyoto does little to solve global warming

Pete du Pont, 3/28/2006, “Kyoto? No Go.,” National Center for Policy Analysis, <http://environment.ncpa.org/commentaries/kyoto-no-go>

“We also know that the Kyoto Treaty will do little to solve the carbon-dioxide problem. Masquerading as a global environmental policy, Kyoto exempts half of the world's population and nine of the top 20 emitters of carbon dioxide--including China and India--from its emissions reduction requirements. It is in fact an effort to replace the world's markets with an internationally regulated (think U.N.) global economy, perhaps better described as a predatory trade strategy to level the world's economic playing field by penalizing the economic growth of energy efficient nations and rewarding those emitting much greater quantities of noxious gasses. Which explains why in 1997 the U.S. Senate voted 95-0 to oppose the signing of any international protocol that would commit Western nations to reduce emissions unless developing countries had to do so as well.”

Kyoto when fully implemented will only avert 0.07 degrees C of warming by 2050

Ian Murray (MBA from the University of London and Senior Fellow in Energy, Science and Technology at the Competitive Enterprise Institute), January 19, 2006, “No Future in Kyoto Dreaming,” Competitive Enterprise Institute, <http://cei.org/gencon/019,05096.cfm>

“There certainly seem to be many human-caused sources of warming, but whether these are the prime drivers of the recent warming trend is once again open to doubt, and not all of them are to do with fossil fuel emissions. Kyoto, which its supporters admit even if fully implemented would avert just 0.07°C of warming by 2050, may prove to be less effective at controlling global temperature than thought.”

Kyoto-style targets will not produce the technological breakthroughs necessary to cut emissions

Samuel Thernstrom (BA in social studies from Harvard and resident fellow at the American Enterprise Institute), May 25, 2006, “Inconvenient Truth for Al Gore,” American Enterprise Institute, <http://www.aei.org/article/24451>

“The problem with meeting these targets is simple: the necessary technologies don’t exist. At best, Kyoto would mean spending a lot of money to accomplish very little. Kyoto-style targets may promote modest reductions in emissions today but they aren’t going to produce the research needed for fundamental technological breakthroughs that could slash overall global emissions. Short-term, modest targets aren’t incentives for ambitious long-term research.”

Impact Turn: With new study showing trees contribute to global warming, Kyoto may exuberates the problem

National Center for Policy Analysis, January 18, 2006, “New Study Confirms Kyoto’s Impotency,” <http://environment.ncpa.org/news/new-study-confirms-kyotos-impotency>

“A new study published in the British journal Nature suggests that the biggest climate offender may literally be in our own backyard-trees. NCPA Senior Fellow H. Sterling Burnett states that the study proves the ineffectiveness of the Kyoto Protocol. "The Kyoto Protocol rewards countries that plant trees because up until now, science believed that plants absorbed carbon dioxide, offsetting the effect of human carbon emissions," said Dr. Burnett. "However, this study shows that the very remedy Kyoto advances could actually exacerbate the problem." The study suggests that while trees do soak up carbon dioxide, they also release methane, another ozone-depleting gas. Like carbon dioxide, methane traps heat, causing a rise in temperatures. According to the study, plants emit approximately 10 to 30 percent of the total amount of methane released into the atmosphere per year. This amounts to tens of millions of tons per year.”

US emissions reductions under Kyoto would be largely by developing country emissions growth

Jim Moore (State Department Official and Deputy Chief of Mission to Sri Lanka), May 6, 2008, “Introductory Remarks by Deputy Chief of Mission Jim Moore to the American Chamber of Commerce Forum on “Good for your Business, Good for the Environment”,” <http://srilanka.usembassy.gov/dcmsp-06may08.html>

“Moreover, U.S. reductions - no matter how costly – would be largely negated by developing country emissions growth, which is occurring at a rate twice that of developed countries. Costly targets would promote migration of energy-intensive industry and jobs to countries that are not bound by the Kyoto Protocol, further exacerbating the problem. Developing countries' emissions are forecast to surpass those of developed countries by 2010, just as China's emissions have already surpassed those of the United States.”

DISADVANTAGES

DA #1) Masking

Kyoto wastes a decade and is a distraction from the real issue: weaning us off fossil fuels

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen) May 14, 2009, “Another Empty Kyoto Protocol,” The Australian, <http://www.theaustralian.news.com.au/story/0,25197,25475544-5013480,00.html>

“Kyoto-style policies can be only an expensive distraction from the real business of weaning us off fossil fuels. There are two fundamental reasons a focus on reducing carbon emissions is the wrong response to global warming. First, using fossil fuels remains the only way out of poverty for developing countries. Coal provides half of the world's energy. In China and India, it accounts for about 80 per cent of power generation and is helping labourers in those countries enjoy a quality of life that their parents could barely imagine. Capping emissions means, effectively, ending this success story for hundreds of millions of people. There is no green energy source that is affordable enough to replace coal in the near future. Instead, our increased research will make green energy cheaper than fossil fuels by mid-century. Second, immediate carbon cuts are expensive and the cost significantly outweighs the benefits. If the Kyoto agreement had been fully implemented throughout this century, it would have cut temperatures by only an insignificant 0.2C, at a cost of $180 billion every year. In economic terms, Kyoto does only about 30c worth of good for each dollar spent. Deeper emissions cuts such as those proposed by the European Union - 20per cent below 1990 levels within 12 years - would reduce global temperatures by only 1/60th of 1C by 2100, at a cost of $10 trillion. For every dollar spent, we would do just 4c worth of good. The saddest thing about the global warming debate is that nearly all of the protagonists - politicians, campaigners and pundits - know that the old-style agreement that is on the table for Copenhagen will have a negligible effect on temperatures. Unless we change direction and make our actions realistic and achievable, it is already clear that the declarations of success in Copenhagen will be meaningless. We will make promises. We will not keep them. And we will waste another decade. Instead, we must challenge the orthodoxy of Kyoto. We can do better.”

GW measures which over-promise and underachieve do not win hearts and minds

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen) May 14, 2009, “Another Empty Kyoto Protocol,” The Australian, <http://www.theaustralian.news.com.au/story/0,25197,25475544-5013480,00.html>

“At the same time, the proposed solutions for the problem of global warming have been awful. In Rio de Janeiro in 1992, politicians from wealthy countries promised to cut emissions by 2000 but did no such thing. Leaders met again in Kyoto in 1997 and promised even stricter carbon cuts by 2010, yet emissions keep increasing and Kyoto has done virtually nothing to change that. What is most tragic is that when leaders meet in Copenhagen this December, they will embrace more of the same solution: promises of even more drastic emission reductions that, once again, are unlikely to be fulfilled. Measures that consistently over-promise and underachieve at vast cost do not win hearts and minds in the best of times, and this is manifestly not the best of times.”

Kyoto stifles discussion of policy alternatives that could really combat climate change

Dr. Gwyn Prins (PhD, professor at the London School of Economics and the director of the LSE Mackinder Programme for the Study of Long Wave Events) and Dr. Steve Rayner (PhD and Professor of Science and Civilization at Oxford University), October 2007, “Time to Ditch Kyoto,” Nature, Vol 449.25, <http://www.fao.org/forestry/foris/data/intranet/Cheemin/kyoto.pdf>

“Kyoto has failed in several ways, not just in its lack of success in slowing global warming, but also because it has stifled discussion of alternative policy approaches that could both combat climate change and adapt to its unavoidable consequences.”

DA #2) Deaths

Impact: Kyoto style cuts would mean net 84,000 people die

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen), January 2009, “The True Cost of Kyoto,” CNBCEB News, [http://cnbceb.com/alternative-energy-environment/the-true-cost-of-kyoto/859 /](http://cnbceb.com/alternative-energy-environment/the-true-cost-of-kyoto/859%20/)

“Implementing Kyoto-style cuts would mean 88,000 more cold-related deaths to save 4,000 people from heat-related deaths. The financial cost would be $180bn annually for 50 years. Each life saved, in other words, would cost more than $100m.”

DA #3) Economy

Kyoto could cost the world $180 billion

Dr. Bjorn Lomborg (PhD in Political Science from the University of Copenhagen and former director of the Environmental Assessment Institute in Copenhagen), 2007, “Cool It,” p. 24 [Google Books]

“In estimating the cost of Kyoto, the largest assembly of the top macroeconomic models show an average cost of about $180 billion annually from 2008. While this cost would definitely not bankrupt the industrialized world, it is still a significant amount- about 0.5 percent of global GDP. Of course with the United States out, the cost is lower and the effect is dramatically lower.”

Kyoto would cost the US $100 billion annually and have no discernable impact on global warming

Dr. Marlo Lewis, Jr. (Ph.D. in Government from Harvard University and Senior Fellow at the Competitive Enterprise Institute specializing in energy policy and global warming) , November 2, 2006, “The Snowe-Rockefeller Road to Kyoto,” The Competitive Enterprise Institute, <http://cei.org/gencon/019,05587.cfm>

“Conservatively estimated, implementing Kyoto would cost the United States $100 billion a year—yet it would have no discernible effect on global temperatures, averting a hypothetical and undetectable 0.07 degress C. of global warming by 2050. All cost, no benefit.”

Kyoto could cost the US 4.9 million jobs and cause mass outsourcing

Jim Moore (State Department Official and Deputy Chief of Mission to Sri Lanka), May 6, 2008, “Introductory Remarks by Deputy Chief of Mission Jim Moore to the American Chamber of Commerce Forum on “Good for your Business, Good for the Environment”,” <http://srilanka.usembassy.gov/dcmsp-06may08.html>

“For the U.S. to fulfill Kyoto, we would have had to mandate reductions equal to one-third of our energy economy in less than a decade, requiring draconian measures at a huge economic cost -- projected at $400 billion annually and the likely loss of 4.9 million jobs. Many energy-intensive industries would almost certainly have moved overseas – ironically, they would have gone primarily to developing countries, causing global carbon emissions to actually increase due to less efficient industry practices and lower environmental standards in those countries. The experiences of many Kyoto signatory countries struggling to meet their targets bear out how unrealistic such a commitment would have been.”

CON: NUCLEAR ENERGY

By Nicholas Bruno

INHERENCY

Though no new reactors have been started, US nuclear generation has increased by 20% since 1996

Larry Parker and Mark Holt (Specialists in Energy Policy Resources, Science, and Industry Division at Congressional Research Service), 9 March 2007, “Nuclear Power: Outlook for New U.S. Reactors”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=58374>

Currently, there are 103 licensed and operable power reactors at 65 plant sites in 31 states, generating about one-fifth of U.S. electricity. Although no new U.S. reactors have started up since 1996, U.S. nuclear electricity generation has since grown by more than 20%. Much of this additional output resulted from reduced downtime, notably through shorter refueling outages. Licensed commercial reactors generated electricity at an average of 89.8% of their total capacity in 2006, after averaging about 75% in the mid-1990s and about 65% in the mid-1980s.

SOLVENCY

When uranium mining and disposition are considered, nuclear creates comparable CO2 emissions as fossil fuels

Mary Olson (Director of the Southeast Office Nuclear Information and Resource Service), 3 May 2006, Confronting a False Myth of Nuclear Power: Nuclear Power Expansion is Not a Remedy for Climate Change” <http://www.nirs.org/climate/background/climateandnukestalkunmay32006.pdf>

Nuclear power is not free from carbon emissions. A number of recent studies have found that when mining, processing, and extensive transportation of uranium in order to make nuclear fuel is considered, the release of carbon dioxide (CO2) as the result of making electricity from uranium is comparable to burning natural gas to make electric power. Additional energy required for decommissioning and disposition of the wastes generated increases this CO2 output substantially.

Nuclear Power requires other power to come on line; typically coal

Mary Olson (Director of the Southeast Office Nuclear Information and Resource Service), 3 May 2006, Confronting a False Myth of Nuclear Power: Nuclear Power Expansion is Not a Remedy for Climate Change” <http://www.nirs.org/climate/background/climateandnukestalkunmay32006.pdf>

Nuclear power is not only dependent upon fossil fuels for the production of uranium fuel, decommissioning, and the disposition of wastes generated: it is also dependent upon a grid that is powered by other sources of energy, typically coal. This is due to the simple fact that nuclear reactors cannot “black start” – in other words, they depend on electric power from the external power grid to be able to come on-line. Transition away from the combustion of fossil fuels cannot be accomplished solely by the expansion of nuclear power since it depends on the grid being powered up before reactors can come on-line.

Production bottleneck on safe nuclear power limits new nuclear reactors to four (globally) per year

Center for American Progress, 8 July 2008, “10 Reasons Not to Invest in Nuclear Energy”, <http://www.americanprogress.org/issues/2008/07/nuclear_energy.html>

Plant construction is limited by production bottlenecks. Japan Steel is the only company in the world “capable of producing the central part of a nuclear reactor’s containment vessel in a single piece, reducing the risk of a radiation leak,” but it can only produce four per year. Even if Japan Steel increases its capacity, American power companies would be buying components in a global market at a time when [China](http://www.eia.doe.gov/cneaf/nuclear/page/nuc_reactors/china/reactors.html) and [India](http://www.dae.gov.in/power/npcil.htm) are increasing their nuclear capacity to meet growing energy needs.

Water shortages may hinder nuclear production

Center for American Progress, 8 July 2008, “10 Reasons Not to Invest in Nuclear Energy”, <http://www.americanprogress.org/issues/2008/07/nuclear_energy.html>

Large areas of the United States already face water shortages, and the effects of global warming are expected to exacerbate this problem. “Electricity generation accounts for nearly half of all water withdrawals in the nation,” and nuclear power stations require more water than fossil fuel use does. The only alternative to the water usage associated with nuclear energy is less efficient (and more expensive) dry cooling systems.

High capital costs, production bottlenecks, long time frames, etc. constrain the growth of nuclear power

Dr. Joseph Romm (Senior Fellow at American Progress), 2 June 2008, “The Self-Limiting Future of Nuclear Power”, Center for American Progress, <http://www.americanprogressaction.org/issues/2008/nuclear_power_report.html>

Yet nuclear power’s own myriad limitations will constrain its growth, especially in the near term. These include: Prohibitively high, and escalating, capital costs; Production bottlenecks in key components needed to build plants; Very long construction times; Concerns about uranium supplies and importation issues; Unresolved problems with the availability and security of waste storage; Large-scale water use amid shortages; High electricity prices from new plants

11 States ban new nuclear facilities without provisions for long-term disposal of nuclear waste

Congressional Budget Office, June 2008, “Nuclear Power’s Role in Generating Electricity”, [www.cbo.gov/ftpdocs/91xx/doc9133/05-02-Nuclear.pdf](http://www.cbo.gov/ftpdocs/91xx/doc9133/05-02-Nuclear.pdf)

At least 11 states have prohibitions against the construction of new nuclear facilities until certain provisions governing the long-term disposal of spent nuclear fuel are put in place.6 Minnesota completely bans the construction of new nuclear power plants.

DISADVANTAGES

A) Costs

Generation costs for nuclear power is triple US electricity rates

Climate Progress (project of the [Center for American Progress Action Fund](http://www.americanprogressaction.org/), a nonprofit, nonpartisan organization), 5 January 2009, “Exclusive Analysis, Part 1: The Staggering Cost of New Nuclear Power”, <http://climateprogress.org/2009/01/05/study-cost-risks-new-nuclear-power-plants/>

**A** [new study](http://climateprogress.org/wp-content/uploads/2009/01/nuclear-costs-2009.pdf) **puts the generation costs for power from new nuclear plants at from 25 to 30 cents per kilowatt-hour — triple current U.S. electricity rates**! This staggering price is far higher than the cost of a variety of carbon-free renewable power sources available today — and ten times the cost of energy efficiency

Nuclear plant construction costs rose by 185% between 2000 and 2007

Center for American Progress, 8 July 2008, “10 Reasons Not to Invest in Nuclear Energy”, <http://www.americanprogress.org/issues/2008/07/nuclear_energy.html>

Nuclear power plant construction costs—mainly materials, labor, and engineering—rose by [185 percent](http://www.reuters.com/article/idUSN1339129420080214?pageNumber=2&virtualBrandChannel=0) between 2000 and 2007. More recently, costs have been increasing even faster: In mid-March, Progress Energy [informed state regulators](http://www.tampabay.com/news/business/energy/article414653.ece) that the twin 1,100 MW nuclear plants it intends to build in Florida would cost $14 billion, which “triples estimates the utility offered little more than a year ago.”

B) Thermal Pollution

Nuclear Power contributes thermal pollution to air and water

Mary Olson (Director of the Southeast Office Nuclear Information and Resource Service), 3 May 2006, Confronting a False Myth of Nuclear Power: Nuclear Power Expansion is Not a Remedy for Climate Change” <http://www.nirs.org/climate/background/climateandnukestalkunmay32006.pdf>

In addition to radiological pollution, nuclear power also contributes massive thermal pollution to both our air and water. It has been estimated that every nuclear reactor daily releases thermal energy –heat-- that is in excess of the heat released by the detonation of a 15 kiloton nuclear bomb blast. In addition to horrendous direct impact of this heat on aquatic ecosystems, nuclear power contributes significantly to the thermal energy inside Earth’s atmosphere, making it contraindicated at this time of rapid global warming.

****Thermal pollution harms fish****

Tatiana Pires Teixeira, Leonardo Mitrano Neves, and Francisco Gerson Araújo (Universidade Federal Rural do Rio de Janeiro), 7 June 2009, “Abstract: Effects of a nuclear power plant thermal discharge on habitat complexity and fish community structure in Ilha Grande Bay, Brazil”, [Marine Environmental Research](http://www.sciencedirect.com/science/journal/01411136) (Peer reviewed journal on chemical, physical, and biological interactions in the oceans and coastal waters), <http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed&cmd=search&term=19573906>

“Fish communities and habitat structures were evaluated by underwater visual censuses a rocky location impacted by thermal discharge (I) and at two control locations, one in a Sargassum bed (C1) and the other in a rocky shore with higher structural complexity (C2). Habitat indicators and fish communities exhibited significant differences between the impacted and control locations, with the impacted one showing a significant decrease in fish species richness and diversity, as well as a decrease in benthic cover. At the I location, only 13 fish species were described, and the average water temperature was 32+/-0.4 degrees C, compared with 44 species at C1 (25.9+/-0.3 degrees C) and 33 species at C2 (24.6+/-0.2 degrees C). Significant differences in fish communities among locations were found by ANOSIM with Eucinostomus argenteus, Mugil sp. and Haemulon steindachneri typical of location I, while Abudefduf saxatilis, Stegastes fuscus and Malacoctenus delalandi were typical of the control locations. Our study shows that thermal pollution alters benthic cover and influences fish assemblages by altering composition and decreasing richness.”

C) Nuclear Waste

Opening of nuclear waste disposal site experiencing a 19 year delay and may not open until 2017

Larry Parker and Mark Holt (Specialists in Energy Policy Resources, Science, and Industry Division at Congressional Research Service), 9 March 2007, “Nuclear Power: Outlook for New U.S. Reactors”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=58374>

Highly radioactive spent fuel produced by nuclear reactors poses a disposal problem that could be a significant factor in the consideration of new nuclear plant construction. The Nuclear Waste Policy Act of 1982 (NWPA, P.L. 97- 425) commits the federal government to providing for permanent disposal of spent fuel in return for a fee on nuclear power generation. However, the schedule for opening the planned national nuclear waste repository at Yucca Mountain, Nevada, has slipped far past NWPA’s deadline of January 31, 1998. DOE currently hopes to begin receiving waste at Yucca Mountain by 2017.

Yucca mountain will probably already be filled when it opens

Larry Parker and Mark Holt (Specialists in Energy Policy Resources, Science, and Industry Division at Congressional Research Service), 9 March 2007, “Nuclear Power: Outlook for New U.S. Reactors”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=58374>

In the meantime, more than 50,000 metric tons of spent fuel is being stored in pools of water or shielded casks at nuclear facility sites. NWPA limits the planned Yucca Mountain repository to the equivalent of 70,000 metric tons of spent fuel. Because U.S. nuclear power plants discharge an average of 2,000 metric tons of spent fuel per year, the Yucca Mountain limit is likely to be reached before any new reactors begin coming on line.

Nuclear Waste would likely be stored at reactor sites and interim storage loactions

Larry Parker and Mark Holt (Specialists in Energy Policy Resources, Science, and Industry Division at Congressional Research Service), 9 March 2007, “Nuclear Power: Outlook for New U.S. Reactors”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=58374>

Therefore, even if Yucca Mountain eventually begins operating as planned, it is unclear what ultimately would be done with spent fuel from new nuclear power plants under current law. In the near term, continued storage at reactor sites and interim storage at central locations would be the most likely possibilities.

12,000 generations to reduce hazard from nuclear waste

Mary Olson (Director of the Southeast Office Nuclear Information and Resource Service), 3 May 2006, Confronting a False Myth of Nuclear Power: Nuclear Power Expansion is Not a Remedy for Climate Change” <http://www.nirs.org/climate/background/climateandnukestalkunmay32006.pdf>

The vast majority of radioactivity in nuclear waste worldwide is from the production of electricity. Even in the United States, where for decades a robust nuclear weapons program operated, more than 95% of the total radioactivity is in waste from commercial nuclear power. Reactor waste contains materials with half-lives measured in tens of thousands, and some in millions of years. More than 12,000 human generations -- are required to reduce the hazard of these materials to acceptable levels.

Hundreds of accidents predicted from transporting nuclear waste

Richard Wiles (former senior staff officer at the National Academy of Sciences' Board on Agriculture; co-founder of the Environmental Working Group) and James R. Cox (President of the Oilfield Waste Policy Institute), 27 June 2002, “A nuclear waste accident scenario in Springfield, IL”, <http://www.ewg.org/files/nuclearwaste/plumes/Springfield.pdf>

Everyone agrees that there will be accidents if nuclear waste is transported by train and truck through 45 states for 38 years to the repository at Yucca Mountain in Nevada. The Department of Energy (DOE) predicts that there will be about 100 accidents over the life of the project. The State of Nevada predicts about 400 accidents during the same time period.

Nuclear Waste poses serious danger to human health

Public Citizen, April 2006, “The Fatal Flaws of Nuclear Power”, <http://www.citizen.org/documents/FatalFlawsSummary.pdf>

Nuclear power is not a clean energy source. In fact, it produces both low and high-level radioactive waste that remains dangerous for several hundred thousand years. Generated throughout all parts of the fuel cycle, this waste poses a serious danger to human health.

D) Terrorism

Potential threat of terrorism from shipping nuclear waste not studied

Benjamin Grove (Columnist at the Las Vegas Sun), 12 February 2006, “Terror threat not weighed in assessing nuke waste shipments”, Las Vegas Sun, <http://www.lasvegassun.com/news/2006/feb/12/terror-threat-not-weighed-in-assessing-nuke-waste-/>

The National Academy of Sciences did not thoroughly consider the threat of terrorism as it studied the risks involved in shipping nuclear waste from around the U.S. to Yucca Mountain. The study, partially funded by an affiliate of the nuclear power industry, concluded that the shipments would be safe. But the 292-page report noted that terrorism risks had not been fully considered because some researchers on the 16-member study panel did not have the security clearances required for access to classified government briefings.

US nuclear facilities not adequately defended from credible threats

Lisbeth Gronlund (co-director and senior scientist of the UCS Global Security Program), David Lochbaum (director of the nuclear safety project in the UCS Global Security Program), and Edwin Lyman (senior staff scientist in the UCS Global Security Program), December 2007, “Nuclear power in a warming world”, The Union of Concerned Scientists, <http://www.ucsusa.org/assets/documents/nuclear_power/nuclear-power-in-a-warming-world.pdf>

While the United States has one of the world’s most well-developed regulatory systems for protection of nuclear facilities against sabotage and attack, current security standards are inadequate to defend against credible threats. Congress should give the responsibility for identifying credible threats and ensuring that security is adequate to the Department of Homeland Security rather than the NRC.

Might reduce global warming but threat of terrorism must be considered

Lisbeth Gronlund (co-director and senior scientist of the UCS Global Security Program), David Lochbaum (director of the nuclear safety project in the UCS Global Security Program), and Edwin Lyman (senior staff scientist in the UCS Global Security Program), December 2007, “Nuclear power in a warming world”, The Union of Concerned Scientists, <http://www.ucsusa.org/assets/documents/nuclear_power/nuclear-power-in-a-warming-world.pdf>

Global warming demands a profound transformation in the ways we generate and consume energy. Because nuclear power results in few global warming emissions, an increase in nuclear power could help reduce global warming—but it could also increase the threats to human safety and security. The risks include a massive release of radiation due to a power plant meltdown or terrorist attack, and the death of hundreds of thousands due to the detonation of a nuclear weapon made with materials obtained from a civilian nuclear power system.

CON: OFFSHORE DRILLING

By Phillip Mayer and Nicholas Bruno

INHERENCY

Large Amount of Unused Land is Already Leased

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html>

Why open up new areas to drilling when oil companies hold over 4,000 undeveloped leases in the western Gulf of Mexico? What’s more, the government already leases 44 million acres offshore, of which only 10.5 million—or one quarter—are producing oil or gas.

Untapped, Leased Land is already Available to Oil Companies

The Herland Tribune, June 2009 “Offshore Drilling’s siren song,” <http://www.heraldtribune.com/article/20090612/OPINION/906121019?Title=Offshore-drilling-s-siren-song>

Untapped oil and gas leases are already available. A study by the U.S. House Committee on Natural Resources found that, of the 90 million acres of federal land being leased to the energy industry, offshore and on land, less than 25 percent are producing oil and gas. Those 68 million acres of untapped leases include large tracts in the eastern Gulf that Congress opened in 2006. Apparently, oil and gas companies are more interested in stockpiling leases -- perhaps waiting for prices to rise -- than they are in increasing the current supply.

SIGNIFICANCE

Offshore drilling in sensitive areas would only increase domestic production by 7%

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html> [ellipses in original]

“Offshore drilling in sensitive areas would increase domestic oil production by 7 percent by 2030 compared to a reference case, according to the Energy Information Administration. But “because oil prices are determined on the international market…any impact on average wellhead prices is expected to be insignificant.”

Insignificant Amount of Oil

Lisa Wangsness (Staff Writer for The Boston Globe) June 2008, “New offshore drilling not a quick fix, analysts say” The Boston Globe <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/?page=1>

“About 86 billion barrels of additional oil may lie offshore, according to the US government's Energy Information Administration. Of that amount, about 18 billion barrels are subject to the moratorium. Much of the rest lies in areas that are too expensive to exploit or that oil companies have not yet tapped for technical reasons, fueling the industry's desire for fresh territory.”

EIA: Drilling offshore in the moratorium area would probably increase production 200,000 bpd starting in 2017

Jacob Leibenluft (writer from Washington D.C.), 12 August 2008, “What's the Deal With Offshore Drilling?”, Slate Magazine (daily magazine on the Web owned by Washington Post company), <http://www.slate.com/id/2197283/>

To understand what drilling on the OCS might yield, start with the report you heard about, a 2007 study by the federal agency assigned to compile statistics about the nation's oil usage, the Energy Information Administration. That report appears to deflate most of the arguments for drilling in the areas currently under a federal moratorium—mostly off the coasts of California and Florida. Doing so would increase oil production only by 200,000 barrels of oil a day, or just about 1 percent of the country's daily consumption. Furthermore, that level of production won't kick in until 2017 and will never have any impact on oil prices.

SOLVENCY

Lack of Infrastructure will cause Delays, and Produced Oil won’t Help Prices

Steve Hargreaves (Staff Writer for CNNMoney.com) May 2008 “Drilling our way out of rising oil prices” CNNMoney.com <http://money.cnn.com/2008/05/30/news/economy/oil_drilling/index.htm>

“Places like the Atlantic coast, thought to be rich in natural gas, lack drilling platforms, pipelines, terminals, storage facilities, and other energy infrastructure. EIA estimates that if Alaska's Arctic National Wildlife Refuge were opened for drilling tomorrow, oil wouldn't flow at full tilt until 2025. Plus, oil is a global market. It's true that oil pumped in the U.S. could stay in the U.S. But prices will be determined by international, not national, supply and demand.”

Oil Companies Lack Resources and drilling ships are booked for the next five years

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 Center for American Progress “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html>

Due to the high price of oil, existing drilling ships are “booked solid for the next five years,” and demand for deepwater rigs has driven up the price of such ships. Oil companies just don’t have the resources to explore oil fields in the OCS.

Even 2 Million Barrels a Day won’t do much good

Steve Hargreaves (Staff Writer for CNNMoney.com) May 2008 “Drilling our way out of rising oil prices” CNNMoney.com <http://money.cnn.com/2008/05/30/news/economy/oil_drilling/index.htm>

By 2025, world consumption, currently at about 85 million barrels a day, is expected to swell to well over 100 million barrels a day. That makes 2 million barrels a day look pretty small. "I wouldn't say it's a drop in the bucket," said Greg Priddy, a global energy analyst at the Eurasia group. "But it changes things only marginally over the long term." Priddy said these 2 million barrels a day would need to be balanced against steep production declines expected in many non-OPEC areas like Russia, Mexico and the North Sea over the next several years. Non-OPEC production is expected to peak within the next decade or two, regardless of what the U.S. does, he said. "It really just delays the day of reckoning a bit," he said.

No Effect on Global Prices

Lisa Wangsness (Staff Writer for The Boston Globe) June 2008, “New offshore drilling not a quick fix, analysts say” The Boston Globe <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/?page=1>

It would take at least a decade for oil companies to obtain permits, procure equipment, and do the exploration necessary to get the oil out of the ground, most industry analysts say. And even then, they add, the amount of new oil produced would probably be too small to significantly affect world oil prices.

Increasing Drilling does not mean Cheaper Gas

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 Center for American Progress “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html>

According to a report by the House Committee on Natural Resources Majority Staff: “Between 1999 and 2007, the number of drilling permits issued for development of public lands increased by more than 361 percent, yet gasoline prices have also risen dramatically, contradicting the argument that more drilling means lower gasoline prices. There is simply no correlation between the two.”

U.S. Supply can’t meet ever growing Demand

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 Center for American Progress “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html>

The U.S. oil supply-demand balance is insurmountable. We have less than 2 percent of the world’s known reserves, yet use 25 percent of its oil. Even if we drilled off of every beach, and inside every national park, refuge, and forest, we could not produce enough oil to offset our growing demand.

Oil Companies will Charge the Same Prices

Lisa Wangsness (Staff Writer for The Boston Globe) June 2008 The Boston Globe New offshore drilling not a quick fix, analysts say” <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/?page=1>

"Suppose the US produced all its oil domestically," said Robert Kaufmann, director of the Center for Energy and Environmental Studies at Boston University. "Do you think oil companies would sell oil to US consumers for one cent less than they could get from French consumers? No. Where oil comes from has no effect on price."

Possible 3 to 4 Cent Reduction is all that is likely

Bryan Walsh (A columnist for TIME Magazine) June 2008 “Will More Drilling Mean Cheaper Gas?” TIME Magazine <http://www.time.com/time/business/article/0,8599,1815884,00.html>

“Opening up offshore areas to oil exploration — currently all coastal areas save a section of the Gulf of Mexico are off-limits, thanks to a congressional ban enacted in 1982 and supplemented by an executive order from the first President Bush — might cut the price of gas by 3 to 4 cents a gallon at most, according to the Natural Resources Defense Council. And the relief at the pump, such as it is, wouldn't be immediate — it would take several years, at least, for the oil to begin to flow, which is time enough for increased demand from China, India and the rest of the world to outpace those relatively meager savings.”

New, Safer Drilling Techniques won’t Reduce Environmental Impacts

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

“New drilling technologies won’t help when we’ve got the same old policies guiding offshore oil development; that is, ‘drill as much as you can as cheap as you can, the fisheries and the environment be darned’,” said Grader “Indeed, the new technologies we should be talking about are developing renewable energy sources, not looking for more fossil fuels whose greenhouse gasses are causing floods, droughts and the acidification of our oceans.”

Hurricanes Jeopardize Production and Destroy Facilities

ScienceDaily “Katrina and Rita Provide Glimpse of What Could Happen to Offshore Drilling if Gustav Hits Gulf” August 2008 <http://www.sciencedaily.com/releases/2008/08/080829104949.htm>

Katrina and Rita (both Category 5 storms with sustained winds of up to 175 mph) caused the following damage on an estimated 3,000 platforms and 22,000 miles of pipelines that were in the direct path of hurricanes:

* 52 platforms with major damage
* 19 of the floating drill units exposed to hurricane force winds went adrift or were damaged
* 115 platforms destroyed
* Eight rigs destroyed
* 535 pipeline segments damaged

Hurricanes have led to Price Spikes

ScienceDaily “Katrina and Rita Provide Glimpse of What Could Happen to Offshore Drilling if Gustav Hits Gulf” August 2008 <http://www.sciencedaily.com/releases/2008/08/080829104949.htm>

“If one major deep-water production platform is destroyed, you’re talking about a $1 billion or more loss,” Nagarajaiah said. “If it’s multiple rigs and platforms in a variety of water depths, then we’re talking billions of dollars.”When Katrina and Rita struck, gas prices soared as a result of damage to oil facilities.

DISADVANTAGES

A. Oil Spills

Offshore Drilling has had Spills in the Past

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

“In recent years, oil spills from offshore exploratory and production rigs have often resulted from equipment failure or human error, or a combination of both. Computerized equipment, not subject to constant monitoring and human oversight, has resulted in uncontrolled discharges of oil at many operations in various locations. After Hurricane Katrina, remote sensing equipment using Synthetic Aperture Radar on the “Radarsat” Canadian satellite detected extensive slicks of highly-toxic liquid natural gas consensate, a light oil, spreading throughout the Gulf of Mexico from damaged offshore natural gas drilling infrastructure at the Apache Field.”

New Offshore Drilling Present Very Large Risk of Spills

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

California’s “Torch” pipeline oil spill, and Alaska’s Cook Inlet “Cross-Timbers” oil spill, represent recent examples of highly-automated subsea oil pipelines that have leaked for extensive periods of time without the source of the leaks being detected. Since any oil produced from offshore drilling operations that lie beyond existing pipeline infrastructure is inevitably transported by barge or tanker to refining centers, there is a constant risk of a tanker spill that can originate from any point in transit. In addition, massive floating offshore oil storage facilities, now being expanded in the Gulf of Mexico and planned for other regions, represent the risk of very large spills.

Impact: Harm to Marine Life, Ecosystems, and Humans

Albert Venosa (Ph.D., Director, Land Remediation and Pollution Control Division of the National Risk Management Research Laboratory, Office of Research and Development US. Environmental Protection Agency) June 2009 Written Statement before the House of Representatives “Hearing on Oil Spill Research and [Development” http://www.epa.gov/ocir/hearings/testimony/111\_2009\_2010/2009\_0604\_adv.pdf](Development)

An oil discharge to the waters of the U.S. can affect drinking water supplies; sicken and/or kill fish, animals, and birds; foul beaches and recreational areas; and persist in the environment, harming sensitive ecosystems.

Drilling increases risk of oil spills

Greenpeace, 4 August 2008, “Offshore Drilling – It’s NOT the Answer to High Gas Prices at the Pump”, <http://www.greenpeace.org/usa/news/offshore-drilling-it-s-not-t>

Plus, offshore drilling creates an increased risk of oil spills close to our beaches and coastlines. One of the biggest myths told by political candidates (the oil industry and their allies in Congress) is that hurricanes Katrina and Rita caused no significant oil spills in the Gulf of Mexico. Nothing could be further from the truth. Katrina and Rita trashed drilling platforms, ruptured pipelines and yanked 2-million-gallon storage tanks off their foundations. More than 9 million gallons of oil spilled as a result of those two storms. Compare that amount with the 11 million gallons of oil spilled by the infamous Exxon Valdez when it ran aground in Prince William Sound Alaska in 1989. The Minerals Management Service (MMS), the federal agency that regulates offshore drilling, reported that hurricanes Katrina and Rita destroyed 113 oil platforms and damaged 457 pipelines.

B. Environmental Devastation

Pollution from Toxic Chemicals

Lisa Wangsness (Staff Writer for The Boston Globe) June 2008 The Boston Globe New offshore drilling not a quick fix, analysts say” <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/?page=1>

Environmentalists argue that the pollution caused by drilling could compromise fragile ecosystems for very little economic benefit when the United States should be focusing on conservation - the cheapest barrel of oil, they like to say, is the one we don't have to buy - and developing better renewable energy sources. They point to a number of environmental risks. Drilling fluids contain toxic chemicals. If oil is found, one of the waste products is briny water that also contains toxic chemicals. The noise from drilling could harm some sea animals, such as whales. And the oil would also have to be transported by pipeline or ship, creating its own environmental impacts.

Offshore drilling creates aesthetic pollution, GHGs, air pollution, and toxins

Jacob Leibenluft (writer from Washington D.C.), 12 August 2008, “What's the Deal With Offshore Drilling?”, Slate Magazine (daily magazine on the Web owned by Washington Post company), <http://www.slate.com/id/2197283/>

What about the environmental impact? One major concern is aesthetic—voters (and the tourism industry in states like Florida) just don't want oil rigs sullying their coastline. Offshore oil production also produces its share of greenhouse gas emissions greenhouse gas emissions and air pollution and poses a hazard to seabirds. And while large spills may be rare, platforms do release "produced formation water" and drilling mud, among other materials, that might be toxic to marine life.”

Air Pollution from Emissions

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

Oil and natural gas drilling and production operations offshore generate a suite of air pollutants, including ozone, oxides of Nitrogen, and sulfur compounds. Each gas well releases 50 tons of nitrogen oxides (NOx), 13 tons of carbon monoxide, 6 tons of sulfur dioxide, and 5 tons of volatile organic carbons (VOC’s). The platforms themselves annually generate another 50 tons of NOx, 11 tons of carbon monoxide, 8 tons of sulfur dioxide, and 38 tons of VOC’s. Because drilling rigs offshore lie outside of the regulatory jurisdiction of onshore air quality management districts, coastal states generally have little authority over air emissions from the rigs. Tankering and barging also generate emissions from the transportation of produced crude oil, both as a result of the burning of vessel fuel and from fugitive hydrocarbon emissions from the loading and offloading of tankships.

Environmental Damages will Outweigh any Benefits

Lisa Wangsness (Staff Writer for The Boston Globe) June 2008 The Boston Globe New offshore drilling not a quick fix, analysts say” <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/?page=1>

Expanded offshore exploration also carries with it some environmental risks, from oil spills to destruction of habitat to vibrations that damage sea life, which environmentalists say could have catastrophic consequences that far outweigh any potential benefit from further offshore drilling.

List of Further Potential Environmental Harms

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

PCFFA acknowledges advances in slant drilling may mean fewer wells, but serious problems remain for fisheries from offshore drilling. Those include:

* Seismic Testing. The sound blasts kill small foraging fish and scare other fish off making fishing difficult, if not impossible, where it occurs;
* Loss of Fishing Grounds. Fishing grounds are lost to the placement of rigs and the “safety zones” placed around rigs where fishing is prohibited. Moreover, debris left on the seafloor from offshore drilling operations can damage or destroy fishing gear;
* Chronic Small Spills. Large major oil spills from rigs (such as what occurred in 1969 in the Santa Barbara Channel) are relatively rare, however, chronic, unreported small spills are frequent that can foul fishing gear or taint the catch;
* Loss of Port Infrastructure. Offshore oil and gas operations often displace commercial fishing facilities (marinas, fish processing plants, ice houses, etc) making fishing operations difficult to conduct;
* Contamination of Fish. Fish found around oil rigs in the Gulf of Mexico have high concentrations of mercury and heavy metals, making these fish, many taken by sport fishermen, questionable for consumption. Much of the contamination is associated with the drill muds and their disposal on the seafloor near the rigs

Drilling will put US beaches and fish at risk

Greenpeace, 4 August 2008, “Offshore Drilling – It’s NOT the Answer to High Gas Prices at the Pump”, <http://www.greenpeace.org/usa/news/offshore-drilling-it-s-not-t>

In 1981, responding to public sentiment, Congress adopted the Outer Continental Shelf (OCS) Moratorium, which prevents the leasing of coastal waters off the Atlantic and pacific coasts and Alaska’s Bristol Bay for oil and gas drilling. If the moratorium is lifted, our oceans and the species that call them home will suffer. An increase in offshore drilling will put more of this country’s beaches, fish, and marine mammals at risk, as both the exploration and the drilling for oil increase the threat to our valuable coastlines.

Offshore drilling harms wildlife

Greenpeace, 4 August 2008, “Offshore Drilling – It’s NOT the Answer to High Gas Prices at the Pump”, <http://www.greenpeace.org/usa/news/offshore-drilling-it-s-not-t>

Seismic testing to locate oil creates decibel levels of 260 – twice as loud as an ambulance. Exposure to these levels of noise can cause disorientation, beaching, and brain hemorrhaging in whales and dolphins. Drilling for oil results in routine releases of toxic drilling muds, excavation materials, production waters, and contaminants such as mercury lead, cadmium and radioactive substances such as radium. Offshore oil drilling also comes with tanker, boat and barge traffic and other industrial activity and noise that disturb wildlife. And all offshore oil drilling requires an onshore network of pipelines, roads, refineries, docks and other infrastructure that release pollutants into the air and water, as well as destroy coastal habitat.

C. Fishing Industry and Marine Life Damaged

Mass Stranding of Whales, and Decreased Fish Catch

Pacific Coast Federation of Fishermen’s Associations(A federation of many different port and fishermen's marketing associations with members spanning the US west coast from San Diego to Alaska) July 2008 Pacific Coast Federation of Fishermen’s Associations “Halt the Drumbeat to Drilling: Fishermen’s Group Says Offshore Drilling Threatens Fish and Oceans, Won’t Make a Dent in Oil Supplies” <http://sacramentofordemocracy.org/?q=node/view/19619>

The initial exploratory phase of offshore oil and gas activities involves the discharge of thousands of high-intensity blasts from powerful “airguns”, creating a strong shockwave through the ocean that pounds into the seabed. Because water is an excellent medium for the transmission of sound, seismic airgun exploration has been directly associated with mass strandings and resulting mortality of whales and other marine mammals, with decreased fish catch in the impacted region, and with permanent damage to the acoustic receptors of various fish species, and the hearing capacity of fish enables them to avoid predators, locate mates, and find prey, i.e., to survive.

Drilling could be “final straw” for collapse of New England fisheries

Lisa Wangsness, 20 June 2008, “New offshore drilling not a quick fix, analysts say”, Boston Globe, <http://www.boston.com/news/nation/articles/2008/06/20/new_offshore_drilling_not_a_quick_fix_analysts_say/>

“Today we think offshore oil drilling could be the final straw in the unfolding collapse of New England fisheries," said Priscilla Brooks, director of the Ocean Conservation Project at the Conservation Law Foundation, which successfully fought a proposed drilling lease on Georges Bank in the late 1970s.

Fisheries create billions of dollars in economic activity

National Oceanic and Atmospheric Administration, 2008 “Economic Benefits,” <http://www.economics.noaa.gov/?goal=ecosystems&file=users/business/fisheries&view=benefits>

“In 2007, the total export value of edible and nonedible fishery products was $20.1 billion, an increase of $2.3 billion compared with 2006. United States firms exported 2.9 billion pounds of edible products valued at $4.0 billion a decrease of 97.9 million pounds but an increase of $26.7 million compared with 2006 (NOAA National Marine Fisheries Service, 2007). In 2006, commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 states were 9.5 billion pounds or 4.3 million metric tons valued at $4.0 billion NOAA National Marine Fisheries Service, 2006). U.S. consumers spent an estimated $69.5 billion for fishery products. In producing and marketing these items, the commercial fishing industry contributed $35.1 billion in value added to the U.S. Gross National Product (NOAA National Marine Fisheries Service, 2006).

D. Long-term Security Jeopardized

Loss of Needed Reserves if Deposits are Exploited now

The Herald Tribune, June 2009 “Offshore Drilling’s siren song” <http://www.heraldtribune.com/article/20090612/OPINION/906121019?Title=Offshore-drilling-s-siren-song>

If there are oil and gas deposits in the Gulf bottom, and if the industry is willing to tap them, why is it in the nation's interest to do so now? Why not leave them there, as reserves and as a check against foreign exporters that might someday threaten to cut off the U.S. supply? Unless the United States can quickly develop renewable sources of energy -- and Congress, unfortunately, seems reluctant to push that development -- America will need oil and gas reserves for the foreseeable future.

E. Distraction from Real Solution

Oil Based Solutions Distract from Alternatives

The Herald Tribune, June 2009 “Offshore Drilling’s siren song” <http://www.heraldtribune.com/article/20090612/OPINION/906121019?Title=Offshore-drilling-s-siren-song>

“As long as U.S. politics and policies are directed toward unsustainable, ineffective strategies like Gulf drilling, the nation will be distracted from the goal of achieving true energy independence through the use of renewable sources like wind and solar power.”

Distraction from both Innovation and a Long-term Solution

Center for American Progress (A a nonpartisan research and educational Think Tan) June 2008 Center for American Progress “Ten Reasons Not to Lift the Offshore Drilling Moratorium” <http://www.americanprogress.org/issues/2008/06/offshore_drilling.html>

The real solution to the energy crisis—and to the climate crisis—is to innovate, become more efficient, and move forward. That’s why offshore drilling in sensitive areas is a bad idea. For a long-term plan, it is remarkably short-sighted.

Demand can’t be offset by Supply, Real Solution is Alternative Energy

The Herald Tribune, June 2009 “Offshore Drilling’s siren song” <http://www.heraldtribune.com/article/20090612/OPINION/906121019?Title=Offshore-drilling-s-siren-song>

The United States has only 3 percent of the world's oil reserves, according to the U.S. Energy Information Administration. Yet, America consumes 25 percent of the world's supply. Obviously, the more reasonable solution to U.S. dependency on foreign oil is to reduce consumption through better fuel efficiency -- in cars, homes and buildings, for example -- and greater use of renewable sources.

Impact: Increased Dependence on OPEC 20-30 years from now

Steve Hargreaves (Staff Writer for CNNMoney.com) May 2008 “Drilling our way out of rising oil prices” CNNMoney.com <http://money.cnn.com/2008/05/30/news/economy/oil_drilling/index.htm>

"When you're addicted, the first thing you want to do is stop drinking," said Adam Kolton, director of congressional affairs for the National Wildlife Federation, referring to President Bush's State of the Union speech when he said the nation was addicted to oil. "What the American people want is an end to dependency on oil and a focus on alternatives." Kolton said more and cheaper oil will only foster the same culture of big cars and sprawling houses we've become accustomed to, and leave us even more dependent on OPEC 20 or 30 years out. "This is just more of the failed policies of the past," he said.”

CON: OIL DEPENDENCE

By Renee Davis and Matthew Baker

INHERENCY

Growing global demand will make the world economy even more dependent on oil

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

“The growing worldwide demand for oil in the coming decades will magnify the problems that are already evident in the functioning of the world oil market. During that period, the availability of low cost oil resources is expected to decline; production and transportation costs are likely to rise. As more hydrocarbon resources in more remote areas are tapped, the world economy will become even more dependent on elaborate and vulnerable infrastructures to bring oil and gas to the markets where they are used.”

The US now imports 60% of its oil more than twice the ratio before the 1973 Oil Embargo

Anne Korin (Co-Director for the Institute for the Analysis of Global Security), May 22, 2008, “Rising Oil Prices, Declining National Security,” <http://www.iags.org/Korin_HFRC_052208.pdf>

“With 97 percent of U.S. transportation energy based on petroleum, oil is the lifeblood of America’s economy. America is poor in oil relative to its need. It consumes one of every four gallons in the world but has barely 3 percent of the world’s proven reserves of conventional oil. The United States now imports over 60 percent of its oil, more than twice the ratio of imports before the 1973–74 Arab oil embargo.”

Spare oil production capacity is at the lowest level in three decades

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

“Oil is the lifeblood of the American economy, providing more than 40% of all energy consumed in the United States and 97% of the energy used for transportation. For the last quarter century, the U.S. economy has been relatively insulated from the potentially devastating consequences of this dependence thanks to global spare production capacity and surplus conditions. U.S. energy policy has focused on increasing and diversifying supply, establishing strategic reserves, and relying on Saudi Arabia to moderate oil prices. Today, however, surplus conditions are fading fast. Spare production capacity is at its lowest level in three decades, with most estimates currently between 1 and 2 million barrels per day (mbd)—very little in a world that consumes approximately 84 mbd.4 Though world production may not peak anytime soon, the production system is under considerable strain—creating a tremendous amount of risk to the global economy.”

SIGNIFICANCE: PEAK OIL

Peak oil could be reached in a few years or 2030: both estimates are bad

Vice Admiral Dennis McGinn, April 18, 2007, “Hearing on the Geopolitical Implications of Rising US Dependence on Imported Oil and Rising Global Temperature,” <http://globalwarming.house.gov/tools/assets/files/0115.pdf>

“Some predict we will reach peak of oil production within a few years, others say peak oil won’t arrive until 2030 or later. In either case, our demand is going in the opposite direction while oil is getting harder and more expensive to extract.”

Oil is limited and its consumption will eventually peak

Rex Weyler, August 8, 2008, “Deep Green: Peak Oil Changes Everything,” Greenpeace, <http://www.greenpeace.org.uk/blog/about/deep-green-peak-oil-changes-everything-20080804>

“Oil is a fixed asset of the planet, representing stored sunlight accumulated over a billion years as early marine algae, and other marine organisms (not dinosaurs) captured solar energy, formed carbon bonds, gathered nutrients, died, sank to the ocean floors, and lay buried under eons of sediment. Like any fixed non-renewable resource, oil is limited, and its consumption will rise, peak, and decline.”

Since 2005 world oil production has stayed on a plateau

Rex Weyler, August 8, 2008, “Deep Green: Peak Oil Changes Everything,” Greenpeace, <http://www.greenpeace.org.uk/blog/about/deep-green-peak-oil-changes-everything-20080804>

“World oil production increased for 150 years until the spring of 2005, when world crude oil production reached about 74.3 million barrels per day (mb/d), and total liquid fuels, including tar sands, liquefied gas, and biofuels reached about 85 mb/d. In spite of the efforts since, and tales of “trillions of barrels” of oil in undiscovered fields, liquid fuel production has remained at about 85.5 mb/d for three years, the longest sustained plateau in modern petroleum history. Discoveries of new fields peaked 40 years ago. Meanwhile economies everywhere want to grow, so demand for oil soars worldwide. The gap between this surging demand and flat or declining production will drive price increases and shortages. That’s peak oil.”

Peak oil is not a theory but rather reality

Rex Weyler, August 8, 2008, “Deep Green: Peak Oil Changes Everything,” Greenpeace, <http://www.greenpeace.org.uk/blog/about/deep-green-peak-oil-changes-everything-20080804> (Ellipses in original)

“Peak oil is not a theory, but rather a simple observation of a common natural occurrence. Peak oil is only one symptom of an exponentially growing population, with exponentially growing demands, reaching worldwide limits of all resources. “Peak oil has long been a reality for the oil industry,” says Anita M Burke, former Shell International senior advisor on Climate Change and Sustainability. “To believe anything else belies the facts of science.” In 2007, Dr James Schlesinger, former US Defense and Energy Secretary stated flatly, “if you talk to industry leaders, they concede … we are facing a decline in liquid fuels. The battle is over. The peakists have won.”

Oil has already peaked

Rex Weyler, April 2008, “Lord of the Fruit Flies,” Greenpeace, http://www.greenpeace.org/international/about/deep-green/deep-green-april-2008

“Forget quibbling about peak oil. We are way past peak everything. There is no natural resource available on the planet today that we are going to have more of in the future, except perhaps heat. World oil production has now peaked, and if you add in a “net-energy” factor, it is already in decline. Net petroleum energy per capita peaked three decades ago, in 1979.”

IEA admits that oil has peaked

Rex Weyler, December 2008, Greenpeace, <http://www.greenpeace.org/international/about/deep-green/deep-green-dec-2008>

“In October, after decades of denial that oil production would peak, the International Energy Agency announced that the world's 800 largest oil fields are in "accelerating decline" and the global energy supply is "patently unsustainable." This announcement arrives now that the data prove irrefutable, but geologists warned in the 1950s that we should plan ahead for the oil decline.”

SIGNIFICANCE: ECONOMY

Oil imports largest component of the US trade deficit

US Department of Energy, 11/12/2008, “Economic Growth,” http://www1.eere.energy.gov/biomass/economic\_growth.html

“Oil imports are the largest component of the U.S. trade deficit, accounting for more than 65 percent of the entire trade deficit in 2007. The production of nearly 6.5 billion gallons of ethanol means that the United States needed to import 228.2 million fewer barrels of oil in 2007 to manufacture gasoline. The value of crude oil displaced by this ethanol production was $16.5 billion.”

At $60 a barrel, $500,000 a minute flows out of the US increasing the trade deficit

Vice Admiral Dennis McGinn, April 18, 2007, “Hearing on the Geopolitical Implications of Rising US Dependence on Imported Oil and Rising Global Temperature,” <http://globalwarming.house.gov/tools/assets/files/0115.pdf>

“With oil at $60 a barrel, $500,000 a minute is flowing out of our country, increasing our trade deficit, and putting money into the hands of some regimes that are hostile to our interests.”

US sends $460 billion annually overseas for oil and the real economic cost is $825 billion a year

Dr. Gal Luft (PhD in Strategic Studies from Johns Hopkins University and executive director for the Institute for the Analysis of Global Security), March 20, 2008, “Oil dependency is America’s ruin,” <http://israel-institute.com/media/Gal%20Luft%20Energy%20Plan.doc.pdf>

“At current oil prices, this country sends overseas $460 billion per year to finance the daily buying of 12 million barrels of imported oil. This amount of money is about the size of our defense budget and three times the size of the ''economic stimulus'' package recently passed by Congress. But the real economic impact of oil dependence is hidden to most Americans. Energy economist Milton Copulos (who passed away this month) calculated last year that the grand total of all external costs associated with foreign oil dependence -- including the cost of oil-related defense expenditures, amortized cost of supply disruptions, and lost economic activity and tax revenues -- stands at $825 billion per year.”

Foreign oil consumption equivalent to a tax of $1,600 a year on every American

Anne Korin (Co-Director for the Institute for the Analysis of Global Security), May 22, 2008, “Rising Oil Prices, Declining National Security,” <http://www.iags.org/Korin_HFRC_052208.pdf>

“While the U.S. economy bleeds, oil-producing countries like Saudi Arabia and Iran—sympathetic to, and directly supportive, of radical Islam—are on the receiving end of staggering windfalls. In 2006, the United States spent about $260 billion on foreign crude oil and refined petroleum products. This year, with oil hovering over $125 a barrel, the figure could surpass $500 billion, the equivalent of our defense budget. At today's prices, foreign oil producers are extracting a tax of more than $1,600 a year from every American man, woman and child.”

Oil imports account for 56% of the total trade deficit

Reuters News, March 3, 2009, “SAFE: Oil Trade Deficit Damaging US Economy,” <http://www.reuters.com/article/pressRelease/idUS225733+03-Mar-2009+PRN20090303>

“Securing America's Future Energy (SAFE) President and CEO Robbie Diamond issued the following statement today in response to the release of government data showing that the 2008 trade deficit for petroleum and refined products was more than $380 billion, representing more than 56 percent of the entire national trade deficit: "This week, we once again have been presented with clear and compelling evidence of the tremendous threats posed by our dependence on petroleum, most of it imported. Petroleum and petroleum products represented more than $380 billion of our total $677 billion trade deficit in 2008. In other words, our addiction to oil accounted for more than 56 percent of our entire national trade deficit. This is an unprecedented and unsustainable transfer of wealth to other nations, many of which are hostile to American interests.”

Oil price shocks have cost the US economy an estimated $7 trillion over 30 years

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

“History provides ample evidence of the potential economic consequences of oil dependence.From 1970-2000, oil shocks are estimated to have cost the U.S. economy an estimated $7 trillion (in 1998 dollars.)13”

SIGNIFICANCE: TERRORISTS DISRUPTION

Terrorists have historically targeted oil infrastructure and another strike is likely

Dr. Ariel Cohen (Senior Research Fellow at the Heritage Foundation and PhD at the Fletcher School of Law and Diplomacy at Tufts University), May 14, 2007, “The National Security Consequences of Oil Dependency,” The Heritage Foundation, <http://www.heritage.org/Research/NationalSecurity/hl1021.cfm>

“Terrorist attacks that have been carried out to date on the oil infrastructure have clearly caught oil producers unprepared. For example, al-Qaeda's February 24, 2005, attack on the Aramco facility in Abqaiq, Saudi Arabia, sent shock waves through the world's financial markets. On the same day, the price of oil on international markets jumped nearly $2 per barrel, despite the attack's complete failure (the terrorists and two security guards were killed.)[[3]](http://www.heritage.org/Research/NationalSecurity/hl1021.cfm#_ftn3) Most analysts agree that the February attack, an additional attempt on March 28, 2005, and a 9/11-style assault in April 2007, all of which were suc­cessfully averted, were merely trial runs in a much longer campaign designed to disrupt the global economy in general, and the oil and gas industry in particular.[[4]](http://www.heritage.org/Research/NationalSecurity/hl1021.cfm#_ftn4) As the September 11, 2001, World Trade Center attacks demonstrated, al-Qaeda tends to return to the scene of the crime, so another strike on Abqaiq and other oil targets is likely.”

A carefully targeted terrorists attack in Saudi Arabia could create a disastrous disruption

Dr. Ariel Cohen (Senior Research Fellow at the Heritage Foundation and PhD at the Fletcher School of Law and Diplomacy at Tufts University), May 14, 2007, “The National Security Consequences of Oil Dependency,” The Heritage Foundation, <http://www.heritage.org/Research/NationalSecurity/hl1021.cfm>

“Some analysts have warned that a carefully targeted terrorist attack on oil facilities in Saudi Arabia could reduce Saudi oil production to 4 million barrels per day or less for up to three months, which would have disastrous results for the global economy.”

A successful terrorist attack at one of multiple choke points could devestate the global economy

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

“Al Qaeda has targeted and continues to target oil infrastructure as a way of “bleeding” the U.S. economy. Along the oil supply and distribution chain, numerous chokepoints are vulnerable to attack. Shipping lanes are of particular concern:

**>** Roughly 90 percent of Middle East oil exports pass through the Strait of Hormuz (17 mbd),

Bab el Mandeb (3.0 mbd), or the Suez Canal/Sumed pipeline (3.8 mbd)—passageways with limited alternatives.10

**>** Another 11.7 mbd pass through the Strait of Malacca and 3.1 mbd through the Turkish Straits.

**>** Each of these passageways is vulnerable to accidents, piracy, or terrorism, and the effects of a major attack at one of these points could devastate the global economy.”

SIGNIFICANCE- DISRUPTION

Iran poses a threat to energy security and has built up capacity to interdict the oil flow

Dr. Ariel Cohen (PhD and Senior Research Fellow), James Phillips (Senior Research Fellow for Middle Eastern Affairs), and William Schirano, November 13, 2006, “Countering Iran's Oil Weapon,” Backgrounder #1982, The Heritage Foundation, <http://www.heritage.org/Research/Iran/bg1982.cfm>

The Islamic Republic of Iran poses one of the most troubling threats to energy security. Because of its recent military buildup, Iran now has a much greater ability to interdict the flow of Persian Gulf oil exports than it had during the Iran–Iraq War. Iran’s arsenal now includes sophisticated mines, anti-ship missiles, submarines, and aircraft procured from China, Russia, and North Korea that will make defending the Persian Gulf a much more difficult task for the U.S. military. If the growing crisis over Iran’s nuclear program leads Iran to interfere again in the flow of Persian Gulf oil as Tehran has openly threatened, the resulting disruption could severely damage the global economy.

Increased global demand and decling spare production have increased vulnerability to shocks

Dr. Ariel Cohen (PhD and Senior Research Fellow), James Phillips (Senior Research Fellow for Middle Eastern Affairs), and William Schirano, November 13, 2006, “Countering Iran's Oil Weapon,” Backgrounder #1982, The Heritage Foundation, <http://www.heritage.org/Research/Iran/bg1982.cfm>

Growing global demand for oil, particularly from China and India, and declining spare oil production capacity have increased the global oil market’s vulnerability to sudden shocks. Natural disasters (Hurricane Katrina), political instability within oil-producing countries (Nigeria), violent insurgencies (Iraq), or a regional war (the 1973 Arab–Israeli war) could trigger an oil supply crisis.

Terrorist attacks, unrest, and a cold snap could drive prices up throwing millions out of work

Robert B. Semple (MA in history from the University of California), March 1, 2006, “The End of Oil,” The New York Times, <http://select.nytimes.com/2006/03/01/opinion/01talkingpoints.html?_r=1&pagewanted=all>

“It wouldn't take much — a terrorist attack on Alaska’s Port of Valdez would reduce global oil supply by 900,000 barrels a day; unrest in Nigeria, 600,000 barrels; an attack on Saudi Arabia processing facilities at Haradh, 250,000. Throw in an unseasonable cold snap across the Northern Hemisphere, boosting demand by 800,000 barrels, and before long you're staring at a net shortfall of almost 3 million barrels, or about 4 per cent of normal daily supply. This, in turn, is enough to drive oil prices from about $60 to $161 a barrel. The cost of fuel at the pump — indeed, the cost of most petrochemical-based products — rises dramatically. The U.S. economy slides into recession. Millions are thrown out of work.”

Simulations show that a 4% shortfall in daily oil supplies could dramatically spike the price

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

“Oil ShockWave, a crisis simulation developed to explore the vulnerability of the global energy system, showed that even relatively small supply disruptions can cause the price of oil to rise dramatically. In one exercise, a roughly 4 percent global shortfall in daily supply caused a 177 percent increase in the price of oil. As a result, consumer spending plunged, GDP dropped, and the economy went into recession. The current account deficit rose to unprecedented levels and there was an historically significant decline in the S&P 500.

SIGNIFICANCE: FOREIGN POLICY

Oil Revenues give states like Russia, Iran, and Venezuela the ability to oppose US policy objectives

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

First, the control over enormous oil revenues gives exporting countries the flexibility to adopt policies that oppose U.S. interests and values. Iran proceeds with a program that appears to be headed toward acquiring a nuclear weapons capability. Russia is able to ignore Western attitudes as it has moved to authoritarian policies in part because huge revenues from oil and gas exports are available to finance that style of government. Venezuela has the resources from its oil exports to invite realignment in Latin American political relationships and to fund changes such as Argentina’s exit from its International Monetary Fund (IMF) standby agreement and Bolivia’s recent decision to nationalize its oil and gas resources. Because of their oil wealth, these and other producer countries are free to ignore U.S. policies and to pursue interests inimical to our national security.

Global Oil Dependence = international alignments that hinder US policy objectives

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

Second, oil dependence causes political realignments that constrain the ability of the United States to form partnerships to achieve common objectives. Perhaps the most pervasive effect arises as countries dependent on imports subtly modify their policies to be more congenial to suppliers. For example, China is aligning its relationships in the Middle East (e.g., Iran and Saudi Arabia) and Africa (e.g., Nigeria and Sudan) because of its desire to secure oil supplies. France and Germany, and with them much of the European Union, are more reluctant to confront difficult issues with Russia and Iran because of their dependence on imported oil and gas as well as the desire to pursue business opportunities in those countries. These new realignments have further diminished U.S. leverage, particularly in the Middle East and Central Asia. For example, Chinese interest in securing oil and gas supplies challenges U.S. influence in central Asia, notably in Kazakhstan. And Russia’s influence is likely to grow as it exports oil and (within perhaps a decade) large amounts of natural gas to Japan and China.

Oil dependence undermines democracy around the world

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx>

“Finally, oil dependence undermines democracy and good governance around the world. Oil wealth corrodes democratic institutions. This dynamic is not inevitable, but it is widespread. A growing body of scholarly work explores this topic, concluding that oil wealth is strongly associated with corruption and authoritarian rule. New York Times Foreign Affairs columnist Tom Friedman has written about the “First Law of Petropolitics” -- that the price of oil and pace of freedom move in opposite directions. A few examples underscore these trends. Bahrain, the Persian Gulf country with the smallest oil reserves, was also the first to hold free elections. As oil prices climbed in recent years, both Vladmir Putin and Hugo Chavez moved away from democratic institutions and toward more authoritarian rule. In Nigeria, oil abundance contributes to widespread corruption.”

Oil revenues undermine local governance and entrench totalitarian governments

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

“Fourth, revenues from oil and gas exports can undermine local governance. The United States has an interest in promoting good governance both for its own sake and because it encourages investment that can increase the level and security of supply. States that are politically unstable and poorly governed often struggle with the task of responsibly managing the large revenues that come from their oil and gas exports. The elements of good governance include democratic accountability, low corruption, and fiscal transparency. Production in fragile democracies, such as in Nigeria, can be undermined when politicians or local warlords focus on ways to seize oil and gas rents rather than on the longer-term task of governance. Totalitarian governments that have control over those revenue flows can entrench their rule.”

Oil dependence emboldens Iran and exempts them from international pressure

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx>

“Several leading oil exporters pursue policies that threaten the United States. Today, the most serious threat comes from Iran, whose nuclear ambitions could put terrifying new weapons into the hands of terrorists. Yet efforts to respond to this threat with multilateral sanctions have often foundered on fears that Iran would retaliate by withholding oil from world markets. Indeed Iran does not even need to withhold oil from world markets to play its “oil card.” The mere fear it might do so can cause oil prices to climb, as traders build a “risk premium” into the cost of every barrel. This puts pressure on governments around the world to minimize “saber-rattling” against Iran, in order to help control oil prices. The result – an emboldened Iran, more confident in its ability to pursue policies that threaten U.S. national security.”

The Need to protect oil flows has shaped US policy in the gulf (Shah of Iran and Gulf War I)

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx> (Ellipses in original)

“For more than 50 years, the need to protect oil flows has shaped U.S. policy and relationships in the Persian Gulf. During the Cold War, we supported the Shah of Iran in part to keep oil flowing from the region. In 1980, President Carter declared that attempts by outside forces to gain control of the Persian Gulf would be “repelled by any means necessary, including military force.” In 1991, with Saddam Hussein in Kuwait, President George H.W. Bush told Congress that war was necessary because “[v]ital economic interests are at risk…Iraq itself controls some 10% of the world’s proven oil reserves. Iraq plus Kuwait controls twice that.” After removing Saddam from Kuwait in 1991, U.S. troops remained in Saudi Arabia where their presence bred great resentment.”

Alan Greenspan: War in Iraq about oil

Graham Peterson, September 16, 2007, “Alan Greenspan claims Iraq war was really for oil,” The Times (Major Uk Newspaper) <http://www.timesonline.co.uk/tol/news/world/article2461214.ece>

“AMERICA’s elder statesman of finance, Alan Greenspan, has shaken the White House by declaring that the prime motive for the war in Iraq was oil. In his long-awaited memoir, to be published tomorrow, Greenspan, a Republican whose 18-year tenure as head of the US Federal Reserve was widely admired, will also deliver a stinging critique of President George W Bush’s economic policies. However, it is his view on the motive for the 2003 Iraq invasion that is likely to provoke the most controversy. “I am saddened that it is politically inconvenient to acknowledge what everyone knows: the Iraq war is largely about oil,” he says. Greenspan, 81, is understood to believe that Saddam Hussein posed a threat to the security of oil supplies in the Middle East.”

Demand for oil weakens US diplomatic leverage

Vice Admiral Dennis McGinn, April 18, 2007, “Hearing on the Geopolitical Implications of Rising US Dependence on Imported Oil and Rising Global Temperature,” <http://globalwarming.house.gov/tools/assets/files/0115.pdf>

“Our burgeoning demand for oil weakens U.S. diplomatic leverage around the globe, burdens our armed forces and leaves the U.S. vulnerable to unstable or hostile regimes.”

Oil consuming countries are constrained in dealing with Iran due to oil

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

All consuming countries, including the United States, are more constrained in dealing with producing states when oil markets are tight. To cite one current example, concern about losing Iran’s 2.5 million barrels per day of world oil exports will cause importing states to be reluctant to take action against Iran’s nuclear program.”

Oil revenues allow Chavez to stay in power and finance anti-American policies

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx>

“In short, three decades after the first oil shocks -- and a quarter-century after the humiliating capture of U.S. diplomats in Tehran – we remain hostage to the world’s continuing dependence on oil. Other oil-exporting nations pose problems as well. President Hugo Chavez of Venezuela – the world’s eighth largest exporter -- fans anti-American sentiments throughout Latin American. Oil revenues not only help maintain his grip on power, they allow him to finance policies that put U.S. assets at risk in countries such as Bolivia and Argentina. Here again, rising oil prices enhance the wealth and power of those who wish us ill, putting all Americans at risk.

Condoleezza Rice: US diplomacy “warped” by oil dependence

Anne Korin (Co-Director for the Institute for the Analysis of Global Security), May 22, 2008, “Rising Oil Prices, Declining National Security,” <http://www.iags.org/Korin_HFRC_052208.pdf>

“The flow of petrodollars from consuming economies to the coffers of producers not only casts a large shadow over America’s prospects of winning the war on terrorism but it also limits U.S. diplomatic maneuverability on central issues like human rights and nuclear proliferation. Perhaps the most powerful statement of the impact on America’s ability to accomplish its foreign policy goals came from Secretary of State Condoleezza Rice, who in April 2006 told the Senate Foreign Relations Committee: “We do have to do something about the energy problem. I can tell you that nothing has really taken me aback more, as Secretary of State, than the way that the politics of energy is . . . “warping” diplomacy around the world. It has given extraordinary power to some states that are using that power in not very good ways for the international system, states that would otherwise have very little power.”

Oil influence on US foreign policy puts considerable leverage in the hands of hostile powers

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

“Oil’s influence on U.S. foreign policy puts considerable leverage in the hands of hostile powers and undemocratic regimes. In addition, close ties with corrupt and repressive governments impede America’sability to encourage political liberalization and democratization—weakening our capacity to combatviolent extremism.”

SIGNIFICANCE- NATIONAL SECURITY

Oil dependence has involved us in the Middle East provoking backlash from Islamic extremists

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx>

“By making us central players in a region torn by ancient rivalries, oil dependence has exposed us to resentment, vulnerability and attack. Osama bin Laden’s first fatwa, in 1996, was titled “Declaration of War against the Americans Occupying the Land of the Two Holy Places. Today, deep resentment of the U.S. role in the Persian Gulf remains a powerful recruitment tool for Islamic fundamentalists. Yet the United States faces severe constraints in responding to this resentment. With half the world’s proven oil reserves, the world’s cheapest oil and the world’s only spare production capacity, the Persian Gulf will remain an indispensable region for the global economy so long as modern vehicles run only on oil. To protect oil flows, the U.S. policymakers will feel compelled to maintain relationships and exert power in the region in ways likely to fuel Islamic terrorists.”

Oil purchases help finance terrorist networks

David B. Sandalow (Obama’s nominee for Assistant Secretary for Policy and International Affairs at the Department of Energy, BA from Yale, JD from the University of Michigan, former Assistant secretary of state for Oceans and International Environment and Scientific Affairs, and former attorney, general counsel at the US EPA), May 22, 2008, “Rising Oil Prices, Declining National Security,” The Brookings Institution, <http://www.brookings.edu/testimony/2008/0522_oil_sandalow.aspx>

“Compounding these problems, the huge money flows into the Persian Gulf from oil purchases help finance terrorist networks. Al Qaeda raises funds from an extensive global network, with Islamic charities and NGOs playing an important role. Saudi money provides critical support for madrassas with virulent anti-American views. The sharp increase in oil prices in recent months deepens these problems, further enriching those who fund terrorists committed to our destruction.”

True cost of oil is $6.50 to $7.00 a gallon when costs of military security for oil routes is included

Vice Admiral Dennis McGinn, April 18, 2007, “Hearing on the Geopolitical Implications of Rising US Dependence on Imported Oil and Rising Global Temperature,” <http://globalwarming.house.gov/tools/assets/files/0115.pdf>

“U.S. oil dependency burdens our military forces and exacts a huge price tag in protecting sea-lanes, military bases of operations and maintaining continuous high level of forward presence

• Our fine men and women in the Armed Forces serve our nation with honor, protecting American interests throughout the globe. The major focus of their activities for nearly thirty years has centered in the Middle East, a region from which so much of the instability, strife, root causes of terrorism and Arabian Gulf oil flow.

• The October, 2000 terrorist attack on the USS Cole, while on a refueling stop in Yemen, was a tragic reminder of the convergence of oil, instability, terrorism and the need for ever vigilant presence by American servicemen and women who are forward deployed.

• Recent energy-market disruptions and increasing awareness of the vulnerability and insecurity of supplies world-wide have added urgency to the U.S. military's efforts to curb its use of oil and other fuels. iv

• One study estimates that in peacetime the “true” cost of oil in a given year is $800 billion dollars, assuming 2004 oil prices.

• Retired Air Force General Charles Wald estimates that if the true cost of military security were incorporated into the price of gasoline, we would be paying between $6.50 and $7 a gallon.”

Securing global oil supplies requires substantial defense expenditures

SAFE (Security America’s Future Energy), 2006, “Oil Dependence: A Threat to U.S. Economic & National Security,” <http://www.secureenergy.org/reports/Briefing-OilDependence.pdf>

The need to secure global oil supplies requires substantial defense expenditures and involves significant risks to American forces—none of which are factored into the market price of a barrel of oil.

**>** CENTCOM troops ensure “unfettered access” to oil supplies in the Middle East.

**>** SOUTHCOM troops defend Colombia’s Cano Limón pipeline.

**>** EUCOM soldiers are training locals to guard the Baku-Tbilisi-Ceyhan pipeline and working to curb corruption and improve the security of facilities in West Africa.

**>** PACOM ships and planes patrol tanker routes in the Indian Ocean, the South China Sea, and the Western Pacific.

SIGNIFICANCE- OPEC

OPEC clout will be increased in coming years until it eventually controls more than 50% of oil

Vice Admiral Dennis McGinn, April 18, 2007, “Hearing on the Geopolitical Implications of Rising US Dependence on Imported Oil and Rising Global Temperature,” globalwarming.house.gov/tools/assets/files/0115.pdf

“OPEC, which added Angola as its newest member this year, will likely see its clout reinforced in coming years as it is poised to control more than 50 percent of the oil market in coming years, up from 35 percent today.”

OPEC price fixing harms global security and drives regional unrest

Anne Korin (Co-Director for the Institute for the Analysis of Global Security), May 22, 2008, “Rising Oil Prices, Declining National Security,” <http://www.iags.org/Korin_HFRC_052208.pdf>

“While we in the U.S., which enjoys a per capita income of over $40,000 a year, are feeling the sharp pinch of high oil prices, we should all consider the impact of these prices on the world’s poor. People throughout the world who live on $2 a day are suffering far more than we can imagine as their economies hemorrhage. This has profound implications for global security, driving regional unrest, increasing poverty, and nipping in the bud progress towards democracy. Countries that are still carrying debts from the 1970’s oil shocks, are being now looted by OPEC price fixing. In fact, we are witnessing a tremendous transfer of wealth from the world’s poorest to the world’s producers of oil.”

OPEC is deliberately keeping oil supply tight to prop up prices

Anne Korin (Co-Director for the Institute for the Analysis of Global Security), May 22, 2008, “Rising Oil Prices, Declining National Security,” <http://www.iags.org/Korin_HFRC_052208.pdf>

“OPEC, spearheaded by Saudi Arabia, is deliberately keeping oil supply tight to prop up prices. Not only is Saudi production lower today than it was two years ago, despite the increase in demand, but the cartel has effectively deleted 2.4mbd from the global oil market in what amounts to an accounting scam. In 2007, OPEC expanded its member roster to include Ecuador and Angola – together the two had accounted for nearly 2.4mbd of non-OPEC oil. Yet, total OPEC production remained constant, allowing existing members to reduce production. This translates into a net reduction in non-OPEC supply with no equivalent increase in OPEC supply. This is equivalent to the production of Norway disappearing off the market. Further, while non-OPEC production has doubled over the last thirty years, as the graph below shows, OPEC production today is virtually identical to its production thirty years ago, even as the global economy has grown and with it demand for oil.”

OPEC controls 2/3rds of world oil reserves and is composed of heavily corrupt governments

Dr. Ariel Cohen (Senior Research Fellow at the Heritage Foundation and PhD at the Fletcher School of Law and Diplomacy at Tufts University), April 7, 2006, “Reducing U.S. Dependence on Middle, Eastern Oil,” <http://www.heritage.org/research/features/nationalsecurity/bg1926.cfm>

“Two-thirds of the world’s oil reserves are concentrated in the increasingly unstable Middle East and are con­trolled by members of the quasi-monopolistic Organization of Petroleum Exporting Countries (OPEC).[[7]](http://www.heritage.org/research/features/nationalsecurity/bg1926.cfm#_ftn7) Over the years, OPEC has been quick to cut supply and slow to increase production, bring­ing oil prices to today’s high levels.[[8]](http://www.heritage.org/research/features/nationalsecurity/bg1926.cfm#_ftn8) Most OPEC member countries and other oil producers have high levels of government economic regulation and corruption, as documented in the *Index of Economic Freedom*, published by The Heritage Foundation and *The Wall Street Journal*.[[9]](http://www.heritage.org/research/features/nationalsecurity/bg1926.cfm#_ftn9) Thus, consumers are effectively paying two premiums on oil: one for security and one for suppliers’ economic ineffi­ciency and monopolistic behavior.”

SIGNFIICANCE- RESOURCE CONFLICT

Oil dependence puts the US into competition with over importing countries and could seriously strain relations

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

“Dependence also puts the United States into increasing competition with other importing countries, notably with today’s rapidly growing emerging economies of China and India. At best, these trends will challenge U.S. foreign policy; at worst, they will seriously strain relations between the United States and these countries.”

CON: OIL PRICES HARM THE ECONOMY

By Matthew Baker

Studies show oil shocks had significant effects before 1985 but not after

Jerry Taylor and Peter Van Doren, September 28, 2007, “Be Not Afraid,” The Cato Institute, <http://www.cato.org/pub_display.php?pub_id=8726>

“Several important papers appeared in 2006, which reexamine the role of oil shocks in the macroeconomy. A common theme of those papers is that policy-imposed rigidities in the economy were responsible for the bad economic outcomes associated with past oil price shocks. An analysis by economists at the Federal Reserve Bank of Atlanta demonstrated that oil shocks had significant effects on the macroeconomy before 1985 but not after.”

High oil prices have had no perceptible impact on the macroeconomy over the last few years

Dr. Paul Segal (DPhil in Economics from Oxford and Research Fellow at the Oxford Institute for Energy Studies), October 2007, “Why Do Oil Price Shocks No Longer Shock,” Oxford Institute for Energy Studies, <http://www.oxfordenergy.org/pdfs/WPM35.pdf>

“We also saw, however, that high oil prices have had no perceptible impact on the macroeconomy over the last few years, and that in the data oil price rises already stopped having an impact some time in the 1980s. At the same time, oil price rises stopped passing through to inflation, and this may hold the explanation: if oil price rises do not raise prices, then interest rates do not need to respond to them, and the impact on aggregate activity may therefore be minimal.”

Some studies indicate oil has never been a major driver of macroeconomic cycles

Dr. Paul Segal (DPhil in Economics from Oxford and Research Fellow at the Oxford Institute for Energy Studies), October 2007, “Why Do Oil Price Shocks No Longer Shock,” Oxford Institute for Energy Studies, <http://www.oxfordenergy.org/pdfs/WPM35.pdf>

“While these studies find that oil price shocks no longer have a significant impact on the macroeconomy, Barsky and Kilian (2004) argue that they have never been a major driver of macroeconomic cycles. They do not present formal statistical tests of the hypothesis but instead argue that oil prices are themselves determined, so some extent, by global macroeconomic conditions. In particular, they argue that the ability of a cartel like OPEC to sustain co-operation among its members is increased in times of low real interest rates (owing to the high weight that this implies on future revenues that depend on cooperation), and high growth (following a model of imperfect information by Green and Porter, 1984). They also point out, following Mabro (1988), that the impact of exogenous events in the Middle East on the oil price depends a lot on the tightness of global demand for oil, so that embargo- or war-induced price spikes are partly due to global economic conditions, in addition to the disturbances themselves.”

1974-75 recession is not well explained by oil shocks

Dr. Paul Segal (DPhil in Economics from Oxford and Research Fellow at the Oxford Institute for Energy Studies), October 2007, “Why Do Oil Price Shocks No Longer Shock,” Oxford Institute for Energy Studies, <http://www.oxfordenergy.org/pdfs/WPM35.pdf>

“It also seems clear that even before the 1980s the effect of oil price shocks was less than it appeared to be in the popular imagination. Hunt (2005) considers the role of the oil price shocks in the US recession of 1974–75 using a version of the IMF’s Global Economic Model (GEM), and finds that ‘the simulation results do not suggest that the oil price shock alone can account for the extent of the slowing in real activity and the acceleration in inflation that occurred in the United States in 1974 and 1975’. Similarly, Bernanke, Gertler and Watson (1997) find that the 1974–75 recession is not well explained by the oil shock, even allowing for an endogenous monetary policy reaction. More important was a spike in general commodity prices and the rise in interest rates caused by that spike.”

Oil consumption per dollar of GDP has declined 89% since 1970

Chris Puplava (financial commentator and fundamental analyst at Puplava Financial Services), 10/3/2007, “US Economic Energy Intensity,” Financial Sense, <http://www.financialsense.com/Market/cpuplava/2007/1003.html>

“Conversely, the steadily declining share of manufacturing employment to total employment in the U.S. has led a decline in energy intensity as measured by oil consumption per dollar of GDP. Since the 1970s, oil consumption has not kept pace with economic activity as current oil consumption per dollar of GDP has fallen 89% since 1970. The declining relative share of manufacturing employment and oil consumption per dollar of GDP are highly correlated with a correlation coefficient of 91%, supporting the notion that a declining manufacturing base results in declining economic energy intensity.”

Declining energy intensity is the reason our economy has not been stopped by high oil prices

Chris Puplava (financial commentator and fundamental analyst at Puplava Financial Services), 10/3/2007, “US Economic Energy Intensity,” Financial Sense, <http://www.financialsense.com/Market/cpuplava/2007/1003.html>

“The reason why high petroleum costs have not stopped the economic expansion is that the energy intensity of our economy is no where close to that of the 1970s and early 1980s, as consumption has not kept pace with either GDP or incomes. For example, since the low in oil consumption in 1983 of 15,094,850 barrels a day, oil consumption is up 37% as of December 2006, while nominal GDP is up over 300% over the same period. This indicates that oil consumption has not kept pace with economic activity over the last three decades resulting in a decrease in the energy intensity per economic activity. Oil consumption has also not kept pace with consumer incomes, which have increased by 294% since 1983, close to the same increase seen in nominal GDP levels.”

As UK proves, as long as the US uses oil, energy dependence will not free us form price schocks

Babak Farrahi, May 14, 2009, “Re-evaluating US Oil Dependence, International Relations and Security Network, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?ots591=4888CAA0-B3DB-1461-98B9-E20E7B9C13D4&lng=en&id=100148>

“A report by the Brookings Institution last year examining this debate raised the example of the UK, which has been self-sufficient since 1980 yet has suffered to the same extent as the US when global oil prices have risen. In 2002, the Congressional Research Service produced a report in which it said, “as long as prices are determined in that market, energy independence will not free the United States from oil price shocks.”

CON: OZONE HOLE

By Jared Rixstine

INHERENCY

Damage has stopped and ozone hole may be solved by 2060

National Science Foundation (The National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering.) August 22, 2006 “Chemical Cause of Antarctic Ozone Hole Discovered 20 Years Ago This Month – some models predict recovery by 2060**”** <http://www.nsf.gov/news/news_summ.jsp?cntn_id=107957> [Brackets added]

“"The patient hasn't recovered," said [David] Hoffman, who heads NOAA's global atmospheric monitoring program. "But it's not getting any sicker. We really have not seen any recovery in Antarctica," he said. Hoffman also predicted it would take until 2060 for the ozone layer to heal completely, provided humans stop all release of man-made substances containing chlorine or bromine.”

Ozone Hole is slowly recovering

Dawn Stover (Editor at Large for Popular Science Magazine) April 25, 2008 “Recovery of Ozone may Increase Antarctic Warming – one step forward, one step back” Popular Science Magazine (Popular Science has been a leading source of science and technology news since its inception way back in 1872.) <http://www.popsci.com/environment/article/2008-04/recovery-ozone-hole-may-increase-antarctic-warming>

“The good news is that the ozone hole over Antarctica is slowly healing, thanks to controls on ozone-depleting substances that were once widely used in products such as refrigerators and aerosol cans. Stratospheric ozone protects us from harmful ultraviolet radiation that can cause problems such as skin cancer and crop damage.”

The amount of ozone-depleting gasses is decreasing

The Environment News Service, October 19, 2007, “2007 Antarctic Ozone Hole Smaller But Not Recovering,” <http://www.ens-newswire.com/ens/oct2007/2007-10-19-02.asp>

“The amount of ozone-depleting gases reached a maximum in the Antarctic stratosphere around the year 2000. This amount is now declining slowly at a rate of about one percent per year.”

Ozone solved by 2050

EPA (US Environmental Protection Agency - EPA leads the nation's environmental science, research, education and assessment efforts.) August 2008 “Will the Ozone Layer Recover? Can we Make More Ozone? <http://www.epa.gov/Ozone/science/makemore.html>

Over time, stratospheric chlorine and bromine will combine with other chemicals and eventually fall back to Earth. That's the point of ending production of these chemicals under the Montreal Protocol and the Clean Air Act. The good news is that the stability works both ways. In our bucket, narrowing the hole allows the water inside to rise to a higher stable point. Similarly, by ending production of ozone depleters, we allow natural processes to remove excess chlorine and bromine, which slows the ozone destruction reactions to normal speeds, and the production process will have the chance to restore the ozone layer to normal levels. Scientists expect that with full compliance with the Montreal Protocol, the ozone layer will heal by about 2050.”

Ozone Depleting Chemicals Down 12%

Steven F. Hayward (F. K. Weyerhaeuser Fellow at AEI[American enterprise institute] He writes on a wide range of public policy issues. He is the coauthor of the annual [Index of Leading Environmental Indicators](http://www.aei.org/book/100008); the producer and host of An Inconvenient Truth . . . or Convenient Fiction?, a rebuttal to Al Gore's documentary; and the author of many books on environmental topics. He has written biographies of Presidents Jimmy Carter and Ronald Reagan and of Winston Churchill. Mr. Hayward is also a senior fellow at the Pacific Research Institute. He contributes to AEI's [Energy and Environment Outlook](http://www.aei.org/outlooksBinder?page=1&bid=100016) series. Senior Fellow, Pacific Research Institute for Public Policy, 1992-present Ph.D., American studies; M.A., government, Claremont Graduate School) April, 2009 “Index of Leading Environmental Indicators 2009 – Fourteenth Edition” American Enterprise Institute (The American Enterprise Institute for Public Policy Research is a private, nonpartisan, not-for-profit institution dedicated to research and education on issues of government, politics, economics, and social welfare) <http://www.aei.org/book/100008>

“Stratospheric ozone--the "good" kind of ozone, akin to "good" cholesterol in blood--appears to have reversed its long-term decline and is now increasing over the U.S. The level of ozone-destroying chemical compounds in the atmosphere declined 12 percent from 1995 through 2006.”

SIGNIFICANCE

No significant ozone depletion trends outside of the polar regions

Ben Lieberman (senior policy analyst in the Thomas A. Roe Institute for Economic Policy Studies at the Heritage Foundation), August 10, 2007, “Ozone Crisis that was Exaggerated?,” The Heritage Foundation, <http://www.conservative.org/pressroom/2007/070914bl.htm> [brackets added]

“More importantly, the feared widespread increase in ground-level UVB radiation has also failed to materialize. Keep in mind that ozone depletion, in and of itself, is not of consequence to human health or the environment. It is the concern that an eroded ozone layer would allow more of the sun's damaging UVB rays to reach the earth that gave rise to the Montreal Protocol. But the [World Meteorological Organization] WMO concedes that no statistically significant long-term trends have been detected, noting earlier this year that "outside the polar regions, ozone depletion has been relatively small, hence, in many places, increases in UV due to this depletion are difficult to separate from the increases caused by other factors, such as changes in cloud and aerosol." In other words, ozone depletion's impact on UVB over populated regions is so small as to be easily lost amidst the noise of background variability.”

No impact (mortality, cancer, species extinction, etc.) ever linked to ozone depletion

Ben Lieberman (senior policy analyst in the Thomas A. Roe Institute for Economic Policy Studies at the Heritage Foundation), August 10, 2007, “Ozone Crisis that was Exaggerated?,” The Heritage Foundation, <http://www.conservative.org/pressroom/2007/070914bl.htm>

“Needless to say, if UVB has not gone up, then the fears are unfounded: indeed, the much hyped acceleration in skin cancer rates has not happened. For example, U.S. National Cancer Institute statistics show that malignant melanoma incidence and mortality, which had shown a long-term increase that pre-dated ozone depletion, had actually been leveling off during the time of the putative ozone crisis. Further, no eco-system or species was ever shown to be seriously harmed by ozone depletion. This is true even in Antarctica, where the largest seasonal ozone losses, the so-called Antarctic ozone hole, occur each year.”

No human risk from seasonal polar ozone thinning

James Taylor (managing editor of Environment & Climate News), November 2007, “China Balks at Proposed Ozone Timetable,” The Heartland Institute, <http://www.heartland.org/policybot/results/22214/China_Balks_at_Proposed_Ozone_Timetable.html>[brackets added]

The alleged skin cancer risks associated with seasonal ozone thinning--which occurs during winter months at the poles--are grossly overstated, [Jay] Lehr [science director for The Heartland Institute] adds. "There are no human inhabitants in Antarctica," he said. "There are relatively small populations of Eskimos and native Indians in the polar regions of North America, Europe, and Asia. And since the thinning develops during the coldest months, people are bundled up in thick clothing and there is very little skin exposed to the sun. "Furthermore, the polar regions are the land of nearly complete darkness in winter," Lehr explained. "The bottom line is, there is virtually no risk to humans from seasonal ozone thinning."

CFC’s and HCFC’s contribution to atmospheric ozone depletion minor compared to natural sources

James Taylor (managing editor of Environment & Climate News), November 2007, “China Balks at Proposed Ozone Timetable,” The Heartland Institute, <http://www.heartland.org/policybot/results/22214/China_Balks_at_Proposed_Ozone_Timetable.html>

“Jay Lehr, science director for The Heartland Institute, says even if CFCs and HCFCs have ozone-thinning properties, their contributions to atmospheric ozone depletion are very minor compared with natural sources. "Evaporation from the surface of the planet's oceans puts 4,000 times more chlorine annually into the atmosphere than was produced by human beings in the form of CFCs," Lehr observed. "Chlorine sent by volcanoes into the stratosphere dwarfs manmade contributions. The last eruption in Alaska added 570 times more chlorine in one year than all the human-produced CFCs in the world."

SOLVENCY

Polar Vortex produces ozone destroying compounds that create the ozone hole

The Environment News Service, October 19, 2007, “2007 Antarctic Ozone Hole Smaller But Not Recovering,” <http://www.ens-newswire.com/ens/oct2007/2007-10-19-02.asp>

“During the southern hemisphere winter, the atmospheric mass above the Antarctic continent is kept cut off from exchanges with mid-latitude air by prevailing winds known as the polar vortex. This leads to very low temperatures, and in the cold and continuous darkness of this season, polar stratospheric clouds are formed that contain chlorine. As the polar spring arrives, the combination of returning sunlight and the presence of polar stratospheric clouds leads to splitting of chlorine compounds into highly ozone-reactive radicals that break ozone down into individual oxygen molecules. A single molecule of chlorine has the potential to break down thousands of molecules of ozone, scientists say.”

Ozone hole probably explained more by natural variation than CFC usage

Ben Lieberman (senior policy analyst in the Thomas A. Roe Institute for Economic Policy Studies at the Heritage Foundation), August 10, 2007, “Ozone Crisis that was Exaggerated?,” The Heritage Foundation, <http://www.conservative.org/pressroom/2007/070914bl.htm>

“A 1998 World Meteorological Organization report said that "since 1991, the linear depletion trend observed during the 1980s has not continued, but rather total column ozone has been almost constant." This was too soon to be attributable to the Montreal Protocol as that same report noted that the stratospheric concentrations of the offending compounds were still increasing at the time of writing. In fact, they did not begin to decline until the end of the 1990s. This lends credence to the view, widely derided at the time of the Montreal Protocol, that natural variations explain the fluctuations in the global ozone layer more than CFC usage.”

China and other developing nations don’t want to speed up ozone compliance deadline

James Taylor (managing editor of Environment & Climate News), November 2007, “China Balks at Proposed Ozone Timetable,” The Heartland Institute, <http://www.heartland.org/policybot/results/22214/China_Balks_at_Proposed_Ozone_Timetable.html>

“The Bush administration is proposing to speed up the timetable for phasing out chemicals alleged to contribute to ozone thinning in the upper atmosphere, but it is encountering stiff opposition from China and other developing nations. The administration made its proposal during September meetings of 191 nations that signed a 1987 treaty regarding atmospheric ozone. China and other nations are profiting under the current system in which the chemicals are legal but European nations pay them to not produce them.”

DISADVANTAGES

Global Warming

Solving Ozone will Increase Global Warming across the globe

Dawn Stover (Editor at Large for Popular Science Magazine) April 25, 2008 “Recovery of Ozone may Increase Antarctic Warming – one step forward, one step back” Popular Science Magazine (Popular Science has been a leading source of science and technology news since its inception way back in 1872.) <http://www.popsci.com/environment/article/2008-04/recovery-ozone-hole-may-increase-antarctic-warming>

Unfortunately, the recovery of the ozone hole has a dark side: The return of a thin, suspended blanket of stratospheric ozone will raise temperatures over the southern polar region, according to a new study by scientists at the University of Colorado at Boulder, the National Oceanic and Atmospheric Administration, and NASA Goddard Space Flight Center. The scientists, who relied on a NASA computer model for their predictions, also report that the healing of the hole will weaken winds that currently shield the Antarctic interior from warmer air masses to the north. Antarctica may not be the only continent affected: The researchers also found that the changes in air circulation caused by ozone recovery could mean wetter conditions during late spring and early summer in southern South America, and warmer and drier weather in Australia—which is already suffering from a long drought.

When Ozone hole is fixed, there could be more global warming

Greg Roberts (of The Australian) April 18, 2009 “Change is a cold certainty” The Australian (2009 Online Paper of the year in Australia) <http://www.theaustralian.news.com.au/story/0,25197,25347937-11949,00.html>[Brackets Added]

“Glaciologists point out that the Arctic, where substantial ice losses are well documented, is fundamentally different from the Antarctic. The Arctic is essentially land-locked. The Antarctic is a continent surrounded by the Southern Ocean, which may be absorbing global heat. The Antarctic also has an ozone hole above it, which could be acting as a pressure valve, allowing heat to escape the icecap. "It could be that when the ozone hole is fixed, there will be more warming," [Ian] Allison [Antarctic Climate and Ecosystems Co-Operative Research Centre research fellow] says.”

CON: PESTICIDES

By Michael Bixby

SIGNIFICANCE

Study: insecticides, fungicides, pesticides and herbicides cause Asthma

The Local (Swedish newspaper), September 17, 2007, “Scientists: pesticides cause asthma” <http://www.thelocal.se/8518/20070917/>

“The study presented Sunday was conducted by researcher Jane Hoppin of the US National Institute of Environmental Health Sciences. It examined 20,183 male farmers in the US states of Iowa and North Carolina. "This is a breakthrough: never before has a large-scale study demonstrated that farmers' exposure to insecticides, fungicides and herbicides can contribute to the prevalence of asthma, independently of other risk factors," a statement from the European Respiratory Society's annual congress said. The study group was exposed to 48 different pesticides and asthma was found to be linked to the use of 16 of them, a "quite alarming" discovery, the statement said. "Asthma was linked to specific chemicals since we did not identify a link either with particular pesticide classes or with a particular method of use," Hoppin said. "In addition, we show that a history of high pesticide exposure event was associated with a doubling of asthma risk," she added.”

Pesticides runoff into water and cause environmental damage

New York State Attorney General, 2008, “Can pesticides cause environmental problems?” <http://www.oag.state.ny.us/bureaus/environmental/home_garden_pesticides/can_pesticides.html>

“Pesticides can contaminate soil and water and many of them carry such warnings on their labels. In agricultural areas in New York State and around the country, drinking water wells have been closed due to pesticide contamination of groundwater. When it rains, pesticides are carried by storm drains into streams and rivers, where they can kill small plants and animals that fish depend on for food. Pesticides can also poison fish and wildlife. As discussed above, diazinon has killed ducks, geese and other water fowl. There is substantial evidence that it also has killed song-birds.”

Pesticides pose serious risk to human health, particularly children’s

Professor Valerie Watnick (Associate Professor of Law at Baruch College, former Zicklin Fellow in Law), Spring 2008, “Pesticides and Children: Unwitting Participants in Experimentation” Cardozo Journal of Law & Gender (accessed via lexis-nexis)

“As early as March 1996, a highly regarded independent research institution, the World Resources Institute, also issued a significant report, which concluded that a large body of evidence suggests that exposure to pesticides damages the immune system and that pesticide-induced suppression of the immune system is a substantial public health risk. n57 The World Resources Institute found that because children have immature immune systems, their systems may be particularly susceptible to immuno-suppression and that this susceptibility called for immediate precautionary action. n58 [\*809] More recently, the Natural Resources Defense Council reported that numerous studies establish a link between chronic pesticide exposure and neurological effects, childhood cancers, reproductive and developmental toxicity, and endocrine disruption. n59 Thus, scientists have concluded that pesticides may suppress the human immune system, and have a more profound effect on developing children than on adults.”

SOLVENCY

Prices without pesticides are not exorbitant and they will go down

Gideon Forman (Executive Director of Canadian Association of Physicians for the Environment), December 18, 2008, “PESTICIDE BAN WILL HELP ECONOMY GROW WITHOUT HURTING CONSUMERS” Hamilton Spectator <http://www.turflogickamloops.ca/images/PDFs/TF_Article_PesticidesBan.pdf>

“What about costs to the consumer? A recent survey of Ontario lawn companies showed the price of pesticide-free services is competitive with traditional services and is sometimes exactly the same. (One company, for example, charges $159.88 to treat a 2,500-square-foot property — whichever service the customer picks.) And as more firms go organic, prices will drop.”

Pesticides bans boost the economy, creating jobs

Gideon Forman (Executive Director of Canadian Association of Physicians for the Environment), December 18, 2008, “PESTICIDE BAN WILL HELP ECONOMY GROW WITHOUT HURTING CONSUMERS” Hamilton Spectator <http://www.turflogickamloops.ca/images/PDFs/TF_Article_PesticidesBan.pdf>

“The Ontario government’s new lawn pesticide ban, which should come into effect in early 2009, will do much to protect human and environmental health. But it’s also becoming clear the legislation will be a boon to our economy — boosting business and creating green jobs. Communities across Canada that already have pesticide restrictions have enjoyed a major expansion of their lawn-care sector. For example, in the five years following a pesticide ban in Halifax, the number of lawn-care firms in the city grew to 180 from 118 — an increase of 53 per cent, according to Statistics Canada. The number of employees in the sector also grew. As well, Statistics Canada reports the number of landscaping and lawncare businesses in Toronto has grown each year since that city passed a pesticide ban. Why does the nontoxic route help the economy? For one thing, it’s a bit more labour intensive, relying less on chemicals and more on hand-weeding. But it also requires some specialized knowledge of plant and soil ecology that homeowners often lack — hence their increased reliance on organic professionals. Ontario’s organic lawn-care providers are booming. For instance, Barrie-based Turf Logic Inc. will be doubling its business by spring 2009. The Oshawa-based organic firm Environmental Factor has grown its business tenfold over the last eight years.”

Study: No drop in agricultural yields under pesticides bans in Sri Lanka

Gamini Manuweera (Office of registrar of pesticides, Sri Lanka), Dr. Michael Eddleston (M.A., Ph.D., Fellow at the Clinical Pharmacology Unit, University of Edinburgh), Samitha Egodage (Center for Tropical Medicine at Oxford University), and Dr. Nick A. Buckley (M.D., Associate Professor, Clinical Pharmacology and Toxicology at Australian National University Medical School) January 22, 2008, “Do Targeted Bans of Insecticides to Prevent Deaths from Self-Poisoning Result in Reduced Agricultural Output?” Environmental Health Perspectives <http://www.ehponline.org/docs/2008/11029/abstract.pdf> [brackets added]

“The World Resources Institute website data on the yields of the main crop groups in Sri Lanka was compared with data from surrounding South Asian countries for 1980-2005. The Sri Lankan Department Of Census And Statistics data on the yields of 13 specific vegetable crops and rice were examined for 1990-2003 along with the costs of rice production. Results: There was no drop in productivity in the years after the main [pesticide] bans were instituted (1995, 1998). Substantial annual fluctuation in estimated yields are seen in all data sources but these did not coincide with the bans and were no larger than the fluctuations in other countries. There was also no sudden change in costs of rice production coinciding with bans.”

CON: PLASTIC BAGS

By Matthew Baker

INHERENCY

Only 2% of plastic bags are recycled in the US

Katharine Mieszkowski (graduate of Yale University and Senior Writer for Salon), August 2007, “Plastic Bags Are Killing Us,” The Sierra Club, <http://missouri.sierraclub.org/thb/newsletter/2009/05/plastic.html>

“Only 1 percent of plastic bags are recycled worldwide — about 2 percent in the U.S. — and the rest, when discarded, can persist for centuries. They can spend eternity in landfills, but that’s not always the case. “They’re so aerodynamic that even when they’re properly disposed of in a trash can they can still blow away and become litter,” says Mark Murray, executive director of Californians Against Waste.”

SIGNIFICANCE

Long term costs of Plastic bags outweighs the short term cost savings

Katharine Mieszkowski (graduate of Yale University and Senior Writer for Salon), August 2007, “Plastic Bags Are Killing Us,” The Sierra Club, <http://missouri.sierraclub.org/thb/newsletter/2009/05/plastic.html>

“After all, the major appeal of plastic bags to stores is that they’re much cheaper than paper. Plastic bags cost grocery stores under two cents per bag, while paper goes for four to six cents and compostable bags 9 to 14 cents. “However,” says Eriksen from the Algalita Marine Research Foundation, “the long-term cost of having these plastic bags blowing across our landscape, across our beaches and accumulating in the northern Pacific far outweighs the short-term loss to a few.”

Plastic bags can stay around for over 1,000 years in landfills or break down into thousands of pieces in the environment

Tara Lohan (Senior Editor at AlterNet), September 5, 2007, “The Great Plastic Bag Plague,” AlterNet, <http://www.alternet.org/environment/61607/>

“Each year across the world some 500 billion plastic bags are used, and only a tiny fraction of them are recycled. Most of them will have a short lifetime with a consumer -- they'll be used for the few minutes it takes to get from the store to home and then they're thrown away. But what does "away" really mean? Plastic shopping bags can last up to a thousand years in a landfill. In the environment, they break down into tiny, toxic particles that become part of the soil and water.”

Paper bags are easier to recycle

Judy Keen, March 14, 2008, “Tide turns against use of plastic bags,” USA Today, <http://www.usatoday.com/news/nation/environment/2008-03-14-plastic-bags_N.htm>

“Paper bags are easier to recycle, the Sierra Club says, and the equivalent of 11 barrels of oil is saved for every ton of plastic bags reused or recycled. It recommends reusable bags.”

Trees are a renewable resource as opposed to oil

Katharine Mieszkowski (graduate of Yale University and Senior Writer for Salon), August 2007, “Plastic Bags Are Killing Us,” The Sierra Club, <http://missouri.sierraclub.org/thb/newsletter/2009/05/plastic.html>

“Gordon Bennett, an executive in the San Francisco Bay chapter of the Sierra Club, agrees. “The fundamental thing about trees is that if you manage them properly they’re a renewable resource,” he says. “I haven’t heard about the oil guys growing more oil lately.”

DISADVANTAGES

A) Dependence on Foreign Oil

Plastic bags use petroleum increasing our dependence on foreign suppliers and destroying ecosystems around the world

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“The production of plastic bags requires petroleum and often natural gas, both non-renewable resources that increase our dependency on foreign suppliers. Additionally, prospecting and drilling for these resources contributes to the destruction of fragile habitats and ecosystems around the world.”

Plastic bags Americans throw away are equivalent to 12 million barrels of oil

Katharine Mieszkowski (graduate of Yale University and Senior Writer for Salon), August 2007, “Plastic Bags Are Killing Us,” The Sierra Club, <http://missouri.sierraclub.org/thb/newsletter/2009/05/plastic.html>

“Every year, Americans throw away some 100 billion plastic bags after they’ve been used to transport a prescription home from the drugstore or a quart of milk from the grocery store. It’s equivalent to dumping nearly 12 million barrels of oil.”

Plastic bags use so much oil 14 of them could drive a car one mile

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“The amount of petroleum used to make a plastic bag would drive a car about 115 metres. It would take only 14 plastic bags to drive one mile!”

B) Marine Mammals

Plastic bags wreck havoc on marine mammals and sea turtles

Katharine Mieszkowski (graduate of Yale University and Senior Writer for Salon), August 2007, “Plastic Bags Are Killing Us,” The Sierra Club, <http://missouri.sierraclub.org/thb/newsletter/2009/05/plastic.html>

“It’s as litter that plastic bags have the most baleful effect. And we’re not talking about your everyday eyesore. Once aloft, stray bags cartwheel down city streets, alight in trees, billow from fences like flags, clog storm drains, wash into rivers and bays and even end up in the ocean, washed out to sea. Bits of plastic bags have been found in the nests of albatrosses in the remote Midway Islands. Floating bags can look all too much like tasty jellyfish to hungry marine critters. According to the Blue Ocean Society for Marine Conservation, more than a million birds and 100,000 marine mammals and sea turtles die every year from eating or getting entangled in plastic. The conservation group estimates that 50 percent of all marine litter is some form of plastic. There are 46,000 pieces of plastic litter floating in every square mile of ocean, according to the United Nations Environment Programme. In the Northern Pacific Gyre, a great vortex of ocean currents, there’s now a swirling mass of plastic trash about 1,000 miles off the coast of California, which spans an area that’s twice the size of Texas, including fragments of plastic bags.”

Plastic bags cause devastating pollution to Ocean ecosystems

Tara Lohan (Senior Editor at AlterNet), September 5, 2007, “The Great Plastic Bag Plague,” AlterNet, <http://www.alternet.org/environment/61607/>

“For every bag, there's a cost. Environment California reports that plastic bags, and other plastic refuse that end up in the ocean, kill up to one million sea creatures every year, such as birds, whales, seals, sea turtles, and others. And the number of marine mammals that die each year because of eating or being entanglement in plastic is estimated at 100,000 in the North Pacific Ocean alone. The Algalita Marine Research Foundation learned that "broken, degraded plastic pieces outweigh surface zooplankton in the central North Pacific by a factor of 6-1. That means six pounds of plastic for every single pound of zooplankton." Which means, when birds and sea animals or looking for food -- more often, they are finding plastic.”

Plastic particles from bags act like sponges for toxic chemicals creating animal “gut bombs”

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“In a landfill, or in the environment, plastic bags take up to 1,000 years to degrade. As litter, they eventually break apart into tiny bits, contaminating our soil and water. The result­ing small plastic particles can pose threats to marine life and contaminate the food web. Researchers have found that plastic debris acts like a sponge for toxic chemicals, soaking up a million fold greater concentration of such deadly compounds as PCBs and DDE (a breakdown prod­uct of the notorious insecticide DDT), than the surround­ing seawater. These turn into toxic gut bombs for marine animals which frequently mistake these bits for food.”

Plastic bags kill 100,000 sea turtles and other marine animals every year

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“Plastic bags cause over 100,000 sea turtle and other marine animal deaths every year when ani­mals mistake them for food.”

C) Flooding

Plastic bags can block drains causing flooding, property damage, and dengue fever

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“Plastic bags thrown in the streets as litter block drains and can lead to flooding during heavy rains, and consequently to property damage. Bags can also act as water traps, with the stagnant water a breeding ground for the mosquitoes that spread diseases like dengue fever.”

D) Global Warming

Production of plastic bags produces pollution and global warming emissions

Pacific Regional Environmental Programme, November 2008, “Factsheet: Plastic Bags,” <http://www.sprep.org/factsheets/pdfs/plasticbags.pdf>

“The toxic chemical ingredients needed to make plastic produces pollution during the manufacturing process. The energy needed to manufacture and transport dis­posable bags eats up more resources and creates glo­bal warming emissions.”

CON: RAINFORESTS

By Matthew Baker

INHERENCY

Brazil has plan to reduce rainforest deforestation 72% by 2017

David Ljunggren, December 3, 2008, “Brazil sets target to slow Amazon deforestation,” The Guardian, <http://www.guardian.co.uk/environment/2008/dec/03/forests-brazil-amazon-carbon-emissions>

“Brazil plans to boost spending and programmes to significantly slow the rate of destruction of the Amazon rainforest by 2017, aiming to reduce global warming by slashing the amount of carbon dioxide emitted when trees are burned. The plan, announced by President Luiz Inácio Lula da Silva on Monday, is the first time Brazil has set specific goals regarding deforestation reduction. Environment minister Carlos Minc said the plan would slow the rate of destruction by 72% when compared with the 7,330 square miles lost on average each year between 1996 and 2005. The new proposal would boost federal patrols of forested areas, replant forest, and finance sustainable development projects to give locals alternative work in areas where illegal logging dominates the economy.”

Between 2005-2006, Brazil reduced deforestation in the Amazon by 25%

BBC News, August 13, 2007, “Brazil Amazon destruction slows,” <http://news.bbc.co.uk/2/hi/americas/6944808.stm>

“Brazil's President Luiz Inacio Lula da Silva has welcomed new figures showing that the destruction of the Amazon rainforest has decreased by 25%. President Lula said this had prevented the release of millions of tonnes of CO2 gas into the atmosphere. The government says environmental policies, including measures against illegal logging, have had an effect. Environmentalists welcomed the figures, but said falling commodity prices and economic conditions were also a factor. In his weekly radio address, President Lula said the new figures showed that protecting the environment and the Amazon would not prevent Brazil from increasing its land under cultivation. "I'm convinced that it's possible to have growth while preserving the environment," he said. "The challenge that we have overcome is knowing how to use the jungle and how to preserve the environment while allowing people's lives to be improved." The figures suggest that between August 2005 and July 2006, deforestation in the Amazon fell by 25%, to the lowest rate since at least 2000.”

For every acre of rain forest cut down, 50 acres of new forests are growing back in the tropics

Elisabeth Rosenthal, January 29, 2009, “New Jungles Prompt a Debate on Rain Forests,” The New York Times., <http://www.nytimes.com/2009/01/30/science/earth/30forest.html>

“The land where Marta Ortega de Wing raised hundreds of pigs until 10 years ago is being overtaken by galloping jungle — palms, lizards and ants. Instead of farming, she now shops at the supermarket and her grown children and grandchildren live in places like Panama City and New York. Here, and in other tropical countries around the world, small holdings like Ms. Ortega de Wing’s — and much larger swaths of farmland — are reverting to nature, as people abandon their land and move to the cities in search of better livings. These new “secondary” forests are emerging in Latin America, Asia and other tropical regions at such a fast pace that the trend has set off a serious debate about whether saving primeval rain forest — an iconic environmental cause — may be less urgent than once thought. By one estimate, for every acre of rain forest cut down each year, more than 50 acres of new forest are growing in the tropics on land that was once farmed, logged or ravaged by natural disaster.”

The new rain forests could blunt the effects of CO2 and habitat loss

Elisabeth Rosenthal, January 29, 2009, “New Jungles Prompt a Debate on Rain Forests,” The New York Times., <http://www.nytimes.com/2009/01/30/science/earth/30forest.html>

“There is far more forest here than there was 30 years ago,” said Ms. Ortega de Wing, 64, who remembers fields of mango trees and banana plants. The new forests, the scientists argue, could blunt the effects of rain forest destruction by absorbing carbon dioxide, the leading heat-trapping gas linked to global warming, one crucial role that rain forests play. They could also, to a lesser extent, provide habitat for endangered species.”

The new forests substantially compensate and create suitable habitat

Elisabeth Rosenthal, January 29, 2009, “New Jungles Prompt a Debate on Rain Forests,” The New York Times., <http://www.nytimes.com/2009/01/30/science/earth/30forest.html>

“Biologists were ignoring these huge population trends and acting as if only original forest has conservation value, and that’s just wrong,” said Joe Wright, a senior scientist at the Smithsonian Tropical Research Institute here, who set off a firestorm two years ago by suggesting that the new forests could substantially compensate for rain forest destruction. “Is this a real rain forest?” Dr. Wright, walking the land of a former American cacao plantation that was abandoned about 50 years ago, and pointing to fig trees and vast webs of community spiders and howler monkeys. “A botanist can look at the trees here and know this is regrowth,” he said. “But the temperature and humidity are right. Look at the number of birds! It works. This is a suitable habitat.”

New secondary forests provide BETTER CO2 sequestration and habitat for important species

World Net Daily, January 31, 2009, “Tear down the Amazon rainforest idol: Save the trees more political myth than environmental truth,” <http://www.wnd.com/index.php?fa=PAGE.view&pageId=87552>

“Science magazine contributor Robin Chazdon, an ecologist at the University of Connecticut, agrees that not all forests are equal – the new ones are in some ways better. Chazdon reports that "in secondary forests that are 15 to 20 years old, the overall abundance of species that have medicinal uses is higher compared to the older forests." Of further benefit is the tendency of younger forests to consume more carbon dioxide than older forests. For those worried about global warming, deforestation can actually be an ally, say scientists.”

No tangible evidence for decline of tropical moist forests since the 1970s

University of Leeds, January 8, 2008, “No Convincing Evidence for Decline in Tropical Forests,” <http://www.leeds.ac.uk/media/press_releases/current/rainforest.htm> [brackets added]

“Since errors in national statistics are higher for forests in the dry tropics than for forests in the humid tropics, in places near the Equator such as Amazonia, Borneo and the Congo Basin, he repeated the process just for tropical moist forest, with a different set of data, in the hope it would give a clearer picture. This time he [Dr Alan Grainger, Senior Lecturer in Geography] found no evidence for decline since the early 1970s. Indeed, while his own estimate in 1983 of tropical moist forest area in 1980 was 1,081 million hectares, the latest satellite data led to an estimate of 1,181 million hectares for the same 63 countries in 2000.”

SIGNIFICANCE

90% of the Brazilian rainforest is intact according to study

Dr. Jay Lehr (PhD in Ground Water Hydrology from the University of Arizona and Science Director of the Heartland Institute) and Professor Samuel Aldrich (Professor Emeritus of Soil Fertility Extension at the University of Illinois), July 2006, “Unmasking the Flaw in Sustainability Thinking,” The Heartland Institute, <http://www.heartland.org/policybot/results/19339/Unmasking_the_Flaw_in_Sustainability_Thinking.html>

“First, the claim that large swaths of the Brazilian rainforest were being destroyed at an alarming rate proved false. Patrick Moore, a founder of Greenpeace, and Philip Statt, a professor of biogeography who studied the tropical forests for 30 years, initially believed rainforests were endangered. But working independently in the 1980s and 1990s, studying from airplane flights and satellite photos, they found 90 percent of the Amazon rainforest was intact.”

It's a myth that rainforests soak up CO2

World Net Daily, January 31, 2009, “Tear down the Amazon rainforest idol: Save the trees more political myth than environmental truth,” <http://www.wnd.com/index.php?fa=PAGE.view&pageId=87552>

"In fact, because the trees fall down and decay, rainforests actually take in slightly more oxygen than they give out," says Philip Stott, professor emeritus of biogeography at the University of London. "The idea of them soaking up carbon dioxide and giving out oxygen is a myth. It's only fast-growing young trees that actually take up carbon dioxide."

SOLVENCY

85% of the rainforest will be destroyed if climate change is not controlled and large parts of the current destruction is already irreversible

David Adam, May 11, 2009, “Amazon could shrink by 85% due to climate change, scientists say,” The Guardian, <http://www.guardian.co.uk/environment/2009/mar/11/amazon-global-warming-trees>

“Global warming will wreck attempts to save the Amazon rainforest, according to a devastating new study which predicts that one-third of its trees will be killed by even modest temperature rises. The research, by some of Britain's leading experts on climate change, shows that even severe cuts in deforestation and carbon emissions will fail to save the emblematic South American jungle, the destruction of which has become a powerful symbol of human impact on the planet. Up to 85% of the forest could be lost if spiralling greenhouse gas emissions are not brought under control, the experts said. But even under the most optimistic climate change scenarios, the destruction of large parts of the forest is "irreversible".”

Tropical Species face extinction risk from overhunting, bushmeat trade, and exotic pathogens

Dr William Laurance (PhD in Integrative Biology from UC Berkeley and scientist for the Smithsonian Tropical Research Institute, Balboa, Panama), January 27, 2009, “Reality check for deforestation,” BBC News, <http://news.bbc.co.uk/2/hi/science/nature/7848200.stm>

“Finally, tropical species face perils above and beyond habitat destruction. Many, including apes, monkeys, and forest elephants, are being killed off by rampant overhunting and the commercial bushmeat trade. Others are being driven to extinction from exotic pathogens, such as the deadly chytrid fungus, that has wiped out hundreds of tropical amphibians.”

DISADVANTAGES

A) FARC Hideout Preserved

FARC has become guerillas in the rainforest and the rainforest gives the conflict its savage character

Ibsen Martinze (Latin American Columnist), June 2, 2008, “Greed, Grievence, and Rainforest,” The Liberty Fund, “Greed, Grievence, and Rainforest,” <http://www.econlib.org/library/Columns/y2008/Martinezrainforest.html>

“Despite the inequalities anyone can see in Colombia—a country where 50% of the population lives in poverty—the "social base" of the guerrillas is minimal. The support that this rural "Army of the People" has within the poor is more likely to be zero than even 3%, according to every survey available. On second thought, using the word "rural" is a misnomer because the FARC guerrillas have become guerrillas *in the rainforest*, rather than in the rural areas. The rainforest gives the conflict its savage character.”

Impenetrable rainforest is hide-out and resting spot for FARC

Anne Stanton, 9/28/2006, “Panama Connection,” The Northern Express (Largest Newspaper in Northern Michigan), <http://www.northernexpress.com/editorial/features.asp?id=2072>

“The rainforest is nearly impenetrable and also a hide-out and resting spot of sorts for rebel groups from Colombia. One is a revolutionary group called FARC (Revolutionary Armed Forces of Colombia), guerrillas who dress in camouflage. They claim they are fighting for the rights of the poor, but make millions through extortion, kidnapping and drug running, sometimes recruiting 12-year-olds as soldiers.”

FARC used rainforest canopy to limit aerial detection of the camp that sheltered Paul Reyes

Garry Leech (journalist), August 27, 2007, “Life in a FARC Camp,” Columbia Journal, <http://www.colombiajournal.org/colombia263.htm>

“Terry and I were at the remote FARC camp for different reasons. She was there to interview female guerrillas as part of her research on women engaged in social struggle in Colombia. I was there to interview [Paul] Reyes [member of FARC’s four person central command]. We were given free rein of the camp and access to all the guerrillas, about one third of whom were female. We were also allowed to take photos with the stipulation that we didn’t publish the faces of any of the rebels except Reyes. We also passed many hours engaged in informal conversations with Reyes and other guerrillas. Living conditions for the guerrillas were austere to say the least. They consisted of the aforementioned bivouac, two uniforms, a pair of rubber boots, an AK-47 assault rifle, extra cartridges of ammunition, a machete and three meals a day. Despite the austerity, the camp’s infrastructure was impressive given its remote location. The bivouacs were interconnected with a network of wooden walkways constructed several inches above the wet, muddy ground. As few trees as possible had been felled to make space for the bivouacs and walkways in order to preserve the rainforest canopy, no doubt to limit the possibility of detection from the air.”

Drug cartels just recently moved into Brazil’s Amazon rainforests

Rory Carroll, March 18, 2008, “First coca crop found in Brazilian rainforest,” The Guardian (major UK newspaper), <http://www.guardian.co.uk/world/2008/mar/19/brazil.drugstrade>

“Drug cartels have moved into Brazil's Amazon and are producing cocaine deep in the rainforest, opening a new frontier in South America's narcotics trade. Authorities discovered the first known coca plantations in Brazil's jungle at the weekend after satellite images revealed clearings that turned out to be about 2 hectares (5 acres) of coca plantations.”

Thick rainforest canopy prevents US special forces from using thermal-imaging cameras to find guerilla hostages

Jonathan Green (journalists), February 28, 2009, “The habit that’s costing the earth,” The Daily Mail (major UK newspaper), <http://www.dailymail.co.uk/home/moslive/article-1157642/The-habit-8217-s-costing-earth.html> [ellipses in original]

“The brutal 40-year war in Colombia, the world’s biggest exporter of cocaine, is intensifying. The damaged plane was being flown by an American pilot as part of a US-financed initiative known as Plan Colombia. More than $6 billion has been spent over the past eight years in an attempt to destroy the coca crops that keep the guerrillas and drug cartels in business. The military base is in the dusty town of San José del Guaviare, a cocaine-trading hot spot deep in the south of the country. Until recently, it was controlled by the Revolutionary Armed Forces of Colombia (aka the Farc), left-wing guerrillas who currently hold an estimated 700 hostages and are waging a brutal insurgency against the government. Last year, 900 civilians were killed in the fighting. Not so long ago, you could buy your groceries or fill up your car by paying with cocaine paste in San José. Around 40 cocaine traffickers were caught in the town by police last year alone. But the army has driven the guerrillas out of town and into the jungle bordering Ecuador and Venezuela. Nevertheless, rebels still ambush patrols and plant roadside bombs. One improvised device, made from a gas cylinder packed with explosives, killed a policeman last August; another was discovered just before Christmas. One pilot told me there’s a rumour swirling around the base that the Farc pays a reward for anyone who shoots an American in the town… As San José fades beneath us, the countryside changes into an endless, lush rainforest. Hot, sweaty jungle air blasts through the open door of the helicopter and an aroma of fertile earth seeps into the cabin. The jungle is so dense that when US special forces tried to sweep it for hostages with thermal-imaging cameras, their hi-tech systems couldn’t penetrate the canopy.”

FARC uses their jungle hideaways to import billions of dollars of cocaine into the US

US Drug Enforcement Administration, March 22, 2006 “United States Charges 50 leaders of Narco-Terrorist FARC in Colombia With Supplying More than Half Of the World’s Cocaine,” <http://www.usdoj.gov/dea/pubs/pressrel/pr032206a.html>

“Fifty leaders of the Fuerzas Armadas Revolucionarias de Colombia (the FARC) in Colombia have been indicted on charges of importing more than $25 billion worth of cocaine into the United States and other countries, the Department of Justice announced today. “From their jungle hideaway, the FARC uses the drug trade to bankroll terrorism in Colombia, finance attacks on innocent citizens, and poison Americans,” said DEA Administrator Karen P. Tandy. “Today’s indictment challenges that lawlessness, and the FARC leadership should prepare to face the justice that they have long denied to so many.” The one-count indictment, returned by a federal grand jury in the U.S. District Court for the District of Columbia on March 1, 2006, and unsealed today, names as defendants 50 leaders of the FARC, a designated foreign terrorist organization. Three of the charged FARC leaders are currently in custody in Colombia, and the United States is seeking their extradition on the charges unsealed today. In addition, the United States Department of State announced more than $75 million worth of rewards for information that leads to the capture of the remaining FARC leaders. “This indictment strikes at the very heart of the FARC narcotics operation that has flooded our communities with cocaine,” said Attorney General Alberto R. Gonzales. “Because of unprecedented cooperation between U.S. and Colombian authorities, we are closer than ever before to reaching our goal of bringing the leaders of this narco-terrorist group to justice in the United States.” According to the indictment, the FARC currently supplies more than 50 percent of the world’s cocaine and more than 60 percent of the cocaine that enters the United States. The FARC initially taxed other narcotics traffickers involved in the manufacture and distribution of cocaine in areas the FARC controlled, it was charged. Recognizing the increased profits available, from the 1990s up to the present, the FARC moved to become directly involved in the production and distribution of cocaine by, among other criminal activities, setting the prices to be paid to farmers across Colombia for cocaine paste, the raw material used to produce cocaine, and transporting cocaine paste to jungle laboratories under FARC control where it was converted into ton quantities of finished cocaine and then shipped out of Colombia to the United States and other countries. Recognizing that cocaine was the “lifeblood” of the FARC, the charged FARC leaders collected millions of dollars in cocaine proceeds and used the money to purchase weapons for the FARC’s terrorist activities against the government and people of Colombia, it was charged.”

B) Jobs Lost

Clearing of the tropical rain forest has created millions of jobs for the poor

Michael Astor, March 25, 2007, “Environmentalists and loggers like new Amazon logging law,” Associated Press, <http://news.mongabay.com/2007/0325-ap.html>

“Brazil is home to the vast bulk of the Amazon rain forest and in recent years the country has struggled with how to balance the region's development with preservation. Farmers and ranchers are increasingly making inroads into the world's largest remaining tropical wilderness, threatening the region's environment, but also creating jobs for the millions of poor people who live in the region.”

C) Hunger Solution Eliminated

Cleared rainforest lands mostly used for pasture and grain fields

Michael Astor, March 25, 2007, “Environmentalists and loggers like new Amazon logging law,” Associated Press, <http://news.mongabay.com/2007/0325-ap.html>

“So far about 20 percent of the Amazon's 1.6 million square miles rain forest has been cut down, mostly to make way for pasture and grain fields.”

Brazilian governor says deforestation is necessary to feed the world

Deutsche Presse-Agentur (German News Agency), May 17, 2008, “Brazil's forest loss now linked to world food prices,” http://www.monstersandcritics.com/science/features/article\_1405101.php/Brazils\_forest\_loss\_now\_linked\_to\_world\_food\_prices

“The world food crisis has actually weakened the hand of environmentalists in Brazilian politics who are trying to conserve the untouched forests as a biodiversity treasure trove. Mato Grosso's governor, Blairo Maggi, responded to the figures by defending deforestation as necessary to feed the world. 'You can't grow more food unless you put more land into production by chopping down trees,' declared Maggi, who is nicknamed the 'soya king' in Brazil. The businessman is the world's biggest soybean exporter.”

Basic foodstuffs are becoming truly scarce

Jon Markman (financial analyst for MSN money), 3/6/2008, “Could we really run out of food,” MSN Money, <http://articles.moneycentral.msn.com/Investing/SuperModels/CouldWeReallyRunOutOfFood.aspx>

“The very idea that the modern world could run out of food seems ludicrous, but that is the flip side, or cause, of the tremendous recent increase in the cost of raw wheat, corn, rice, oats and soybeans. Food prices are not escalating because speculators have run them up for sport and profit, but because accelerating demand in developing nations, biofuel production and poor harvests in some areas have made basic foodstuffs truly scarce. In energy circles, folks who warn about the beginning of the end of cheap fossil fuels talk about "peak oil" as a point we have dangerously and expensively crossed. Likewise, you can now add "peak wheat" to your political and investment lexicon. And it's a lot worse. One can always move closer to work to cut down on gasoline. But be forced to eat less toast, beer and steak? Them's fightin' words. Wheat futures prices have tripled since 2004, corn prices have almost tripled since 2005, and soybeans have tripled since 2006. Meanwhile, crude oil is up merely 60% in the past three years, which makes it seem very bearable in comparison. U.S. stock prices have barely eked out a 10% advance since 2005, underscoring the diminishment of our buying power. A large pepperoni pizza these days costs about as much as a share of **Citigroup** ([C](http://moneycentral.msn.com/detail/stock_quote?Symbol=C), [news](http://news.moneycentral.msn.com/ticker/rcnews.asp?Symbol=C), [msgs](http://moneycentral.msn.com/community/message/board.asp?Symbol=C)). Citigroup finished Wednesday at $22.15. This is no joke, already, in Asia. Rice prices surged to a 20-year high earlier this year -- more than $18 per hundred pounds -- as countries that have the most are hoarding it for their own people. Vietnam, India and Egypt have restricted exports to keep local markets stocked. Thai, Philippine and Indonesian officials are warning of civil unrest if the flow of rice does not increase.”

Food shortages are real

Jon Markman (financial analyst for MSN money), 3/6/2008, “Could we really run out of food,” MSN Money, <http://articles.moneycentral.msn.com/Investing/SuperModels/CouldWeReallyRunOutOfFood.aspx>

“Shortages are real. The Financial Times reports that rice stocks have fallen this year to about 70 million tons, the lowest level in 25 years and less than half the total held in global inventories in 2000. Wheat inventories, called "carry-overs" in the trade, are at 30-year lows even though world wheat production was actually up 1% last year. In the past year, reports show, wheat inventories in the European Union have plunged to 1 million tons from 14 million tons.”

Hunger prevents aids drugs from working, burdens world economy, and causes war and terrorism

Marshall Matz (J.D. from the University of Louisville and Founding Chairman of the Friends of the World Food Programme), 2007, “Letter from the Chair,” <http://www.friendsofwfp.org/atf/cf/%7Bd7580fdc-3d52-4a72-9c1e-5e3fbab86c28%7D/PART1ANNUALREPORT2007.PDF>

“In Eldoret, Kenya, medical doctors are working in the fields growing crops because there is not enough food and the AIDS drugs do not work without food. In Nairobi, I remember the children who attend school only because of the school lunch program. Education is a by-product. So is a reduction in the birthrate. There are 850 million hungry people in the world. Hunger has become the moral imperative of our time. Our planet can produce enough food to feed ten billion people. Yet, almost one billion of the 6.5 billion people living today are hungry. Beyond the immorality of hunger there are compelling practical reasons to fight hunger. Hunger not only saps the energy of the individual, but it is also a major burden on the entire world economy. Hunger is a cause of war, instability, and terrorism.”

CON: RECYCLING

By Matthew Baker

INHERENCY

If recycling made economic sense it would occur without government intervention

James M. Taylor, February 1, 2006, “Lake County, Ohio Scraps Flagship Recycling Program,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/18439/Lake_County_Ohio_Scraps_Flagship_Recycling_Program.html>

"If recycling made economic sense, government would not have to mandate it or subsidize it," countered Jerry Taylor, director of natural resource studies at the Cato Institute. "Recycling companies would willingly pay people for their recyclable waste or charge governments less to reprocess waste than landfills charge to store it."

32.5% of the Municipal Waste Stream (MSW) is recycled

Lanny Hickman, September 2008, “Wasted Energy,” MSW Management (The Journal for Municipal Solid Waste Professionals), <http://www.mswmanagement.com/september-2008/wasted-energy-landfills.aspx>

“The EPA also reports that in 2006 a total of 81.8 million tons of materials in the MSW stream were diverted from landfills for recycling. This equates to 32.5% of the MSW stream, leaving 169.2 million tons to be managed by other means. “Other means” includes combustion with energy recovery and sanitary landfills.”

SIGNIFICANCE

90% of paper already coming from renewable forests which are increasing in acreage

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2> [brackets added]

“But what about saving precious resources by recycling? Almost 90 percent of this country's paper comes from renewable forests, and to say we will someday run out of trees is the same as saying we will some day run out of corn. According to Jerry Taylor [policy analyst at the CATO Institute], we are growing 22 million acres of new forest each year, and we harvest 15 million acres, for a net annual gain of 7 million acres. The United States has almost four times more forested land today than it did 80 years ago.”

We will never run of out glass since it is made from sand

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2> [brackets added]

“Are we running out of that other staple of recycle bins, glass? All those wine and beer bottles are manufactured from silica dioxide, the fancy term for sand, which [Dr.] Jay Lehr [PhD in Ground Water Hydrology from the University of Arizona and science director of the Heartland Institute] points out is the most abundant mineral in the earth's crust.”

We will never run out plastics; even if oil runs out it can be synthesized from plant products

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“Nor will we ever suffer a shortage of plastic, which is made from petroleum byproducts. Today more petroleum reserves are being discovered than are being used up. And plastics can now also be synthesized from farm products.

We will never run out of any resource that we recycle

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2> [brackets added]

“[Dr. Jay] Lehr [PhD in Ground Water Hydrology from the University of Arizona and science director of the Heartland Institute] concludes, "We are not running out of, nor will we ever run out of, any of the resources we recycle."

SOLVENCY

Recycling paper and plastic consumers more energy and resources than it saves

The Clean Tech Group (Green Technology consulting firm), December 5, 2008, “Report Calls Recycling a Waste of Energy,” <http://cleantech.com/news/3948/report-calls-recycling-waste-energy>

“Institution of Mechanical Engineers suggests paper and plastic are better used for fuel, heat and electricity. Recycling paper and plastic consumes more energy and resources than it saves, according to new report from the Institution of Mechanical Engineers. The report, *A Wasted Opportunity*, calls on the UK government to make energy-from-waste (EfW) plants a key component of its renewable energy portfolio. Currently, legislation regards EfW plants as waste-treatment instead of energy-generation plants.”

No matter how big our recycling programs, a significant fraction of waste will not be able to reused beneficially

Sam Zaitlin, Fall/Winter 2008, “Landfill: Gas to Energy,” Maine Policy Review, Issue 17, Number 2, <http://mcspolicycenter.umaine.edu/?q=zaitlin_V17N2>

“A modern, secure landfill has become an essential piece of public infrastructure. While Casella [A major Maine waste company]’s resource management strategy is founded on the tenet that a significant fraction of the waste stream can be recycled, the present reality is that no matter how comprehensive our recycling programs may be, a significant fraction of the waste stream still can not be reused beneficially.”

DISADVANTAGES

A) Cost

Net cost of recycling double that of regular garbage collection

Max Borders (Policy analyst specializing in Energy and the Environment at the National Center for Policy Analysis and former Program Director at the Institute for Humane Studies), January 13, 2008, “State Has Made a Religion out of Recycling,” <http://greenyes.grrn.org/2008/01/msg00047.html>

"The net cost for recycling is more than double the cost for regular garbage collection that will go to the transfer station” said Greensboro Councilman Tom Phillips in a public hearing. “A lot of what we recycle winds up at the landfill anyway because of contamination or lack of markets for the recycled material."

1/4th of material recycled in Phoenix is non-recyclable costing $1 million extra

Corinne Purtill, October 8, 2006, “Errant Recycling an Expensive Mistake,” The Arizona Republic, <http://www.azcentral.com/arizonarepublic/news/articles/1008recycling1008.html>

“Nearly one-quarter of everything tossed into Phoenix's blue barrels shouldn't be there. Removing all that non-recyclable trash costs the city nearly $1 million each year. Non-recyclable trash plagues municipal recycling programs across the Valley. Plastic bags or dirty diapers, for example, must be plucked from the machinery by hand. Both can jam and damage equipment, costs added to the rates that recycling contractors charge cities.”

Every community recycling program in the US costs more than the revenue it generates

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“The truth, though, is that recycling is an expense, not a savings, for a city. "Every community recycling program in America today costs more than the revenue it generates," says Dr. Jay Lehr of the Heartland Institute.”

It costs about $240 per ton to recycle as opposed to $130 a ton to send to landfill

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“A telling indicator is that cities often try to dump recycling programs when budgets are tight. As Angela Logomasini, director of risk and environmental policy at the Competitive Enterprise Institute, points out in the *Wall Street Journal*, every New York City mayor has attempted to stop the city's recycling program since it was begun in 1989. Mayor David Dinkins tried, but changed his mind when met with noisy criticism. Rudy Giuliani tried, but was sued by the Natural Resources Defense Council, which won the case. Mayor Bloomberg has proposed temporarily ending the recycling program because, as Logomasini notes, it costs $240 per ton to recycle and only $130 per ton to send the material to a landfill. The numbers for other areas are roughly comparable. The net per-ton cost of recycling exceeds $180 in Rhode Island, while conventional garbage collection and disposal costs $120 to $160 per ton.”

Curbside recycling is 55% more expensive than conventional garbage disposal

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“Franklin Associates, which provides consulting services for solid waste management, estimates that curbside recycling is 55 percent more expensive, pound for pound, than conventional garbage disposal.”

B) Global Warming

Recycling Paper produces more carbon than new paper

Iain Murray (Senior Fellow in Energy, Science and Technology at the Competitive Enterprise Institute with an MA from Oxford and an MBA from the University of London), June 16, 2008, “Time to recycle recycling?,” <http://cei.org/articles/time-recycle-recycling>

“And in fact, striking at the base of institutionalized environmentalism, it appears recycling can produce more carbon than new manufacture. Let's face it, there is probably no more widespread example of what some people have termed "everyday environmentalism" than recycling. Many of us do it as a matter of course because the recycling company comes round at the same time as the garbage truck. Or we have "green" receptacles in our offices for the paper that seems to abound in our "paperless" offices. It is also pushed as a solution for global warming. For instance, one environmental organization's Web site lists four steps to lowering one's carbon emissions (note: descriptions are shortened slightly from full Web site text): (1) Reduce every form of energy use that derives ultimately from fossil fuel. (2) Reuse as much of every product as possible. (3) Recycle all paper, cardboard and wood products. (4) Purchase personal carbon offsets.If only it was that simple. What this group, Al Gore and many other environmentalists may not appreciate is that recycling paper is actually a carbon positive process. Fossil fuels are required to de-ink recovered paper and sanitize paper headed for close consumer use. Compare this to virgin trees - which produce no net carbon provided a new tree is planted to replace each one that is harvested, as is generally the case. Contrary to received wisdom, paper is one of the least recyclable materials in circulation. Each time paper is recycled, it loses part of its physical construction. Structure is crucial to paper's performance - lose it, and performance plummets. Paper is often recycled far more than once. According to a study for the Corporate Forum on Paper and the Environment, the first time paper is recycled, it retains about 85 percent of its strength. By the time it is recycled the sixth time, that drops to 38 percent. Yet each time, it is using the same energy and emitting more and more carbon for the value you get from it.”

C) Auto Accidents

Recycling possibly linked to thousands of accidents and actually highway deaths

Jeff Poor, July 12, 2007, “CBS: Recycling Might Be a Deadly Problem,” Business & Media Institute, <http://www.businessandmedia.org/articles/2007/20070712121727.aspx> [brackets in original]

“It seems recycling may be deadly. “The business of recycling is a big part of the reason people are piling their trucks full of junk,” said CBS News correspondent Sandra Hughes on the July 11 “Evening News.” According to the CBS Web site report, “the mess [from trucks full of junk] causes some 25,000 accidents a year.” The story focused on “saving lives” as Katie Couric referred to it because at least three people mentioned had been killed by debris. Drivers were killed either by falling pieces of material or as a result of dodging large objects left in the road. “There’s been an increase in both the scrap metal and scrap paper and cardboard,” said Officer Kenneth Duke of the California Highway Patrol. “There’s been a big increase in – in people collecting all the cardboard and bringing it to the recycling center.”

D) Pollution

More toxic materials created by recycling paper than cutting virgin timber

James M. Taylor, February 1, 2006, “Lake County, Ohio Scraps Flagship Recycling Program,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/18439/Lake_County_Ohio_Scraps_Flagship_Recycling_Program.html> [brackets added]

"Moreover, recycling is a manufacturing process, so it has environmental impacts," [Dr. Daniel] Benjamin [PhD in Economics from UCLA and Professor of Economics at Clemson University] added. "An EPA study found more toxic materials in recycling paper processes than in virgin paper manufacturing.”

Curbside recycling requires trucks that create air pollution and waste fuel

James M. Taylor, February 1, 2006, “Lake County, Ohio Scraps Flagship Recycling Program,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/18439/Lake_County_Ohio_Scraps_Flagship_Recycling_Program.html> [brackets added]

"Still further," [Dr. Daniel] Benjamin [PhD in Economics from UCLA and Professor of Economics at Clemson University] observed, "curbside recycling requires another round of collection trucks stopping at every household in the county. This means more trucks driving more miles, wasting more fuel, and adding more air pollution to our skies."

E) Productivity

Average household in Seattle spends 16 minutes “recycling” resulting in 8,500 lost work days

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“City Budgets aren't the only victims of recycling. Citizens also have a significant cost--their time. Seattle Public Utilities researchers (in collaboration with University of California, Davis) conducted a survey in 2005 that indicated 98 percent of Seattle households participate in the curbside recycling program, and that 16 minutes are spent recycling per household. The city contains 260,000 households, which means each week Seattleites spend almost 8,500 work days recycling. Working days lost in traffic jams are commonly cited by proponents of HOV lanes, bike paths, and light rail. Nary a word is heard about lost time.”

All the sorting involved with recycling can raise a building’s janitorial costs by 10%

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“And what are those 16 minutes spent doing? Sorting, extracting, rinsing, bundling, and stomping. In Seattle, household batteries can be put into the garbage, but not rechargeable batteries. Plastic soda bottles can be recycled, but not plastic flower pots. Plastic shopping bags go into the recycle bin (bundle them first), but not plastic produce bags or plastic freezer wrap bags. Plastic cottage cheese tubs, yes, but not plastic six-pack rings. Frozen food boxes go into the recycle bin, but not paper plates. Cardboard, sure, but not if a pizza came in it, and make sure to flatten the box. And remove any tape. Cereal boxes, yes, but pull out the liner. Typing paper, of course, but sort out the paper punch holes, as those little dots can't be recycled. Hardback books, okay, but wrestle off the covers. Metal hangers, yes: aluminum foil, no. Tin cans, you bet, but rinse them, and push the lid down into the can. No loose lids can go in the recycle bin. And no confetti. So at least it's a fun 16 minutes. There are out-of-pocket expenses, too: Rod Kauffman, president of the Building Owners and Managers Association of Seattle and King County, says this sorting will add 10 percent to a building's janitorial bills.”

F) Road Wear

Recycling requires LA to have twice as many trucks adding to street wear and pollution

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“Clemson professor Daniel K. Benjamin points out that Los Angeles has 800 trucks working the neighborhoods, instead of 400, due to recycling. Radley Balko at aBetterEarth.Org, a project of the Institute for Humane Studies at George Mason University, writes, "That means extra wear and tear on city streets, double the exhaust emissions into the atmosphere, double the man hours required for someone to drive and man those trucks, and double the costs of maintenance and upkeep of the trucks."

CON: RELISTING GRAY WOLF

By Matthew Baker

INHERENCY

Five groups sued the government over the delisting

John Flescher, June 16, 2009, “Groups sue US Over gray wolf de-lising in Great Lakes States,” Associated Press in the Capital Times, <http://www.madison.com/tct/news/455021>

“Five groups sued the government Monday for removing more than 4,000 gray wolves in the upper Great Lakes region from the endangered list, prolonging a dispute over whether the predator can survive without federal protection.”

Past Attempts to delist the gray wolf have been REPEATEDLY struck down

Born Free USA and the Animal Protection Institute, June 15, 2009, “Wildlife Protection Groups Challenge Great Lakes Wolf Delisting,”<http://www.bornfreeusa.org/press.php?p=2075&more=1>

“This is the second time in little more than a year that the federal government has removed Endangered Species Act protections for gray wolves in the western Great Lakes region, and it is the latest installment in an effort that has been repeatedly struck down by the courts over the last several years.”

Nothing has changed about the wolf rule since it was deemed unlawful

Suzanne Stone (Northern Rockies Representative for Defenders of Wildlife), March 6, 2009, “Same Bad Plan to Delist Wolves in the Northern Rockies,” Defenders of Wildlife, <http://www.defenders.org/newsroom/press_releases_folder/2009/03_06_2009_same_bad_plan_for_wolves.php> (note Suzanne Stone opposes the delisting of the Gray wolf)

“Nothing about this rule has changed since it was rejected and deemed unlawful in a federal court in July of 2008.”

The FWS will monitor the wolf for 5 years could put the wolf back on the ESA list if necessary

U.S. Fish & Wildlife Service, April 2009, “Final Rule to Remove the Gray Wolf "Western Great Lakes Distinct Population Segment" from the Federal List of Threatened and Endangered Species,” <http://www.fws.gov/midwest/WOLF/delisting/fnlruledelistapril2009qas.htm> [Brackets added]

“Even though the [The Endangered Species Act] ESA no longer protects gray wolves in the Western Great Lakes [Distinct Population Segment] DPS, the law requires the Service to monitor wolves in the DPS for five years after delisting. The DPS could be re-listed as threatened or endangered if necessary.”

SIGNIFICANCE

Most wolf biologists are satisfied that the regional wolf population has biologically recovered

MSNBC News, March 6, 2009, “Bush-era delisting of gray wolves is upheld: Interior chief cites recovering numbers; activists vow to sue,” <http://www.msnbc.msn.com/id/29550694/>

“David Mech, a leading wolf expert and senior research scientist with the U.S. Geological Survey, supported the Bush administration's assertion that the wolf population had rebounded. "I'm satisfied, and most wolf biologists I know are satisfied, that wolf populations in both regions have been biologically recovered for the last five years," Mech said of the Northern Rockies and western Great Lakes.”

State Wolf Management plans will ensure survival of the Gray Wolf

U.S. Fish & Wildlife Service, April 2009, “Final Rule to Remove the Gray Wolf "Western Great Lakes Distinct Population Segment" from the Federal List of Threatened and Endangered Species,” <http://www.fws.gov/midwest/WOLF/delisting/fnlruledelistapril2009qas.htm> [Brackets added]

“We delisted the gray wolf in the Western Great Lakes [Distinct Population Segment] DPS because that DPS supports a healthy self-sustaining population of wolves. In the past, human-caused mortality resulted in the near extinction of gray wolves in the conterminous U.S. With state management plans in place, each of the states will now manage wolf populations in accordance with population objectives, which will ensure survival of the species in the DPS into the foreseeable future.”

When the wolf was delisted in 2007, the wolf population remained stable under state control

U.S. Fish & Wildlife Service, April 2009, “Final Rule to Remove the Gray Wolf "Western Great Lakes Distinct Population Segment" from the Federal List of Threatened and Endangered Species,” <http://www.fws.gov/midwest/WOLF/delisting/fnlruledelistapril2009qas.htm> [Brackets added]

“During the time period that wolves in the Western Great Lakes DPS were delisted (from the effective date of the final delisting rule on March 12, 2007, until the court vacated that rule on September 29, 2008) the wolf population remained stable under state management. The late winter 2006-2007 population estimates were 2,922 wolves in Minnesota, a minimum of 537 in Wisconsin, and 520 in Michigan. Although the Minnesota population estimate is down slightly compared to the previous estimate (from 2003-2004), the change is not statistically significant which indicates that the population has remained stable since the previous survey. The number of wolf deaths that occurred during the time wolves were delisted closely mirror what the Service predicted in the 2007 final rule. Illegal killing of wolves actually dropped in Wisconsin and is unchanged in Michigan (no data are available from Minnesota). The number of wolves killed by USDA Wildlife Services and individuals for depredation control increased in both Michigan and Wisconsin, but not any more than predicted in the 2007 final rule. The number remained about the same in Minnesota.”

SOLVENCY

**Past Compensation scheme for cattle killed by wolfs afflicted with red tape & difficult to prove**

Ken Korczak, June 3, 2009, “Ranchers affected by wolf predation: cattle lost, damaged,” Pine and Lake News (news publication based in the Brainerd Lakes Area of Minnesota) <http://www.pineandlakes.com/stories/060309/news_20090603124.shtml>

“Previous to the delisting, the only option available to farmers who lost cattle to wolves was to apply for reimbursement of the market value of the animal from the Department of Agriculture - a process that is not always perfect, said Danny Wiese. "You have to jump through so many hoops before you can prove that you lost a cow to a wolf," Wiese said. "It has to be reported within 24 hours, and then a DNR officer has to come out and inspect the site. Sometimes it's hard to find exact evidence. Sometimes a calf is just missing and you can't prove a wolf took it."

Ranchers have no intention of allowing Mexican wolves to return and in the past poachers have killed many wolves

High County News, December 24, 2007, “Last chance for the Lobo,” <http://www.hcn.org/issues/361/17419> [ellipses added]

Ranchers say they have no intention of letting Mexican wolves again roam the landscape to prey on livestock, horses and pets, and maybe even their friends and family. They say environmentalists are using the wolf as a terrorist tactic to force ranchers off public lands they have controlled for decades through grazing leases. "We're not saying kill the wolf. We're saying remove the wolf," says Catron County manager Bill Aymar. "It's not going to end well if they don't remove the wolf."

However you look at it, things aren't going well for the wolves these days. That's partly due to the vehemence of local aversion, which has helped inspire tactics such as Mike Miller's. But critics blame the wolf reintroduction program itself, or at least an aspect that lies at its very foundation. By following political rather than biological protocol, they say, the Fish and Wildlife Service is sabotaging itself: It's dropping genetically weak packs into a hostile landscape where only the strongest have a chance to survive.

The Mexican gray wolf once roamed freely throughout the Southwestern United States and deep into Mexico. But human settlers and wolves have never mixed well. At the behest of ranchers early in the 20th century, the U.S. government began a campaign to exterminate the wolf. And by 1950, all but a handful of Mexican gray wolves had been wiped out.

The killing didn't stop at the border: U.S. officials exported poison and sent American hunters to Mexico to continue the slaughter. By the late 1970s, there were less than 50 wolves left. Absolute extinction was staved off in 1976, when the Mexican gray wolf was listed under the Endangered Species Act.

The listing triggered plans to bring the wolf back from near-extinction through a captive breeding program. Between 1977 and 1980, five wild Mexican gray wolves were captured in Mexico. The progeny of three of those wolves, plus four other purebred Mexican gray wolves already in captivity, have provided the breeding stock for the entire reintroduction effort.

The first 11 wolves were released in March 1998 into the 7,000-square-mile Blue Range Wolf Recovery Area, which includes portions of national forests and wilderness areas in eastern Arizona and western New Mexico, as well as the Fort Apache Indian Reservation in Arizona.

Northern Rockies gray wolves had already been successfully reintroduced in Yellowstone National Park in 1995. There, however, the wolves were protected from conflicts with ranchers. In contrast, the Mexican gray wolves were released directly onto public lands long controlled by the livestock industry. Soon after the first release, the New Mexico Cattle Growers Association sued the U.S. Fish and Wildlife Service, seeking to stop the program. The ranchers lost that skirmish in the courtroom, but in the wild, the wolves seem to be losing the war.

Wildlife managers have issued orders to kill or permanently remove 59 wolves. Most were removed or shot because they were caught feasting on cattle, even though the dead livestock constitute only a tiny fraction of the animals that graze in the wolf recovery area.

Poachers, meanwhile, have shot and killed another 25 wolves. Only two of the shootings have been resolved: One was ruled self-defense and the other resulted in a successful prosecution. The other cases remain under investigation. Meanwhile, last month, another three wolves disappeared under mysterious circumstances.

A/T Wildlife Watchers: Estimates are that wolves kill thousands of elk

Lance Hebdon and Sharon W. Kiefer, February 18, 2009, “Your Inquirary about wolf impact on other predators and economic impact of wolves to Idaho hunting revenue,” Idaho Department of Fish and Game, <http://wolves.files.wordpress.com/2009/02/wlfecon-impct.pdf>

“The 1994 EIS estimated the recovered wolf population (about 100 wolves) would kill 1,650 ungulates/year. Elk were estimated to make up 30% of the wolf kills with deer making up the remaining 70%. Research conducted in Idaho using radio-collared elk and deer have not supported the ratio of 30% elk 70% deer used in the 1994 EIS. Data from radio-collared ungulates in Idaho indicate elk have made up a larger portion of the ungulates killed. This analysis used wolf kill ratio of 70% elk. For this extrapolated analysis it was estimated that the current population of 824 wolves would kill an estimated of 9,517 elk /year. The 1994 EIS considered mortality from wolf predation to be completely additive, we retain that assumption here. However, we know that predation is never totally additive or compensatory over time, but occurs along a continuum. Therefore, these calculations would be considered an estimate based on these assumptions.”

State Management plans for worked for other keystone species and they can work for wolves

Robert Williams, January 2009, “Elk Foundation Voices Support for Delisting Wolves,” The American Sports Outdoor Magazine, <http://www.asomagazine.com/magazinepdf/0109/036.pdf>

“The Rocky Mountain Elk Foundation and 18 other conservation organizations have submitted a joint letter to the U.S. Fish and Wildlife Service in support of delisting gray wolves in Montana, Idaho and Wyoming. Delisting would remove gray wolves from the federal Endangered Species List and turn management over to state wildlife agencies. Read the full letter by going to: <http://www.rmef.org> “The 19 organizations that signed onto the letter represent millions of outdoorsmen and conservationists. We’re gratified that they share our concern about wolves in the northern Rockies,” said David Allen, Elk Foundation president and CEO. “Wolf populations are well above federal recovery goals and it’s time to manage them like other game animals.” He added, “This letter is another way for us to express our longstanding support of state-based wolf management. It’s a system that works for elk, deer, turkeys, bears, cougars and other keystone species, and it will work for wolves, too.”

DISADVANTAGES

DA 1) Dead Cattle

Link: The reintroduction of the wolf increased livestock depredation and continued recolonization will increase depredations

Jeff Lehmkuhler (PhD, Extension Beef Cattle Specialist, Department of Animal Science, University of Wisconsin-Madison. Member of Wisconsin Wolf Science Team), Gregory Palmquist (DVM, Grantsburg Animal Hospital, Member of Wisconsin Wolf Science Team), David Ruid (Assistant District Supervisor, USDA-APHIS-WS), Bob Willging (District Supervisor, USDA-APHIS-WS and Member of the Wisconsin Wolf Science Team), Adrian Wydeven (Mammal Ecologist, Wisconsin DNR, Chair Wisconsin Wolf Science Team) May 2007, “Effects of Wolves and Other Predators on Farms in Wisconsin: Beyond Verified Losses,” Wisconsin Wolf Science Committee of the Wisconsin Department of Natural Resources, <http://www.dnr.state.wi.us/org/land/er/publications/pdfs/wolf_impact.pdf>

“The 1999 Wisconsin Wolf Management Plan has a management of goal of 350 wolves for Wisconsin. In 2002 when the minimum wolf population estimate was 323 wolves, there were 9 farms that had a livestock depredation. In 2005, there were a minimum of 425 wolves in Wisconsin and 25 farms had livestock depredations. From 2002 to 2005 the wolf population increased by 32% while farms with livestock depredation increased 178%. Continued wolf recolonization in fragmented habitats containing livestock production will continue to increase the number of farms that have verified wolf depredations and detrimental non-predation impacts.”

Link: The Presence of wolves prevent livestock conception and increase risk of pregnancy loss

Jeff Lehmkuhler (PhD, Extension Beef Cattle Specialist, Department of Animal Science, University of Wisconsin-Madison. Member of Wisconsin Wolf Science Team), Gregory Palmquist (DVM, Grantsburg Animal Hospital, Member of Wisconsin Wolf Science Team), David Ruid (Assistant District Supervisor, USDA-APHIS-WS), Bob Willging (District Supervisor, USDA-APHIS-WS and Member of the Wisconsin Wolf Science Team), Adrian Wydeven (Mammal Ecologist, Wisconsin DNR, Chair Wisconsin Wolf Science Team) May 2007, “Effects of Wolves and Other Predators on Farms in Wisconsin: Beyond Verified Losses,” Wisconsin Wolf Science Committee of the Wisconsin Department of Natural Resources, <http://www.dnr.state.wi.us/org/land/er/publications/pdfs/wolf_impact.pdf>

“Presence of wolves or other predators in pastures likely increases activity of cattle and harassment often causes cattle to run. This increases heat stress during warm weather and risk of cold stress during cold periods from cattle that are sweated wet (Dr. Jeff Lehmkuhler, personal communication). Chebel et al. (2004) discovered that heat stress (>29 degrees Celsius) prior to artificial insemination resulted in lowered conception rates for high producing dairy cows. Dairy cows exposed to high heat index values during peri-implantation may have a greater risk of pregnancy loss (Garcia-Ispierto et al., 2006)

Brink: Livestock production is a small profit margin industry

Jeff Lehmkuhler (PhD, Extension Beef Cattle Specialist, Department of Animal Science, University of Wisconsin-Madison. Member of Wisconsin Wolf Science Team), Gregory Palmquist (DVM, Grantsburg Animal Hospital, Member of Wisconsin Wolf Science Team), David Ruid (Assistant District Supervisor, USDA-APHIS-WS), Bob Willging (District Supervisor, USDA-APHIS-WS and Member of the Wisconsin Wolf Science Team), Adrian Wydeven (Mammal Ecologist, Wisconsin DNR, Chair Wisconsin Wolf Science Team) May 2007, “Effects of Wolves and Other Predators on Farms in Wisconsin: Beyond Verified Losses,” Wisconsin Wolf Science Committee of the Wisconsin Department of Natural Resources, <http://www.dnr.state.wi.us/org/land/er/publications/pdfs/wolf_impact.pdf>

“Livestock production typically is a small profit margin industry. This is especially true for the beef industry. Beef cow-calf operations on average made only $3.04/hd since 1980 (Cattle-Fax 2003). Further, according to the University of Minnesota FINBIN database, the average return to cow-calf producers spanning the years of 1993-2006 and representing 1,960 operation analyses was a loss of $42.75/hd (http://www.finbin.umn.edu). Based on this same dataset, it is reported that the average labor and management charge for these operations was $65.88/hd on an annual basis and represented 13% of the total cost of production. The reported estimated labor per cow on an annual basis was 9.65 hrs and equates to $7.11/hr in labor expenses. For the reported average herd size of 73 cows, nearly 2 hrs/day of labor was required. Increasing labor from more frequent surveillance of pastures will result in increased cost of production and reduced economic return (Dr. Jeff Lehmkuhler, personal communication.)”

Uniqueness: De-listing the wolf gives ranchers greater ability to protect their herds

Ken Korczak, June 3, 2009, “Ranchers affected by wolf predation: cattle lost, damaged,” Pine and Lake News (news publication based in the Brainerd Lakes Area of Minnesota) <http://www.pineandlakes.com/stories/060309/news_20090603124.shtml>

“As for rancher Danny Wiese, all he wants is some "reasonable control." "No, I'm not saying I want the wolf hunted to extinction," he said. "I just think we need some good way to protect our herds, and our investments. And maybe there are too many wolves now. I think delisting the wolf gives us greater ability to protect our own herds."

Impact: $500,000 in direct, quantifiable handouts for wolf damage

Jeff Lehmkuhler (PhD, Extension Beef Cattle Specialist, Department of Animal Science, University of Wisconsin-Madison. Member of Wisconsin Wolf Science Team), Gregory Palmquist (DVM, Grantsburg Animal Hospital, Member of Wisconsin Wolf Science Team), David Ruid (Assistant District Supervisor, USDA-APHIS-WS), Bob Willging (District Supervisor, USDA-APHIS-WS and Member of the Wisconsin Wolf Science Team), Adrian Wydeven (Mammal Ecologist, Wisconsin DNR, Chair Wisconsin Wolf Science Team) May 2007, “Effects of Wolves and Other Predators on Farms in Wisconsin: Beyond Verified Losses,” Wisconsin Wolf Science Committee of the Wisconsin Department of Natural Resources, <http://www.dnr.state.wi.us/org/land/er/publications/pdfs/wolf_impact.pdf>

“With the growth of the wolf population there have been major increases in depredation on livestock, especially toward the later 1990s and into the 2000s (Treves et al 2002, Ruid et al. 2005, Wydeven et al. 2006). The majority of the livestock losses have been calves with over a half a million dollars paid to livestock, hunters, and pet owners since 1985 (Jurewicz 2007 pers. comm.).”

DA 2) Hunting Harmed

Wolf Reintroduction could be costing Idaho up to $24 million from foregone hunter benefits

Lance Hebdon and Sharon W. Kiefer, February 18, 2009, “Your Inquirary about wolf impact on other predators and economic impact of wolves to Idaho hunting revenue,” Idaho Department of Fish and Game, <http://wolves.files.wordpress.com/2009/02/wlfecon-impct.pdf>

“Another method to evaluate the economic impact of wolves on Idaho is to expand the value of “foregone benefits to hunters” assessed in the 1994 EIS by the current wolf population and adjust the dollar values for inflation. The annual economic values and expenditures associated with reduced hunting opportunity associated with a recovered wolf population of 100 wolves was estimated in the 1994 EIS as between $571,591 and $857,386 in 1992 dollars based on a value of elk hunting at $39.10/day (value for day of elk hunting from 1986 US Forest Service publication). Adjusted for 2008 dollars (using the US Bureau of Labor and Statistics Consumer Price Index Calculator) the values would range from $865,432 to $1,298,148. Assuming a linear relationship of reduced hunting opportunity with the current wolf population, the estimated annual reduction in economic values and expenditures associated with a population of 824 wolves would be between $7 million and $11 million. Using the most recent estimate from Cooper et al. (2002), a day of elk hunting in Idaho is worth $127.40/day for direct expenditures in 2008 dollars. The 1994 EIS estimated that between 14,619 and 21,928 hunter days would be lost due to wolf reintroductions in central Idaho. If the reduction in hunter days was linearly related to wolf populations then the loss of hunter days associated with 824 wolves would be between 120,460 and 180,686 resulting in an estimated value of the foregone benefits to hunters of between $15 million and $24 million.”

DA 3) Harm to Humans

Harassment by predators may cause livestock to become nervous or aggressive harming humans

Jeff Lehmkuhler (PhD, Extension Beef Cattle Specialist, Department of Animal Science, University of Wisconsin-Madison. Member of Wisconsin Wolf Science Team), Gregory Palmquist (DVM, Grantsburg Animal Hospital, Member of Wisconsin Wolf Science Team), David Ruid (Assistant District Supervisor, USDA-APHIS-WS), Bob Willging (District Supervisor, USDA-APHIS-WS and Member of the Wisconsin Wolf Science Team), Adrian Wydeven (Mammal Ecologist, Wisconsin DNR, Chair Wisconsin Wolf Science Team) May 2007, “Effects of Wolves and Other Predators on Farms in Wisconsin: Beyond Verified Losses,” Wisconsin Wolf Science Committee of the Wisconsin Department of Natural Resources, <http://www.dnr.state.wi.us/org/land/er/publications/pdfs/wolf_impact.pdf>

“Harassment by predators may cause livestock to become nervous or aggressive. Aggressive or nervous animals have no place on the farm because they may hurt humans and the other cattle that are around them. Not only are they dangerous but they will also stress other cattle and reduce their performance as well (Ellington, 2002). Grazing animals are a prey species, and fear motivates them to escape from perceived danger (Grandin 1999). Fear based behavior is likely to be the main cause of accidents due to a horse kicking or a cow or steer becoming agitated in a chute; reducing fear improves both welfare and safety (Grandin 1999). Harassment by predators may result in agitated and reduce flight zones of cattle. Agriculture is a dangerous occupation and over a three-year period spanning the years of 2002-2004, cattle were responsible for killing 13 people in Wisconsin (http://www.wiscash.uwex.edu/ Pages/StatisticsAndMiscDocuments/FatalitiesReports/FatalitiesReports.htm).”

Partially consumed Canadian corpse refutes myth that a fatal wolf attack has never occurred in North America

Sarah Gilman, February 6, 2006, “First fatal wolf attack recorded in North America?,” High Country News, <http://www.hcn.org/issues/315/16084>

“Conservationists have long assuaged the public’s fear of wolves by saying that there have been no documented instances of a healthy wild wolf killing a human being in North America. Until now, that is. On Nov. 8, a search party found the partially consumed body of 22-year-old Kenton Joel Carnegie in the woods of northern Saskatchewan. Carnegie had gone for a walk and didn’t return to the surveyors camp where he was working.”

Mayor: Inevitable wolf attack will cost resort town $100 million

Tony Mayer (a founder of Save our Elk and long time supporter of complete wildlife management), May 18, 2009, “The Haily Wolf Rally,” <http://westinstenv.org/wildpeop/2009/05/18/394/> [brackets added]

“Wayne Willich, the Mayor of Sun Valley [Idaho] spoke, and he was quite impassioned and expressed his grave concerns about wolves and the way the wolf population has gotten totally out of hand in the Valley. Willich stood before the crowd pointing his finger at the pro-wolvers and occasionally at Cal Groen and other IDFG personnel in attendance. He said that he came to the valley about 10 years ago from back East and at that time he was decidedly for animal rights, and was opposed to hunting and the killing animals. He since has changed and understands and appreciates the values of most Idahoans. He’s gotten a concealed weapons permit and now enjoys shooting and fishing, along with his many other outdoor pastimes. He says the Valley’s way of life is being threatened “to the core” by these wolves. He believes that this wolf situation has gotten entirely out of hand and something has to be done immediately. He believes the wolves have caused the natural order of things to turn “upside down”. Elk are being chased through the streets of town with wolves killing them within yards of buildings. He doesn’t feel safe in his own home as wolves often wander through his yard and he recently had a mountain line slaughtered by wolves within 100 yards from his home. That just isn’t right. Residents and visitors are afraid. Do they dare venture out from their safe surroundings? He is very concerned that someone is destined get attacked by a wolf as they become increasingly human habituated. This habituation threatens visitors who come to Sun Valley from all over the country for its outdoor recreational opportunities. Visitors come to the resort to mountain bike, hike, ski, fish, etc, and if someone is attacked as he is sure will happen, it’s going to be a major economic blow to the area. Willich believes it will be an immediate $100 million economic hit. He said he had been authorized to speak on behalf of the Sun Valley Company and they too see this urgency and are demanding that something be done. They believe a single wolf attack will cost them millions and will result in visitors going elsewhere. They have too much invested to sit back and to let this happen. Willich said as mayor he is charged with the responsibility to look out for the local resident’s businesses and interests, and for the health and safety of all residents and visitors. He believes all affected parties are prepared to sue in the unfortunate event that someone in the Valley is attacked or killed by a wolf..”

DA 4) Federalism

Link to Federalism: In the delisted world, states and tribes are in control

U.S. Fish & Wildlife Service, April 2009, “Final Rule to Remove the Gray Wolf "Western Great Lakes Distinct Population Segment" from the Federal List of Threatened and Endangered Species,” <http://www.fws.gov/midwest/WOLF/delisting/fnlruledelistapril2009qas.htm> [Brackets added]

“Gray wolves in the Western Great Lakes DPS are no longer protected by the Endangered Species Act. Instead, state and tribal laws dictate the level of gray wolf protection and management. Minnesota, Wisconsin and Michigan developed wolf management plans in preparation for the delisting. Those plans now take effect.”

CON: REGULATION: ENVIRONMENT

SIGNIFICANCE- Cost

Environmental regulations cost the US economy $100 billion annually

Dr. Steven C. Hacket (PhD in Economics from Texas A&M University and professor of Economics at Humboldt State University), 2006, “Environmental and Natural Resource Economics,” 3rd Edition, p. 188 [Google Books]

“Viscusi (1996) reported that of the estimated $500 billion in annualized regulatory costs in the US economy from all forms of regulation about one-half are attributable to paperwork costs. Of the estimated $200 billion in annualized direct regulatory costs to business and elsewhere, about one-half can be attributed to environmental regulations.”

Combined compliance costs of environmental and energy regulations are $150 billion

Edwin S. Rubenstein (President of the economic consulting firm ESR Research, former Director of Research at the Hudson Institute with an MA in public finance from Columbia University) Winter 2007-2008, “Department of Energy and Environmental Protection Agency,” The Social Contract, <http://www.thesocialcontract.com/pdf/eighteen-two/tsc_18_2_rubenstein_energy.pdf>

“Administrative costs associated with all federal energy and environmental regulations are estimated to be $7.5 billion in FY2007.2 That translates to a whopping $150 billion compliance cost imposition on private sector businesses.”

Every $1 spent by federal agencies on regulatory programs = $20 in compliance costs

Edwin S. Rubenstein (President of the economic consulting firm ESR Research, former Director of Research at the Hudson Institute with an MA in public finance from Columbia University) Winter 2007-2008, “Department of Energy and Environmental Protection Agency,” The Social Contract, <http://www.thesocialcontract.com/pdf/eighteen-two/tsc_18_2_rubenstein_energy.pdf>

“Two things must be borne in mind when tallying the financial burden greenhouse gas regulations impose on the private sector. First, every dollar spent by federal agencies on regulatory programs generates an estimated $20 of compliance costs.1 Applying the 20 to 1 ratio to the $912 million EPA spends administering clean air and climate change programs, we arrive at $18 billion in private sector compliance costs.”

Indirect costs of environmental regulations: crowd out, reduce flexibility, reduced future productive output

Dr. Steven C. Hacket (PhD in Economics from Texas A&M University and professor of Economics at Humboldt State University), 2006, “Environmental and Natural Resource Economics,” 3rd Edition, p. 188 [Google Books]

“In addition to direct costs, environmental regulations also impose various kinds of indirect costs, sometimes known as hidden costs. The indirect costs, or secondary costs, of complying with environmental and natural resource regulations occur as a side effect of consequence of direct expenditures in compliance efforts. For example, expenditures for complying with environmental or natural resource regulation may “crowd out” other productive investments, or discourage investment in more efficient production technologies, and reduce operational flexibility, thereby further reducing future productive output, profits, and (in aggregate) economic growth. This value of this reduced future economic output would represent an indirect cost of regulation. Moreover, cost-accounting systems (from which direct compliance cost information is drawn) may fail to properly accumulate significant elements of materials, managerial, and certain overhead costs that should be allocated to compliance with environmental and natural resource regulations.”

$1 increase in the direct costs of environmental regulations results in $10-11 in indirect costs

Dr. Steven C. Hacket (PhD in Economics from Texas A&M University and professor of Economics at Humboldt State University), 2006, “Environmental and Natural Resource Economics,” 3rd Edition, p. 188 [Google Books]

“The study by Joshi, Krishnan, and Lave (2001) provides a good example of indirect cost analysis. They studied the full economic cost of compliance with environmental regulations using plant-level data from fifty-five steel mills, as well as structured interview of corporate-level managers and plant-level accountants. While the US steel industry had experienced a 58 percent decline in production between 1974 and 1995, and industry blamed a portion of this decline on the cost of environmental regulations, direct compliance costs in this industry were estimated to be less than 5 percent of total cost. While some may see this as unwarranted scapegoating of environmental regulations, Joshi et al. found that a $1 increase in the visible (direct) cost of environmental regulations is associated with an increase in total cost (at the margin) of $10-11, of which $9019 are hidden or indirect.”

SIGNIFICANCE- Free Markets

A/T Social Contract: Governments accrete power and free markets better allow people to “revote” on the contract

Dr. Michael S. Rozeff (PhD from the University of Rochester and Professor of Finance at the University at Buffalo), July 17, 2006, “Why Market Failure Fails,” <http://www.lewrockwell.com/rozeff/rozeff79.html>

“There are other problems with a social contract theory. There are many risks associated with the creation of a government, even one that is freely created. They include that the government will accrete power, or start to rule on a set of issues that many people did not agree on. This risk also counts against people unanimously voting for the government, especially if its powers are to be great and hard to control. Furthermore, social contract theory suggests that new votes on the compact are logical as people change and new issues arise. This doesn’t happen or happen very often. Thus, even if a government could be justified in 1865 for a set of people facing a set of policy issues for which they desire government, a continuation of that government or its laws in 1906 or 1946 or 2006 is not justifiable. The contrast with how individuals continually "vote" in markets with their purchases could not be greater.”

“Market failure” implies that an imposed government standard is more important than individual choice

Dr. Michael S. Rozeff (PhD from the University of Rochester and Professor of Finance at the University at Buffalo), July 17, 2006, “Why Market Failure Fails,” <http://www.lewrockwell.com/rozeff/rozeff79.html>

“To make a judgment of market failure requires an external standard of value that is supposed to lie above the standards of value used by the individuals who are freely transacting in the market. That standard is supposedly "efficiency." It is virtually self-evident that it is impossible to justify such an external value over the values of free choices and exchanges made by individuals in a market. If individuals make all the exchanges that they find to be worthwhile, while respecting property rights of others, how can any outside authority justify invoking a higher standard of value that interferes and overrules individual choices? And if no external standard can be justified, then *a fortiori* it is impossible to justify government as a means of *imposing* such an external value. For these basic reasons, market failure can be indicted as a justification of government. The burden of proof strongly falls upon those who propose to impose government measures. It does not fall upon those falsely accused of failing to live up to a concocted standard.”

Free markets have done better than the government at providing environmental sustainability

Dr. David R. Henderson (PhD in economics from UCLA, associate professor of economics at the Naval Postgraduate School in Monterey, California, and former senior economist for energy and health policy with the President’s Council of Economic Advisors from 1982 to 1984) November/December 2008, “Are We Ailing Too Much Deregulation,” CATO Policy Report, <http://www.cato.org/pubs/policy_report/v30n6/cpr30n6-1.html>

“Free markets have done much better than governments at providing safety, fairness, economic security, and environmental sustainability. The reason, for three out of the four, is simple. Economic freedom tends to lead to economic growth, as Pearlstein himself admits in the above quote, and economic growth leads to more safety, more economic security, and more demand for environmental quality.”

SIGNIFICANCE- Spending & Taxes

Every $1 in taxes cost the economy $2.50

Ernst S. Christian & Garry A. Robbings, June 24, 2006 “What Price Government?: The cost of an additional $1 in taxes and spending is much more than $1,” The Heritage Foundation, <http://www.heritage.org/Press/Commentary/ed062406a.cfm>

“In fact, the cost to the private sector of providing the government an additional $1 in tax revenue is about $2.50, and in some circumstances much more. Even academics on the left now acknowledge that taxes adversely affect economic performance and, therefore, when taxes go up, it is not just the private sector’s after-tax income that goes down; its pre-tax income suffers as well.”

Government spending does not put new money into the economy

Brian M. Riedl (MA in public affairs from Princeton and Fellow in Federal Budgetary Affairs at the Roe Institute for Economic Policy Studies), February 13, 2007, “Top 10 Myths About the Bush Tax Cuts,” The Heritage Foundation, <http://www.heritage.org/Press/Commentary/ed021307a.cfm>

*“Pro-growth tax cuts support incentives for productive behavior.* Government spending does not "pump new money into the economy," because government must first tax or borrow that money out of the economy. The right tax cuts help the economy by reducing government's influence on economic decisions and allowing people to respond more to market mechanisms.”

SOLVENCY- General

Command and control regulations don’t address unique environmental situations and place undue information requirement on public officials

Jerry Taylor (Senior fellow at the Cato Institute, adjunct scholar at the Institute for Energy Research, and member of the International Association for Energy Economics) 2009, “44. Environmental Policy,” CATO Handbook for Policy Makers, 7th Edition, Chapter 44, <http://www.cato.org/pubs/handbook/hb111/hb111-44.pdf>

“There is little reason for government to prescribe exactly how firms are to go about complying with pollution standards. Command-and-control regulations, which require regulators to determine exactly which technologies and what manufacturing methods are to be adopted for pollution control in every single facility in the nation, place on public officials informational requirements that are difficult to meet in the real world. This task is complicated by the fact that every air shed and watershed has different carrying capacities for different pollutants.”

Specific Advocacy: Environmental regulations necessary in one region will be unnecessary in another

Ashley Matthews, October 30, 2008, “Scholar: Government Should Revise Approach to Environmental Regulation,” University Virginia Law News, <http://www.law.virginia.edu/html/news/2008_fall/adler.htm>

“We want regulations to be context specific. Air emissions of nitrogen oxides in Washington, D.C. have a different effect and may matter differently than the same amount of emissions in Bozeman, Montana,” [Jonathan] Adler [law professor at the Case Western Reserve University School of Law] said. “In Washington, D.C., those emissions are going to contribute to a smog problem. They’re going to contribute to ozone formation. In Bozeman, Montana, they’re essentially going to be dispersed.”

Environmental law is so complicated, businesses often can’t comply no matter how hard they try

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf> [brackets and ellipses in original]

“David Schoenbrod, a law professor and former litigator for the Natural Resources Defense Council, describes the permitting system this way: Instead of limiting total emissions from each plant, the regulatory system frequently slaps a separate emissions limit on every one of the many smokestacks, pipes and vents coming out of the typical plant. [EPA] regulates not only emissions but sometimes also the techniques used to control them, monitor them, and report them. All this must be pinned down in a permit. . . . If the source needs to change what it is producing or how it operates . . . it will need an amended permit. Beyond all this, a source that violates a requirement can be punished heavily even if no harm was done and even if the violation was neither intentional nor negligent. . . . No major facility can hope to avoid violating such an exacting system of legally binding requirements. . . . More than a few former colleagues of mine at the Natural Resources Defense Council, who now work for corporations trying to comply with environmental law, tell me . . . their clients can’t help but violate the law, no matter how hard they try, because the legal requirements are just too complex and confusing.18”

SOLVENCY- Regulatory Capture

All too often environmental regulations are designed without the public interest in mind

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“A number of analysts have shown how a complex, centrally controlled, bureaucratic, and process-focused regulatory system actually serves the interests of environmental activists, legislators, federal and state regulators, and even many regulated businesses.19 For many readers, this conclusion may seem counterintuitive. As Jonathan Adler, a legal scholar at Case-Western Reserve University, has noted: Most Americans recognize that politics has a lot to do with the pursuit of power, privilege, and special interests; however, there is a general presumption that environmental politics is somehow different. We take for granted that environmental laws are what they seem; that the legislators who enact those laws and the bureaucrats who implement them are earnestly struggling to protect public interests; and that these laws will be enforced in a fair and sensible manner. All too often, however, environmental regulations are designed to serve narrow political and economic interests, not the public interest.20”

Top Justice Department Environmental pick Ignacia Moreno has a history of helping polluters

Mike Papantonio, May 19, 2009, “We Can’t Just Be Obama Cheerleadrs,” The Huffington Post, <http://www.huffingtonpost.com/mike-papantonio/we-cant-be-obama-cheerlea_b_205050.html>

“Last week, we barely saw more than a yawn from Democrats when Obama recommended Ignacia Moreno to take over the position of Assistant Attorney General for the Environmental and National Resources Division at the Department of Justice. It's basically the equivalent of asking Colonel Sanders to guard your chickens. A quick history on this newest Obama pick is that she has always been a lawyer for some of America's most lawless corporate polluters. Not just the little polluters, but the real experts. Moreno represented General Electric in that company's effort to reverse health protection regulations for people who breathe the toxic filth emanating from America's most poisonous superfund sites. She wanted to help super polluters abolish clean-up requirements and allow the residents living near those sites to become ill and die from diseases related to toxins like PCB, arsenic and mercury. When Obama tapped Moreno for this new job, he knew that Moreno also went to court on behalf of Mexican factory tuna fisherman who were killing Pacific dolphin by the thousands so they could catch more tuna.”

Taking regulatory capture out of the realm of public debate = ineffective agencies (As Bush Administration proves)

Thomas Frank, June 24, 2009, “Obama and ‘Regulatory Capture’: Its Time to Take the Qualilty of our Watchdogs seriously,” The Wall Street Journal, <http://online.wsj.com/article/SB124580461065744913.html#printMode> [brackets added]

“The George W. Bush administration elevated this strategy to a snickering, sarcastic art form. It gave us a Food and Drug Administration that sometimes looked as though it was taking orders from Big Pharma, an Environmental Protection Agency that could never rouse itself from the recliner, [and] an energy policy that might well have been dictated by Enron, and a Consumer Product Safety Commission that moved like a rusty wind-up toy. And it created a situation where banking regulators posed for pictures with banking lobbyists while putting a chainsaw to a pile of regulations. Smiles all around. Let the fellows at IndyMac do whatever they want. Misgovernment of this kind is not a partisan phenomenon, of course. Democrats have been guilty of it as well as Republicans. Conservatives have written about it as well as liberals. The most famous essay on industry's power over the regulatory state was penned by George Stigler, a Nobel Prize-winning, Chicago-school economist. Yet today we talk around this problem, with its nose-on-your-face obviousness, as though it didn't exist. It's not until page 29 of the Obama administration's densely worded white paper that you find a reference to "regulatory capture," and then it is buried in a list of items to be considered by a future Treasury working group. Maybe the administration downplays bad or bought regulators because it believes organizational tweaking can solve the problem. If the new missions of the regulatory agencies are defined clearly and their operations made transparent, it will limit the ability of some future regulator to mess things up. But the administration must go further. Calling this infernal species of misgovernment by its true name would allow the president both to vindicate the regulatory state and address the problems of recent years. After all, the Bush team was only able to install the dreadful regulators it did because the governance of federal agencies was rarely a topic of public debate in those days.”

DISADVANTAGE: ENVIRONMENTAL CONSCIOUS UNDERMINED

Link: Government regulation causes consumers to view high environmental morale as superfluous

Dr. Bruno S. Frey (PhD and Professor of Economics at the University of Zurich and Research Director of the Center for Research in Economics) and Dr. Alois Stutzer (PhD in Economics from the University of Zurich), “17. Environmental Moral and Motivation,” The Cambridge Handbook of Psychology and Economic Behavior, edited by Alan Lewis, 2008, p. 416[Google Books]

“When government intervenes via regulations, it often prescribes in great detail a particular behavior, and threatens punishment. This shifts the locus of control away from the individuals. Consumers’ self-determination is reduced and they fell that to exercise high environmental morale is superfluous.”

Brink: People follow their environmental conscious as long as the costs are not too high

Dr. Bruno S. Frey (PhD and Professor of Economics at the University of Zurich and Research Director of the Center for Research in Economics) and Dr. Alois Stutzer (PhD in Economics from the University of Zurich), “17. Environmental Moral and Motivation,” The Cambridge Handbook of Psychology and Economic Behavior, edited by Alan Lewis, 2008, p. 416[Google Books]

“There exists abundant evidence that people are prepared to follow their environmental conscience provided the cost of doing so is not too high (particularly in low-cost situations, see Kliemt 1986, Kirchgassner 1992, Diekmann and Preisendorfer 2003). Examples are the separation of types of refuse, non-littering in public places, and the boycott of firms which damage the environment, such as choosing a rival petrol station over Shell in the case of the Brent Spar incident (see Thogersen 1994 for many further examples).”

Uniqueness: Along with government and business, individuals are of great importance in preserving the environment

Dr. Bruno S. Frey (PhD and Professor of Economics at the University of Zurich and Research Director of the Center for Research in Economics) and Dr. Alois Stutzer (PhD in Economics from the University of Zurich), “17. Environmental Moral and Motivation,” The Cambridge Handbook of Psychology and Economic Behavior, edited by Alan Lewis, 2008, p. 416[Google Books]

“Individuals as consumers are of great importance for the preservation of the natural environment (see Olander and Thogersen 1995). Firms and other private organizations as well as the government sector, also play a major role in the protection and preservation of the environment.”

Impact: Complex, abstract, and opaque regulations will not offset environmental losses created by declines in environmental morale

Dr. Bruno S. Frey (PhD and Professor of Economics at the University of Zurich and Research Director of the Center for Research in Economics) and Dr. Alois Stutzer (PhD in Economics from the University of Zurich), “17. Environmental Moral and Motivation,” The Cambridge Handbook of Psychology and Economic Behavior, edited by Alan Lewis, 2008, p. 417[Google Books]

“A large number of complex, abstract and opaque regulations, on the other hand, are unlikely to improve the environment as environmental morale will be strongly crowded out while threatened punishments are easier to evade.”

CON: SOLAR ENERGY

By Alexandra Hebdon

INHERENCY

A. Private sector

The investors that fueled the IT revolution are shifting their focus into clean tech like solar

Peter Hebert ( graduated cum laude from Syracuse University's Newhouse School and Co-Founder and Managing Partner of Lux Capital, a research-driven investment firm), August 22, 2007, "Lux Executive Summit Expoes Opportunities and Threats in Science-Driven Innovation,” Lux Research, <http://www.luxresearchinc.com/press/RELEASE_LES3_2007.pdf>

In the past 30 years, a wave of information technology innovation created trillions of dollars in economic value and altered the structure of business and society. Now, corporations and financial leaders are looking to the physical sciences for the next wave of transformational technologies – and investing heavily in clean technology, nanotechnology, and post-silicon electronics. Business, financial, and scientific leaders will gather to discuss these trends – and network with corporations and start-ups on the cutting edge at the third annual Lux Executive Summit: Connecting Business with Science for Innovation, to be held on October 15-16 in Cambridge, Massachusetts. “The signs of the science-driven technology wave are all around us,” said Lux Research President Matthew M. Nordan. “Corporations like IBM, best-known for services and software, are shifting R&D resources to solar energy and water purification.”

$1.5 billion annually going to clean technology with solar and biofuels leading

Daniel McGinn (national correspondent for Newsweek who helps to oversee Newsweek's partnership in the Kaplan-Newsweek MBA program; graduated magna cum laude from Boston College and holds an MBA from Auburn University), October 8, 2007, "The Power of the Sun", Newsweek, <http://www.newsweek.com/id/41912/page/1>

The focus on all things green may be getting a little ahead of itself. Between 2005 and 2006, venture-capital investments in the clean-tech sector jumped from $623 million to $1.5 billion, with solar and biofuel garnering the biggest infusions, according to analysts at Lux Research. That's led to talk of an alt-energy bubble. "From the perspective of investors and entrepreneurs, this is the new Internet," says Lux Research president Matthew Nordan. Even employees at alt-energy firms acknowledge that renewable energy has suffered false starts in the past. Still, even skeptics suggest that for young workers charting a career path, the industry's allure is hard to beat. "It's virtually impossible to beat the long-term trends in clean tech," says Nordan.

Solar technology investment and development are exploding worldwide

Lux Research (leading emerging technology researcch firm that provides strategic advance and on-going intelligence about emerging technologies that leaders in business, finance, and government depend on to help them make informed decisions), July 23, 2007, "LUX RESEARCH EXPANDS WITH NEW SOLAR INTELLIGENCY SERVICE", <http://www.luxresearchinc.com/press/RELEASE_LRSI.pdf>

Solar technology investment and deployment is exploding worldwide: Solar shipments in the U.S. alone grew by 35% in 2006 to over 180 MW; venture capital skyrocketed 50% to $421 million; and over 500 companies worldwide operate in the field ranging from raw silicon manufacturers to cell developers to solar installers. In this environment, executives and investors need primary research and insider knowledge to capitalize on rapidly-changing technologies – needs met by the new LR Solar Intelligence service from leading emerging technology research firm Lux Research.

B. Federal Government

Tax credits already available for solar (up to 30% of expenditures)

U.S. Department of Energy Energy Efficiency and Renewable Energy Database of State Incentives for Renewables & Efficiency (DSIRE), last DSIRE Review: June 10, 2009, "Business Energy Investment Tax Credit (ITC)", Federal Incentives/Policies for Renewables & Efficiency, <http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US02F&State=Federal&currentpageid=1>

The federal business energy investment tax credit available under 26 USC § 48 was expanded significantly by the Energy Improvement and Extension Act of 2008 (H.R. 1424), enacted in October 2008. This law extended the duration -- by eight years -- of the existing credits for solar energy, fuel cells and microturbines; increased the credit amount for fuel cells; established new credits for small wind-energy systems, geothermal heat pumps, and combined heat and power (CHP) systems; extended eligibility for the credits to utilities; and allowed taxpayers to take the credit against the alternative minimum tax (AMT), subject to certain limitations. The credit was further expanded by The American Recovery and Reinvestment Act of 2009, enacted in February 2009. In general, credits are available for eligible systems placed in service on or before December 31, 2016:\*

Solar. The credit is equal to 30% of expenditures, with no maximum credit. Eligible solar energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. Passive solar systems and solar pool-heating systems are not eligible. (Note that the Solar Energy Industries Association has published a four-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.)

SOLVENCY

Solar dependent on the whim of the weather and less dependable than carbon fuel sources

Elsa Wenzel (M.S. degree in journalism from Medill), May 9, 2008, "Barriers to solar energy's blockbuster promise", CNet News, <http://news.cnet.com/8301-11128_3-9939715-54.html>

No matter how renewables improve in efficiency and price, [Roy] Kuga [Vice President] of P[acific] G[as] & E[electricity] said he foresees a continued reliance on the grid, especially for peak demand. Renewables make up less than 3 percent of U.S. energy, according to the Department of Energy. They can be less reliable than tried-and-true yet carbon-intensive sources like coal. Both solar and wind depend upon the whims of weather.

$1.5 to $2.0 billion in R&D needed to make solar cost competitive

U.S. Department of Energy (U.S. DOE) Solar Energy Technologies Program, February 2007, Report to Congress on "Assessment of Potential Impact of Concentrating Solar Power for Electricity Generation", (EPACT 2005 - Section 934(c)), DOE/GO-102007-2400, <http://www.nrel.gov/docs/fy07osti/41233.pdf> [Brackets added]

For cost-competitive [concentrating solar plants] CSP, both R&D and deployment are required:

• Projections by the S&L study indicate that, with continued R&D and incentives that encourage deployment, CSP costs could become competitive with the costs of conventional natural gas-fired power plants over the next ten years.

• DOE’s survey of the CSP industry indicated such incentives could range between $1.5 and $2.0 billion. This cost estimate does not account for utility pass-through of any increased costs to utility customers (i.e. ratepayers).

Federal policymakers must carefully weigh the potential benefits of CSP against the significant cost to taxpayers in terms of industry subsidies and the cost to ratepayers in those states where CSP would initially provide electricity at costs higher than conventionally produced electricity.

The silicon shortage is a threat to the growth of the solar industry

Tom Abate, September 4, 2006, "Chip material shortage spooks Silcon Valley: Rare substance vital to 2 booming sectors, making prices rise", The San Francisco Chronicle, <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/09/04/MNGIEKV0CS1.DTL>

Silicon Valley has weathered business cycles and foreign competition, but in recent months, a cloud has appeared on its horizon -- a shortage of the highly purified form of silicon essential to making most computer chips and solar cells. Produced by a handful of chemical plants around the world, this substance, technically known as "polysilicon," is made by putting pulverized quartz through some extraordinary refining processes to create one of the purest materials ever known. Semiconductors are based on polysilicon. So are most solar cells. As the larger and older industry, semiconductor firms have traditionally consumed most of this rare material -- leaving solar cell makers to feed off the scraps. But demand for solar cells has soared thanks in part to government stimuli such as California's "million solar roofs" initiative and the new greenhouse gas bill. Solar's growing appetite for polysilicon has pushed up prices and constricted supplies of a substance that can only be made in complex and costly plants. "In 2003, polysilicon was going for $32 a kilogram (about 2.2 pounds). Now it's more like $75 to $80," said Richard Winegarner, whose Healdsburg consulting firm, Sage Concepts, tracks this rare product. Yet even at those prices, polysilicon is getting tough to find. "You have solar procurement people traveling around the world with suitcases full of cash," Winegarner said. The shortage has already cooled the growth of solar cell production from 67 percent in 2004, to roughly 30 percent in 2005, to a projected 10 percent in 2006, according to Piper Jaffray analyst Jesse Pichel, one of the first market watchers to sound the alarm. "Solar industry growth is choked," Pichel wrote in July. So far, most chipmakers appear relatively unaffected by this polysilicon feeding frenzy, industry officials say, partly because they've been buying the stuff longer. "We have long-term price agreements, and we're comfortable with our supply,'' said Intel Corp. spokesman Chuck Mulloy. "However, we are watching the polysilicon market very carefully for the long term." But for solar cell makers, the shortage of purified silicon is an immediate threat that has them scrambling for product -- and answers. As Thomas Werner, chief executive of San Jose's SunPower Corp., asked in feigned exasperation: "How can the second most abundant element (after oxygen) in the Earth's crust be in short supply?"

Metallurgical silicon substitutes have problems

Alex Desbarres (energy and utilities senior analyst and report author for Datamonitor), June 20, 2008, "Solar PV Industry: cutting corners to offset silicone supply limitations?", Datamonitor (a leading provider of online database and analysis services for key industry sectors that works with 500 of the world's leading companies to address complex strategic issues), <http://www.datamonitor.com/store/News/solar_pv_industry_cutting_corners_to_offset_silicone_supply_limitations?productid=3939CC2C-CFE3-4425-92A5-A87D00E5BB00>

Over the past few years, most cell manufacturers have increased their production capacity substantially in order to keep up with demand growth. Silicon supplies are therefore more vital than ever for manufacturers to run their production capacity at full regime. However, persistent silicon supply shortages are restricting such efforts and are driving costs in the opposite direction. This spells danger for manufacturing companies. To warrant the record valuations that they are fetching, they must deliver on high sales forecasts and rapid, sustained growth expectations. Some manufacturers are therefore turning to metallurgical silicon to supplement traditional silicon supplies in order to maximize production capacity and reduce costs. However, the performance of metallurgical silicon is under question, as its impurity levels tend to be higher. This reduces a cell's ability to generate power from the sun which, in turn, can make a solar PV array less economically viable. In most cases, the production cost gains will not offset the reduction in a cell's yield. In this instance, lateral thinking on the part of solar PV cell manufacturers could easily be perceived as 'cutting corners'. Markets will need to be convinced that sales growth has not been achieved at the cost of cell efficiency and quality.

Solar will not be able to replace oil unless plug-in cars are widely available

Jerry Taylor (senior fellow at the Cato Institute and a member of the International Association for Energy Economics), June 12, 2007, "Alternative Energy in the Dock", The Cato Institute, <http://www.cato.org/pubs/articles/taylor-poweringamerica.pdf>

It’s important to note, however, that these alleged “national security externalities” are exclusively related to oil – not to coal, natural gas, or any other sort of fossil fuel because we don’t import those energy sources by any appreciable amount. Accordingly, subsidizing wind, solar, and nuclear power will do little to improve national security because those energy sources do not compete with crude oil and would not displace crude oil. Until plug-in cars are both available and economically attractive to consumers, building 100 new wind, solar, and nuclear power plants won’t reduce oil consumption by very much at all.

Solar cell factories are currently using fossil fuels for manufacturing

Charles Q. Choi (freelance writer with an M.A. from the University of Missouri-Columbia, School of Journalism), February 27, 2008, "Solar Power's Greenhouse Emissions Measured", Live Science, <http://www.livescience.com/environment/080227-solar-power-green.html> [Brackets added]

In fact, most of the toxic emissions from making solar cells come indirectly from fossil fuel-burning power plants, which provide the electricity needed for manufacture. Ironically, solar cell factories will likely need to rely on fossil fuels for power for a while, since solar power is too intermittent to use, [Vasilis] Fthenakis [an environmental engineer at Brookhaven National Laboratory] explained, shutting down as it does when the sun goes down.”

Subsidies for renewable energy don’t work

Jerry Taylor (senior fellow at the Cato Institute and a member of the International Association for Energy Economics), June 12, 2007, "Alternative Energy in the Dock", The Cato Institute, <http://www.cato.org/pubs/articles/taylor-poweringamerica.pdf>

Five decades of lavish nuclear energy subsidies have yet to produce a technology that could compete in the electricity market absent subsidy. Ethanol has been on the federal dole since the late 1970s. Renewable energy has been subsidized to varying degrees over the last three decades yet wind and solar energy still constitute less than 1 percent of the electricity market and likewise wouldn’t exist at all absent government intervention. Herculean efforts to promote “Synfuels” in the 1970s (what we once called “coal-to- liquid” technology) produced nothing but epic economic loss. If the objective of government subsidy is to produce industries that ultimately won’t need government assistance, then we have yet to find a consequential example of energy subsidies that have produced the intended result.

Federal action insufficient: States are needed to clear regulatory hurdles that block solar

JP Ross (policy director for Vote Solar, an organization that advocates for large state-level solar projects: NOTE: even an advocate of solar power growth states that federal action alone is not enough), January 30, 2008, "Developing State Solar Photovoltaic Markets: Riding the Wave to Clean Energy Independence", Center for American Progress <http://www.americanprogress.org/issues/2008/01/solar_report.html>

The federal government has recently initiated programs to increase the use of solar energy across the country. The Energy Policy Act of 2005 created a 30 percent Investment Tax Credit for solar power systems that expires at the end of 2008. The Securing Energy Independence Act of 2007 would extend the credits through the end of 2016, but these measures alone are not sufficient. Most energy policy is set at the state level, so state action is necessary to clear the regulatory hurdles that stand in the way of wide-scale deployment of solar energy and provide incentives to spur development of solar markets.

DISADVANTAGES

A) Cost

Solar is 6 to 7 times more costly than coal or natural gas

Elsa Wenzel (M.S. degree in journalism from Medill; covered green technologies, software and social media for CNET.com and News.com; formerly the Senior Associate Editor at CBS Interactive), May 9, 2008, "Barriers to solar energy's blockbuster promise", CNet News, <http://news.cnet.com/8301-11128_3-9939715-54.html>

Even in California, however, conference attendees spoke of stunted growth in solar. To start, it's expensive. Laws meant to help the spread of solar and protect ecosystems may also hurt the sector, some argued. And financing plans and tax incentives designed to spur installation may bring unintended negative side effects. Solar power is recognized as the most expensive form of energy at around 30 cents per kilowatt hour. By comparison, coal costs about 5 cents and natural gas 4 cents per kilowatt hour.”

Solar power is incredible expensive when compared to conventional power

Jerry Taylor (senior fellow at the Cato Institute and a member of the International Association for Energy Economics), June 12, 2007, "Alternative Energy in the Dock", The Cato Institute, <http://www.cato.org/pubs/articles/taylor-poweringamerica.pdf>

”Let’s look first at the electricity sector. According to a recent analysis by Tufts economist Gilbert Metcalf, the “levelized cost” of building a new conventional coal-fired power plant (that is, the cost associated with building the plant and buying coal over the lifetime of the plant divided by the energy output that one might expect from the facility over its lifetime) works out to 3.53 cents per kilowatt hour (kWh). By means of comparison:

• a new “clean coal” plant costs 3.55 cents per kWh,• a nuclear power plant costs 4.31 cents per kWh,• a biomass-fired power plant costs 5.34 cents per kWh,• a natural gas power plant costs 5.47 cents per kWh,• a wind power plant costs 5.70 cents per kWh,• a solar thermal power plant costs 12.25 cents per kWh, and • a solar photovoltaic power plant costs 22.99 cents per kWh. But that doesn’t tell the whole story. First of all, those cost estimates represent costs under current law, which distort prices via a panoply of subsidies and regulatory interventions. Second, those calculations disregard the costs associated with providing back-uppower for wind and solar powered energy plants, which are necessary to ensure that those plants are producing kilowatts even when the wind isn’t blowing or the sun isn’t shining. A recent study by the Royal Academy of Engineering estimated that including the costs of back-up power raised the price of onshore wind energy production by nearly 50 percent. Third, those calculations ignore the costs associated with building sufficient transmission capacity to ensure that the power harnessed by wind and solar power producing facilities can get to load centers. Given that both of those energy sources are most abundant primarily where people aren’t, those costs are not insubstantial. Given that adding back-up power generation and transmission costs to renewable energy facilities can be difficult, let’s simply adjust the above estimates by stripping out the subsidies and regulatory distortions and leaving taxes aside. If we do that, Prof. Metcalf informs us that conventional coal-fired power plants cost 3.10 cents per kWh to build. By means of comparison:• a new clean coal plant costs 3.53 cents per kWh,• a nuclear power plant costs 4.57 cents per kWh,• a wind power plant costs 4.95 cents per kWh,• a biomass-fired power plant costs 4.96 cents per kWh,• a natural gas power plant costs 5.29 cents per kWh,• a solar thermal power plant costs 13.84 cents per kWh, and• a solar photovoltaic power plant costs 26.64 cents per kWh.These numbers are not sacrosanct. After all, what one thinks about the future interest rates, fuel prices, and other matters that are difficult to forecast will significantly affect these calculations. But since Prof. Metcalf’s estimates on these matters are not particularly controversial within the field, they represent reasonable “best estimates” for analytical purposes.”

Production of solar cells is incredibly expensive

Overflow Magazine (monthly environmental and engineering industry newsletter published by OTEK, an Australian environmental, engineering, and remediation company offering a variety of services, including environmental consulting and remediation and engineered risk solutions), November 2007, "The New Dawn of Solar", Issue 13, originally published in Popular Science, November 2007, <http://www.otek.com.au/downloads/12455_OTEK_Overflow_November_2007.pdf>

Cost has always been one of solar’s biggest problems. Traditional solar cells require silicon, and silicon is an expensive commodity (exacerbated currently by a global silicon shortage). What’s more, says Peter Harrop, chairman of electronics consulting firm IDTechEx, “it has to be put on glass, so it’s heavy, dangerous, expensive to ship and expensive to install because it has to be mounted.” And up to 70 percent of the silicon gets wasted in the manufacturing process. That means even the cheapest solar panels cost about $3 per watt of energy they go on to produce. To compete with coal, that figure has to shrink to just $1 per watt.

Under a typical scenario 14 years is required to reach payback on a home solar power system

Damon Darlin (technology editor for The New York Times; formerly the senior editors at Forbes Magazine, senior editor at Business 2.0, managing editor at U.S. News & World Report, and a reporter for the Wall Street Journal), April 14, 2007, "Financially, Solar Power for the Home Is a Tough Sell", The New York Times, <http://www.nytimes.com/2007/04/14/business/14money.html>

”With a $2,000 federal tax credit and generous rebates from states like New Jersey and California, it has never cost less to install a solar power system. And it still makes no economic sense. You might want photovoltaic solar panels to generate your own electricity out of a belief that you will save the planet. But, as is the case with hybrid vehicles, you certainly should not do it to save money. An online calculator created by solar power advocates and the Department of Energy demonstrates just how hard it is to justify the switch. For instance, a homeowner in New Jersey whose electric bill is an above-average $100 a month could buy a system for about $54,000, it says. After the state rebate of $18,468 and the $2,000 federal tax credit, the system would cost $33,532. And how many years will it take before you see any savings? From 11 to 22 years. The average payback is 14 years, said Polly N. Shaw, a senior regulatory analyst with the California Public Utilities Commission. The calculator provides a lot of other information, but it doesn’t figure in the $1,580 a year your cash outlay would have been making had you left the money in a conservative investment like a government bond. That’s more than enough to cover the monthly electric bill.”

Solar 2 to 4 times higher per kilowatt hours and cost of panels is not dropping much

Damon Darlin (technology editor for The New York Times; formerly the senior editors at Forbes Magazine, senior editor at Business 2.0, managing editor at U.S. News & World Report, and a reporter for the Wall Street Journal), April 14, 2007, "Financially, Solar Power for the Home Is a Tough Sell", The New York Times, <http://www.nytimes.com/2007/04/14/business/14money.html>

“At this stage, you don’t put in photovoltaic panels for economic reasons,” said John Anderson, senior principal at the Rocky Mountain Institute, an energy consultant and research organization in Snowmass, Colo. He said the energy generated by utilities for 10 cents a kilowatt- hour held a distinct advantage over solar power that cost 20 cents to 40 cents a kilowatt-hour. Ron Kenedi, vice president of the solar energy solutions group at Sharp, a major maker of solar panels, said, “The utility rates — that’s who we compete against.” The other variable, the cost of the solar panels, has not been dropping much. An incentive program two years ago in Germany distorted the market and created worldwide shortages of the silicon-based devices. Demand is still ahead of supply, which means prices have not declined.

B) Ecosystem Destruction

Past Proposed Transmission Lines attempted to go through state parks

Associated Press, June 16, 2008, "Huge Calif. solar plant would run transmission lines through state park", Grist.beta (nonprofit organization that has dished out environmental news and commentary with a wry twist since 1999), <http://www.grist.org/article/transmit/>

A proposed solar power plant in Southern California is facing heavy opposition from some environmentalists as the plan also calls for high-voltage transmission lines to run through a popular state park. To move the power generated by 12,000 solar-thermal dishes near El Centro, Calif., to customers in San Diego, power company San Diego Gas & Electric wants to build a $1.5 billion, 150-mile high-voltage transmission line that would cut through the middle of Anza-Borrego Desert State Park. "This transmission line will cross through some of the most scenic areas of San Diego," said David Hogan of the Center for Biological Diversity. "It would just ruin it with giant, metal industrial power lines." The Anza-Borrego section of the line would span 23 miles, with 141 towers at an average height of about 130 feet. Six other transmission-line routes were studied by state and federal regulators, but SDG&E seems set on the Anza-Borrego route. The California Public Utilities Commission may vote on the proposal by the end of the summer.

Solar power plants can use up water and previously untouched wild areas

John G. Edwards (reporter on utilities, banks and investments), June 21, 2008, "Experts air solar grievances at hearing", Las Vegas Review-Journal, <http://www.lvrj.com/business/20625599.html>

Many environmentalists oppose nuclear reactors and coal-fired power plants. Others fear even large-scale solar power projects, a popular source of renewable energy, will damage the environment. Concentrating solar thermal power plants, which focus the heat of the sun to boil liquids and spin generators, can consume large quantities of water and use vast areas of previously untouched wild areas, participants told the Bureau of Land Management at a hearing Wednesday night at the Clarion hotel in Las Vegas. Some solar thermal plants, which use wet cooling, consume the same quantity of water as wet-cooled coal-fired plants, although water consumption can be cut by 90 percent with dry- cooling technology. Government experts also said solar thermal plants typically need five acres for every megawatt of electricity produced. John Hiatt, a representative of the Audubon Society, said he supported solar energy but worries developers will clear a large area only to abandon the project, permanently damaging the environment.

Alternative Energy (including solar) can result in widespread ecological destruction

Bruce M. Pavlik, PhD (PhD in Botony from UC Davis and Professor of Biology at Mill College in Oakland California and Director of the Joseph McInnis Memorial Botanical Garden), February 15, 2009, "Could green kill the desert?", The Los Angeles Times, Environment Section, <http://www.latimes.com/news/science/environment/la-oe-pavlik15-2009feb15,0,6845781.story>

California's desert lands are in some ways a perfect fit with the renewable energy industries necessary to combat climate change. There's sun. There's wind. There's space. But without careful planning and regulation, these "climate solutions" could irrevocably damage the planet they are intended to protect. The biologically rich but arid desert ecosystems are remarkably fragile. Once topsoil and plant life have been disrupted for the placement of solar arrays, wind farms, power plants, transmission lines and CO2 scrubbers, restoration would be cost-prohibitive, if not technically impossible. And widespread desert construction -- even of projects aimed at environmental mitigation -- would devastate the very organisms and ecosystems best able to adjust to a warming world. Nevertheless, there is a public land rush underway. The U.S. Bureau of Land Management is processing more than 180 permit applications from private companies to build solar and wind projects in the California deserts. One such venture, the Ivanpah Solar Electric Generating System, will begin construction this year in a beautiful valley near the California-Nevada border in San Bernardino County. It will occupy 3,400 acres, and that doesn't include the land needed for transmission lines. Most projects are even larger, averaging 8,000 acres, with a few exceeding 20,000 acres. The total public land under consideration for alternative energy production exceeds 1.45 million acres in this state alone. The scale of some proposals borders on fantasy. One Columbia University scientist, Wallace Broecker, has proposed installing 60 million CO2 scrubbers, each a 50-foot-tall tower, throughout the world's deserts -- 17 million of them in the United States -- for the purpose of capturing greenhouse gases. One appeal of locating projects in remote regions is that there isn't as much NIMBYism in those areas, so approvals can be easier to get. But there is another way. Why not install scrubbers in parking garages, skyscrapers, transit tunnels and other existing structures? Existing commercial and residential rooftops, landfills, marginal agricultural lands and mine sites could readily accommodate these green technologies, and we would be creating energy closer to where it is needed. At this point in the evolution of our ecological psychology, we need to acknowledge the true costs of any energy development. When a dam is built, a river is lost. But people who turn on their tap and draw that water rarely think about the river that was destroyed to produce it. Similarly, if we choose to place our "ugly" industrial technologies in the wilderness, there will be less awareness of the damage, less incentive to conserve.”

CON: TOBACCO SMOKE

By Matthew Baker

INHERENCY

Although cigarette smoking has decline, sales of non-cigarette tobacco products have been on the rise

Harvard School of Public Health, June 10, 2008, “Decline in Cigarette Smoking In U.S. Significantly Offset by Increase in Use of Cigars, Snuff, Roll-Your-Own and Other Tobacco Products,” <http://www.hsph.harvard.edu/news/press-releases/2008-releases/decline-in-cigarette-smoking-in-offset-by-use-of-other-tobacco-products.html>

“While trends in cigarette smoking and sales have declined in the U.S. for the past decade, sales of non-cigarette tobacco products have been on the rise. Researchers from the Harvard School of Public Health, led by Professor Gregory N. Connolly, director of the Tobacco Control Research Program at HSPH, and Hillel Alpert, research associate in the program, sought to compare trends in sales of all tobacco products in the U.S. and found that 30% of the recent decline in cigarette sales may be offset by the robust sale of small cigars, snuff and roll-your-own products. Thus, the apparent magnitude of overall decline in tobacco use in the U.S. may be illusory.”

25.9 million men and 20.7 million women in the US are smokers

Harvard School of Public Health, June 10, 2008, “Decline in Cigarette Smoking In U.S. Significantly Offset by Increase in Use of Cigars, Snuff, Roll-Your-Own and Other Tobacco Products,” <http://www.hsph.harvard.edu/news/press-releases/2008-releases/decline-in-cigarette-smoking-in-offset-by-use-of-other-tobacco-products.html>

“An estimated 25.9 million men (23.9 percent) and 20.7 million women (18.1 percent) in the U.S. are smokers, according to the American Heart Association.”

SIGNIFICANCE

Smoking related illnesses account for an estimated 438,000 deaths each year

Harvard School of Public Health, June 10, 2008, “Decline in Cigarette Smoking In U.S. Significantly Offset by Increase in Use of Cigars, Snuff, Roll-Your-Own and Other Tobacco Products,” <http://www.hsph.harvard.edu/news/press-releases/2008-releases/decline-in-cigarette-smoking-in-offset-by-use-of-other-tobacco-products.html>

“According to the National Cancer Institute, in the U.S. smoking-related illnesses account for an estimated 438,000 deaths each year. “

Tobacco is deadly and will kill 1 billion people

Dr. Judith Mackay (MD, WHO Health official, and director of the Asian Consultancy onTobacco Control), Dr. Michael Erikson (MD from the University of Washington School of Medicine and Director of the CDC Office of Smoking and Health), and Dr. Omar Shafey (PhD from Berkeley in Medical Anthropology with a Masters in Public Health), 2006, “The Tobacco Atlas,” The American Cancer Society, 2nd Edition, [www.cancer.org/downloads/AA/TobaccoAtlasFront.pdf](http://www.cancer.org/downloads/AA/TobaccoAtlasFront.pdf)

“Tobacco use, in any form, is deadly. Smoking kills half of all lifetime users and half of those deaths occur between the ages of 30 and 69. If current smoking patterns continue, tobacco will kill about 10 million people every year by 2020 and 70 percent of these deaths will occur in developing nations. Smoking accounts for 12 percent of global adult mortality with more men dying from smoking in developing countries than in industrialized countries. Currently, more men than women die from smoking, but smoking rates are increasing among women in many developing countries. Tobacco also causes death among non-smokers. Maternal smoking during pregnancy is responsible for many foetal deaths and is also a major cause of Sudden Infant Death Syndrome. Exposure to secondhand smoke in the home, workplace, and public areas also kills tens of thousands of non smokers ever year. Infants, children, pregnant women and foetuses are at particularly high risk from secondhand smoke. “One hundred million people died from tobacco use in the 20th century. Unless effective measures are implemented to prevent young people from smoking and to help current users quit, tobacco will kill 1 billion people in the 21st century.”

Second hand smoke clearly leads to premature deaths

Vice Admiral Richard H. Carmona (MD,MPH, and former United States Surgeon General), June 27, 2006, “Remarks at press conference to launch Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General,” <http://www.surgeongeneral.gov/news/speeches/06272006a.html>

“The science is clear: secondhand smoke is not a mere annoyance, but a serious health hazard that causes premature death and disease in children and nonsmoking adults.”

Second hand smoke causes approximately 3,000 lung cancer deaths each year

Vice Admiral Richard H. Carmona (MD,MPH, and former United States Surgeon General), June 27, 2006, “Remarks at press conference to launch Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General,” <http://www.surgeongeneral.gov/news/speeches/06272006a.html>

“The Report confirms that secondhand smoke is a known human carcinogen that causes lung cancer in nonsmoking adults. Nonsmokers who are exposed to secondhand smoke, at home or at work, increase their risk of developing lung cancer by 20 percent to 30 percent. Secondhand smoke causes approximately 3,000 lung cancer deaths among U.S. nonsmokers each year.”

Second hand smoke a cause of sudden infant death syndrome

Vice Admiral Richard H. Carmona (MD,MPH, and former United States Surgeon General), June 27, 2006, “Remarks at press conference to launch Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General,” <http://www.surgeongeneral.gov/news/speeches/06272006a.html>

“In an important new finding, we have determined that secondhand smoke is a cause of sudden infant death syndrome (SIDS). Infants who die from SIDS tend to have higher concentration of nicotine in their lungs and higher levels of cotinine (a biological marker for secondhand smoke exposure) than infants who die from other causes. We have also found that infants who are exposed to secondhand smoke after birth are also at increased risk of dying of SIDS. In addition, babies of nonsmoking women who are exposed to secondhand smoke during pregnancy are at risk for a small reduction in birth weight. Chemicals in secondhand smoke appear to affect the brain in ways that interfere with its regulation of infants’ breathing.”

There is no risk free level of second hand smoke

Vice Admiral Richard H. Carmona (MD,MPH, and former United States Surgeon General), June 27, 2006, “Remarks at press conference to launch Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General,” <http://www.surgeongeneral.gov/news/speeches/06272006a.html>

“We know that secondhand smoke harms people’s health, but many people assume that exposure to secondhand smoke in small doses does not do any significant damage to one’s health. However, science has proven that there is NO risk-free level of exposure to secondhand smoke. Let me say that again: there is no safe level of exposure to secondhand smoke. Breathing secondhand smoke for even a short time can damage cells and set the cancer process in motion. Brief exposure can have immediate harmful effects on blood and blood vessels, potentially increasing the risk of a heart attack. Secondhand smoke exposure can quickly irritate the lungs, or trigger an asthma attack. For some people, these rapid effects can be life-threatening. People who already have heart disease or respiratory conditions are at especially high risk.”

126 million nonsmoking Americans exposed to second hand smoke

Vice Admiral Richard H. Carmona (MD,MPH, and former United States Surgeon General), June 27, 2006, “Remarks at press conference to launch Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General,” <http://www.surgeongeneral.gov/news/speeches/06272006a.html>

“However, while we have made great strides over the years to reduce smoking in America, the success story is not complete. More than 126 million nonsmoking Americans, including both children and adults, are still exposed to secondhand smoke in their homes and workplaces.”

Tobacco use has resulted in excess mortality in the hundreds of thousands

Dr. Robert Repetto (PhD and Professor in the Practice of Economics & Sustainable Development at the Yale University School of Forestry and Environmental Studies), 2006, “Best Practices in International Oversight of Lobbying Practice,” Yale School of Forestry & Environmental Studies

“Tobacco companies have lobbied heavily to defend agricultural support programs for tobacco, to deter increased cigarette taxes and to scuttle tobacco company settlements with state governments. All serve to promote continuation of the tobacco industry in America, despite the fact that tobacco use results in excess mortality of hundreds of thousands of people, excess morbidity and higher health costs.24”

CON: WATER QUALITY

By Nicholas Bruno

INHERENCY

Private wells not regulated

US Environmental Protection Agency, last updated 17 March 2009, “Safe Drinking Water Act (SDWA)”, <http://www.epa.gov/OGWDW/sdwa/basicinformation.html>

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.) For more information see: Law and Statues. SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met.

Clean Water Act is not being enforced adequately

US House Committee on Oversight and Government Reform, 16 December 2008, “Deterioration of the Nation’s Clean Water Act Enforcement Program”, <http://oversight.house.gov/story.asp?ID=2292>

New internal documents obtained by the Committees show that hundreds of Clean Water Act violations have not been pursued with enforcement actions. Dozens of existing enforcement cases have become informal responses, have had civil penalties reduced, and have experienced significant delays. Many violations are not even being detected because of the substantial reduction in investigations. Violations involving oil spills make up nearly half of the Clean Water Act violations that have been detected but are not being addressed.

SIGNIFICANCE

A) Pollution

20% of private domestic wells contain potentially dangerous contaminants

Jessica Robertson (Public Affairs Specialist for the U.S. Geological Survey) and [Leslie DeSimone](mailto:ldesimon@usgs.gov) (USGS scientist), 27 March 2009, “Water Quality of Potential Concern in US Private Wells”, U.S. Department of the Interior, U.S. Geological Survey <http://www.usgs.gov/newsroom/article.asp?ID=2173>

“More than 20 percent of private domestic wells sampled nationwide contain at least one contaminant at levels of potential health concern, according to a study by the U.S. Geological Survey (USGS). About 43 million people - or 15 percent of the Nation's population - use drinking water from private wells, which are not regulated by the Federal Safe Drinking Water Act.”

People with private wells may be unknowingly affected from poor water

Jessica Robertson (Public Affairs Specialist for the U.S. Geological Survey) and [Leslie DeSimone](mailto:ldesimon@usgs.gov) (USGS scientist), 27 March 2009, “Water Quality of Potential Concern in US Private Wells”, U.S. Department of the Interior, U.S. Geological Survey <http://www.usgs.gov/newsroom/article.asp?ID=2173>

"The results of this study are important because they show that a large number of people may be unknowingly affected," said Matt Larsen, USGS Associate Director for Water. "Greater attention to the quality of drinking water from private wells and continued public education are important steps toward the goal of protecting public health."

62% of industrial and municipal facilities discharge more pollution into water more than allowed

Sunny Lewis (editor-in-chief of Environment News Service), 24 March 2006, “Factories, Cities Across USA Exceed Water Pollution Limits”, Environment News Service, <http://www.ens-newswire.com/ens/mar2006/2006-03-24-05.asp>

More than 62 percent of industrial and municipal facilities across the country discharged more pollution into U.S. waterways than their Clean Water Act permits allowed between July 2003 and December 2004, finds a report on compliance with the law released Thursday. "Troubled Waters: An analysis of Clean Water Act compliance," released by by the U.S. Public Interest Research Group (U.S. PIRG), shows that the 10 states with the most exceedances of Clean Water Act permit limits during this time period are Ohio, Texas, New York, Pennsylvania, Louisiana, Tennessee, Indiana, West Virginia, Massachusetts, and Illinois.

Some polluters discharge over 275% of legal limits

Sunny Lewis (editor-in-chief of Environment News Service), 24 March 2006, “Factories, Cities Across USA Exceed Water Pollution Limits”, Environment News Service, <http://www.ens-newswire.com/ens/mar2006/2006-03-24-05.asp>

Using the Freedom of Information Act, U.S. PIRG obtained data on major facilities’ compliance with their National Pollution Discharge Elimination System (NPDES) permits between July 1, 2003 and December 31, 2004. U.S. PIRG researchers found that polluters repeatedly exceeded their permit limits, often by egregious amounts. The average facility discharged pollution in excess of its permit limit by more than 275 percent, or almost four times the legal limit.

45% of waterways in the US do not meet water quality standards

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

EPA has determined that 45 percent of waterways across the country do not meet water quality standards, and more than half of assessed river miles were designated impaired in 19 states.

Poor US water infrastructure spills out 1.26 trillion gallons of untreated sewage

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

Old infrastructure is often unable to handle increased capacity demands, breaking down and releasing untreated sewage. Combined sewer overflows from failing and insufficient infrastructure wreak environmental havoc on a massive scale: between 23,000 and 75,000 occur each year, spilling out 1.26 trillion gallons of untreated sewage and incurring $50.6 billion in cleanup costs.

57% of major facilities exceed Clean Water Act permits in 2005

U.S. PIRG Education Fund (independent voice that works on behalf of the public interest sister organization of US PIRG – a federation of state Public Interest Research Groups), October 2007, “Troubled Waters: An analysis of 2005 Clean Water Act compliance”, <http://static.uspirg.org/reports.asp?id2=35946>

**Thousands of facilities continue to exceed their Clean Water Act permits.** Nationally, more than 3600 major facilities (57%) exceeded their Clean Water Act permit limits at least once between January 1, 2005 and December 31, 2005. The 10 U.S. states with the highest percentage of major facilities exceeding their Clean Water Act permit limits at least once are Maine, Massachusetts, Rhode Island, New Hampshire, Ohio, Connecticut, New York, North Dakota, California, and West Virginia. The 10 U.S. counties with the most facilities exceeding their Clean Water Act permits at least once in this period are Harris County, Texas; Los Angeles County, California; Worcester County, Massachusetts; New Haven County, Connecticut; Calcasieu Parish, Louisiana; Allegheny County, Pennsylvania; Hartford County, Connecticut; Will County, Illinois; Wayne County, Michigan; and Erie County, New York. **These facilities often exceed their permits more than once and for more than one pollutant.** The 3600 major facilities exceeding their permits in the time period studied reported more than 24,400 exceedances of their Clean Water Act permit limits. This means that many facilities exceeded their permits more than once and for more than one pollutant. Facilities are designated as major based on an EPA scoring system that considers a combination of factors, including toxic a pollutant potential, streamflow volume, public health impacts, and proximity to coastal waters. The 10 U.S. states with the most exceedances of Clean Water Act permit limits between January 1, 2005 and December 31, 2005 are Ohio, Pennsylvania, New York, Texas, California, Massachusetts, Louisiana, Tennessee, Alabama, and Florida. Nationally, 628 major facilities exceeded their Clean Water Act permit limits for at least half of the monthly reporting periods between January 1, 2005 and December 31, 2005. **These facilities often exceed their permits egregiously.** Major facilities exceeding their Clean Water Act permits, on average, exceeded their permit limits by 263%, or nearly four times the allowed amount.

Future US access to clean water far from secure

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

When a resource is as basic as clean water, it can be easy to take for granted. Flowing in and out of our homes and businesses through underground pipes, clean water for sanitation keeps our communities livable, our lifestyles possible, and our industries viable. But while steady access to clean water is a cornerstone of modern society, its future is far from secure. As recent tragedies have shown, the United States’ national infrastructure is experiencing the consequences of decades of neglect. Our water systems, many of which are more than 100 years old, are no exception.

B) Health

Poor water results in millions more illnesses every year

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

Although direct outbreaks and illnesses are the most immediate consequences of faulty infrastructure, poorly performing clean water systems have a widespread negative impact. Sewage-contaminated water sickens swimmers, taints drinking water, and poisons seafood, which is then eaten by humans, leading to more illnesses – as many as two million per year. When systems break down, the resulting sewage overflows poison our environment, turning our beaches and waterways into toxic waste dumps.

Despite regulation, potential for outbreak still exists

Committee on Public Water Supply Distribution Systems: Assessing and Reducing Risks, National Research Council, 2006, “Executive Summary: Drinking Water Distribution Systems: Assessing and Reducing Risks”, The National Academies Press,<http://www.nap.edu/nap-cgi/report.cgi?record_id=11728&type=pdfxsum>

Despite the existence of these rules, programs, and codes, current regulatory programs have not removed the potential for outbreaks attributable to distribution system-related factors. Part of this can be attributed to the fact that existing federal regulations are intended to address only certain aspects of distribution system water quality and not the integrity of the distribution system in its totality. Most contaminants that have the potential to degrade distribution system water quality are not monitored for compliance purposes, or the sampling requirements are too sparse and infrequent to detect contamination events.

C) Economy

Beach closings are occurring because of elevated amounts of bacteria

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

Overall beach closing and advisory days leaped by 28 percent from 2005 to 2006. NRDC found that the vast majority of 2006’s 25,000 closing and advisory days were due to elevated counts of bacteria found in sewage.

Pollution harms local tourism economies

Food & Water Watch (nonprofit consumer organization), October 2007, “Clear Waters Why America Needs a Clean Water Trust Fund”,<http://www.fwwatch.org/water/trust-fund/clearwaters/clearwaters_SEPT07_WEB.pdf>

When sewage spills onto beaches, local communities must issue advisories and close them to swimmers, boaters, and fishermen. These closures do more than keep overstressed Americans from relaxing and having fun; they rob coastal and lakefront communities of the crucial tourism dollars that form the backbone of their local economies. Coastal areas are by far the United States’ most lucrative tourist attractions. Tourism produced 1.67 million jobs and $13.8 billion in wages in 2000, and $117 billion was contributed to the national economy by ocean activities.

PRO: ACID RAIN

By Matthew Baker

INHERENCY

Acid rain dropped below government cap in the Adirondacks for the first time ever

Sara Foss, February 22, 2009, “Park recovering as acid rain levels show declines,” Daily Gazette (A New York Newspaper), <http://www.adirondackcouncil.org/Park%20recovering%20as%20acid%20rain%20levels%20show%20decline.pdf>

“Pollution in the Adirondacks continues to decline, the result of government efforts to reduce harmful emissions from power plants. According to a new report issued by the U.S. Environmental Protection Agency, in 2007, national acid rain levels dropped below the government cap for the first time in history. “Inside Adirondack Park, we’re seeing evidence of chemical recovery,” said John Sheehan, a spokesman for the Adirondack Council. “The chemistry of the water is becoming more hospitable to natural life. We’re seeing a larger population of fish in places like Big Moose Lake” in Eagle Bay, in the central Adirondacks. The EPA attributed the steep cuts in emissions to two regulations: the Clean Air Act Amendments of 1990, which mandated a 50 percent cut in sulfur dioxide emissions, and the Clean Air Interstate Rule, which power plant companies are already starting to comply with, even though it doesn’t go into effect until 2010. Many power plants have installed the new scrubbers mandated by the Clean Air Interstate Rule, which accounted for the big decrease in emissions between 2006 and 2007.”

Since 1990 acid rain emissions have declined 36%

Gregg Easterbrook, June 2006, “Case Closed: The Debate about Global Warming is Over,” The Brookings Institution, <http://www.brookings.edu/views/papers/easterbrook/20060517.pdf>

“Since 1990, acid rain emissions have declined by 36 percent, even as the amount of coal burned for power has risen. When the permit-trading program was enacted, reducing acid rain was expected to cost about $2,000 a ton (in current dollars). Instead most permits of the 1990s sold for about $200 a ton, meaning acid rain control cost only about 10 percent as much as predicted. The reason the phrase “acid rain” has largely vanished from American politics is that acid rain is no longer a problem in the United States—and the Appalachian forests are currently in their best health since Europeans first laid eyes on them.”

Acid rain down 40% since 1990

Environmental News Service, November 19, 2007, “Acid Rain Emissions Are Down, Monitoring Still Needed,” <http://www.ens-newswire.com/ens/nov2007/2007-11-19-094.asp>

“For the first time, emissions of a key component of acid rain and smog from power plants fell below 10 million tons in a year, the U.S. Environmental Protection Agency reports. In 2006, annual sulfur dioxide, SO2, emissions from acid rain program electric power generation sources fell sharply. Sources emitted 9.4 million tons of SO2 last year, below the emission cap of 9.5 million tons. Reductions amounted to 830,000 tons from 2005 levels and an overall reduction of 40 percent from 1990 levels, according to the EPA. In the United States, the electric power industry accounts for 70 percent of total annual sulfur dioxide emissions. In addition, emissions of nitrogen oxides, NOx, are down by over three million tons since 1990 and had decreased to nearly half the level anticipated without the Acid Rain Program.”

Sulfate deposition decreased 35 in Northeast and 33 percent in the Midwest since 1989

EPA, January 2009, “Acid Rain Program 2007 Progress Report,” <http://www.epa.gov/airmarkt/progress/arp07.html>

“Comparisons between the 1989-1991 and 2005-2007 observation periods show wet sulfate deposition decreased 35 percent in the Northeast and 33 percent in the Midwest. Wet nitrogen deposition also decreased between these periods with a decrease in the Northeast by 21 percent and in the Midwest by 7 percent. These reductions in sulfur and nitrogen deposition have resulted in positive changes in environmental indicators, including improved water quality in lakes and streams.”

Legislation is allowing Adirondack lakes to recoverying suggesting hope of future revitalization

Shannon Brescher Shea (graduate of Cornell University’s Natural Resources / Communication program), April 2008, “Acid Rain, Rain Go Away,” The Conservationist, <http://www.dec.ny.gov/pubs/43763.html>

“Implementation of air pollution laws have lightened the burden on Adirondack lakes, which have started to show signs of recovery. Over the last 20 years, both the lakes and atmosphere have become far less acidic. The areas that were sensitive to acidity are resurging, suggesting that the whole region may undergo revitalization. The lakes are gaining back their ability to neutralize acid and the toxic aluminum is reverting back to forms which are less dangerous.”

Despite acid rain’s past decimation, future is optimistic for New York’s lakes and forests

Shannon Brescher Shea (graduate of Cornell University’s Natural Resources / Communication program), April 2008, “Acid Rain, Rain Go Away,” The Conservationist, <http://www.dec.ny.gov/pubs/43763.html>

“Despite acid rain's past decimation of some of New York's forests and lakes, the data on declining pollution provides an optimistic outlook. For anyone who loves the Adirondack Park, these numbers should be both a cause for celebration and a motivation to continue our protection of this unique region.”

Acid rain trend is shifting for the Adirondacks

Shannon Brescher Shea (graduate of Cornell University’s Natural Resources / Communication program), April 2008, “Acid Rain, Rain Go Away,” The Conservationist, <http://www.dec.ny.gov/pubs/43763.html>

“Writers and artists have long celebrated the vibrant beauty of the Adirondacks. Its majestic mountains, stately forests, and pristine waters have been the subject of countless books, poems and paintings. In the recent past, however, acid precipitation has dimmed that radiance, leading to damaged forests and depleted lakes. Thankfully, this trend is shifting. Both the federal government and New York State's actions have resulted in a decrease in the pollutants that cause acid rain. Consequently, its drastic impact on the region is now diminishing, and the Adirondacks' ecosystems are showing promising signs of recovery.”

SOLVENCY

Terrestrial recovery from acidic deposition may take decades

Dr. Charles T. Driscoll (PhD in Environmental Engineering from Cornell University), Kathy Fallon Lambert (Masters of Forest Science from Yale and founder of ecological consulting company), and Limin Chen (Wate Resources and Environmental Engineer at Systech Engineering), 2006, “Acidic Deposition: Sources and Ecological Effects” Acid in the Environment, Eds. Dr. Gerald Visgilo and Diana Whilelaw. [Google Books]

“Terrestrial recovery is even more difficult to project than aquatic recovery. Give the life span of trees and the delay in the response of soil to decreases in acidic deposition, it is reasonable to suggest that decades will be required for affected trees on sensitive sites to recover once chemical conditions are restored.”

IMPACT TURNS

Acid rain improves forest productivity

Michigan Tech News, October 20, 2008, “Climate Change, Acid Rain Could be Good for Forests,” <http://www.admin.mtu.edu/urel/news/media_relations/767/>

“After more than 20 years of research in the northern hardwood forests of Michigan, scientists at Michigan Technological University's School of Forest Resources and Environmental Science have reached a surprising conclusion: Moderate increases in temperature and nitrogen from atmospheric pollution actually improve forest productivity. Andrew Burton, an associate professor at Michigan Tech and head of the National Institute for Climatic Change Research's Midwestern Regional Center, is part of a team of researchers that has been monitoring and measuring the temperature, moisture levels and nitrogen deposited by acid rain or varying levels of experimental nitrogen at four forest sites ranging from northwestern to southern Michigan since 1987. He's found that the trees grow faster at higher temperatures and store more carbon at greater concentrations of nitrogen, a chemical constituent of acid rain, providing there is sufficient moisture.”

Acid rain increases rice yields

The New Scientist, August 7, 2008, “China’s smogs have surprised climate benefits,” <http://www.newscientist.com/article/mg19926682.800-chinas-smogs-have-surprise-climate-benefit.html>

“In fact, says [Dr. Vincent] Gauci [researcher from the Open University in Milton Keynes], "the acid rain seems to increase rice yields". That may be how the unexpected methane suppression operates. By boosting grain production, the sulphur helps plants retain organic matter that once disappeared from their roots to trigger the manufacture of methane in the flooded fields.”

Acid rain reduces greenhouse gas emissions from rice paddies and wetlands

Science Daily, August 7, 2008, “Acid Rain Reduces Methane Emissions From Rice Paddies,” <http://www.sciencedaily.com/releases/2008/08/080806154802.htm>

“Acid rain from atmospheric pollution can reduce methane emissions from rice paddies by up to 24 per cent according to research led by Dr Vincent Gauci of The Open University. This is potentially a beneficial side effect of the high pollution levels China - the world’s largest producer of rice - is often associated with. Methane is 21 times more powerful as a greenhouse gas than carbon dioxide. “The reduction in pollution happens during a stage of the lifecycle when the rice plant is producing grain. This period is normally associated with around half of all methane emissions from rice and we found that simulated acid rain pollution reduced this emission by 24 per cent,” said Dr Gauci. The project - funded by the Natural Environment Research Council - used rice soils and grain from Portuguese paddies. Soils from these paddies have been exposed to very little acid rain and are similar to Asian rice soils before they became polluted. To test the effects of acid rain, the researchers added frequent small doses of sulphate, which simulate acid rain experienced in polluted areas of China. “We had similar results when exposing natural wetlands to simulated acid rain but this could be more important since natural wetlands are mostly located far from major pollution sources, whereas for rice agriculture, the methane source and the largest source of acid rain are both in the same region - Asia,” added Dr Gauci.”

PRO: AIR POLLUTION

By Matthew Baker

INHERENCY

Average drop in air pollution in 51 metro areas has added 5 months to people lives

CNN News, January 21, 2009, “Drop in US air pollution linked to longer lifespans,” <http://edition.cnn.com/2009/HEALTH/01/21/healthmag.airpollution.lifespan/index.html>

“Americans are living longer because the air they breathe is getting cleaner, a new study suggests. The average drop in pollution seen across 51 metropolitan areas between 1980 and 2000 appears to have added nearly five more months to people's lives, according to a study published Wednesday in The New England Journal of Medicine.”

With Ozone, PM, Nox, and CO levels down, air quality in America’s cities air quality is the best it has been in 100 years

Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“Air quality in America's cities is better than it has been in more than a century, with levels of air pollutants declining substantially from 1980 to 2005. As the figure shows:

* Peak 8-hour ozone levels declined 20 percent, and days per year exceeding the 8-hour ozone standard fell 79 percent.
* Fine particulate matter declined 40 percent.
* Nitrogen dioxide levels decreased 37 percent and sulfur dioxide dropped 63 percent.
* Carbon monoxide concentrations fell 74 percent and lead dropped 96 percent.”

US air quality has improved—pollution is being addresse

Drew Thornley (an independent policy analyst focused primarily on energy, environmental, and natural resources; professor of business law at Concordia University; B.A. in Economics, J.D. from Harvard Law School), Manhattan Institute Center for Energy Policy and the Environment, April 2009, “Energy and the Environment: Myths and Facts, Second Edition,” Myth 5, <http://www.manhattan-institute.org/pdf/EnergyMyth_2ndEdition.pdf>

Statistics reveal, however, that the latter are correct. Data from the Environmental Protection Agency also confirm that U.S. air quality has improved since 1970. The six commonly found, or “criteria” air pollutants—PM2.5 particulate matter, sulfur dioxide, nitrogen oxide, volatile organic compounds, carbon monoxide, and lead—have decreased by more than 50 percent; air toxins from large industrial sources, such as chemical plants, petroleum refineries, and paper mills have been reduced by nearly 70 percent; new cars are more than 90 percent cleaner in terms of their emissions; and production of most ozone-depleting chemicals has ceased. Meanwhile, gross domestic product has tripled, energy consumption has increased 50 percent, and motor vehicle use has increased by almost 200 percent.

America’s cities have cleaner air now than they have in a decade

Drew Thornley (an independent policy analyst focused primarily on energy, environmental, and natural resources; professor of business law at Concordia University; B.A. in Economics, J.D. from Harvard Law School), Manhattan Institute Center for Energy Policy and the Environment, April 2009, “Energy and the Environment: Myths and Facts, Second Edition,” Myth 5, <http://www.manhattan-institute.org/pdf/EnergyMyth_2ndEdition.pdf>

According to air-quality expert Joel Schwartz, average levels of air pollution fell between 20 percent and 96 percent between 1980 and 2005, depending on the pollutant. Schwartz notes that Americans are driving, producing, and using more energy than ever before, yet “air quality in America’s cities is better than it has been in more than a century—despite the fact that the U.S. population has almost quadrupled and real GDP has risen by a factor of nearly thirty.”

SIGNIFICANCE

Only 20% of Americans live in an area that violates federal air pollution standards

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“In fact, slightly more than 20 percent of all Americans, rather than more than half, live in areas that actually violate federal standards for ozone, PM2.5, or both. For each pollutant individually, the fraction is lower still— about 11 percent for ozone and 14 percent for PM2.5. And because average pollution levels have been dropping, even areas that still violate a federal standard do so by smaller margins than in the past.”

The air pollution-mortality hypothesis is based on small statistical correlations

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“The most serious claim about air pollution is that it prematurely kills tens of thousands of Americans each year. The claim is based on small statistical correlations between daily pollution levels and daily deaths. But correlation doesn’t necessarily mean causation, as recent embarrassing medical reversals have shown.”

Air pollution doesn’t pose a risk: 3 reasons why air pollution-mortality claims deserve reconsideration

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“The air pollution–mortality claim deserves even greater skepticism. First, it is based on the same unreliable correlation methods that have led medical authorities astray in other areas. Second, even though pollution was correlated with higher premature mortality on average, it seemed to *protect* against death in about one-third of cities. How could pollution kill people in some cities and save them in others? More likely, both results are chance correlations rather than real effects. Third, researchers have been unable to kill animals in laboratory experiments, even when they expose them to air pollution at levels many times greater than ever occur in the United States. This suggests that air pollution at today’s record-low levels doesn’t pose a risk, and current standards are health-protective with plenty of room to spare.”

Low Probability of developing cancer from air pollution

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“Even in high-pollution areas, regulators estimate the cancer risks from pollution to be relatively small. For example, MATES-II, a major study by regulators in Southern California, estimated the lifetime risk of developing cancer from air pollution at about 1 in 600, or 0.17 percent, in areas with the highest pollution levels.165 Given this estimate, what fraction of all cancers could be caused by air pollution? The average person’s lifetime risk of developing cancer is about 42 percent—that is, about four of every ten people will develop cancer at some point in their lives.166 If so, then the fraction of all cancers that are due to air pollution is 0.17/42, or about 0.4 percent. Put another way, assuming the air pollution cancer risk estimate is correct, if you’ve developed cancer, there’s a 1 in 250 chance it was caused by air pollution.”

OZONE

Studies show no consistent link between asthma and levels of air pollutants like ozone

Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“Studies show no consistent link between asthma and levels of exposure to air pollution. A government-sponsored study of California children found that higher ozone was associated with a greater risk of developing asthma for the 8 percent of children who played three or more team sports, but higher ozone was also associated with a 30 percent lower risk of asthma among all children in the study. Even for the 8 percent of children who were very active, the study showed current ozone levels are lower than those associated with asthma.”

Reverse Correlation: Asthma is the highest in the parts of the world with the lowest air pollution

Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“International data also show air pollution is not causing asthma. Asthma rates are highest in wealthy Western countries with relatively low air pollution levels, while developing countries with awful air pollution have low asthma rates. Before 1991, for example, the former East Germany had high air pollution levels and low asthma prevalence. But after reunification, East Germans adopted Western lifestyles, incomes increased and air pollution declined - but the incidence of asthma rose to levels comparable to West Germany.”

When ozone levels fell in the US, the number of asthmatics increased by 75%

Nicolas Loris (Research Assistant at The Heritage Foundation's Roe Institute for Economic Policy Studies) and Ben Lieberman (specialist in energy and the environment at the Heritage foundation, CPA with a BS in accounting from the University of Maryland, and a JD from George Washington University), February 26, 2008, “EPA Should Not Increase the Ozone Regulation Burden,” The Heritage Foundation, <http://www.heritage.org/Research/energyandenvironment/wm1827.cfm>

“From 1980 to 2005, when levels of ozone and other pollutants fell in the United States, the number of asthmatics increased by 75 percent. In fact, some of the lowest asthma rates in the world are found in highly polluted developing countries in the former Soviet Union, while countries in Western Europe have considerably higher asthma rates and relatively lower levels of air pollution.”

Lowering ground level ozone could have detrimental health effects (cataracts and cancer)

Nicolas Loris (Research Assistant at The Heritage Foundation's Roe Institute for Economic Policy Studies) and Ben Lieberman (specialist in energy and the environment at the Heritage foundation, CPA with a BS in accounting from the University of Maryland, and a JD from George Washington University), February 26, 2008, “EPA Should Not Increase the Ozone Regulation Burden,” The Heritage Foundation, <http://www.heritage.org/Research/energyandenvironment/wm1827.cfm>

“Lowering ground-level ozone standards is not entirely beneficial for quality of health. The EPA distinguishes between "good" ozone and "bad" ozone: It maintains that ground-level (or "tropospheric") ozone is a pollutant and a health risk, while stratospheric ozone protects the public and the environment by shielding Earth from the Sun. However, ground-level ozone also reduces exposure to ultraviolet rays. In fact, Randall Lutter and Christopher Wolz suggest in *Environmental Science and Technology News* that a decrease in tropospheric ozone of 10ppb would result in increases in cataracts and non-melanoma skin cancer.[[7]](http://www.heritage.org/Research/energyandenvironment/wm1827.cfm#_ftn7) Subsequently, *tightening* the ground-level ozone standard could actually have detrimental health effects.”

A new ozone standard could create billions in compliance costs and cost thousands of jobs

Nicolas Loris (Research Assistant at The Heritage Foundation's Roe Institute for Economic Policy Studies) and Ben Lieberman (specialist in energy and the environment at the Heritage foundation, CPA with a BS in accounting from the University of Maryland, and a JD from George Washington University), February 26, 2008, “EPA Should Not Increase the Ozone Regulation Burden,” The Heritage Foundation, <http://www.heritage.org/Research/energyandenvironment/wm1827.cfm>

“A new ozone standard would affect counties all across the United States, including counties already classified as non-attainment areas and new regions that would be required to develop regulations in order to comply. The counties already struggling to meet the current standard would have the most trouble. Furthermore, a study prepared for the National Association of Manufacturers analyzed five specific regions and estimated that annual attainment costs would range from $1.4 million in Salt Lake City to $9.8 billion in Atlanta, Georgia.[14] Complying with a lower target of 65ppb would significantly exacerbate the financial burden, resulting in lower regional gross domestic product, thousands of lost jobs, a drop in population, and millions of dollars in lost state tax revenue.”

NOx

NOx and VOC will be 91% lower in 20 years or so

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“In twenty years or so, when almost all automobiles on the road are Tier 2 automobiles, the average automobile will be about 90 percent cleaner than it is today. This can be seen by comparing current emissions with those of a fleet in which all automobiles are built to Tier 2 standards. According to EPA’s MOBILE6 vehicle emissions model, the average automobile on the road in 2005 emitted about 1.8 grams/mile of VOC + NOx.55 A fleet of vehicles meeting EPA’s Tier 2 requirements and having the same age distribution as the current fleet would emit about 0.16 grams/mile of VOC + NOx, or 91 percent less than the estimate for the current fleet.56”

Even if driving were to increase 80%, these emissions reductions would not be significantly reduced

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“With reductions like these on the way, even large increases in total driving will have only a minor effect on future emissions. For example, if total miles driven increase 80 percent during the next twenty years, which might happen in a very high-growth metropolitan area, but per-mile emissions of the average vehicle decline 90 percent, then total emissions would still decline 82 percent.57”

PARTICULATE MATTER (PM)

PM emissions have declined 40% since the 1980s

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“During the last twenty-five years, average PM levels have declined more than 40 percent, and about 15 percent since 1999. Back in the early 1980s, nearly the entire nation would have violated current PM2.5 standards. But today, the violation rate is down to about 13 percent.”

DIESEL

EPA regulations will result in declines in Diesel PM and NOx of 90% by 2025

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“Diesel trucks and off-road mobile sources have also been subject to progressively more stringent regulation. For example, EPA reduced NOx emissions limits for new diesel trucks by 40 percent in 2003, and requires an additional 90 percent reduction starting in 2007.58 The 2007 regulation also requires a 90 percent reduction in soot emissions. These reductions are in addition to previous standards for diesel trucks implemented in the 1980s, 1990s, and, most recently, in 2003. MOBILE6 predicts that per-mile diesel truck NOx and PM emissions will decline about 90 percent between 2005 and 2025, which is in line with expectations, given the stringent requirements of the emissions standards.59”

VOLATILE ORGANIC COMPOUNDS (VOCs)

VOCs from automobile emissions (the leading source) are from are predicted to decrease 52 to 71 %

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“Most transportation-related VOCs come from gasoline vehicles, as diesels emit few, so the VOC projection is mainly influenced by projections for automobile emissions. However, the NOx trend is influenced roughly equally by projections for both gasoline and diesel vehicles. The projections all come from these metropolitan areas’ transportation plans and conformity determinations. Note that the number of vehiclemiles traveled is projected to increase by as much as 51 percent for the metropolitan areas shown in the graph. Nevertheless, total motor-vehicle VOCs are projected to decrease between 52 and 71 percent, while total motorvehicle NOx is projected to decrease between 70 and 83 percent. The story is the same in all other metropolitan areas—air quality regulators and regional planners predict that in the future there will be much more driving and much less air pollution.”

INDUSTRIAL POLLUTION

Faced with new regulations, industrial emissions will also continue to decline

Joel Schwartz (Visiting fellow at the American Enterprise Institute with an MS in Planetary Science from California Institute of Technology) and Dr. Steven F. Hayward (PhD in American Studies form the Claremont Graduate School and fellow at the American Enterprise Institute), December 2007, “Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends, and Health Risks,” American Enterprise Institute, <http://www.aei.org/docLib/20080317_AirQuality.pdf>

“Industrial emissions will also continue to decline. Compared with 2003, EPA’s Clean Air Interstate Rule (CAIR) requires power plants to reduce total sulfur dioxide emissions 42 percent by 2010 and 64 percent by 2020.67 The ultimate cap, which would be achieved a few years after 2020 when all banked emissions are depleted, is 73 percent below 2003 emissions. CAIR also requires additional NOx reductions. Compared with 2003, CAIR requires total annual power plant NOx to decline 42 percent by 2009 and 48 percent by 2015. Total ozone-season NOx must decline 34 percent by 2009 and 40 percent by 2015. All of these are over and above the substantial reductions in power plant emissions achieved through 2003 (see figures 4-9 and 4-10 above). EPA’s Clean Air Mercury Rule will reduce power plant mercury emissions by 21 percent in 2010 and 70 percent in 2018.68”

SOLVENCY

International Cooperation needed: air pollution can be carried thousands of miles

Health Canada (The Canadian government department overseeing public health), May 16, 2006, “Let's Talk About Health And Air Quality,” <http://www.hc-sc.gc.ca/ewh-semt/air/out-ext/effe/talk-a_propos-eng.php>

“Air pollutants can be carried thousands of miles across borders and oceans or from one urban area to another. This phenomenon is common around the world and is referred to as "long-range atmospheric transport" or "transboundary pollution".

DISADVANTAGE #1- Global Warming

Air pollution increased plant storage of CO2, less plant storage = more global warming

Scientific American, April 23, 2009, “Could Cleaning Up Air Pollution Actually Speed Up Global Warming?” <http://www.scientificamerican.com/article.cfm?id=could-cleaning-up-air-pollution-hasten-global-warming>

“Ecosystem modeler Lina Mercado from the Center for Ecology and Hydrology headquartered in Wallingford, England, and her colleagues' study, published in *Nature*, found that plants stored 23.7 percent more CO2—the leading greenhouse gas causing climate change—between 1960 and 1999 thanks to more efficient photosynthesis brought on by air pollution scattering sunlight. Less CO2 storage in the plant "carbon sink" means more in the atmosphere, accompanied by more global warming.”

DISADVANTAGE #2- Agriculture

Plants thrive in hazy conditions that exist in periods of atmospheric pollution

Scientific American, April 23, 2009, “Could Cleaning Up Air Pollution Actually Speed Up Global Warming?” <http://www.scientificamerican.com/article.cfm?id=could-cleaning-up-air-pollution-hasten-global-warming>

"Plants often thrive in hazy conditions such as those that exist during periods of increased atmospheric pollution," [Lina] Mercado [of the Center for Ecology and Hydrology] says.”

Increased atmospheric pollution has increased plant productivity by as much as 25%

Matt McGarth, April 28, 2009, “Pollution ‘fights global warming,” BBC News, <http://news.bbc.co.uk/2/hi/science/nature/8013709.stm>

“Since the 1960s, increased levels of atmospheric pollution have enhanced plant productivity by as much as one quarter, research has found. In terms of carbon dioxide, this means that an extra 10% has been stored in the soil. The research was published in the scientific journal, Nature. It is a common assumption that plants grow best in clear sunny weather, but scientists say this is not always the case. Research has shown that forests and crops can also thrive in hazy conditions because clouds and particles in the atmosphere scatter sun light so that it bathes more leaves. That enhances photosynthesis, the process by which plants turn light and carbon dioxide into food.”

With hunger riots in 33 nations, biofuels, & speculators world is on the brink of a hunger-tsunami

Helga Zepp- LaRouche (Founder of the Schiller Institute and German political activist), April 18, 2008, “Worldwide Hunger Catastrophe! Produce Food, Not Biofuels!,,” Executive Intelligence Review, <http://www.larouchepub.com/eiw/public/2008/2008_10-19/2008-16/pdf/20-22_3516.pdf>

“What’s happening now was totally foreseeable: There is an explosion of disastrous hunger and food riots in 33 (!) nations in Africa, Asia, and Ibero-America. Without doubt, the world is standing at the brink of a hunger-tsunami, which is the direct result of the attempt by the central banks to postpone the collapse of the hopelessly bankrupt world financial system, with injections of more and more liquidity, as well as that of speculators who have thrown themselves into the food sector, for the inhuman destruction of food in order to produce biofuels.”

DISADVANTAGE #3- Masking Asthma

Tightening air pollution standards to fight asthma diverts from measures that could actually do good Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“Current air pollution levels are not the cause of high asthma rates. Thus, focusing regulatory efforts on tightening air pollution standards to combat asthma diverts research resources away from understanding the real causes of asthma and developing possible cures.”

DISADVANTAGE #4- Healthy Living Turn

Higher regulatory costs from air quality rule reduces real income that could be used to improve health in other areas

Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“In addition, the higher costs of goods and services due to ineffectual regulations reduces people's discretionary income, preventing them from spending more on healthier foods, exercise and medical care - much more effective ways to improve health and welfare than stricter air quality rules.”

SOURCE INDICTMENT

American Lung Association selectively reports scientific evidence on their website

Dr. H. Sterling Burnett (PhD from Bowling Green State University and lead analysis for the National Center for Policy Analysis Energy and Environment Team) , January 29, 2007, “Breathe Easy on Air Quality,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba577>

“The science is also misrepresented on the American Lung Association's Web site. It includes an area called Medical Journal Watch, which summarizes hundreds of air pollution health studies, but it omits studies and portions of studies that do not report any harm from air pollution.”

PRO: ANWR

By Nicholas Bruno

INHERENCY

11.6 billion barrels of oil are present on federal lands in ANWR

M. Lynne Corn (Specialist in Natural Resources Policy Resources, Science, and Industry Division), Bernard A. Gelb (Specialist in Industry Economics Resources, Science, and Industry Division), and Pamela Baldwin (Legislative Attorney American Law Division), 7 July 2006, “Arctic National Wildlife Refuge (ANWR): Controversies for the 109th Congress”, Congressional Research Service, <http://opencrs.com/getfile.php?rid=51484>

Estimates of ANWR oil potential, both old and new, are based on limited data and numerous assumptions about geology and economics. Recent interest has centered especially on parts of the 1002 area west and north of the Marsh Creek anticline, roughly a third of the 1002 area. (See Figure 5 in CRS Report RL31278.) The most recent government geologic study of oil and natural gas prospects in ANWR, completed in 1998 by the USGS,4 found an excellent chance (95%) that at least 11.6 billion bbl of oil are *present* on federal lands in the 1002 area.

SOLVENCY

ANWR could create jobs and contribute billions to the economy

Jon Basil Utley (associate publisher of The American Conservative), 14 August 2008, “Open ANWR Already!”, Reason Online, <http://www.reason.com/news/show/128096.html>

There has already been a test well drilled in ANWR and the oil drilling could be done from a concentrated small area, about the size of Dulles Airport. Compare this to the total size of ANWR, which is roughly equivalent to the size of South Carolina. Its reserves are estimated at 10 billion barrels by the U.S. Geological Survey, compared to 32 billion nationwide, almost a 33 percent increase. At full production, ANWR would add a million barrels per day to U.S. production. At $100 per barrel, this would equal over $36 billion per year that would not need to be spent on foreign oil. It would also create some 700,000 well-paying jobs, according to a Wharton Econometrics study.

A/T: DISADVANTAGES

Caribou

Empirically Denied: Caribou population grew with oil development

Patti Harper (editor and writer with the Division of Wildlife Conservation in Juneau) ,June 2007, “Caribou Calves and Oil Development Do They Mix?”, Alaska Wildlife News Online Magazine <http://wildlife.alaska.gov/index.cfm?adfg=wildlife_news.view_article&articles_id=298&issue_id=51>

It’s an important finding because some of the calving and summer ranges of the Central Arctic caribou herd overlap areas of oil development on Alaska’s North Slope. The herd’s size increased from approximately 5,000 caribou in 1975, about the time development began, to almost 32,000 in 2002. But Arthur says no easy answer can be gleaned about whether development has affected the herd from looking at changes in the overall number of caribou, because many factors affect growth or decline of caribou populations.

Wildlife congregate near oil pipelines

Robin Nixon (Special Livescience), 25 June 2008, " Oil Drilling: Risks and Rewards”, Livescience (chronicles the daily advances and innovations made in science and technology), <http://www.livescience.com/environment/080625-oil-drilling.html> [brackets added]

Similar concerns about wildlife arose before construction of the Alaskan Pipeline, built in the 1970s. "But there hasn't really been any effect on the wildlife; they congregate near the pipeline and it doesn't seem to bother them," said UT's [University of Texas Austin] Eric Potter [associate director of the Bureau of Economic Geology].

PRO: BIODIESEL

By Stephen Menesick

SOLVENCY

Biodiesel is a cleaner fuel

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

Biodiesel is a cleaner-burning, alternative diesel fuel produced from natural, renewable sources-mainly vegetable oils and animal fats. n22 Soybean oil is the most common biodiesel feedstock in the United States, but a variety of other sources are available, such as corn, cottonseed, animal fats, and fry grease. n23

Biodiesel is a complete substitute to diesel and works in existing infrastructure

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

Biodiesel is a complete substitute for petroleum-based diesel fuel and requires little or no changes to the diesel retail infrastructure. n24 Low-level biodiesel blends, which are the most commonly marketed forms of biodiesel, can be used in standard diesel engines with little or no engine modification. n25 Retail diesel dealers can also store and pump biodiesel using their existing petroleum diesel facilities. n26

Biodiesel can be blended with diesel

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

Pure biodiesel, known in the trade as B100, may be used as a stand-alone fuel, but it is most commonly blended with petroleum-based diesel fuel. n27 A biodiesel blend is designated by the percentage of biodiesel it contains by volume; thus, a B20 blend is 20% biodiesel and 80% petroleum diesel. n28 Biodiesel may be blended at any concentration, but the most common blend is B20. n29

Biodiesel has a similar energy efficiency and many performance benefits

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

Biodiesel's energy efficiency is similar to regular petroleum diesel, and both fuels produce roughly the same fuel economy, torque, and horsepower. n30 Biodiesel also provides numerous performance benefits over petroleum diesel, such as a higher cetane number and increased lubricity. n31

Biodiesel costs roughly the same as petroleum diesel

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

Although a new fuel, biodiesel is a viable market competitor with petroleum diesel in terms of retail price. n32 In fact, the average nationwide per-gallon price of B20 for October 2007 was three cents cheaper than petroleum diesel. n33

Biodiesel has multiple environmental benefits

Brandon E. Durrett “Comment: The New Organic "Texas Tea"?: National Energy Security Implications of a "Clean Fuel" Regulatory Ban on Texas Biodiesel” Texas Tech Law Review, Summer, 2008, 40 Tex. Tech L. Rev. 1001, via Lexis Nexis

In addition to its growing market presence, biodiesel offers a wide array of environmental benefits. n34 Compared to regular petroleum diesel, engine exhaust emissions from B20 blends are substantially lower in most CAA criteria pollutants. n35 B20 is 20.1% lower in particulate matter, 11.8% lower in unburned hydrocarbons, and 14.0% lower in carbon monoxide (CO); B100 produces even more dramatic reductions. n36 Biodiesel is dramatically lower in emissions of volatile organic compounds (VOC), which are precursors to ground-level ozone. n37 Unlike petroleum diesel, biodiesel contains almost no [\*1006] sulfur and virtually eliminates sulfur dioxide emissions, a major contributor to acid rain. n38 Biodiesel is also nontoxic and biodegradable, and thus causes far less damage than petroleum diesel if released into the environment. n39 The reduction in CAA criteria pollutants from increased biodiesel use will not only promote public health and environmental integrity, but it will significantly aid states in reaching CAA attainment goals. n40

Biodiesels CO2 emissions by 78%

Enrique Rene de Vera (JD Candidate in 2008), Chicago Journal of International Law Winter, 2008 “DEVELOPMENT: The WTO and Biofuels: The Possibility of Unilateral Sustainability Requirements” 8 Chi. J. Int'l L. 661 via Lexis Nexis

A 1998 study sponsored by the US Department of Energy and the US Department of Agriculture concluded that biodiesel reduces net carbon dioxide emissions, a leading source of global warming, by 78 percent compared to petro-leum diesel. n8

PRO: BIODIVERSITY

By Matthew Baker

INHERENCY

3 species are dying out every hour

Emily Dugan, May 30, 2008, “Loss of Biodiversity threatens livelihoods of world’s poorest,” The Independent (major UK newspaper), <http://www.independent.co.uk/environment/nature/loss-of-biodiversity-threatens-livelihoods-of-worlds-poorest-836754.html>

“Scientists say biodiversity is facing its greatest threat in millions of years, with three species dying out every hour. Now, the economic cost of such destruction has been assessed.”

Earth could lose 11% of natural area if current trends continue

Emily Dugan, May 30, 2008, “Loss of Biodiversity threatens livelihoods of world’s poorest,” The Independent (major UK newspaper), <http://www.independent.co.uk/environment/nature/loss-of-biodiversity-threatens-livelihoods-of-worlds-poorest-836754.html>

“Urgent remedial action is essential because species loss and ecosystem degradation are inextricably linked to human well-being," said the report's author Pavan Sukhdev. The Earth could lose 11 per cent of its natural areas by 2050 if we fail to combat loss of species diversity. Agriculture, the expansion of infrastructure and climate change would all contribute to this decline. "The loss of biodiversity and ecosystems is a threat to the functioning of our planet, our economy and society," the study, funded by the EU and the German government, warns.”

SIGNIFICANCE

Declining biodiversity in the US has resulted in the proliferation of Lyme disease

Lily Huang, June 20, 2009, “Rise of the Bugs,” Newsweek, <http://www.newsweek.com/id/202865>

“So the loss of biodiversity is itself a threat to public health, and not only in the deforested Amazon; the denatured suburbs of the United States bear increasing risks, too. Throughout the U.S., the patchy woodlands interspersed among suburban homes are breeding grounds for Lyme disease, a flulike illness that can produce neurological disorders and become impossible to cure. The ideal incubator for the Lyme bacterium is the white-footed mouse, a remarkable survivor in fragmented habitats. Infected mice don't get sick, but they allow the pathogen to multiply and pass it on to ticks who feed on all the local mammals, including humans. Other kinds of forest life—opossums, thrushes, flying squirrels—don't transmit the disease as well to ticks (they're "incompetent hosts"), but fewer and fewer of them remain in the forests. The rising incidence of Lyme disease—27,000 cases in the U.S. in 2007—is a direct result of disappearing forests and the decline of species.”

A diversity of species works to suppress infectious disease

Lily Huang, June 20, 2009, “Rise of the Bugs,” Newsweek, <http://www.newsweek.com/id/202865>

“In recent years, disease ecologists Richard Ostfeld and Felicia Keesing have shown how a diversity of species in an ecosystem actually works to suppress infectious diseases. Since not all animals are good reservoirs or vectors for pathogens, the more species there are, the better the chances for a pathogen to be blocked. Ostfeld and Keesing call this the "dilution effect." In healthy ecosystems—say, one with a high diversity of snails or mosquitoes where the dilution effect is strong and infectious disease is better contained—competition from nonvector snails or mosquitoes keeps the vector populations in check.”

Human destruction of ecosystems is no less devastating than nuclear war

Lily Huang, June 20, 2009, “Rise of the Bugs,” Newsweek, <http://www.newsweek.com/id/202865> [ellipses in original]

“With strong enough poison and infinitely transmutable genes, a single pathogen could lay deadly siege to the rest of the living world. The reason this has yet to happen in our lifetimes is that, brilliant as nature is at devising ways to kill, it has also come up with countless ways to cope and survive. Put all the living species together and you have an impressive array of mechanisms to fend off pathogens or contain them in particular ecosystems that have defenses built in. This arrangement, however, is now under serious threat: humans, moving ever deeper into the wild to level forests, extract minerals and plant crops, are changing the balance of ecosystems the world over and taking these defenses apart. These warped ecologies become ground zero for new and deadly infectious diseases, which emerge and spread at an ever-greater rate. This amounts to "Armageddon in slow motion," says Eric Chivian, head of the Center for Health and the Global Environment at Harvard Medical School. Chivian, who shared the Nobel Peace Prize in 1985 for alerting the public to the dangers of nuclear proliferation, now says the danger to human health posed by a degraded planet is "no less devastating than a nuclear war … the ultimate impact might be just as catastrophic."

Biological diversity is the source of may potential new drugs

Science Daily, May 25, 2008, “What Is the Value of Biodiversity To Our Collective Future?,” <http://www.sciencedaily.com/releases/2008/05/080521105713.htm>

“Biological diversity not only maintains the equilibrium of ecosystems, it is also an inexhaustible source of potential new drugs. It helps sustain a healthy food chain and promotes water and soil quality," says Prof. Jürgen Mlynek, President of the Helmholtz Association.”

Mass extinction could cost 40 billion pounds a year and harm the poor’s living standards

Emily Dugan, May 30, 2008, “Loss of Biodiversity threatens livelihoods of world’s poorest,” The Independent (major UK newspaper), <http://www.independent.co.uk/environment/nature/loss-of-biodiversity-threatens-livelihoods-of-worlds-poorest-836754.html>

“Mass extinctions of plants and animals could have a severe impact on the living standards of the poorest people on the planet and cost up to £40bn a year, the first major report into the economic impact of biodiversity loss has found.”

The value of the world’s ecosystem is $33 trillion

Michael J. Jeffries (Lecturer in Ecology and Environment at Northumbria University), 2006, “Biodiversity and Conservation,” 2nd edition, p. 158 [Google Books]

“In 1997 the attention-grabbing publication of an estimated value for the world’s ecosystem services was US$33 trillion. The estimate arose form an intensive workshop, pulling together experts in ecological economics who compiled data from over a hundred individual studies to give the value of services provided by major biomes. The idea was simple: estimate the value per hectare for each biome, multiply this up by the area of each biome and add the results to get a global total. For this study ecosystem services were defined as goods and services.”

The value of biodiversity is greater than GLOBAL GNP

Michael J. Jeffries (Lecturer in Ecology and Environment at Northumbria University), 2006, “Biodiversity and Conservation,” 2nd edition, p. 158 [Google Books]

“When all the data were compiled the average value was US$32,268,000,000,000 per year, the figure often quoted as $33 trillion. This is 1.8 times greater than the global annual gross national product, a widely used measure of the sum total of economic activity. We could not afford to replace biodiversity even if we had the technology. Varying some of the assumptions gave a range of between $16 trillion and $54 trillion. The $33 trillion estimate is likely to be a minimum. The estimate missed out some services and some biomes for which no reliable data were available.”

Study: Biological Diversity prevents the spread of disease

Debra MacKenzie, July 1, 2009, “Disease runs riot as species disappear,” New Scientist, <http://www.newscientist.com/article/mg20327154.800-disease-runs-riot-as-species-disappear.html?DCMP=OTC-rss&nsref=online-news>

“COULD biodiversity protect humans from disease? Conservationists have long suspected it might, and now they have the evidence to back this up. Keeping complex ecosystems intact is thought to pay big dividends, by preserving natural balances among species that keep animal diseases in check. These includes zoonoses – animal diseases that affect humans. Rodents in the Americas carry hantaviruses, which can be lethal to people who inhale them from dried droppings. Some 500 people a year in the US die after being infected with the "sin nombre" hantavirus (SNV) from the common deer mouse. Laurie Dizney and colleagues at Portland State University in Oregon put four different kinds of live traps in five parks around Portland over four years. In each park, they found variation in both the number of mammal species and the proportion of deer mice with SNV. The less mammal diversity there was, the more deer mice were infected (*Emerg Infect Dis*, [DOI: 10.3201/eid1507.081083](http://www.cdc.gov/eid/content/15/7/pdfs/08-1083.pdf), in press). In the park with the lowest diversity, infection levels were sky-high. "This is a landmark paper," says Peter Daszak, head of the Wildlife Trusts in New York, which investigates biodiversity and disease. It is hard to test how the two affect each other, he says, partly because of the huge amount of fieldwork involved.”

PRO: BIOFUELS

By Stephen Menesick

A/T: Hunger DA

Multiple Alternative causes for food price spikes

The Irish Times, April 17, 2008, “Blaming biofuels for food-price rises distorts full picture” via Lexis Nexis

There are many factors behind the spike in world food prices. Australia, a major wheat exporter, is suffering a severe drought. The rise of China and India means that hundreds of millions of people who before could only afford one meal a day can now afford two. The weak dollar - in which commodities are priced - means sellers are looking for higher prices to insulate themselves from the impact of the greenback's decline and are pushing staples beyond the reach of the world's poorest.

Lager trends which dwarf the biofuel industry have caused food prices to increase

ROGER COHEN “Bring on the Right Biofuels” New York Times, April 24, 2008 <https://www.u-cursos.cl/ingenieria/2008/1/CI41B/1/material_docente/objeto/166556>

Before I get to that, some myths need dispelling. If Asian rice prices are soaring, along with the global prices of wheat and maize, it's not principally because John Doe in Iowa or Jean Dupont in Picardy has decided to turn yummy corn and beet into un-yummy ethanol feedstock. Much larger trends are at work. They dwarf the still tiny biofuel industry (roughly a $40 billion annual business, or the equivalent of Exxon Mobil's $40.6 billion profits in 2007). I refer to the rise of more than one-third of humanity in China and India, the disintegrating dollar and soaring oil prices. Hundreds of millions of people have moved from poverty into the global economy over the past decade in Asia. They're eating twice a day, instead of once, and propelling rapid urbanization. Their demand for food staples and once unthinkable luxuries like meat is pushing up prices. At the same time, the rising price of commodities over the past year has largely tracked the declining parity of the beleaguered dollar. Rice prices have shot up in dollar terms, far less against the euro. Countries like China are offloading depreciating dollar reserves to hoard stores of value like commodities. Food price increases are also tied to oil being nearly $120 a barrel. Fossil fuels are an important input in everything from fertilizer to diesel for tractors.

Other issues make high food prices inevitable

PAUL KRUGMAN, “Grains Gone Wild” New York Times, April 7, 2008 <http://www.nytimes.com/2008/04/07/opinion/07krugman.html>

First, there's the march of the meat-eating Chinese -- that is, the growing number of people in emerging economies who are, for the first time, rich enough to start eating like Westerners. Since it takes about 700 calories' worth of animal feed to produce a 100-calorie piece of beef, this change in diet increases the overall demand for grains. Second, there's the price of oil. Modern farming is highly energy-intensive: a lot of B.T.U.'s go into producing fertilizer, running tractors and, not least, transporting farm products to consumers. With oil persistently above $100 per barrel, energy costs have become a major factor driving up agricultural costs. High oil prices, by the way, also have a lot to do with the growth of China and other emerging economies. Directly and indirectly, these rising economic powers are competing with the rest of us for scarce resources, including oil and farmland, driving up prices for raw materials of all sorts. Third, there has been a run of bad weather in key growing areas. In particular, Australia, normally the world's second-largest wheat exporter, has been suffering from an epic drought.

PRO: CAFÉ STANDARDS

By Michael Bixby

ADVANTAGES

A) Economy / Detroit

With 35 mpg standard, Detroit would stand to make billions

University of Michigan News Service, July 14, 2007, “Big Three will gain most from higher fuel economy standards,” <http://www.ns.umich.edu/htdocs/releases/story.php?id=5961>

“Detroit automakers would gain market share and increase profits under proposed new fuel economy standards, according to a new study by the University of Michigan's Transportation Research Institute (UMTRI). Under the highest proposed fuel economy standard of 35 miles per gallon, General Motors, Ford Motor Co. and Chrysler Corp. stand to make $14.4 billion by 2017—at least $6 billion more than the competition.”

Increasing CAFÉ standards would boost net profits as manufactures raise prices

Dr. Walter S. McManus (Ph.D. in economics from Univ. of California, Director, Automotive Analysis Division University of Michigan Transportation Research Institute, former executive director of forecasting and analytics at J.D. Power and Associates) July 2007, “The Impact of Attribute-Based Corporate Average Fuel Economy (CAFE) Standards: Preliminary Findings” Univ. of Michigan Transportation Research Institute, <http://www.umtri.umich.edu/content/CAFEPrelim.pdf>

“Increasing CAFE can boost automakers’ profits. Higher CAFE standards can increase vehicle profits since vehicle prices will need to rise to pay for added fuel-saving technologies, and profits per vehicle will also rise (assuming ordinary profit margins). This is partially offset by slower growth in total vehicle sales caused by the higher prices. The net result in our analysis is automakers’ cumulative profits over the next decade increase by $9 - $23 billion.”

CAFÉ standards will force US automakers to move into higher profit vehicle segments

Dr. Walter S. McManus (Ph.D. in economics from Univ. of California, Director, Automotive Analysis Division University of Michigan Transportation Research Institute, former executive director of forecasting and analytics at J.D. Power and Associates) July 2007, “The Impact of Attribute-Based Corporate Average Fuel Economy (CAFE) Standards: Preliminary Findings” Univ. of Michigan Transportation Research Institute, <http://www.umtri.umich.edu/content/CAFEPrelim.pdf>

“Detroit’s automakers stand to receive most of the profit gains from higher CAFE. The value of an incremental one-mile-per-gallon improvement is higher for vehicles with lower initial fuel economy because more fuel will be saved over the life of the vehicle. In addition, profit margins are higher for higher priced vehicles. With product portfolios that are more concentrated in vehicle segments with lower fuel economy and higher prices (SUVs and pickups), Detroit automakers will be making improvements that have higher market value and higher profit margins. Their profits will be correspondingly higher (see Table ES-2).”

Study: Increasing CAFÉ would create between 73,000 and 350,000 new net jobs

Dr. Edward B. Barbier (Professor of Economics at Univ. of Wyoming, Ph.D. in economics from Univ. of London, former director of the London Environmental Economics Centre of the International Institute for Environment and Development) April, 2009“Rethinking the Economic Recovery: A Global Green New Deal” United Nations Environment Programme <http://www.unep.org/greeneconomy/docs/GGND-Report-April2009.pdf>

“Given the structural change and job displacement that would occur in the automobile industry from a massive switch to fuel-efficient vehicle production, the relevant estimate is the creation of new net employment. A study for the United States shows that increases in the corporate average fuel economy (CAFE) standards for vehicles could create between 73,000 and 350,000 new net jobs as well as reduce US annual oil consumption and greenhouse gas emissions.”

New fuel standards will help the US compete against China

The Independent (British news source) May 19, 2009, “Obama to unveil aggressive fuel standards” <http://www.independent.co.uk/news/world/americas/obama-to-unveil-aggressive-fuel-standards-1687534.html> [brackets added]

"The new standard will dramatically reduce oil use and help make cars go significantly further on a gallon of gas," said [Daniel] Weiss, [a senior fellow and director of Climate Strategy at the Center for American Progress]. "It will also help American car companies make the super-clean cars of the future. And finally, it will help us compete with China, whose leaders have already announced their intention to become the worldwide leader in the production of plug-in hybrid electric vehicles."

B) Cost savings

Fuel efficiency standards mean savings at the pump

Dr. Frank Heinrichs (Ph.D. in Physics, former Postdoctoral research scientist at Johns Hopkins and at Carnegie Mellon University) and Dr. Alfons Graf (Ph.D. from Munich Technical University, Director Automotive Power Innovation Infineon Technologies AG, Congress Chairman at the “Powering Future Vehicles” 3rd Int’l Congress) October 2008, “Reducing CO2 Emissions and Achieving 2020 Fuel-Efficiency Requirements: A US Perspective on Demand-driven Electric Power Control” Infineon, <http://www.btipnow.com/library/white_papers/reducing_co2_emissions_and_achieving_2020.pdf>

“The most obvious saving is, of course, the actual fuel cost. Assuming a gasoline price of $3.50/gallon and 15,000 miles travelled per year, the annual saving from improving the fuel efficiency by 1 mpg from 34 to 35 mpg is $44.10 per year. Or in other units, an emission reduction of 1 g CO2/km leads to a fuel cost saving of $9.70 per year.”

Extra manufacturing cost paid off within 5 years

Dr. Frank Heinrichs (Ph.D. in Physics, former Postdoctoral research scientist at Johns Hopkins and at Carnegie Mellon University) and Dr. Alfons Graf (Ph.D. from Munich Technical University, Director Automotive Power Innovation Infineon Technologies AG, Congress Chairman at the “Powering Future Vehicles” 3rd Int’l Congress) October 2008, “Reducing CO2 Emissions and Achieving 2020 Fuel-Efficiency Requirements: A US Perspective on Demand-driven Electric Power Control” Infineon, <http://www.btipnow.com/library/white_papers/reducing_co2_emissions_and_achieving_2020.pdf>

“The cost of the improvements is paid off within one to five years of an auto’s lifetime, depending on the application, through fuel savings and avoiding CAFE penalties.”

C) Environment

35 mpg standard would remove 280 metric tons of CO2 from the environment

Sierra Club, Environment America, Safe Climate Campaign of the Center for Auto Safety, and the Conservation Law Foundation, July 1, 2008 “DOT DMS DOCKET NUMBER 2008-0089, RIN 2127-AK29” <http://www.clf.org/work/CECC/climateprotection/CCS/docs/2008-7-1.pdf>

“By the agency’s own estimation, the proposed standards will save more than 54 billion gallons of gasoline over the five model years addressed in the rulemaking. Setting standards to at least 35 mpg in 2015 would save an additional 22 billion gallons and keep 280 million metric tons of CO2 out of the atmosphere.”

Fuel economy standards reduces CO2 Pollution

Sierra Club, Environment America, Safe Climate Campaign of the Center for Auto Safety, and the Conservation Law Foundation, July 1, 2008 “DOT DMS DOCKET NUMBER 2008-0089, RIN 2127-AK29” <http://www.clf.org/work/CECC/climateprotection/CCS/docs/2008-7-1.pdf>

“Evidence of global warming is reported almost daily, from Iowa to the Arctic. Raising fuel economy standards not only saves oil but reduces CO2 pollution. America’s cars and light trucks alone emit more CO2 pollution than most countries – all, in fact – except China, Russia and India.”

D) Oil Dependence

Fuel economy improvements have saved the US 2.8 million barrels of oil a day (14% of consumption)

Network for New Energy Choices (public interest group), 2007, “Myths and Facts of Ethanol,” <http://www.newenergychoices.org/uploads/mythandFacts-online.pdf>

“The Corporate Average Fuel Economy (CAFE) program has been effective in increasing the fuel economy of the US passenger fleet. According to the National Academy of Sciences, if fuel economy had not improved, gasoline consumption would be about 2.8 million barrels per day higher than it is, or about 14 percent of today’s consumption”

CAFÉ is the nation’s most successful oil savings law ever passed

Lousiana Sierra Club, May 8, 2006, “TALKING POINTS: RAISING FUEL ECONOMY STANDARDS” <http://louisiana.sierraclub.org/pdf/Fuel-Economy-Talking-Points-5-8-06.pdf>

“According to a 2001 report by the National Academy of Science, these standards save 2.8 million barrels of oil per day, making CAFE the nation’s most successful oil savings law ever passed.”

Increasing efficiency is the fastest and easiest way to reduce oil consumption

Network for New Energy Choices (public interest group), 2007, “Myths and Facts of Ethanol,” <http://www.newenergychoices.org/uploads/mythandFacts-online.pdf>

“Whether the goal is energy independence or decreasing oil use, the easiest and fastest solution—the proverbial “low hanging fruit”— is fuel demand reduction and energy efficiency. The best source of clean energy is the energy we don’t use.”

SOLVENCY

Previous cost estimates were overstated

Dr. Thomas Klier (Ph.D. in Economics from Michigan State Univ. and an M.B.A., senior economist in the economic research department at the Federal Reserve Bank of Chicago) and Professor Joshua Linn (Ph.D. in economics from MIT, Assistant Professor of Economics at University of Illinois at Chicago) 2008, “New Vehicle Characteristics and the Cost of the Corporate Average Fuel Economy Standard” Federal Reserve Bank of Chicago, SSRN

“The CAFE literature has concluded that the regulation is far more costly than using the gasoline tax to reduce gasoline consumption. However, because the previous analysis does not incorporate the medium run, total discounted costs may be significantly overstated. To the extent that reductions in weight and power or modifications to the power train are less costly than adjusting the sales mix, actual costs a few years after a change in the standard could be much lower than the short run analysis suggests.”

The technology exists, and is simple to increase efficiency

Louisiana Sierra Club, May 8, 2006, “TALKING POINTS: RAISING FUEL ECONOMY STANDARDS” <http://louisiana.sierraclub.org/pdf/Fuel-Economy-Talking-Points-5-8-06.pdf>

“The technology exists today to make all vehicles – from sedans to SUVs to pickup trucks – go farther on a gallon of gas. This can be done by using off-the-shelf technology like more efficient engines, smarter transmissions, and better materials. Increasing fuel economy is not rocket science, it’s just smart auto mechanics. Fuel saving technology is being used today in some vehicles, but it should be used in all. Technology like variable valve control engines, continuously variable transmissions, cylinder deactivation, and others can cost-effectively improve fuel economy.”

“Rebound effect” is a myth

Dr. Thomas Klier (Ph.D. in Economics from Michigan State Univ. and an M.B.A., senior economist in the economic research department at the Federal Reserve Bank of Chicago) and Professor Joshua Linn (Ph.D. in economics from MIT, Assistant Professor of Economics at University of Illinois at Chicago) 2008, “New Vehicle Characteristics and the Cost of the Corporate Average Fuel Economy Standard” Federal Reserve Bank of Chicago, SSRN

“If MPG improves, the cost to drive a mile declines, so people drive more. Some critics have even argued that this “rebound” effect is so large that not much gasoline is saved, and other problems such as congestion are exacerbated. Is this right? Our research measures the size of the rebound effect and discovers that it is not large. Moreover, we find that it has become smaller over time, and is likely to become smaller still. This means that improved fuel efficiency does translate into lower fuel consumption. Our results also have implications for the policy choice between CAFE standards and fuel taxes as ways to reduce energy consumption.”

A/T: DISADVANTAGES

HIGHWAY FATALITIES

Technology exists to increase efficiency and safety

Sierra Club, Environment America, Safe Climate Campaign of the Center for Auto Safety, and the Conservation Law Foundation, July 1, 2008 “DOT DMS DOCKET NUMBER 2008-0089, RIN 2127-AK29” <http://www.clf.org/work/CECC/climateprotection/CCS/docs/2008-7-1.pdf>

“The technology exists today to enhance the fuel economy of all of America’s cars and light to levels well above the proposed standards, while improving safety and consumer choice.”

While CAFÉ was doubled, fatalities declined by half

Louisiana Sierra Club, May 8, 2006, “TALKING POINTS: RAISING FUEL ECONOMY STANDARDS” <http://louisiana.sierraclub.org/pdf/Fuel-Economy-Talking-Points-5-8-06.pdf>

“Building safe vehicles that go farther on a gallon of gas is about better technology. When Congress first enacted CAFE standards in 1975, we succeeded in doubling the fuel economy of vehicles. Over the same period, the rate of highway fatalities declined by half.”

PRO: CAP AND TRADE

By Nicholas Bruno

SOLVENCY

Historical Precedent: Cap and Trade Works

Environmental Defense Fund (national nonprofit organization dedicated to protecting the environmental rights of all people), 26 May 2009, “The Cap and Trade Success Story”, <http://www.edf.org/page.cfm?tagID=1085>

Cap and trade was designed, tested and proven here in the United States, as a program within the 1990 Clean Air Act Amendments. The success of this program led *The Economist* magazine to crown it "probably the greatest green success story of the past decade." (July 6, 2002).

Historical Precedent: Acid Rain cap and trade resulted in 100% compliance in reducing SO2 emissions

Environmental Defense Fund (national nonprofit organization dedicated to protecting the environmental rights of all people), 26 May 2009, “The Cap and Trade Success Story”, <http://www.edf.org/page.cfm?tagID=1085>

In the 1990s, the U.S. acid rain cap and trade program **achieved 100 percent compliance in reducing sulfur dioxide emissions.** In fact, power plants took advantage of the allowance banking provision to reduce SO2 emissions 22 percent (7.3 million tons) below mandated levels for the first phase of the program.

Historical Precedent: Acid Rain cap and trade cheaper than expected

Environmental Defense Fund (national nonprofit organization dedicated to protecting the environmental rights of all people), 26 May 2009, “The Cap and Trade Success Story”, <http://www.edf.org/page.cfm?tagID=1085>

On the eve of legislation, the EPA estimated that the program would cost $6 billion annually once it was fully implemented (in 2000 dollars). The Office of Management and Budget has estimated actual costs to be $1.1 to $1.8 billion -- just 20 to 30 percent of the forecasts.

Comprehensive Cap and Trade more effective than alternative approaches

Robert Repetto (professor at the Yale School of Forestry and Environmental Studies, a Senior Advisor to Stratus Environmental Consulting, Inc. in Boulder, Colorado, and Fellow of the Tim Wirth Chair in the Graduate School of Public Affairs at the University of Colorado), June 2007, National Climate Policy: Choosing the Right Architecture, Yale School of Forestry & Environmental Studies <http://www.climateactionproject.com/docs/Repetto.pdf>

An upstream cap-and-trade system is more effective. Such a system will be effective in limiting carbon dioxide emissions, since virtually all such emissions arise from the combustion of carbon fuels. By limiting the availability of fossil fuels at their source, all fuel uses will be covered, whether for electric power generation, industry, transportation, household or commercial energy. Because coverage of carbon fuels will be comprehensive and imposed at source, limitations will be more effective and assured than under alternative approaches

Europe reduced CO2 emissions through cap-and-trade

Mathew Carr and Jonathan Stearns (Reporters at Bloomberg News), 15 May 2009, “EU Says CO2 Trade Helped Cut Emissions for First Time”, Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601072&sid=aF1KaicdYL9o>

European Union power stations and factories in the world’s biggest emission-trading program cut carbon-dioxide output by 3.1 percent last year, the first drop since the system began in 2005. Emissions from participating sites were 2.06 billion tons of CO2 equivalent, compared with 2.126 billion in 2007, the Brussels-based European Commission said today in an e-mailed [statement](http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/794&format=HTML&aged=0&language=EN&guiLanguage=en" \t "_blank). While the recession limited economic output at the end of 2008, the drop in pollution came in a year when the EU grew 0.8 percent, Environment Commissioner [Stavros Dimas](http://search.bloomberg.com/search?q=Stavros+Dimas&site=wnews&client=wnews&proxystylesheet=wnews&output=xml_no_dtd&ie=UTF-8&oe=UTF-8&filter=p&getfields=wnnis&sort=date:D:S:d1) said in the statement.

ADVANTAGES

Incentives created for alternative and cleaner energies

Robert Repetto (professor at the Yale School of Forestry and Environmental Studies, a Senior Advisor to Stratus Environmental Consulting, Inc. in Boulder, Colorado, and Fellow of the Tim Wirth Chair in the Graduate School of Public Affairs at the University of Colorado), June 2007, National Climate Policy: Choosing the Right Architecture, Yale School of Forestry & Environmental Studies <http://www.climateactionproject.com/docs/Repetto.pdf>

Higher prices for fossil fuels will provide a clear economic incentive for development and deployment of alternative energy technologies. Moreover, continuing reductions in the availability of fossil fuels as permit levels are reduced ensures a growing market space for renewables and a robust expectation that that market will expand. Investment will flow into alternative energy and costs will decline with increasing scale, research and development, and learning-by-doing.

Cap and Trade prompts innovation to reduce pollution

Environmental Defense Fund (national nonprofit organization dedicated to protecting the environmental rights of all people), 26 May 2009, “The Cap and Trade Success Story”, <http://www.edf.org/page.cfm?tagID=1085>

Because cap-and-trade gives pollution reductions a value in the marketplace, the system prompts technological and process innovations that reduce pollution down to or beyond required levels. This point is not theoretical; experience has shown these results.

Long-term prosperity depends on reducing carbon emissions

Chad Stone (Chief Economist at the Center on Budget and Policy Priorities), Hannah Shaw (research assistant on climate change and federal tax policy), and Sharon Parrott (Director of the Welfare Reform and Income Support Division at Center on Budget and Policy Priorities), 3 March 2009, “Cap and Trade Can Fight Global Warming Effectively While Also Protecting Consumers”, Center on Budget and Policy Priorities, <http://www.cbpp.org/cms/index.cfm?fa=view&id=2699>

The United States will incur some economic costs to change the way we produce and consume energy in order to reduce greenhouse gas emissions. But a broad consensus exists among scientists that reducing carbon emissions is essential to protecting the planet — and our long-term prosperity. In other words, failure to act is the more costly policy.

Cap-and-trade will stimulate energy efficient technologies and even help the auto industry

Robert Repetto (professor at the Yale School of Forestry and Environmental Studies, a Senior Advisor to Stratus Environmental Consulting, Inc. in Boulder, Colorado, and Fellow of the Tim Wirth Chair in the Graduate School of Public Affairs at the University of Colorado), June 2007, National Climate Policy: Choosing the Right Architecture, Yale School of Forestry & Environmental Studies <http://www.climateactionproject.com/docs/Repetto.pdf>

Similarly, rising energy prices will stimulate energy efficiency technologies and investments throughout the economy, especially in such key sectors as transportation and buildings. In contrast to a tightening of CAFE standards, which perversely encourages car owners to drive their inefficient old cars longer to avoid the higher price of a more efficient new car, an upstream cap-and-trade system that raises fuel prices will encourage car owners to scrap their inefficient old cars sooner and buy new ones. This approach will be much better for hard-pressed auto makers in Detroit.

A/T: DISADVANTAGES

Economic Losses not that large

Cap and Trade will cost households $800 a year – not $3,100

D'Angelo Gore (Journalist at Annenberg Public Policy Center), 28 May 2009, “Cap-and-Trade Cost Inflation”, FactCheck.org (nonpartisan, nonprofit "consumer advocate" for voters that aims to reduce the level of deception and confusion in U.S. politics), <http://www.factcheck.org/politics/cap-and-trade_cost_inflation.html>

Leading Republicans are claiming that President Obama's proposal to curb greenhouse gas emissions would cost households as much as $3,100 per year. The Republican National Committee calls it a "massive national energy tax." But the $3,100 figure is a misrepresentation of both Obama's proposal and the study from which the number is derived. Republicans say they base their figure on a study from the Massachusetts Institute of Technology. But one of the authors says that the GOP's use of the study is "simplistic and misleading" and that it ignores key provisions designed to cushion the impact on consumers. The author puts the true added cost of a cap-and-trade system at closer to $800 a year.

With CO2 priced at $2 a ton, American manufactures will only loose a manageable 1% of their production

R. Stefan Deeran (Editor in Chief of *Exception Magazine*), 8 May 2009, “Study: Cap and Trade Won't Hurt US Manufacturing”, The Exception Magazine, <http://exceptionmag.com/news/green/000922/study-cap-and-trade-wont-hurt-us-manufacturing>

If the United States sets a price on CO2 at $15 per ton, American manufacturers will lose 1 percent of their annual production to imports from countries without CO2 regulations, according to an analysis by the Pew Center on Global Climate Change. “This is one of the most sophisticated efforts ever to quantify the potential competitiveness impacts on energy-intensive industries. The analysis shows clearly that, at the price level studied, the potential impacts are very modest and very manageable,” said Pew Center President Eileen Claussen. “Policymakers have a range of policy tools to mitigate the modest economic impacts that may be foreseen. The bottom line is that fear of competitive harm should not stand as an obstacle to strong climate policy.”

Historical Precedent shown cap-and-trade can have smaller than expected effects on economy

PhysOrg.com (leading web-based science, research and technology news service), 13 November 2008, “MIT analysis shows how cap-and-trade plans can cut greenhouse emissions”, <http://www.physorg.com/news145800764.html>

"The European experience confirms much of what has been learned from similar U.S. systems for other emissions, namely, that cap-and-trade systems can be constructed, that markets emerge to facilitate trading, that emissions are reduced efficiently, and that the effects on affected industries are less than predicted," said A. Denny Ellerman, the study's lead author and a senior lecturer in the MIT Sloan School of Management.

PRO: CLIMATE CHANGE: CO2 HARMFUL

By Matthew Baker

INHERENCY

Since the industrial revolution, CO2 has increased form 280 ppm to over 380 ppm

Environmental News Network, June 18, 2008, “CO2 and Other Greenhouse Gases,” <http://www.enn.com/green_building/article/37435>

“Since the beginning of the Industrial Revolution, however, the concentration of CO2 in the atmosphere has grown from its historical average of 280 parts per million (ppm) to over 380 ppm and counting.”

SIGNIFICANCE

Every ton of CO2 = 0.0000000000015 degrees of global temperature change

United Press International, June 15, 2009, “Global Warming, CO2 Linkage Confirmed,” <http://www.upi.com/Science_News/2009/06/15/Global-warming-CO2-linkage-confirmed/UPI-86731245090202/>

“Canadian scientists say they have discovered a direct relationship between carbon dioxide emissions and global warming. Concordia University Professor Damon Matthews said he used a combination of global climate models and historical climate data to show there is a simple linear relationship between total cumulative emissions and global temperature change. He said the findings mean that scientists can now say: If you emit a ton of carbon dioxide, it will lead to 0.0000000000015 degrees of global temperature change.”

After a scientific investigation, the EPA declared CO2 a danger to public health

Bryan Walsh, April 18, 2009, “EPA’s CO2 Finding: Putting a Gun to Congress’s Head,” TIME Magazine, <http://www.time.com/time/health/article/0,8599,1892368,00.html>

Concluding a scientific review initially ordered by a two-year-old Supreme Court case, the EPA issued its long-awaited "endangerment finding," formally declaring that carbon dioxide and five other greenhouse gases are pollutants that threaten public health and welfare. Under the Clean Air Act, that finding means that the EPA has a responsibility to address the damage caused by greenhouse gases, possibly through direct regulation of CO2 — just as it regulates other air pollutants, like acid rain-causing sulfur dioxide."The finding confirms that greenhouse-gas pollution is a serious problem now and for future generations," said EPA administrator Lisa Jackson.”

CO2 warms the planet by absorbing infrared radiation

Environmental News Network, June 18, 2008, “CO2 and Other Greenhouse Gases,” <http://www.enn.com/green_building/article/37435>

“What defines CO2 and certain other gases as *greenhouse* gases is that they let in more heat than they let out—absorbing and reflecting back more low-energy radiation from the Earth than they do high-energy radiation from the sun—warming the planet. Greenhouse gases absorb infrared (low-energy) radiation because of their ability to vibrate at correspondingly low energy levels. They tend to be molecules composed of three or more atoms—gases that exist as individual atoms, like helium, or in pairs, like oxygen or nitrogen, can’t absorb as much low-energy radiation.”

CO2 directly responsible for premature deaths as earth warms

Louis Bergeron, January 3, 2008, “Study links carbon dioxide emissions to increased deaths,” Stanford University News, <http://news-service.stanford.edu/news/2008/january9/co-010908.html>

“A Stanford scientist has spelled out for the first time the direct links between increased levels of carbon dioxide in the atmosphere and increases in human mortality, using a state-of-the-art computer model of the atmosphere that incorporates scores of physical and chemical environmental processes. The new findings, to be published in *Geophysical Research Letters*, come to light just after the Environmental Protection Agency's recent ruling against states setting specific emission standards for this greenhouse gas based in part on the lack of data showing the link between carbon dioxide emissions and their health effects. While it has long been known that carbon dioxide emissions contribute to climate change, the new study details how for each increase of 1 degree Celsius caused by carbon dioxide, the resulting air pollution would lead annually to about a thousand additional deaths and many more cases of respiratory illness and asthma in the United States, according to the paper by Mark Jacobson, a professor of civil and environmental engineering at Stanford. Worldwide, upward of 20,000 air-pollution-related deaths per year per degree Celsius may be due to this greenhouse gas.”

CO2 directly linked to increased mortality

Louis Bergeron, January 3, 2008, “Study links carbon dioxide emissions to increased deaths,” Stanford University News, <http://news-service.stanford.edu/news/2008/january9/co-010908.html>

"This is a cause and effect relationship, not just a correlation," said Jacobson of his study, which on Dec. 24 was accepted for publication in *Geophysical Research Letters*. "The study is the first specifically to isolate carbon dioxide's effect from that of other global-warming agents and to find quantitatively that chemical and meteorological changes due to carbon dioxide itself increase mortality due to increased ozone, particles and carcinogens in the air."

BRINK: Any violation weakens the fabric

Professor John M. Rogers (Professor at the University of San Diego School of Law), 1999, “Kosovo & Yugoslavia: Law in Crisis,” JURISTS, <http://jurist.law.pitt.edu/acad-com.htm>

“Any violation of international law obligations weakens the fabric of international rights and duties that significantly benefits countries like the United States and Europe. Any violation also creates a precedent that changes the overall content of the law. We should never maintain the “right” to violate international law. Instead we should strive to keep our actions as close as possible to our international obligations.”

IMPACTS

Vienna Convention on Law of Treaties potentially allows complete collapse of agreement in the face a breach

Scott Barrett (Professor School of International Studies at Johns Hopkins University), 2005, “Environment and Statecraft,” Oxford University Press, p. 277 [Google Books] (ellipses in original)

“The Grim strategy calls for the complete dissolution of an agreement should any of its parties cheat. This is a severe punishment. But the strategy is feasible; international law allows it to be used. According to Article 60 of the Vienna Convention on the Law of Treaties, “a material breach of a multilateral treaty by one of the parties entitles…the other parties by unanimous agreement to suspend the operation of the treaty in whole or in part or to terminate it either: (i) in the relations between themselves and the defaulting State, or (ii) as between all the parties [emphasis added]” (Brownline 1990: 618). Do any agreements actually employ this strategy? Certainly, all bilateral treaties have this feature. So did the Convention on Conservation of North Pacific Fur Seals, in both its 1957 and 1976 versions. As explained previously, Article XII effectively requires that each of the parties play Grim.”

Law breaking harms a states’ reputation and invites future deviation

Scott Barrett (Professor School of International Studies at Johns Hopkins University), 2005, “Environment and Statecraft,” Oxford University Press, p. 110-111 [Google Books]

“Law breaking may also harm a state’s reputation, making others reluctant to transact with it in the future. And a violation may invite others to deviate, if not from this custom then perhaps from others, when doing so serves their interests. The expectation that this could happen- that a single deviation could precipitate a general erosion in law abidance- may in turn make the original deviation seem threatening even to countries harmed directly by it, and so provide an incentive for even these countries to challenge a deviant.”

PRO: CLIMATE CHANGE: EXISTENCE OF GLOBAL WARMING

By Matthew Baker

Global warming reaching unacceptable levels

Goddard Institute for Space Studies (part of NASA research), 25 September 2006, “NASA Study Finds World Warmth Edging Ancient Levels”, <http://www.giss.nasa.gov/research/news/20060925/>

The most important result found by these researchers is that the warming in recent decades has brought global temperature to a level within about one degree Celsius (1.8°F) of the maximum temperature of the past million years. According to Hansen, "That means that further global warming of 1 degree Celsius defines a critical level. If warming is kept less than that, effects of global warming may be relatively manageable. During the warmest interglacial periods the Earth was reasonably similar to today. But if further global warming reaches 2 or 3 degrees Celsius, we will likely see changes that make Earth a different planet than the one we know.

Warming of the climate system is unequivocal

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global mean sea level (see Figure SPM-3). {3.2, 4.2, 5.5}.”

Data from the WMO demonstrates the existence of global warming

Michel Jarraud (Secretary-General of the World Meteorological Organization), March 21, 2009, “Understanding Climate Change,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/20/AR2009032003191.html>

“Data collected over the past 150 years by the 188 members of the World Meteorological Organization (WMO) through observing networks of tens of thousands of stations on land, at sea, in the air and from constellations of weather and climate satellites lead to an unequivocal conclusion: The observed increase in global surface temperatures is a manifestation of global warming. Warming has accelerated particularly in the past 20 years.”

The Warming trend should not be mitigated by a warm year followed by several colder years

Michel Jarraud (Secretary-General of the World Meteorological Organization), March 21, 2009, “Understanding Climate Change,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/20/AR2009032003191.html> [brackets in original]

“It is a misinterpretation of the data and of scientific knowledge to point to one year as the warmest on record -- as was done in a recent Post column ["Dark Green Doomsayers," George F. Will, op-ed, Feb. 15] -- and then to extrapolate that cooler subsequent years invalidate the reality of global warming and its effects. The difference between climate variability and climate change is critical, not just for scientists or those engaging in policy debates about warming. Just as one cold snap does not change the global warming trend, one heat wave does not reinforce it. Since the beginning of the 20th century, the global average surface temperature has risen 1.33 degrees Fahrenheit.”

11 of the warmest years on record have occurred in the past 13 years

Michel Jarraud (Secretary-General of the World Meteorological Organization), March 21, 2009, “Understanding Climate Change,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/20/AR2009032003191.html> [brackets in original]

“Evidence of global warming has been documented in widespread decreases in snow cover, sea ice and glaciers. The 11 warmest years on record occurred in the past 13 years.”

2008 was slightly cooler than 2007 was still the 10th warmest year on record and does not negate long term trends

Michel Jarraud (Secretary-General of the World Meteorological Organization), March 21, 2009, “Understanding Climate Change,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/20/AR2009032003191.html>

“While variations occur throughout the temperature record, shorter-term variations do not contradict the overwhelming long-term increase in global surface temperatures since 1850, when reliable meteorological recordkeeping began. Year to year, we may observe in some parts of the world colder or warmer episodes than in other parts, leading to record low or high temperatures. This regional climate variability does not disprove long-term climate change. While 2008 was slightly cooler than 2007, partially due to a La Niña event, it was nonetheless the 10th-warmest year on record.”

From 1850-1899 to 2001 – 2005 global temperatures have increased 0.76 degrees C

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Eleven of the last twelve years (1995 -2006) rank among the 12 warmest years in the instrumental record of global surface temperature9 (since 1850). The updated 100-year linear trend (1906–2005) of 0.74 [0.56 to 0.92]°C is therefore larger than the corresponding trend for 1901-2000 given in the TAR of 0.6 [0.4 to 0.8]°C. The linear warming trend over the last 50 years (0.13 [0.10 to 0.16]°C per decade) is nearly twice that for the last 100 years. The total temperature increase from 1850 – 1899 to 2001 – 2005 is 0.76 [0.57 to 0.95]°C. Urban heat island effects are real but local, and have a negligible influence (less than 0.006°C per decade over land and zero over the oceans) on these values. {3.2}”

Balloon and satellite measures both show warming rates

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“New analyses of balloon-borne and satellite measurements of lower- and mid-tropospheric temperature show warming rates that are similar to those of the surface temperature record and are consistent within their respective uncertainties, largely reconciling a discrepancy noted in the TAR. {3.2, 3.4}”

Balloon and satellite measures both show warming rates

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Observations since 1961 show that the average temperature of the global ocean has increased to depths of at least 3000 m and that the ocean has been absorbing more than 80% of the heat added to the climate system. Such warming causes seawater to expand, contributing to sea level rise (Table SPM-0).{5.2, 5.5}.”

The average temperature of the ocean at 3000m has increased since 1961

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Observations since 1961 show that the average temperature of the global ocean has increased to depths of at least 3000 m and that the ocean has been absorbing more than 80% of the heat added to the climate system. Such warming causes seawater to expand, contributing to sea level rise (Table SPM-0).{5.2, 5.5}.”

Arctic temperature increased at twice the global average rate for the last 100 years

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Average Arctic temperatures increased at almost twice the global average rate in the past 100 years. Arctic temperatures have high decadal variability, and a warm period was also observed from 1925 to 1945. {3.2}”

Warming of the climate has detected at both the surface and atmospheric levels

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Warming of the climate system has been detected in changes of surface and atmospheric temperatures, temperatures in the upper several hundred metres of the ocean and in contributions to sea level rise. Attribution studies have established anthropogenic contributions to all of these changes.”

Arctic sea ice has retreated 278,000 square miles from 1979 to 2000 averages

Brian Handwerk, April 6, 2009, “Arctic Ice Got Smaller, Thinner, Younger This Winter,” National Geographic News, <http://news.nationalgeographic.com/news/2009/04/090406-sea-ice-younger.html>

“Arctic ice continued its decline this winter, with hardy, thicker old ice increasingly being replaced with quick-to-melt, thinner young ice, according to a new report by NASA and the National Snow and Ice Data Center. This winter's maximum Arctic sea ice extent was 5.85 million square miles (15,150,000 square kilometers)—about 278,000 square miles (720,000 square kilometers) less than the Arctic average between 1979 and 2000. "That's a loss about the size of the state of [Texas](http://travel.nationalgeographic.com/places/states/state_texas.html)," said Walter Meier of the National Snow and Ice Data Center (NSIDC) in Boulder, Colorado. "We used to have a winter ice maximum about twice the size of the lower 48 United States," Meier added.”

The past six years have seen the least Arctic ice in recorded history

Brian Handwerk, April 6, 2009, “Arctic Ice Got Smaller, Thinner, Younger This Winter,” National Geographic News, <http://news.nationalgeographic.com/news/2009/04/090406-sea-ice-younger.html>

“This year's ice cover was not a record low, but it did continue a dubious streak. The past six years (2004-09) have seen the least Arctic ice at the time of maximum cover, in winter, since satellite records began in 1979.”

The decline in arctic ice is unprecedented

Brian Handwerk, April 6, 2009, “Arctic Ice Got Smaller, Thinner, Younger This Winter,” National Geographic News, <http://news.nationalgeographic.com/news/2009/04/090406-sea-ice-younger.html>

“Data from the rest of the 20th century, and previous centuries, are far less comprehensive. But scientists do have reports of ice cover from shipping records and other historic documents. "It's been a long time since we've seen so much open water," said Ron Lindsay of the University of Washington's Polar Science Center. "It really is unprecedented, what we've been seeing, for centuries and maybe thousands of years." The new study comes on the heels of a report released last week by the U.S. National Oceanic and Atmospheric Administration (NOAA) and the Joint Institute for the Study of Atmosphere and Ocean. That study used computer modeling and ice-level decline data to predict that most of the Arctic's summer ice could be gone in 30 years.”

PRO: CLIMATE CHANGE: HUMAN CAUSED

By Matthew Baker

EXPERT CONSENSUS

Scientists agree that human activity is a significant contributing factor to global warming

Environmental News Service, January 20, 2009, “Poll: Thousands of Scientists Affirm Human-Caused Global Warming,” <http://www.ens-newswire.com/ens/jan2009/2009-01-20-02.asp>

“The survey of 3,146 earth scientists from around the world found overwhelming agreement that in the past 200 years, mean global temperatures have been rising, and that human activity is a "significant contributing factor" in changing mean global temperatures. Peter Doran, an associate professor of earth and environmental sciences at the University of Illinois at Chicago, along with former graduate student Maggie Kendall Zimmerman, conducted the survey late last year. The findings appeared Monday in the journal "Eos, Transactions," a publication of the American Geophysical Union. "The debate on the authenticity of global warming and the role played by human activity is largely nonexistent among those who understand the nuances and scientific basis of long-term climate processes," the researchers conclude.”

82% of scientists and 97% believe human activity is a significant factor in global warming

Environmental News Service, January 20, 2009, “Poll: Thousands of Scientists Affirm Human-Caused Global Warming,” <http://www.ens-newswire.com/ens/jan2009/2009-01-20-02.asp> [brackts added]

“The 3,146 participating scientists were asked two key questions - "Have mean global temperatures risen compared to pre-1800s levels?" and, "Has human activity been a significant factor in changing mean global temperatures?" About 90 percent of the respondents agreed with the first question and 82 percent the second. [Peter] Doran [associated professor of earth and environmental science at the University of Illinois] determined that climatologists who are active in research showed the strongest consensus on the causes of global warming, with 97 percent agreeing humans play a role.”

Meteorologists study short term and don’t know nearly as much about climate as climatologists

CNN News, January 20, 2009, “Surveyed Scientists Agree Global Warming is Real,” <http://edition.cnn.com/2009/WORLD/americas/01/19/eco.globalwarmingsurvey/index.html>

"The petroleum geologist response is not too surprising, but the meteorologists' is very interesting," said Peter Doran associate professor of earth and environmental sciences at the University of Illinois at Chicago, and one of the survey's authors. "Most members of the public think meteorologists know climate, but most of them actually study very short-term phenomenon." However, Doran was not surprised by the near-unanimous agreement by climatologists. "They're the ones who study and publish on climate science. So I guess the take-home message is, the more you know about the field of climate science, the more you're likely to believe in global warming and humankind's contribution to it.”

CO2 concentrations have increased markedly since 1750 as a result of human activity

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“Global atmospheric concentrations of carbon dioxide, methane and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values determined from ice cores spanning many thousands of years (see Figure SPM-1). The global increases in carbon dioxide concentration are due primarily to fossil fuel use and land-use change, while those of methane and nitrous oxide are primarily due to agriculture. {2.3, 6.4, 7.3}.”

Fossil fuel use the primary source of increased atmospheric CO2

The Intergovernmental Panel on Climate Change, 2007, “Climate Change 2007: The Physical Science Basis,” <http://www.foxnews.com/projects/pdf/SPM2feb07.pdf>

“The primary source of the increased atmospheric concentration of carbon dioxide since the pre-industrial period results from fossil fuel use, with land use change providing another significant but smaller contribution. Annual fossil carbon dioxide emissions4 increased from an average of 6.4 [6.0 to 6.8] 5 GtC”

PRO: CLIMATE CHANGE: IMPACT

By Matthew Baker

SOLVENCY- REVERSABILITY

Warming can be greatly diminished and sea ice loss and sea level rise can be partially avoided

The University Corporation for Atmospheric Research (A Consortium of 70 universities with atmospheric PhD programs), April 14, 2009, “Global Warming: Cuts in Greenhouse Gas Emissions Would Save Arctic Ice, Reduce Sea Level Rise,” <http://www.ucar.edu/news/releases/2009/greenhousecuts.jsp>

“The threat of global warming can still be greatly diminished if nations cut emissions of heat-trapping greenhouse gases by 70 percent this century, according to a new analysis. While global temperatures would rise, the most dangerous potential aspects of climate change, including massive losses of Arctic sea ice and permafrost and significant sea level rise, could be partially avoided.”

Holding carbon dioxide levels at 450 ppm would result in stabilization and impact mitigation

The University Corporation for Atmospheric Research (A Consortium of 70 universities with atmospheric PhD programs), April 14, 2009, “Global Warming: Cuts in Greenhouse Gas Emissions Would Save Arctic Ice, Reduce Sea Level Rise,” <http://www.ucar.edu/news/releases/2009/greenhousecuts.jsp>

“Holding carbon dioxide levels to 450 ppm would have other impacts, according to the climate modeling study:

* Sea level rise due to thermal expansion as water temperatures warmed would be 14 centimeters (about 5.5 inches) instead of 22 centimeters (8.7 inches). Significant additional sea level rise would be expected in either scenario from melting ice sheets and glaciers.
* Arctic ice in the summertime would shrink by about a quarter in volume and stabilize by 2100, as opposed to shrinking at least three-quarters and continuing to melt. Some research has suggested the summertime ice will disappear altogether this century if emissions continue on their current trajectory.
* Arctic warming would be reduced by almost half, helping preserve fisheries and populations of sea birds and Arctic mammals in such regions as the northern Bering Sea.
* Significant regional changes in precipitation, including decreased precipitation in the U.S. Southwest and an increase in the U.S. Northeast and Canada, would be cut in half if emissions were kept to 450 ppm.
* The climate system would stabilize by about 2100, instead of continuing to warm.”

A/T: POSITIVE EFFECTS

Three responses: extreme weather outweighs, earliest stage bad for developing, beyond 2O is bad for everyone

Dr. Frank Ackerman (PhD in Economics from Harvard and Research Professor at the Department of Urban and Environmental Policy and Planning at Tufts University) and Dr. Elizabeth Stanton (PhD in Economics form the University of Massachusetts, Amherst and Research Fellow at the Global Development and Environment Institute at Tufts University), October 11, 2006, “Climate Change- The Costs of Inaction,” <http://www.foe.co.uk/resource/reports/econ_costs_cc.pdf>

“Three types of benefits from moderate warming have been proposed, all of which are discussed in this report: slightly warmer weather and higher levels of CO2could increase yields in temperate agriculture; warmer weather could decrease total temperature-related mortality, particularly among the elderly in cold countries; and people in cold countries might simply enjoy life more if it were a little bit warmer. Even if we were to accept the existence of any of these benefits, the complacent conclusion that global warming might not be so bad is still unfounded for at least three reasons:

* The effects of variable and extreme weather events are bad for everyone, North and South – and outweigh any potential benefits.
* The average effects of even the earliest stages of warming are bad for developing countries.
* Beyond 2°, all regions will suffer from the worsening average effects of climate change, along with intensifying extremes and rising risks of catastrophe.”

A/T: UNCERTAINITY

Most estimates of climate change probably err on the conservative side

Dr. Daniel P Schrag (Professor of Earth and Planetary Sciences and Director of the Laboratory for Geochemical Oceanography at Harvard University with a PhD in Geology from the University of California Berkley), February 12, 2009, “Testimony of Professor of Daniel P Schrag, Harvard University before the Energy and Environmental Subcommittee of the House Committee on Energy and Commerce US House of Representatives,” <http://energycommerce.house.gov/Press_111/20090212/testimony_schrag.pdf>

“As an earth scientist who studies how the climate has changed in the past, I believe there is no serious debate about whether the earth will warm as carbon dioxide levels increase over this century – it will. What is difficult to predict is exactly how much warming will occur, and exactly how that will affect human society. Unfortunately, I believe that most scientific assessments of future climate change may err on the conservative side, contrary to the claims of the few but vocal climate skeptics.”

Significant risk that future climate change will be more severe than most models predict

Dr. Daniel P Schrag (Professor of Earth and Planetary Sciences and Director of the Laboratory for Geochemical Oceanography at Harvard University with a PhD in Geology from the University of California Berkley), February 12, 2009, “Testimony of Professor of Daniel P Schrag, Harvard University before the Energy and Environmental Subcommittee of the House Committee on Energy and Commerce US House of Representatives,” <http://energycommerce.house.gov/Press_111/20090212/testimony_schrag.pdf>

“It is important to understand that the climate models we use to predict the future are not perfect – but this is not surprising as they are attempting to make predictions about an atmospheric state that no human being has ever seen. They remain an essential tool for exploring future scenarios, but we must also consider evidence for climate change from the geologic past. This is the major area of my research. I will not cover it today in much detail, but let me simply say that lessons from earth history are surprisingly consistent, whether from warm climates or cold, whether over millions of years or thousands. The data suggest that our real climate system is likely to be more sensitive than the models, and that there is a significant risk that future climate change will be more severe than most models now predict.”

IMPACT- STATUS QUO DEATHS

300,000 die from climate change every year

The Global Humanitarian Forum (An independent and impartial platform for international collaboration on humanitarian concerns lead by Kofi Annan former Director General of the UN) 2009, “The Anatomy of a Silent Crisis,” p. 10-11, <http://ghfgeneva.org/Portals/0/pdfs/human_impact_report.pdf>

“An estimated 325 million people are seriously affected by climate change every year. This estimate is derived by attributing a 40 percent proportion of the increase in the number of weather-related disasters from 1980 to current to climate change and a 4 percent proportion of the total seriously affected by environmental degradation based on negative health outcomes.10 The 40 percent proportion is based on an analysis of data provided by Munich Re on the past trend of weather-related disasters, as compared to geophysical (i.e. non climate change related) disasters over time.5 It compares well to a 2009 scientific estimate of the attribution of climate change to droughts.11 It is assumed that the 40 percent increase due to climate change based on frequency of disasters can be applied as an approximation for the number of people seriously affected and deaths. The 4 percent proportion is based on a study by WHO4 which looks at health outcomes from gradual environmental degradation due to climate change.12 Application of this proportion projects that more than 300,000 die due to climate change every year—roughly equivalent to having an Indian Ocean tsunami annually.13 The number of deaths from weather-related disasters and gradual environmental degradation due to climate change — about 315,000 deaths per year — is based on a similar calculation, (i.e. an attribution of 40 percent from weather-related disasters that translates into 40 percent of the death burden from weather disasters due to climate change and 4 percent of current death burden from disease14). Over 90 percent of the death toll relates to gradual onset of climate change which means deterioration in environmental quality, such as reduction in arable land, desertification and sea level rise, associated with climate change. As for the number of seriously affected, the basis for the estimations of deaths is negative health outcomes.”

IMPACT- STATUS ECONOMIC COSTS

Net cost of global warming is $125 billion today

The Global Humanitarian Forum (An independent and impartial platform for international collaboration on humanitarian concerns lead by Kofi Annan former Director General of the UN) 2009, “The Anatomy of a Silent Crisis,” p. 18, <http://ghfgeneva.org/Portals/0/pdfs/human_impact_report.pdf>

“Based on an update of the model by the report team used in the Stern review,44 the economic costs and benefits of climate change add up to an economic loss of about $125 billion today, which is a mean value.”

IMPACT- AGRICULTURE

Global warming could eliminate California agriculture due to dried up rivers

Dr. Daniel P Schrag (Professor of Earth and Planetary Sciences and Director of the Laboratory for Geochemical Oceanography at Harvard University with a PhD in Geology from the University of California Berkley), February 12, 2009, “Testimony of Professor of Daniel P Schrag, Harvard University before the Energy and Environmental Subcommittee of the House Committee on Energy and Commerce US House of Representatives,” <http://energycommerce.house.gov/Press_111/20090212/testimony_schrag.pdf>

“For example, one prediction of climate models – again, possibly on the conservative side – is that global warming will advance the timing of summer snow melt from mountains that serve as natural reservoirs for many parts of the world. In the western U.S., this could mean as much as 60 to 80 days earlier than today. Consider the agricultural capacity of Californiaʼs central valley, which depends on rivers that drain the snowpack in the Sierra Nevada. If, by the end of this century, these rivers run dry by mid-summer, instead of lasting through the fall, then California agriculture as we know it today would be impossible.“

IMPACT- ECONOMIC

Future economic losses from climate change could amount to $340 billion by 2030

The Global Humanitarian Forum (An independent and impartial platform for international collaboration on humanitarian concerns lead by Kofi Annan former Director General of the UN) 2009, “The Anatomy of a Silent Crisis,” p. 10-11, <http://ghfgeneva.org/Portals/0/pdfs/human_impact_report.pdf>

“Economic losses due to climate change are expected to more than double in the next 20 years Estimated future economic losses could amount to more than USD 340 billion56 by 2030, i.e. the mean value obtained in the model used in this report. Only 30 countries in the world currently have a GDP higher than this number.57 It is also almost double the EU commission budget for 2009.58”

The SCCO2 is over $1 trillion (1.3 trillion in 2004 alone)

The Global Humanitarian Forum (An independent and impartial platform for international collaboration on humanitarian concerns lead by Kofi Annan former Director General of the UN) 2009, “The Anatomy of a Silent Crisis,” p. 20, <http://ghfgeneva.org/Portals/0/pdfs/human_impact_report.pdf>

“The social cost of climate change is over US Dollars 1 trillion59 Carbon dioxide resides over hundreds if not thousands of years in the atmosphere. In fact recent studies show that after 100 years almost 30 percent of the original CO2 still remains in the atmosphere, after 1000 years about 20 percent.60 Therefore, the carbon emitted today has long lasting implications and the social cost will be far higher than the impact felt today. The USD 1 trillion social cost of climate change is conservative as it is based on the assumption that the CO2 emitted today will only reside 100 years in the atmosphere. The Social Cost of Carbon Dioxide (SCCO2) is a monetary indicator of the global damage done over time by the emission of one extra ton of carbon today, discounted to present value. In cost-benefit analyses of projects to control greenhouse gas emissions, the SCCO2 is employed to measure the financial value of the damages avoided, and therefore the benefit of the mitigation project. The larger the SCCO2, the more attractive is investment in greenhouse gas emissions reductions. The carbon dioxide emitted globally in 2004, for example, carries a social cost of over $1300 billion,61 a figure greater than 2 percent of global GDP in 2008.48”

IMPACT- SUPERBUG

Spike in Deadly dozen superbugs may be the most immediate consequence of global warming

Christine Dell’Amore, October 7, 2008, "Deadly Dozen" Diseases Could Stem From Global Warming,” National Geographic News, <http://news.nationalgeographic.com/news/2008/10/081007-climate-diseases.html>

“A spike in deadly infectious diseases in wildlife and people may be the "most immediate consequence" of global warming, according to a new report released today. Dubbed the "deadly dozen," sicknesses such as Lyme disease, yellow fever, plague, and avian influenza, or bird flu, may skyrocket as global shifts in temperature and precipitation transform ecosystems. Babesia, cholera, Ebola, intestinal and external parasites, red tides, Rift Valley fever, sleeping sickness and tuberculosis round out the list.”

IMPACT- MIGRATION

Climate change could = unprecedented migration with substantial political stability implications

Dr. Koko Warner (PhD in development and environmental economics at the University of Vienna and head of the Environmental Migration, Social Vulnerability, and Adaptation Section at the United Nations University Institute for Environment and Human Security), Dr. Charles Ehrhart (PhD in Social Anthropology from Cambridge University and Climate Change Coordinator for CARE International), Alex Sherbinin (MA in Geography from Syracuse University, Senior Staff Associate for Research at Columbia University's Center for International Earth Science Information Network, and former Depty manager of Socioeconomic Data and Aplications Center) Dr. Susana Adamo (PhD in Sociology/Demography at the University of Texas at Austin and Associate Research Scientist at CIESIN at Columbia University), and Tricia Chai-Onn (Staff Associate at the Center for International Earth Science at Columbia University), May 2009, “In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement,” <http://www.ehs.unu.edu/file.php?id=621>

“The impacts of climate change are already causing migration and displacement. Although the exact number of people that will be on the move by mid-century is uncertain, the scope and scale could vastly exceed anything that has occurred before. People in the least developed countries and island states will be affected first and worst. The consequences for almost all aspects of development and human security could be devastating. There may also be substantial implications for political stability.”

Climate change is contributing to displacement and migration

Dr. Koko Warner (PhD in development and environmental economics at the University of Vienna and head of the Environmental Migration, Social Vulnerability, and Adaptation Section at the United Nations University Institute for Environment and Human Security), Dr. Charles Ehrhart (PhD in Social Anthropology from Cambridge University and Climate Change Coordinator for CARE International), Alex Sherbinin (MA in Geography from Syracuse University, Senior Staff Associate for Research at Columbia University's Center for International Earth Science Information Network, and former Depty manager of Socioeconomic Data and Aplications Center) Dr. Susana Adamo (PhD in Sociology/Demography at the University of Texas at Austin and Associate Research Scientist at CIESIN at Columbia University), and Tricia Chai-Onn (Staff Associate at the Center for International Earth Science at Columbia University), May 2009, “In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement,” <http://www.ehs.unu.edu/file.php?id=621>

“Climate change is already contributing to displacement and migration. Although economic and political factors are the dominant drivers of displacement and migration today, climate change is already having a detectable effect.”

According to estimates 200 million people may become environmentally induced migrants by 2050

Dr. Koko Warner (PhD in development and environmental economics at the University of Vienna and head of the Environmental Migration, Social Vulnerability, and Adaptation Section at the United Nations University Institute for Environment and Human Security), Dr. Charles Ehrhart (PhD in Social Anthropology from Cambridge University and Climate Change Coordinator for CARE International), Alex Sherbinin (MA in Geography from Syracuse University, Senior Staff Associate for Research at Columbia University's Center for International Earth Science Information Network, and former Depty manager of Socioeconomic Data and Aplications Center) Dr. Susana Adamo (PhD in Sociology/Demography at the University of Texas at Austin and Associate Research Scientist at CIESIN at Columbia University), and Tricia Chai-Onn (Staff Associate at the Center for International Earth Science at Columbia University), May 2009, “In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement,” <http://www.ehs.unu.edu/file.php?id=621> [brackets added]

“Estimates of the numbers of migrants and projections of future numbers are divergent and controversial, ranging from 25 to 50 million by the year 201011 to almost 700 million by 2050.12 [The International Organization for Migration] IOM takes the middle road with an estimate of 200 million environmentally-induced migrants by 2050.13”

IMPACT- FOREST FIRES

Climate change will increase the risk of forest fires in the West and Northwest

Dr. Matthias Ruth (PhD and Professor at the School of Public Policy at the University of Maryland), Dana Coelho (Research Associate at the Center for Integrative Environmental Research), and Daria Karetnikov (Research Assistant at the Center for Integrative Environmental Research), October 2007, “The US Economic Impacts of Climate Change and the Costs of Inaction,” Center for Integrative Environmental Research and the University of Maryland, <http://www.cier.umd.edu/documents/US%20Economic%20Impacts%20of%20Climate%20Change%20and%20the%20Costs%20of%20Inaction.pdf>

“In the West and Northwest, climate change is expected to alter precipitation patterns and snow pack, thereby increasing the risk of forest fires. Forest fires cost billions of dollars to suppress, and can result in significant loss of property. The Oakland, California fire of 1991 and the fires in San Diego and San Bernardino Counties in 2003 each cost over $2 billion. Every year for the past four years, over 7 million acres of forests in the National Forest System have burned with annual suppression costs of $1.3 billion or more.”

IMPACT- SEA LEVEL RISE

The IPCC projection of 10 to 25 inches of sea level rise is probably too conservative

Dr. Daniel P Schrag (Professor of Earth and Planetary Sciences and Director of the Laboratory for Geochemical Oceanography at Harvard University with a PhD in Geology from the University of California Berkley), February 12, 2009, “Testimony of Professor of Daniel P Schrag, Harvard University before the Energy and Environmental Subcommittee of the House Committee on Energy and Commerce US House of Representatives,” <http://energycommerce.house.gov/Press_111/20090212/testimony_schrag.pdf>

“A second example of a conservative climate prediction is the IPCCʼs discussion of future sea level rise. Most of the 10 to 25 inches predicted under different emissions scenarios results simply from the thermal expansion of seawater. Only two inches over the century are attributed to melting of ice on Greenland, despite the fact that the Greenland ice sheet would raise sea level by 23 feet if it melted in its entirety. This projection is equivalent to saying that the Greenland ice sheet will continue melting at exactly the same rate as it is melting today with no change as the Earth continues to warm, a highly unlikely outcome. This illustrates the basic problem with scientific assessments under such large uncertainty. When pushed, the scientific community often falls back on an answer that can be defended with confidence, even though it may not provide policy makers with an accurate picture of the risk involved.”

IMPACT- CONFLICT

Global warming could force people to fight over water or arable land

Professor Michael T. Klare (Professor of Peace and World Security Studies at Hampshire College), February 2008, “Viewpoint: Resource Wars: Energy, Resources Conflict, and the Emerging World Ordmer- An Interview with Michael T Klare by Barry S Zellen,” Center for Contemporary Conflict, <http://www.ccc.nps.navy.mil/si/2008/Feb/klareFeb08.pdf>

Global warming will affect resource competition and conflict profoundly. Although global warming's effects cannot be predicted with certainty, it is likely that it will produce diminished rainfall in many parts of the world, leading to a rise in desertification in these areas and a decline in their ability to sustain agriculture. This, in turn, could force people to fight over remaining sources of water and arable land, or to migrate in large numbers to other areas, where their presence may be resented by the existing inhabitants. Indeed, some analysts believe that the conflict in Darfur is partly driven by such phenomena.”

State collapse, epidemic warlordism, and civil disorder are the likely results of global warming

Professor Michael T. Klare (Professor of Peace and World Security Studies at Hampshire College), February 2008, “Viewpoint: Resource Wars: Energy, Resources Conflict, and the Emerging World Ordmer- An Interview with Michael T Klare by Barry S Zellen,” Center for Contemporary Conflict, <http://www.ccc.nps.navy.mil/si/2008/Feb/klareFeb08.pdf>

“Global warming is also expected to produce a significant rise global sea levels, and this will result in the inundation of low-lying coastal areas around the world. Again, the result will be the widespread loss of agricultural lands, forcing many millions of people to migrate to higher areas, possible encountering resistance in the process. Because many poor countries will be unable to cope with the catastrophic effects of global warming, state collapse is a likely result along with an accompanying epidemic of warlordism, ethnic violence, and civil disorder.”

PRO: DDT

By Josh Craddock

INHERENCY

US ban of DDT caused other countries to follow suit

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“The ban of DDT by the EPA caused many other countries to follow suit and discontinue use of DDT as a method for malarial control. The ban was supported by many aid agencies such as USAID, the WHO, the Norwegian Development Agency, and the Swedish Aid Agency, which contributed a large portion of public health aid to poor nations. These countries, dependent on aid, could not continue to use DDT after the ban. Many countries also stopped using DDT for fear that European countries would refuse to buy their agricultural exports. The ban on DDT thwarted progress in the eradication of malaria. In South Africa, DDT was phased out in 1996, causing malaria cases to increase from 12,500 in 1995 to 50,000 in 1999. However, cases dropped by 80% in 2000 in KwaZuluNatal, the one province in South Africa that began using DDT extensively again.”

SIGNIFICANCE

If DDT had continued to be used to fight malaria, millions of deaths might have been prevented

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“With the recent one-hundredth anniversary of Rachel Carson's birthday, the question arises as to whether we should celebrate her legacy. It seems inappropriate to shower her with praise because her argument in Silent Spring was based on faulty statistics and emotionally appealing anecdotes. The real legacy left behind by Silent Spring is millions of deaths from malaria that could have been prevented if health authorities had continued to use DDT as a method for killing mosquitoes carrying the disease.”

SOLVENCY

DDT is the cheapest, most effective way of preventing malaria transmission

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“Since DDT is the cheapest, most effective way of preventing the transmission of malaria, its judicious use should be promoted. DDT can be safely sprayed inside people's homes, killing the mosquitoes that carry the parasite. This method avoids any possible environmental dangers to crops or wildlife. With over one million people dying every year from malaria, the benefits of DDT use far outweigh any possible adverse affects. With the evidence so strongly in favor of the effectiveness of DDT, this argument has a clear solution. The restrictions on DDT should be lifted in order to save the lives of millions of African children.”

DDT historically has reduced malaria and both kills mosquitoes and repels them

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“DDT is a pesticide that not only kills the mosquitoes that transmit the disease, but also irritates them so that they will not bite, and repels them. The U.S. military introduced the use of DDT for malarial control in 1944, and other countries followed. South Africa adopted DDT use in 1946, causing malaria cases in the Transvaal to decline to 10% of their 1942-43 level. DDT was so successful in attacking malaria that Dr. Paul Muller won the Nobel Prize in Medicine in 1948 for his discovery that DDT could kill the mosquitoes that carry the malaria parasite.”

A/T: DISADVANTAGES

A) Birds

DDT does not pose an environmental risk to birds

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“Studies also showed that the risk of DDT to birds was not as great as environmentalists claimed. A 1966 report by the U.S. Fish and Wildlife Service found that environmental DDT residues encountered by bald eagles would not affect eagles or their eggs. A 1970 report by the Pesticides Monitoring Journal further confirmed that DDT residues were not correlated with the thinning of birds' eggshells. The studies that supported the claims of eggshell thinning were ones in which the birds were exposed to levels of DDT much greater than environmental levels and were conducted on birds with low-calcium diets.”

Egg shell thinning studies are flawed

Steven Milloy (adjunct researcher at the CATO Institute, adjunct scholar at the Competitive Enterprise Institute), July 6, 2006, “Bald Eagle-DDT Myth Still Flying High,” Ohio Pest Control Association, <http://www.ohiopma.org/pdfs/insight/DDT/baldeagle.pdf>

“In the few studies claiming to implicate DDT as the cause of thinning, the birds were fed diets that were either low in calcium, included other known egg shell-thinning substances, or that contained levels of DDT far in excess of levels that would be found in the environment – and even then, the massive doses produced much less thinning than what had been found in egg shells in the wild.”

Alternate causes for shell thinning

Steven Milloy (adjunct researcher at the CATO Institute, adjunct scholar at the Competitive Enterprise Institute), July 6, 2006, “Bald Eagle-DDT Myth Still Flying High,” Ohio Pest Control Association, <http://www.ohiopma.org/pdfs/insight/DDT/baldeagle.pdf>

“So what causes thin bird egg shells? The potential culprits are many. Some that have been reported in the scientific literature include: oil; lead; mercury; stress from noise, fear, excitement or disease; age; bird size (larger birds produce thicker shells); dehydration; temperature; decreased light; human and predator intrusion; restraint and nutrient deficiencies.”

B) Human Health

DDT presents no health risk when used properly

John Stossel (investigative reporter), October 04, 2006, “Hooray for DDT's Life-Saving Comeback,” Real Clear Politics, <http://www.realclearpolitics.com/articles/2006/10/hooray_for_ddts_lifesaving_com.html>

“Last month, the WHO announced that it supports indoor spraying of DDT and other insecticides "not only in epidemic areas but also in areas with constant and high malaria transmission, including throughout Africa. The scientific and programmatic evidence clearly supports this reassessment," said Dr. Anarfi Asamoa-Baah, WHO assistant director-general for HIV/AIDS, TB and malaria. "DDT presents no health risk when used properly."”

DT does not increase the risk of cancer

Patricia Ludwig (researcher at the American Council on Science and Health), June 6, 2007, “The Legacy of the DDT Ban, the Legacy of Rachel Carson,” American Council on Science and Health, <http://www.acsh.org/factsfears/newsID.973/news_detail.asp>

“The carcinogenic claim was based on a study in which high doses of DDT caused increased cancer incidence rates in mice, but no correlation was found in humans. A study conducted on North Vietnamese women who had high serum concentrations of DDT found that these women did not have increased incidence of cancer.”

DDT has therapeutic applications

DR. Tirthankar Basu, December 9, 2007, “DDT : Myths And Realities,” Ohio Pest Control Association, <http://www.ohiopma.org/pdfs/insight/DDT/basu-ddt.pdf>

“It is perhaps interesting to note that therapeutic uses for DDT have been discovered. A 17 years old patient had suffered from a genetically determined. Jaundice from his 13th year of his age. He was given a daily dose of 90 mg of DDT for six months. His high plasma bilirubin of 6 mg /100 ml fell to 1 mg/100 ml not only during course of treatment, but remain low for nearly 7 months even after it was discontinued. The therapeutic effect of the DDT is apparently operative because it increase the production of the enzyme glucuronyl- transferase, which enables the bilirubin to be conjugated with glucuronide acid and execrated as diglucuronide with the bile. No side effect of the DDT treatment were noticed and liver function tests and routine hematological tests remained normal. The DDT metabolite DDE which is formed in warm blooded organism has also been found valuable in treating the rare disease of inoperable adrenal cortical carcinoma.”

DDT unlikely to produce mutagenic effects

DR. Tirthankar Basu, December 9, 2007, “DDT : Myths And Realities,” Ohio Pest Control Association, <http://www.ohiopma.org/pdfs/insight/DDT/basu-ddt.pdf>

“The fact that DDT residue in human milk exceeds that of ADI has no consequences for the health of a child since the intake is limited to the short lactation period and does not continue for life time. There have been reports of DDT being a possible mutagen. In the Ames test, DDT proved completely negative with and without metabolic activation & the same applies to dominant lethal tests in mice. The General conclusion is that DDT is most unlikely to produce any mutagenic effects.”

PRO: DOMESTIC DRILLING

By Renee Davis

Just 1 or 2 million more barrels pumped daily: HUGE beneficial job and economic impact

David W. Kreutzer, (Ph.D.and Senior Policy Analyst for Energy Economics and Climate Change in the Center for Data Analysis at The Heritage Foundation), October 1, 2008, “The Economic Case for Drilling Oil Reserves,” WebMemo #2093, <http://www.heritage.org/Research/EnergyandEnvironment/wm2093.cfm>

Increasing domestic production by 1 million barrels per day would reduce imported petroleum costs by $123 billion, generate an additional $7.7 billion in economic activity, and cost $25.6 billion in additional oil production costs. The net gain to the economy would be $105 billion. The impact on employment would be an increase of 128,000 jobs. Applying the same analysis to a 2 million barrel per day increase in domestic petroleum production yields net economic gains to the economy of 270,000 jobs and $164 billion.

Increased domestic availability = reduced spending, lower prices, reduced trade deficit, and expanded economy

David W. Kreutzer, (Ph.D.and Senior Policy Analyst for Energy Economics and Climate Change in the Center for Data Analysis at The Heritage Foundation), October 1, 2008, “The Economic Case for Drilling Oil Reserves,” WebMemo #2093, <http://www.heritage.org/Research/EnergyandEnvironment/wm2093.cfm>

Increasing domestic production of petroleum will affect the economy two ways: First, it will reduce the amount we spend on imported oil. Second, it will lower the price of petroleum. The two effects work together to reduce energy expenditures, reduce the trade deficit, and expand economic activity.

PRO: ENDANGERED SPECIES ACT

By Jared Rixstine

SIGNIFICANCE

ESA has 93% success in North East

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events) March 2 2006 “Endangered Species Act 93% Successful in Northeast – Study finds species recovery will take decades,, but progress is steady” <http://www.ewire.com/display.cfm/Wire_ID/3009>

“The Center for Biological Diversity released a report today which found that no endangered species have gone extinct in the Northeast and 93 percent have increased their population size or become stable since becoming protected under the federal Endangered Species Act.”

Some examples of its successes

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events) March 2 2006 “Endangered Species Act 93% Successful in Northeast – Study finds species recovery will take decades,, but progress is steady” <http://www.ewire.com/display.cfm/Wire_ID/3009> [Brackets Added]

“"The Endangered Species Act has been remarkably successful," said Kieran Suckling, policy director for the Center [for Biological Diversity]. "Humpback and blue whales, bald eagles, green and Kemp's ridley sea turtles, piping plovers, roseate terns, red-bellied turtles, and dwarf cinquefoils are just a few of the species that are recovering quite nicely."”

ESA is “one of America’s most successful conservation laws”

Center for Biological Diversity, May 15, 2007 “The Road to Recovery – 100 Success Stories for Endangered Species Day 2007” <http://biologicaldiversity.org/news/press_releases/100-success-stories-05-15-2007.html>

“From key deer and green sea turtles in Florida to grizzly bears and wolves in Montana, sea otters and blue butterflies in California, and short-nose sturgeon and roseate terns in New York, the Endangered Species Act has not only saved hundreds of species from extinction,” said Kieran Suckling, policy director of the Center for Biological Diversity, “but also put them on the road to recovery. The Endangered Species Act is one of America’s most successful conservation laws.”

The ESA is Effective

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events) March 2 2006 “Endangered Species Act 93% Successful in Northeast – Study finds species recovery will take decades,, but progress is steady” <http://www.ewire.com/display.cfm/Wire_ID/3009> [Brackets Added]

“"There is considerable rhetoric surrounding the Endangered Species Act," said [Kieran]Suckling [Director of the Center for Biological Diversity] ,"but very few efforts to gather and scientifically study real data. The data are now in and it's clear that the Endangered Species Act is effective."”

Northeast study shows ESA 100% successful in preventing extinction, 93% successful in stabilization, and 82% successful in meeting recovery deadlines

Stephanie Jentsch M.S., Esa Crumb,and Rhiwena Slack (All of the Center for Biological Diversity) 2006 “Measuring the Success of the Endangered Species Act: Recovery Trends in the Northeastern United States” Center for Biological Diversity <http://www.esasuccess.org/reports/northeast/ne_species/study/Measuring-the-Success-of-the-ESA.pdf>

“In this report we present population trend data, recovery plan reviews, and narrative accounts for all endangered species that historically or currently occur in eight northeastern states: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, and New Jersey. We find that the Endangered Species Act has been remarkably successful in the region.

**Measures of Success:**

* Preventing extinction: 100% successful
* Stabilizing and moving species toward recovery: 93% successful
* Meeting recovery timelines: approximately 82% successful

**Time Needed for Recovery:**

* On average, federal recovery plans expected recovery to take 42 years, while species have been listed for an average of only 24 years.
* Only 11 federal recovery plans expected recovery by 2005. In practice, nine species were downlisted, under review, formally proposed, or completely delisted due to achieving recovery by 2005.”

ESA has successfully helped the Bald eagle, whooping crane, Kirtland warbler, peregrine falcon, gray wolf, gray whale, and grizzly bear

Center for Biological Diversity (National Conservation Group – Further Credentials at end of brief) 2007 “100 Success Stories for Endangered Species Day 2007) <http://www.esasuccess.org/reports/>

The resolution mentions a few of the Endangered Species Act’s most well known successes: bald eagle (increased from 416 to 9,789 pairs between 1963 and 2006), whooping crane (increased from 54 to 513 birds between 1967 and 2006), Kirtland’s warbler (increased from 210 to 1,415 pairs between 1971 and 2005), peregrine falcon (increased from 324 to 1,700 pairs between 1975 and 2000), gray wolf (populations increased dramatically in the Northern Rockies, Southwest, and Great Lakes), gray whale (increased from 13,095 to 26,635 whales between 1968 and 1998), and the grizzly bear (increased from about 224 to over 500 bears in the Yellowstone area between 1975 and 2005). These are just a few of the hundreds of species whose populations have soared thanks to the Endangered Species Act.

The crane was listed as endangered in 1967 and now there have been introduction of flocks back into the wild

**National Wildlife Foundation (**National Wildlife Federation inspires Americans to protect wildlife for our children's future National Wildlife Federation provides resources for media through our Newsroom including press releases, fact sheets, and reports.**) June 14, 2006 “Whooping Crane and the Endangered Species Act”** <http://www.nwf.org/endangered/whoopingcrane.cfm>

“In 1967, when the crane was listed as endangered, the U.S. Fish and Wildlife Service began a captive breeding and intensive recovery program. Captive management has been challenging, for the bird is very sensitive to human contact. Through this program, three facilities are now captively rearing whooping cranes for reintroduction into the wild, and flocks have been reintroduced into the wild at two sites. There are currently seven captive flocks in the U.S. and Canada.”

Whooping Crane rebounding because of “impressive efforts” from USFW Service

**National Wildlife Foundation (**National Wildlife Federation inspires Americans to protect wildlife for our children's future National Wildlife Federation provides resources for media through our Newsroom including press releases, fact sheets, and reports.**)** June 14, 2006 “Whooping Crane and the Endangered Species Act” <http://www.nwf.org/endangered/whoopingcrane.cfm>

“The whooping crane has been experiencing a difficult but successful rebound from the brink of extinction. Impressive efforts by the U.S. Fish and Wildlife Service and conservation groups in recent decades have led to significant recovery for the whooping crane, the tallest bird species in North America.”

North American Whooping Cranes have increased from less than 20 to 400

**National Wildlife Foundation (**National Wildlife Federation inspires Americans to protect wildlife for our children's future National Wildlife Federation provides resources for media through our Newsroom including press releases, fact sheets, and reports.**)** June 14, 2006 “Whooping Crane and the Endangered Species Act” <http://www.nwf.org/endangered/whoopingcrane.cfm>

“In 1870, between 500 and 1,400 whooping cranes inhabited North America; by 1941, the migratory population had dropped to 16 individuals. Whooping crane numbers fell due to several factors, including hunting and specimen collection, human disturbance, and conversion of nesting habitat for agriculture. Collisions with power lines and fences are known hazards to wild whooping cranes. Others have died of avian tuberculosis, avian cholera, and lead poisoning. Whooping cranes also are vulnerable to natural disasters such as hail storms or drought due to their long migration route. Active intervention by the U.S. and Canadian governments, as well as conservation groups, have helped this flock recover from less than 20 birds in the 1940s to nearly 400 birds today.”

USFW crane program has been very successful

**National Wildlife Foundation (**National Wildlife Federation inspires Americans to protect wildlife for our children's future National Wildlife Federation provides resources for media through our Newsroom including press releases, fact sheets, and reports.**) June 14, 2006 “Whooping Crane and the Endangered Species Act”** <http://www.nwf.org/endangered/whoopingcrane.cfm>

“The U.S. Fish and Wildlife Service's whooping crane recovery program, conducted by a partnership of non-profit organizations and government agencies, has been so successful that other countries have adopted similar methods to protect other threatened crane species. Sixteen cranes, recently hatched at the Patuxent Wildlife Research Center in Texas, are being trained to fly and migrate by following an aircraft. Twenty cranes released during the last two years migrated back to Wisconsin from Florida during spring 2003.”

Peregrine Falcons Improving

Audubon society of Portland Oregon (Audubon Society of Portland promotes the understanding, enjoyment, and protection of native birds, other wildlife and their habitats. We focus on our local community and the Pacific Northwest.) June 20, 2008 “Fremont Bridge Peregrines: A Decade of Successful Nesting” <http://www.audubonportland.org/issues/endangered-species/peregrine-falcon/portland-peregrines/fremont>

“Portland's Fremont Bridge was officially designated "Oregon Aerie (nest) 26" signifying that it was the 26th peregrine nest site to be established in Oregon since the recovery had begun. While still only a handful, it was a far sight better than in 1970 when nesting peregrines were nearly extirpated from the entire continental United States and eliminated from the Oregon landscape altogether.”

Bald eagle breeding program “Highly Successful”

US Fish and Wildlife Service June 19, 2007 “Successful Bald Eagle Breeding Program at San Francisco Zoo Completed as Remaining Birds Fly East” <http://www.fws.gov/news/NewsReleases/showNews.cfm?newsId=45A27DCE-EE87-EDDB-CEAADABC36794BC9>

“A highly successful bald eagle breeding program at the San Francisco Zoo that resulted in the reintroduction of over 100 bald eagles to the Channel Islands concluded on June 18 when nine adult birds took a donated FedEx plane ride to a new home at the American Eagle Foundation?s (AEF) United States Eagle Center in Pigeon Forge, Tennessee.”

The partnership has increased the amount of bald eagles from 35 – 200 pairs

Endangered Species Update (the leading forum for information on scientific and political aspects of current threatened and endangered species protection efforts, the primary forum for government agencies, conservation organizations, private consulting and law firms, zoos, museums educational institutions, and others to exchange ideas and information on endangered species issues) April-June 2007 “San Franscisco zoo ends its successful bald eagle program” University of Michigan’s Endangered Species Update [Bnet] <http://findarticles.com/p/articles/mi_qa4444/is_2_24/ai_n30938769/?tag=content;col1>

“In the 1970s, there were fewer than 35 breeding pairs of eagles in California. In 1985, the zoo partnered with the U.S. Fish and Wildlife Service to create a large-scale captive breeding program, supplying birds for reintroductions. Bald eagles were reintroduced to Santa Catalina Island starting in 1991, and Santa Cruz Island in 2002. Since the beginning of the program, the Zoo has reared and released more than 100 eagles. Approximately sixty eagles currently live on the Channel Islands, with seven natural hatchings in the past two years. Thanks to the help of the Zoo's captive breeding and reintroduction program, there are about 200 nesting pairs of bald eagles in California today.”

Eagles on track for removal

US Fish and Wildlife Service June 19, 2007 “Successful Bald Eagle Breeding Program at San Francisco Zoo Completed as Remaining Birds Fly East” <http://www.fws.gov/news/NewsReleases/showNews.cfm?newsId=45A27DCE-EE87-EDDB-CEAADABC36794BC9>

“The Avian Conservation Center (ACC) at the Zoo acquired its first female bald eagle for the captive breeding program in 1985 from a wild nest in California. Since that time, the number of birds has steadily increased. Most recently the ACC has cared for 10 breeding bald eagle pairs. Kathy Hobson of the ACC and curator John Aikin have been instrumental in the success of the breeding program. Today California is home to an estimated 200 pairs of nesting bald eagles. Throughout the lower 48 states there are nearly 10,000 nesting pairs, a 50 per cent increase since 2000. The species reached its low point in 1963 when only 417 pairs could be found in the lower 48. The Service is on track to make a final determination on the bald eagle’s status under the Endangered Species Act (ESA) by June 29. It is currently a threatened species and the Service has proposed to remove it from that list because of its recovery. National Bald Eagle Management Guidelines and careful monitoring program would continue to protect the bird, as well as its status under the 1940 Bald and Golden Eagle Protection Act.”

DISADVANTAGES

Biodiversity

ESA prevented potential extinction of 172 species

National Wildlife Federation, 2006, “Endangered Species Act by the Numbers,” <http://www.nwf.org/wildlife/pdfs/esabythenumbers.pdf>

“A study published in the Annual Review of Ecological Systematics calculated that 172 species would potentially have gone extinct during the period from 1973 to 1998 if Endangered Species Act protections had not been implemented.”

Extinction of a single species risks loss of miracle drugs

National Wildlife Federation, 2006, “Endangered Species Act by the Numbers,” <http://www.nwf.org/wildlife/pdfs/esabythenumbers.pdf>

“56 percent of the top 150 most popular prescribed drugs are linked to discoveries of natural compounds in the wild, with an annual economic value of $80 billion. This could only be the tip of the iceberg, as less than one percent of all tropical plant species have been screened for potential pharmaceutical applications. At the current extinction rate, experts estimate that the Earth is losing one major drug every two years. A cure for cancer or AIDS may lie in a plant or animal waiting to be discovered.

* The Pacific yew, a slow-growing tree found in the ancient forests of the Pacific Northwest, was historically considered a "trash" tree that was burned after clear-cutting forests. We now know that a substance in its bark -- now marketed as Taxol® -- was later identified and approved as treatment of ovarian, breast, and lung cancer.
* The rosy periwinkle provides the cure for Hodgkin's disease and certain forms of leukemia. The periwinkle was on the brink of extinction due to deforestation until scientists discovered its immense value.
* Digitalis, a drug derived from the purple foxglove plant, extends the life spans of an estimated 3 million Americans who suffer from heart disease.

These are just a few examples of what we may lose each time a species goes extinct. We owe it to our children and grandchildren to be good stewards of the environment and leave behind a legacy of protecting endangered species and the special places they call home.”

A/T DELISTING = MEASURE OF SUCCESS

Measuring success by the number delisted is not accurate, should measure progress toward recovery

Stephanie Jentsch M.S., Esa Crumb,and Rhiwena Slack (All of the Center for Biological Diversity) 2006 “Measuring the Success of the Endangered Species Act: Recovery Trends in the Northeastern United States” Center for Biological Diversity (Conservationist Group – further Credentials at end of brief) <http://www.esasuccess.org/reports/northeast/ne_species/study/Measuring-the-Success-of-the-ESA.pdf> [Brackets added]

Additionally, this argument [of holding the success of the ESA to the number of species delisted] presumes without justification that it is reasonable to expect all species to have recovered by 2005. However, the recovery of endangered species is guided by federal recovery plans that establish goals, benchmarks, processes, and timelines, based on each species’ status and needs. In particular, the timelines estimate the length of time necessary to achieve recovery. The average length of expected recovery time for species in our sample is 42 years. Currently, these species have been listed for an average of just 24 years. Consider the Atlantic salmon: It has only been on the endangered list for five years and only received a recovery plan in November 2005. The plan explains that recovery will require decades of intensive, difficult work. Or consider the North Atlantic Right Whale Recovery Plan: it suggests that this long-lived, slow reproducing species will require 150 years just to qualify for downlisting to “threatened” status. As few species were expected to fully recover by 2005, the most pertinent measure of success is whether species are progressing toward recovery.

Using the fact that only 14 species have been delisted as a standard for success is bad

Stephanie Jentsch M.S., Esa Crumb,and Rhiwena Slack (All of the Center for Biological Diversity) 2006 “Measuring the Success of the Endangered Species Act: Recovery Trends in the Northeastern United States” Center for Biological Diversity (Conservationist Group – further Credentials at end of brief) <http://www.esasuccess.org/reports/northeast/ne_species/study/Measuring-the-Success-of-the-ESA.pdf>

“Critics of endangered species conservation have seized on the fact that only 14 of the 1,350 species have been removed from the endangered species list due to recovery. This is variously described as a one or zero percent success rate. While full recovery and delisting are obviously important, it is illogical to hold them up as a primary, or even a remotely adequate, measure of the Act’s success. Such a rationale declares all improvement short of complete recovery a failure. Under this measure, the spectacular increase in bald eagle numbers (417 pairs in the Lower 48 in 1963 grew to 7,280 in 2003; 21 in the Northeast in 1967 grew to 562 in 2005) would be declared a failure, as would the increases in the shortnose sturgeon (12,669 Hudson River spawning fish in 1979 grew to 56,708 in 1994-1996) and the Atlantic piping plover (550 pairs in 1986 grew to 1,423 in 2004).

Historically the average time needed to achieve recovery is 42 years

Stephanie Jentsch M.S., Esa Crumb,and Rhiwena Slack (All of the Center for Biological Diversity) 2006 “Measuring the Success of the Endangered Species Act: Recovery Trends in the Northeastern United States” Center for Biological Diversity (Conservationist Group – further Credentials at end of brief) <http://www.esasuccess.org/reports/northeast/ne_species/study/Measuring-the-Success-of-the-ESA.pdf>

“The U.S. Fish and Wildlife Service and the National Marine Fisheries Service are required to develop recovery plans outlining the goals, methods, costs, and the length of time expected to recover each endangered species. Most federal recovery plans provide an estimated timeline to achieve recovery of the species, usually contingent upon the achievement of recovery criteria delineated in the recovery plan. These criteria often include not only a specific population size or number of populations, but also the subsequent maintenance and monitoring of those populations over a specific number of years. In almost all cases, these timelines were provided as minimum estimates under the best possible conditions and under the assumption that the recovery actions would be undertaken immediately following the publication of the recovery plan. If a recovery plan specified an expected number of years to recovery, we calculated the time from the date of publication of the plan. If a plan based its recovery criteria on maintaining a particular biological status for a certain number of years, we presumed that it would take ten years to reach the required status, then added the required monitoring time to this. We chose ten years because this figure was frequently used by recovery plans themselves. If the expected time to downlisting from endangered to threatened (but not delisting) was specified, we multiplied the projected time by 1.5 to calculate an estimated time to recovery/delisting. If no plan existed, or the plan included no temporal horizons, we excluded the species from this portion of our analysis. Using the above method, we were able to identify an expected time to recovery for 42 of the 56 northeastern species. The average expected time to recovery was 42 years.”

It takes 42 years average to recover BUT the average species in the northeast has only been listed for 24 years

E-Wire (E-Wire is the leading press release distribution service dedicated to environmental news, products and events) March 2 2006 “Endangered Species Act 93% Successful in Northeast – Study finds species recovery will take decades,, but progress is steady” <http://www.ewire.com/display.cfm/Wire_ID/3009> [Brackets Added]

“The study [Done by the Center for Biological] also found that recovery is a long-term process and it will take decades of continued work to recover and remove all Northeastern species from the endangered species list. Federal recovery plans exist for most species and require an average of 42 years to achieve recovery. On average, however, Northeastern species have only been protected by the Endangered Species Act for 24 years. The recovery plans expected 11 species to have recovered by 2005. The actual record shows that nine have been downlisted from "endangered" to "threatened" status, delisted, proposed for delisting, or are under consideration for delisting in whole or in part.”

A/T ECONOMY HARMED

ESA helps the economy by protecting the ecosystems that provide food, medicine, and flood protection

National Wildlife Federation (National Wildlife Federation inspires Americans to protect wildlife for our children's future National Wildlife Federation provides resources for media through our Newsroom including press releases, fact sheets, and reports.) February 1, 2006 “Endangered Species Act: Myths and Facts” <http://www.nwf.org/wildlife/pdfs/esamythsfacts.pdf>

“The Endangered Species Act explicitly requires balancing species protection and people's economic needs. Once a species is listed, the Endangered Species Act requires that people and the economy be considered at every stage -- including the designation of habitat, the development of regulation, and the creation of alternatives. Plus, the Endangered Species Act actually helps the economy by protecting the ecosystems that provide food, medicine, flood protection and recreation. Hunting, fishing and wildlife watching employ nearly as many people -- 2.6 million -- as the United States computer industry.”

Protecting endangered species makes economic senses: tourism and hunting benefitted

National Wildlife Federation, 2006, “Endangered Species Act by the Numbers,” <http://www.nwf.org/wildlife/pdfs/esabythenumbers.pdf>

“Protecting endangered species isn't just the right thing to do. It makes economic sense too. Extinction is something we can't afford. Diverse plants, wildlife and fish provide us with priceless benefits, from supplying lifesaving drugs to maintaining natural ecosystems for flood protection, drinking water, recreation and eco-tourism.

* $108 billion in annual revenues would rank hunting, fishing and wildlife watching as the seventh largest corporation in America.
* Hunting, fishing and wildlife watching employ nearly as many people -- 2.6 million -- as the United States computer industry.
* Once extirpated from Yellowstone National Park, the gray wolf’s reintroduction in 1995, pursuant to the Endangered Species Act, has boosted revenues in local communities by $10 million annually. Total benefits are expected to reach $23 million a year.”

PRO: EPA EFFECTIVENESS

By Alexandra Hebdon

ADVANTAGES OF THE STATUS QUO

A) General

Best food and pesticides standards, permitting hazardous waste facilities, underground storage tank compliance, and pollution control

White House Office of Management and Budget (US government agency designed to assist the President in overseeing the preparation of the budget and to supervise the activities of the agencies of the Executive Branch; the OMB also evaluates the effectiveness of agency programs, policies, and procedures in helping to formulate the President’s spending plans), Fiscal Year 2008, “Environmental Protection Agency: Budget, Performance and Financial Snapshot Fiscal Year 2008”, [*http://www.whitehouse.gov/omb/expectmore/agency\_snapshots/agency\_020.html*](http://www.whitehouse.gov/omb/expectmore/agency_snapshots/agency_020.html)

“In 2008, the [Environmental Protection]] Agency set stringent new standards for a significant number of air pollutants or pollution sources; proposed a new regulation to allow for the underground storage of greenhouse gases in a manner that protects ground water sources of drinking water; ensured that 96 percent of hazardous waste facilities are permitted and 66 percent of the nation’s underground storage tanks are in compliance; completed a thorough reassessment of all food pesticides, setting the most health protective standards in the world for pesticides and food safety; and took enforcement actions to secure commitments from polluters to spend an estimated $11.8 billion on pollution control activities.”

B) Clean Diesel

In 2006, EPA finalized standards reducing the pollution from stationary diesal engines by about 90%

Environmental Defense Fund (a leading national nonprofit organization representing more that 500,000 members that links science, economics and law to develop cost-effective, innovative solutions to the most pressing environmental problems; declared “…America’s most economically literate green campaigners” by The Economist magazine), February 26, 2009, “Environmental Defense Fund Welcomes EPA Clean Air Standards to Reduce Hazardous Diesal Pollution”, press release, <http://www.edf.org/pressrelease.cfm?ContentID=9300>

In June 2006, EPA finalized protective standards for new stationary diesel engines that will reduce nitrogen oxides, particulate matter and other pollutants from each new engine by about 90 percent. EPA’s proposal today, addressing existing stationary diesel engines, is another important step in providing cleaner, healthier air for all Americans by reducing diesel pollution. Environmental Defense Fund legal action compelled both EPA rulemakings.

The EPA taking actions to emplement standards for stationary diesel engines beginning in 2013

Environmental Defense Fund (a leading national nonprofit organization representing more that 500,000 members that links science, economics and law to develop cost-effective, innovative solutions to the most pressing environmental problemS), February 26, 2009, “Environmental Defense Fund Welcomes EPA Clean Air Standards to Reduce Hazardous Diesal Pollution”, press release, <http://www.edf.org/pressrelease.cfm?ContentID=9300>

Environmental Defense Fund welcomes new clean air standards proposed by EPA Administrator Lisa Jackson to protect public health from about one million stationary diesel engines in operation today. The emission standards would take effect beginning in 2013, reducing emissions of hazardous volatile organic compounds, lethal particulate pollution, carbon monoxide, and oxides of nitrogen. Stationary diesel engines would also be required to use ultra low sulfur diesel fuel, a cleaner fuel broadly deployed today in the nation’s mobile diesel fleet. “Cleaning up these engines is one of the most important actions EPA can take to protect public health,” said Dr. John Balbus, chief health scientist at Environmental Defense Fund and a member of the EPA Children's Health Protection Advisory Committee. “Stationary diesel engines are often located in populated areas where they can expose people to high levels of toxic diesel exhaust.”

C) Economic Growth

EPA spending plan for water infrastructure : every $1 US fed generates $2 for local water needs

Lorraine Woellert, February 26, 2009, "Obama Would Increase EPA Budget, Revive Superfund Tax (Update1)", Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601087&sid=awFmri0ADH58&refer=home>

“The EPA spending plan for the fiscal year that starts Oct. 1 includes $3.9 billion to fund about 1,700 drinking and wastewater treatment projects nationwide. The request, which the Obama budget describes as “historic” in scope, more than doubles the spending in fiscal 2008. The water programs provide money to state revolving funds that make infrastructure loans to communities. The budget outline estimates that every federal dollar invested in the programs generates $2 for local water needs through state matching funds.”

A/T: WORKABILITY

A) Funding and Staffing

EPA adding 30 new enforcement staff

United Press International (UPI), May 7, 2009, "EPA: Budget creates jobs, protects climate", <http://www.upi.com/Top_News/2009/05/07/EPA-Budget-creates-jobs-protects-climate/UPI-98181241730252/>. [brackets added]

[EPA administrator Lisa] Jackson said the $600 million allocated for the EPA's Enforcement and Compliance Assurance program would add nearly 30 more enforcement staff, among other things.

Obama’s 2010 budget proposal boosts EPA funding by 34%

Environmental News Network, May 14, 2009, “Obama’s 2010 Budget to Increase EPA Funding by 34 Percent,” <http://www.enn.com/business/article/39901>

”The Obama administration announced its proposed budget for the fiscal year 2010 which includes a significant boost in funding for the EPA. The $10.5 billion funding will be a 34 percent increase from 2009’s $7.8 billion in funding. "It takes significant strides to ensure that our air, land, and water are safe and clean," EPA Administrator Lisa Jackson said in her May 7 speech. "And it significantly improves accountability and transparency, ensuring fiscal responsibility at a time when every dollar counts."

B) Performance

EPA: first agency to win the President’s Quality Award for Overall Management two years in a row

United States Environmental Protection Agency (EPA), last updated April 13, 2009, “President’s Quality Award (PQA)” <http://www.epa.gov/pqa/>

In 2008, for the second year in a row, EPA was awarded President’s Quality Award for Overall Management. As the first agency to win this award back to back, EPA has become a model for other federal agencies by operating with a results-oriented, data-driven, performance management approach. In 2008, EPA further integrated its management systems, embarked on new improvement strategies and approaches, set new goals, and accomplished great results. Some of EPA's most significant accomplishments are:

>The first Federal Agency to create a 'stat' program; >The only agency to have our senior career managers regularly meet to make decisions regarding improving our operations and management systems; >The first Agency to internally broadcast live, regular senior management progress meetings; >The first Agency to produce a quarterly management report designed for the public; >The only Agency to create a new organization, the Program Analysis Division, whose full-time job is to look for ways to improve operations and outcomes; >One of only a few Agencies to systematically capture, disseminate, and validate best practices; >The second Agency to achieve, and keep, the highest possible score on the President's Management Agenda.”

In 2007, the EPA won the President’s Quality Award

U.S. Environmental Protection Agency Performance and Accountability Report, Fiscal Year 2008, United States Environmental Protection Agency, <http://www.epa.gov/ocfo/par/2008par/par08report.pdf>

In December 2007, EPA received the federal government’s highest honor for strong and effective management: the President’s Quality Award for Management Excellence. EPA was only the second Agency to win the highest tier award—Overall Management—since the award’s inception in 1988. This award recognized the efforts EPA has taken towards improving performance management.

C) Transparency

Obama EPA administrator committed to transparency and openness

Lisa P. Jackson (EPA Administrator), April 23, 2009, "Memo to EPA Employees", Subject: Transparency in EPA's Operations, United States Environmental Protection Agency, [*http://www.epa.gov/administrator/operationsmemo.html*](http://www.epa.gov/administrator/operationsmemo.html)

In my testimony before the Senate Committee on Environment and Public Works and in my January 23, 2009, memorandum to all employees, I expressed my commitment to uphold the values of transparency and openness in conducting EPA operations. President Obama recently said in a memorandum to agency heads: “Transparency promotes accountability and provides information for citizens about what their Government is doing. Information maintained by the Federal Government is a national asset.” I am asking each one of you to help me ensure EPA operates in full compliance with this principle. The success of our environmental efforts depends on earning and maintaining the trust of the public we serve. The American people will not trust us to protect their health or their environment if they do not trust us to be transparent and inclusive in our decision-making. To earn this trust, we must conduct business with the public openly and fairly.

EPA Administrator: agency will provide for fullest possible public participation

Lisa P. Jackson (EPA Administrator), April 23, 2009, "Memo to EPA Employees", Subject: Transparency in EPA's Operations, United States Environmental Protection Agency, <http://www.epa.gov/administrator/operationsmemo.html>

In all its programs, EPA will provide for the fullest possible public participation in decision-making. This requires not only that EPA remain open and accessible to those representing all points of view, but also that EPA offices responsible for decisions take affirmative steps to solicit the views of those who will be affected by these decisions. This includes communities of color, Native Americans, people disproportionately impacted by pollution, small businesses, cities and towns working to meet their environmental responsibilities, and others who have been historically underrepresented in EPA decision-making. EPA will not accord privileged status to any special interest, nor will it accept any recommendation or proposal without careful, critical, and independent

The EPA has uses peer review to access many of its regulations and policies

United States Government Accountability Office (GAO), June 9, 2009, "Scientific Integrity: EPA's Efforts to Enhance the Credibility and Transparency of Its Scientific Processes",Testimony Before the Committee on Environment and Public Works, U.S. Senate, <http://www.gao.gov/new.items/d09773t.pdf>,

Independent, expert peer review of EPA’s scientific and regulatory products, such as risk assessments and proposed rules, is integral to the agency’s ability to effectively protect public health and the environment. Specifically, using peer review, EPA seeks to enhance the quality and credibility of the agency’s highly specialized products. One of the several ways EPA obtains expert peer review is from advice and recommendations it requests of its 24 federal advisory committees comprising independent experts. For example, since its inception in 1978, one of EPA’s largest and most prominent federal advisory committees— the EPA Science Advisory Board—has convened hundreds of peer review panels to assess the scientific and technical rationales underlying a wide range of current or proposed EPA regulations and policies. The IRIS program uses Science Advisory Board panels to peer review some of its particularly complex chemical assessments,7 and the Board is currently expanding a panel that will review existing IRIS assessment values established more than 10 years ago. Federal advisory committees such as the Science Advisory Board are subject to the requirements of the Federal Advisory Committee Act (FACA), which include broad requirements for balance, independence, and transparency.

PRO: ETHANOL

By Stephen Menesick

SIGNIFICANCE

Ethanol is not responsible for raising food prices and taking it off the market would raise prices

The Washington Post, June 16, 2008, “All Biofuels Are Not The Same” BYLINE: Vinod Khosla via LexisNexis

Rising food prices are of course a concern, but principally blaming ethanol production is illogical. "On the international level . . . only 3 percent of the more than 40 percent increase we have seen in world food prices this year is due to the increased demand on corn for ethanol," Agriculture Secretary Ed Schafer said last month. Oil prices affect the U.S. consumer price index for food two to three times as much as corn prices, the global analysis firm LECG has found. If biofuels were taken off the market, Merrill Lynch estimates, oil prices would climb 15 percent, putting further upward pressure on food prices.

Wider market share for ethanol would save billions and create millions of jobs

Inside Energy with Federal Lands, January 15, 2007, BYLINE: Michael Schmidt “37 governors seek more for ethanol; propose aggressive infrastructure plan” via Lexis Nexis

Thirty-seven governors are asking President Bush and congressional leaders to support raising the renewable fuels standard targets, provide new financial incentives and establish an aggressive "regional marketing strategy" for infrastructure to help ethanol capture 20% of the gasoline market within 20 years. Doing so, they said in a report last week, would cut U.S. oil demand by 10 billion barrels, saving more than $50 billion a year, while generating $110 billion for the economy and creating 2.4 million jobs.

SOLVENCY

Studies show ethanol has a positive energy balance and displaces liquid fuels

L. Leon Geyer (Professor, Virginia Tech, Department of Agricultural and Applied Economics), Phillip Chong (Research Assistant, Virginia Tech, Department of Agricultural and Applied Economics ) and Bill Hxue (Research Associate, Virginia Tech, Department of Agricultural and Applied Economics) 2007 “Twenty-Seventh Annual American Agricultural Law Association: Agricultural Law Symposium & Meeting: ARTICLE: Ethanol, Biomass, Biofuels and Energy: A Profile and Overview” Drake Journal of Agricultural Law, Spring, 2007, 12 Drake J. Agric. L. 61, via Lexis Nexis

The core question surrounding corn based ethanol is whether production consumes more energy then it creates. n77 The controversy and uncertainty surrounding this question is in part a function of ethanol's complexity and "variations in data and assumptions used among different studies." n78 In June 2004, the U.S. Department of Agriculture updated its 2002 analysis of the issue and determined that the net energy balance of ethanol production was 1.67 to 1. (For every 100 BTUs [British Thermal Units] of energy used to make ethanol, 167 BTUs of ethanol is produced). In 2002, USDA had concluded that the ratio was 1.35 to 1. n79 Furthermore, a 2002 Michigan State University study "found that ethanol produced from corn provided 56 percent more energy than is consumed during production (1.56 to 1)." n80 Douglas Tiffany of the University of Minnesota attributed ethanol's energy balance to corn's "storage of solar en-ergy in starch molecules." n81 In addition to the positive energy balance, Tiffany reported that: Corn-derived ethanol results in a six-fold displacement of liquid fuels. This means that every gallon of ethanol produced requires only one-sixth of a gallon of liquid fuels. This is due to the fact that corn production and ethanol processing utilize coal for electrical energy and natural gas for fertilizer production. n82

Scientific Consensus supports ethanol’s positive energy balance

L. Leon Geyer (Professor, Virginia Tech, Department of Agricultural and Applied Economics), Phillip Chong (Research Assistant, Virginia Tech, Department of Agricultural and Applied Economics ) and Bill Hxue (Research Associate, Virginia Tech, Department of Agricultural and Applied Economics) 2007 “Twenty-Seventh Annual American Agricultural Law Association: Agricultural Law Symposium & Meeting: ARTICLE: Ethanol, Biomass, Biofuels and Energy: A Profile and Overview” Drake Journal of Agricultural Law, Spring, 2007, 12 Drake J. Agric. L. 61, via Lexis Nexis

The discrepancy that exists between the arguments for a positive and negative balance of energy can be found within the accounted inputs of ethanol production. Pimentel states that those who argue for a positive energy balance omit some energy inputs. n86 Similarly, the United States Department of Agriculture states that those who argue for a negative energy balance "overestimate the amount of energy needed to grow corn and convert corn to ethanol." n87 Ul-timately, the consensus within the scientific community supports the findings of USDA.

There is sufficient biomass to meet the mandates and to replace gas imports

The Washington Post, June 16, 2008, “All Biofuels Are Not The Same” BYLINE: Vinod Khosla via LexisNexis

Sufficient biomass exists as waste from forestry operations alone to meet the cellulosic fuels mandate (21 billion gallons) in the 2007 energy bill. All 36 billion gallons could be produced, at prices approaching $1 per gallon, within 10 years, if we include agricultural crop waste, municipal organic waste and sewage. By adding winter cover crops to about half of the land used for agriculture, land that sits idle during winter, we could replace most of our gasoline imports.

Winter cover crops could be used to replace much of our imported gas

The Washington Post, June 16, 2008, “All Biofuels Are Not The Same” BYLINE: Vinod Khosla via LexisNexis

By some agronomists' estimates, winter cover crops could produce 450 million tons of biomass a year within 10 years and more than 750 million tons by 2030. That by itself would be enough to replace much of our imported gas -- without an additional acre of land being used for biofuels production.

Ethanol reduces total GHG emissions by 87%

Enrique Rene de Vera (JD Candidate in 2008), Chicago Journal of International Law Winter, 2008 “DEVELOPMENT: The WTO and Biofuels: The Possibility of Unilateral Sustainability Requirements” 8 Chi. J. Int'l L. 661 via Lexis Nexis

“Ethanol burns without particulate emissions and produces less carbon monoxide and nitrogen oxide than gasoline. n9 According to a report issued by Argonne National Laboratories, ethanol use can reduce total greenhouse gas [\*664] emissions by up to 87 percent. n10 Since the carbon dioxide produced during ethanol combustion is largely offset by the carbon dioxide that was absorbed during the growth of the plants used to make ethanol, on balance ethanol greatly reduces carbon dioxide emissions relative to gasoline. n11

Cellulosic ethanol breakthrough is “inevitable”

Waste News, August 6, 2007, “On the search for a bio-breakthrough” BYLINE: Elizabeth McGowan, Via Lexis Nexis [brackets added]

“As 60 percent of the planet's biomass is microbial, [Arstides] Patrinos [president of Synthetic Genomics In and leading authority on structural biology] is convinced the answer to commercial production of cellulosic ethanol as transportation fuel will come in a tiny package. The fact that the genetic makeup of hundreds of microbes has now been sequenced could simplify the research. To create fuel, plant cellulose must first be transformed to the starch or sugar stage. Inventors now experimenting in labs with making fuel from specially grown crops, such as switch grass, and biomass sources, including corn waste, wheat straw and wood chips, count on high pressure, high temperatures and harsh chemicals to fashion a subpar end product with accompanying, less-than-desirable leftovers. ``The breakthrough is inevitable,'' he said. ``It's just a question of time and proper balance.”

DISADVANTAGE

Reducing Ethanol Use would be disastrous for the economy and the environment

The Washington Post, June 16, 2008, “All Biofuels Are Not The Same” BYLINE: Vinod Khosla via LexisNexis

Congress has required oil refiners and fuel blenders to use up to 36 billion gallons of renewable fuels produced in America annually. Critics fault this renewable fuels standard, but reducing it could be disastrous for energy security and the environment.

PRO: FORESTS

By Matthew Baker

INHERENCY

Legal confusion concerning Clinton’s roadless rule has allowed logging projects to move forward

New York Times, May 6, 2009, “Who Will Protect the Forests?,” <http://www.nytimes.com/2009/05/07/opinion/07thu3.html>

“The roadless rule was one of President Bill Clinton’s signature environmental achievements. Thanks to it — and citizen protests and legal efforts by environmental groups — very few miles of new roads have been built in protected areas since the rule took effect in 2001. But enduring legal confusion (the rule has been upheld in the Ninth Circuit, shot down in district court in Wyoming) has permitted regional foresters to move forward with commercial logging projects in Idaho, Colorado, Oregon and the White Mountains in New Hampshire. Mr. Obama should make sure these and other threats to the nation’s forests are stopped until more permanent protections are put in place.”

Obama has broken from the roadless rule and may be now evaluating roadless areas on a case by base basis

Green Change (national environmental organization), July 17, 2009, “Obama breaks roadless logging campaign promise, approves Tongass timber sale,” <http://www.greenchange.org/article.php?id=4687>

“In a first for the Obama administration, the sale of Orion North timber in a roadless area of the Tongass National Forest was approved by the U.S. Secretary of Agriculture Tom Vilsack. Environmental activists support the continuation of the Clinton-era Roadless Area Conservation Rule, and are disappointed in the administration’s decision to allow road construction and timber cutting on the unspoiled Revillagigedo Island.  The sale of timber was awarded to a Ketchikan mill, Pacific Log and Lumber, for the rights to clear-cut 4.4 million board-feet of timber, with the option to cut an additional 2.4 million board-feet. Contractors have already built about a mile of the 6.9 miles of roads that will be needed for the clear-cutting. A total of 381-acres of the Tongass National Forest would be affected by the sale.  When President Obama took office, he implemented a review of the Roadless rule, which prohibits road building on about 58 million acres of virgin national forest lands. And Secretary of Agriculture Vilsack proposed a plan to personally review all timber sales in roadless areas.  Although Obama supported the Roadless rule during his campaign, he appears to be migrating towards a policy of reviewing timber sales in roadless areas on a case-by-case basis.”

Lifespan of pacific conifers on the decline due to higher temperatures and drought

Yale Global Online, 2009, <http://yaleglobal.yale.edu/display.article?id=11870>

“It's suspected that some redwoods, yellow cedars and hemlocks of the temperate rain forests of the Pacific Northwest can live 1000 years and well beyond. But a new study from the US Geological Survey, reported on in Science, suggests that the lifespan for such confers is on the decline. “Warmer temperatures and subsequent water shortfalls” are pinpointed as the likely cause of the trees' increased death rate.”

Western US trees are disappearing twice as fast as three decades ago

Catherine Brahic, January 22, 2009, “Tree deaths double across western US,” The New Scientist, <http://www.newscientist.com/article/dn16469-tree-deaths-double-across-western-us.html>

“The majestic old trees of the western US are disappearing twice as fast as they were three decades ago, and climate change is most likely to blame, say scientists. Philip van Mantgem of the US Geological Survey and colleagues collected data from 76 plots on the west coast – from California up to British Columbia, Canada – and in Idaho, Arizona and Colorado. These are plots without any direct human management, so any tree loss is not due to logging. The team focused on old forests, where many of the trees were at least 200 years old, and sometimes as much as 1000 years old. In 87% of the plots, trees are disappearing faster than new trees are springing up. Death rates varied, but the trend held whether the trees were old or relatively young, big or small, high up in the mountains or down in valleys. The Pacific Northwest, including the pine trees of British Columbia, were the worst affected – death rates there are doubling every 17 years.”

US southwestern native forests and being replaced by single-species plantations

National Resource Defense Council, April 2, 2009, “Paper Industry Laying Waste to North American Forests:  Kimberly-Clark and other top U.S. manufacturers are sacrificing our most ecologically rich forests to make disposable tissue paper products,” <http://www.nrdc.org/land/forests/tissue.asp>

“The native forests of the southeastern United States also are vanishing at an alarming rate. These fragile ecosystems support dense stands of oak, hickory, black gum and red maple, and provide a haven for deer, fox and more than 230 fish species. But sprawling plantations of single-species pine are quickly taking the place of crucial forest habitat and food sources in this region. The southern United States now contains approximately half of the world's tree plantations, and due in part to increasing demand for paper products, the area of these plantations is expected to increase by 63 percent -- to 52 million acres -- by 2040.”

Clearcut logging in Canada is threatening wildlife and Indigenous communities who depend on wildlife

National Resource Defense Council, April 2, 2009, “Paper Industry Laying Waste to North American Forests:  Kimberly-Clark and other top U.S. manufacturers are sacrificing our most ecologically rich forests to make disposable tissue paper products,” <http://www.nrdc.org/land/forests/tissue.asp>

“Each year, due to ongoing demand from Kimberly-Clark and other companies, clearcut logging claims half a million acres of Ontario and Alberta's boreal forest -- a primeval expanse of pine, spruce, fir and poplar trees that nourishes caribou, lynx, bear, wolves and scores of songbirds. Indigenous communities depend on the wildlife and plants of this forest for sustenance and medicine. The thick layers of moss, soil and peat of Canada's boreal, which stretches across the country's entire northern range, form one of the world's largest terrestrial storehouses of carbon dioxide and play a critical role in preventing global warming.”

SIGNIFICANCE

Malaria can be ascribed almost entirely to deforestation

Lily Huang, June 20, 2009, “Rise of the Bugs,” Newsweek, <http://www.newsweek.com/id/202865>

Malaria, currently the most prevalent cause of death in the world, can be ascribed almost entirely to human acts of deforestation, which produces stagnant pools of water and allows more sunlight to reach water surfaces. This intensifies the growth of algae and forms the perfect nursery for *Anopheles* mosquitoes, potent vectors for the malaria parasite. Anopheles barely had a foothold in the ecosystem in its former state, but when conditions changed—as in the Amazon, East Africa and Southeast Asia—vector mosquitoes quickly displaced other benign species. The spread of other diseases has followed a similar trajectory.

Trees absorb 1/5th of humanity’s climate change emissions

United Press International, February 19, 2009, “Study: Trees absorb one-fifth of CO2 gas,” <http://www.upi.com/Science_News/2009/02/19/Study-Trees-absorb-one-fifth-of-CO2-gas/UPI-11191235069651/>

“Trees absorb nearly one-fifth of humanity's climate-change emissions, a 40-year British university study finds. The University of Leeds study is being hailed by environmentalists as the most compelling evidence yet supporting an end to the logging or burning of trees in forested areas.”

Trees substantially buffer the rate of climate change

United Press International, February 19, 2009, “Study: Trees absorb one-fifth of CO2 gas,” <http://www.upi.com/Science_News/2009/02/19/Study-Trees-absorb-one-fifth-of-CO2-gas/UPI-11191235069651/>

"We are receiving a free subsidy from nature," with trees "substantially buffering the rate of climate change," said study author and Leeds geography Professor Simon Lewis, a research fellow at the Royal Society of London for the Improvement of Natural Knowledge.”

US forests already capture 10% of US carbon emission and could capture more

American Forest Foundation, February 18, 2009, “Private Forests are Key to Offsetting Carbon Emissions New Industry-Conservation Coalition Calls on Congress to Act,” <http://www.forestfoundation.org/climatepr.html>

“U.S. forests and forest products already capture and store 10 percent of all U.S. carbon emissions produced each year, but the new coalition called the Forest-Climate Working Group (FCWG) says they can trap even more if landowner incentives and forest-carbon offsets are put in place. “This is something we can ramp up right now and that is exactly what policy makers want to see,” said Jad Daley, Director, Northern New England Programs for The Trust for Public Land. “We don’t need to wait for new technologies, and we have enough experience with carbon markets to make it work.”

PRO: GAS TAX

By Phillip Mayer

SIGNIFICANCE

Gas Taxes Comparatively Low in U.S.

Charles Krauthammer (American Pulitzer Prize-winning syndicated columnist and political commentator syndicated in more than 200 newspapers and media outlets, and a contributing editor to the Weekly Standard and The New Republi.c He received an M.D. from Harvard University) January 2009 The Weekly Standard “The Net-Zero Gas Tax” <http://www.weeklystandard.com/Content/Public/Articles/000/000/015/949rsrgi.asp?pg=2>

This combination of geography and romance is the principal reason gas taxes are so astonishingly low in America. The federal tax is 18.4 cents per gallon. In Britain, as in much of Europe, the tax approaches $4 per gallon--more than 20 times the federal levy here.

Gas tax low in the US compared to rest of the industrialized world

David Goldstein (Writing for the Huffington Post) May 2008 The Huffington Post “The Falling Federal Gas Tax” <http://www.huffingtonpost.com/david-goldstein/the-falling-federal-gas-t_b_100379.html>

Still think our federal gas tax is unaffordable? Take a look at the US tax compared to a handful of other industrialized nations:

Country Gas tax in US cents

Belgium 422

France 421

Germany 449

Italy 403

Japan 439

Netherlands 466

United Kingdom 471

United States 18.4

Gas Tax Not Responsible for High Prices, Needed for Infrastructure

Virginia Miller (Writing for the American Public Transportation Association a nonprofit international association of more than 1,500 member organizations including public transportation systems) April 2008 APTA “Senator McCain’s Gas Tax Holiday Would Hurt the Economiy—Don’t Cut Transportation Funds” <http://www.apta.com/media/releases/080416_gas_tax.cfm>

The truth is that gas prices are high because the cost of oil is high; they’re not high because of the federal gas tax. The truth is that we need the federal gas tax to pay for the much needed highway and public transportation infrastructure.

ADVANTAGES OF THE CURRENT SYSTEM

Tax can Reduce Oil Prices with a Myriad of Benefits

Charles Krauthammer (American Pulitzer Prize-winning syndicated columnist and political commentator syndicated in more than 200 newspapers and media outlets, and a contributing editor to the Weekly Standard and The New Republic He received an M.D. from Harvard University) January 2009 The Weekly Standard “The Net-Zero Gas Tax” <http://www.weeklystandard.com/Content/Public/Articles/000/000/015/949rsrgi.asp?pg=2>

A tax that suppresses U.S. gas consumption can have a major effect on reducing world oil prices. And the benefits of low world oil prices are obvious: They put tremendous pressure on OPEC, as evidenced by its disarray during the current collapse; they deal serious economic damage to energy-exporting geopolitical adversaries such as Russia, Venezuela, and Iran; and they reduce the enormous U.S. imbalance of oil trade which last year alone diverted a quarter of $1 trillion abroad.

Tax Facilitates Shift to Fuel-Efficient Cars

Charles Krauthammer (American Pulitzer Prize-winning syndicated columnist and political commentator syndicated in more than 200 newspapers and media outlets, and a contributing editor to the Weekly Standard and The New Republic He received an M.D. from Harvard University) January 2009 The Weekly Standard “The Net-Zero Gas Tax” <http://www.weeklystandard.com/Content/Public/Articles/000/000/015/949rsrgi.asp?pg=2>

High gas prices, whether achieved by market forces or by government imposition, encourage fuel economy. In the short term, they simply reduce the amount of driving. In the longer term, they lead to the increased (voluntary) shift to more fuel-efficient cars.

Gas Tax Kills Harmful Regulation

Charles Krauthammer (American Pulitzer Prize-winning syndicated columnist and political commentator syndicated in more than 200 newspapers and media outlets, and a contributing editor to the Weekly Standard and The New Republic. He received an M.D. from Harvard University) January 2009 The Weekly Standard “The Net-Zero Gas Tax” <http://www.weeklystandard.com/Content/Public/Articles/000/000/015/949rsrgi.asp?pg=2>

This is a major benefit of the gas tax that is generally overlooked. It is not just an alternative to regulation; because it is so much more efficient, it is a killer of regulation. The most egregious of these regulations are the fleet fuel efficiency (CAFE) standards forced on auto companies. Rather than creating market conditions that encourage people to voluntarily buy greener cars, the CAFE standards simply impose them. And once the regulations are written--with their arbitrary miles-per-gallon numbers and target dates--they are not easily changed. If they are changed, moreover, they cause massive dislocation, and yet more inefficiency, in the auto industry.

Low Administrative costs and ability to raise huge amounts make it ideal as a revenue source

The National Surface Transportation Policy and Revenue Study Commission (Comprised of 12 members, representing: Federal, state and local governments; metropolitan planning organizations; transportation-related industries; and public interest organizations) December 2007 “Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission” <http://transportationfortomorrow.org/final_report/vol_1_chapter_1.aspx>

As noted above, the gas tax has been a staple of highway finance at both the Federal and State levels for 80 years. Public acceptance of this mechanism, its ability to raise considerable revenues, and its low administrative cost have been significant positive attributes.

Low Cost, High and Stable Revenue

The National Surface Transportation Policy and Revenue Study Commission (Comprised of 12 members, representing: Federal, state and local governments; metropolitan planning organizations; transportation-related industries; and public interest organizations) December 2007 “Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission” <http://transportationfortomorrow.org/final_report/vol_1_chapter_1.aspx>

Among the attributes that make fuel taxes particularly attractive sources of surface transportation revenues are their (1) low administrative and compliance costs, (2) ability to generate substantial amounts of revenue, (3) relative stability and predictability, and (4) ease of implementation.

SOLVENCY

Oil Companies would Raises Prices and Get more Profits

Jonathan Alter (senior editor for Newsweek magazine) April 2008 Newsweek “Political Pandering: Suspending the Federal Gas Tax is a crass ploy for votes. Why Hillary Clinton and John McCain should know better” <http://www.newsweek.com/id/134856>

If the federal excise tax were lifted, oil companies would simply raise prices and pocket most of the difference.

Tax Kept by Suppliers, not Passed on to Consumers

Alec MacGillis and Steven Mufson (Writers for the Washington Post) May 2008 Mercury News “Experts disparage Clinton’s plan to suspend gas tax” <http://www.mercurynews.com/politics/ci_9116310>

Harvard professor Gregory Mankiw, who has written a best-selling textbook on economics, said what he teaches is different from what Clinton and McCain are saying about gasoline taxes. "What you learn in Economics 101 is that if producers can't produce much more, when you cut the tax on that good the tax is kept . . . by the suppliers and is not passed on to consumers," he said.

No Drop in Prices

Robert Schroeder (Reporter for MarketWatch in Washington) April 2008 MarketWatch “Candidates’ gas-tax plans are counterproductive, economists say” <http://www.marketwatch.com/story/gas-tax-reduction-plans-are-counterproductive-economists-say>

"I don't think that a gas-tax cut would result in a really big drop in gasoline prices," said James Hamilton, a professor of economics at the University of California San Diego. It's simple economics: Without a corresponding increase in supply, he added, the price would rise again.

Turn: Elimination of the gas tax would = more people driving and thus lead to higher gas prices

Dunstan Prial (Writer for FOX Business) June 2008 FOX Business “Gas Tax Holiday Never Got Off the Ground” <http://www.foxbusiness.com/story/gas-tax-holiday-got-ground/>

More than one economist suggested that eliminating the 18.4 cents per gallon federal gas tax, even temporarily, could ultimately lead to higher prices by encouraging more people to drive. More driving would increase demand for gasoline and force the price upward.

DISADVANTAGE

A. Funding Gap

Gas Tax Provides Billions for Infrastructure

Dunstan Prial (Writer for FOX Business) June 2008 FOX Business “Gas Tax Holiday Never Got Off the Ground” <http://www.foxbusiness.com/story/gas-tax-holiday-got-ground/>

The gas tax raises about $30 billion a year, virtually all of it (99.5%) earmarked for infrastructure improvements and mass transit projects.

$10 billion in government funding lost

Steve Hargreaves (Staff Writer for CNNMoney.com) April 2008 CNNMoney.com “Tax Cut Could Push Gas Prices Higher” <http://money.cnn.com/2008/04/29/news/economy/gastax_cut/index.htm?postversion=2008042911>

The federal government collects about $38 billion a year in gas and diesel taxes, with state and local governments bringing in about $78 billion more, according to the Federal Highway Administration. Most of the money is used to fund highway projects. Suspending the gas tax during the summer would leave a funding gap of about $10 billion.

B. Repair Project Delays

Thousands of repair projects delayed

Jonathan Alter (senior editor for Newsweek magazine) April 2008 Newsweek “Political Pandering: Suspending the Federal Gas Tax is a crass ploy for votes. Why Hillary Clinton and John McCain should know better” <http://www.newsweek.com/id/134856>

The proceeds from the gas tax go for highway construction and upgrades. Because the tax (24.4 cents a gallon on diesel fuel) was last raised 15 years ago, our infrastructure is a mess, with potholes and dangerous crossings practically everywhere. Thousands of repair projects will be further delayed.

Brink: Transportation vital to the US economy

U.S. Chamber of Commerce April 2008 “The Transportation Challenge: Moving the U.S. Economy” <http://www.uschamber.com/publications/reports/0804transportationchallenge>

Transportation infrastructure is vital to the success of the five major economic sectors that account for 84% of the U.S. economy: services, manufacturing, retail, agriculture and natural resources, and transportation providers.

Impact: Lack of adequate transportation infrastructure puts key industries at risk

U.S. Chamber of Commerce April 2008 “The Transportation Challenge: Moving the U.S. Economy” <http://www.uschamber.com/publications/reports/0804transportationchallenge>

Without adequate transportation infrastructure capacity and reliable and costeffective transportation services, the economic growth, productivity, and competitiveness of metropolitan areas, megaregions, and key industries are at risk

C. Job Loss

Suspending the Gas tax for 3 months would cost 300,000 jobs

American Association of State Highway and Transportation Officials (AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico) April 2008 AASHTO “McCain's Gas Tax Holiday Would Devastate Highway and Transit Programs While Saving Motorists an Average of $28” <http://www.transportation.org/news/109.aspx> [brackets added]

Using an estimate of an $8.5 billion loss in fuel tax receipts as a result of the suspension, the potential effect of such a cut [suspending the gas tax for three months] would be the reduction of nearly 300,000 jobs. The proposed revenue loss would come on top of what is already a $3.2 billion shortfall in the Highway Trust Fund in September that could trigger a $13.5 billion cut in highway programs in FY 2009, unless Congress comes up with a solution. McCain's proposal [to suspend the gas tax for 3 months] would add $8.5 billion to that shortfall, essentially wiping out the program next year.

Jobs Lost and Construction Halted

Steve Hargreaves (A Staff Writer for CNNMoney.com) April 2008 CNNMoney.com “Tax Cut Could Push Gas Prices Higher” <http://money.cnn.com/2008/04/29/news/economy/gastax_cut/index.htm?postversion=2008042911> [brackets added]

A House Democratic staffer, interviewed shortly after McCain's announcement, also criticized the proposal [to suspend the gas tax for three months], largely on the grounds that state transportation departments may not be able to cover the loss in funding and construction projects would be suspended. "If you turn that off, a lot of construction projects won't take place and a lot of people will be put out of work," said Jim Berard, a spokesman for the House Transportation and Infrastructure Committee.

Cutting the gas tax for three months = Reduced Infrastructure Funding and Jobs Jeopardized

American Association of State Highway and Transportation Officials (AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico) April 2008 AASHTO “McCain's Gas Tax Holiday Would Devastate Highway and Transit Programs While Saving Motorists an Average of $28” <http://www.transportation.org/news/109.aspx>

Presidential contender Senator John McCain (R-AZ) has called for a suspension of the federal gasoline and diesel fuel taxes from Memorial Day to Labor Day. AASHTO Executive Director John Horsley said, "This proposal would have devastating impacts upon the federal-aid highway and transit programs, sharply reducing funding available to states and jeopardizing hundreds of thousands of jobs nationwide. Such a move would be short-sighted and damaging to our nation's economy, while providing little relief to America's drivers."

D. Public Transportation Harmed

Link: Lifting the gas tax for just one summer would severely restrict public transit’s ability to add and improve transit service

Virginia Miller (Writing for the American Public Transportation Association a nonprofit international association of more than 1,500 member organizations including public transportation systems) April 2008 APTA “Senator McCain’s Gas Tax Holiday Would Hurt the Economiy—Don’t Cut Transportation Funds” <http://www.apta.com/media/releases/080416_gas_tax.cfm>

Last year 10.3 billion trips were taken on public transportation – the largest ridership number in fifty years. At a time when more and more Americans are using public transportation to beat the high cost of gas, the federal government needs to increase its investment in public transportation. If instead, the gas tax was suspended for the summer, it would eliminate $1.4 billion of federal funding for public transportation and severely restrict the industry’s ability to add and improve transit services for a growing number of Americans.

Impact: Increased Oil Dependency, Pollution, and Decreased Alternative Energy Sources

Environmental Literary Council (An independent organization which offers free background information on common environmental science concepts) April 2008 Environmental Literary Council “Public Transportation” <http://www.enviroliteracy.org/article.php/1363.html>

The use of public transportation is widely viewed as being beneficial to the environment. When individuals choose mass transit options over automobiles, they can greatly reduce the pollution that would have been emitted from individual automobile use. Using public transportation is estimated to save over 1.4 billion gallons of gas and decrease carbon dioxide emissions by 1.5 million tons each year. Many public transportation agencies have also begun to use alternative fuels in buses and their support vehicles and, as of 2005, 16 percent of our nation's bus fleet had changed over to alternative fuels. Most subway systems are powered by electricity, further reducing emissions below what would otherwise be emitted by cars.

PRO: GENETICALLY MODIFIED ORGANIZATIONS

By Matthew Baker

A) Gene Splicing

Every risk analysis shows that splicing genes poses no danger

Dr. Henry Miller (MD, foundering director of the FDA Office of Biotechnology, Research Fellow at the Hoover Institution specializing in science and technology), May 15, 2008, “Europe’s bad Harvest,” The Guardian, <http://commentisfree.guardian.co.uk/henry_miller/2008/05/europes_bad_harvest.html>

“Every risk analysis performed by countless scientific bodies worldwide has shown that the splicing of new genes into plants, per se, introduces no incremental risks. A 2001 European Commission report summarising the conclusions of 81 different EU-funded research projects spanning 15 years concluded that, because gene-spliced plants and foods are made with highly precise and predictable techniques, they are at least as safe as and often safer than their conventional counterparts. In 2003, then-EU commissioner for health and consumer affairs David Byrne acknowledged that the official European Commission position was that currently marketed gene-spliced crop varieties posed no greater food safety or environmental threat than the corresponding conventional food varieties.”

Americans have consumed 2 trillion servings of gene-spliced food without a single injury

Dr. Henry Miller (MD, foundering director of the FDA Office of Biotechnology, Research Fellow at the Hoover Institution specializing in science and technology), August 19, 2008, “The Dunce of Wales,” The Guardian, <http://www.guardian.co.uk/commentisfree/2008/aug/19/gmcrops.princecharles>

“Americans have consumed about two trillion servings of gene-spliced foods, and not a single person has been injured or an ecosystem disrupted. In contrast, five products engineered with traditional techniques (two squash, two potato and one celery variety) have had unsafe levels of toxins and have caused injury or death.”

B) GM Crops

WHO: GM foods are not likely to present health risks to humans

Dr. Anthony Bradley (PhD from Westminster Theological Seminary with a BS in biological sciences from Clemson University), May 9, 2008, “European Commission Attacks its Own Scientists,” <http://blog.acton.org/archives/tag/biotechnology>

“But here’s what the WHO actually says: “GM foods currently available on the international market have passed risk assessments and are not likely to present risks for human health. In addition, no effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved. European worries about food safety are to a large extent based on the experience of the 1990s when a number of food scandals, in particular BSE or mad cow disease, caused understandable anxiety among consumers. All of these scandals, however, were entirely unrelated to GM food; it is irresponsible to exploit these fears in the current debate on biotechnology.”

Resistance to GM crops may have prevented millions of lives from being sold

Dennis T. Avery and Alex A. Avery, October 25, 2007, “Biotech Deaths May Already Total Millions,” The Center for Global Food Issues, <http://www.cgfi.org/2007/10/25/biotech-deaths-may-already-total-millions/>

“Unfortunately, the clash over modern farming technology has already had victims by the millions. New technologies that would save millions of lives every year are being held back by activist-scared regulators, using the excuse of “more testing.” During the severe southern African drought of 2002, eco-activists told local governments that American food aid was “poison” because it contained genetically modified seeds. In at least one country, Zambia, the government locked up the U.S. food aid—despite the starvation of thousands in outlying villages. The food aid was later liberated by a mob that overwhelmed its armed guards.”

GM crops do not have nonunique risks and regulations are in place

Debra Cano Ramos, November 28, 2006, “Biochemistry Professor Delves Into Study of Genetically-Engineered Food,” INSIDE Cal State Fullerton, <http://calstate.fullerton.edu/news/Inside/2006/future_foder.html>

“Between 2004 and 2005, [Christopher] Meyer [Professor of Biochemistry at California State, Fullerton] said, there was an 11 percent increase of biotech crops worldwide, with 21 countries growing such crops, including the United States. Plants that are genetically engineered have risks, as do all technologies, but don’t pose risks that are different than conventionally grown food, he said. “Natural foods are not always good for you,” he said. Natural crops, such as coffee, he noted, may contain harmful compounds and still other plants produce “natural” pesticides, which can be toxic. Moreover, biotech foods have been deemed to be safe by various government agencies, including the U.S. Food and Drug Administration. “There are a lot more regulations for biotech foods than for many of the ‘natural’ foods that you’d find in health food stores — and that can be risky,” he said. Safety standards also have been set in place for genetic engineering to reduce public health risks, such as creating or exacerbating a food allergen or toxin, Meyer said.”

No documented health problems linked to GM

Jon Entine (adjunct fellow at the American Enterprise Institute), February 8, 2006, “Let Them Eat Precaution,” National Review, <http://www.nationalreview.com/comment/entine200602080747.asp>

“Slogans like “better safe than sorry” may have a nice ring of moderation, but they are scientifically simplistic. There have been no documented health problems linked to GM crops and absolutely no evidence that genetic modification poses greater risks than crossbreeding and gene-splicing, which have given us such products as the tangelo and seedless grapes. The U.N.’s Food and Agriculture Organization has endorsed the safety and health benefits of biotech crops, urging their extension to the developing world.”

Blocking GMs causes millions to die and suffer from disease unnecessarily

Jon Entine (adjunct fellow at the American Enterprise Institute), February 8, 2006, “Let Them Eat Precaution,” National Review, <http://www.nationalreview.com/comment/entine200602080747.asp>

“The hypothetical risk of biotechnology has to be balanced against the lives being lost as new products remain trapped in a regulatory maze. In 2002, Zambia and Zimbabwe, wary of offending their major trading partners in the EU, cited the “precautionary principle” in rejecting donations of bioengineered grain that could have helped feed ten million undernourished people, thousands of whom ultimately died. Today in the Philippines, where 42 percent of the diet comes from white rice, a recent study by U.N. food experts estimates that Golden Rice could avert 879 deaths, 1,925 corneal ulcers, and 15,398 cases of night blindness each year. A Philippines-based based anti-biotechnology group with ties to Greenpeace has aggressively lobbied against Golden Rice on the grounds that the benefits from beta-carotene are minimal — claims rejected by scientists.”

In more than two dozen countries GM crops are producing higher yields, less chemical use and reduced impact on the environment

Dr. Henry Miller (MD, foundering director of the FDA Office of Biotechnology, Research Fellow at the Hoover Institution specializing in science and technology), April 16, 2008, “Gene Therapy: Genetically Modified Crops Could Solve the World Food Crisis- If Only the UN and other groups would permit their use,” The Guardian, <http://www.guardian.co.uk/commentisfree/2008/apr/16/genetherapy>

“Genetic modification offers plant breeders the tools to make old crop plants do spectacular new things. In two dozen countries, farmers are using genetically modified crop varieties to produce higher yields, with less use of chemical pesticides and reduced impact on the environment. Moreover, plant biologists have identified genes that regulate water utilisation that can be transferred into important crop plants. These new varieties are able to grow with smaller amounts or lower quality water, such as water that has been recycled or that contains large amounts of natural mineral salts. Where water is unavailable for irrigation, the development of crop varieties able to grow under conditions of low moisture or temporary drought could both boost yields and lengthen the time that farmland is productive. Aside from new varieties that have lower water requirements, pest- and disease-resistant crop varieties also make water use more efficient indirectly. Because much of the loss to insects and diseases occurs after the plants are fully grown - that is, after most of the water required to grow a crop has already been applied - the use of genetically modified varieties that experience lower post-harvest losses in yield means that the farming (and irrigation) of fewer plants can produce the same total amount of food. We get more crop for the drop.”

C) GM Animals

Five advantages of genetically modified animals

Dr. Scott Gottlieb (MD, former FDA official, and Resident Fellow at the American Enterprise Institute) and Dr. Matthew B Wheeler (PhD in Physiology and Biophysics), 2008, “Genetically Engineered Animals and Public Health,” <http://www.aei.org/docLib/20080619_GEAnimalBenefitsReport.pdf>

“Genetically engineered agricultural animals are being developed to transform and improve public health. These public health benefits can be grouped into five broad areas of scientific development.

1. Genetically engineered animals will improve human health through production of novel replacement proteins, drugs, vaccines and tissues for the treatment and prevention of human disease.

2. Animals that are genetically engineered will have improved food production traits enabling them to help meet the global demand for more efficient, higher quality and lower-cost sources of food.

3. Genetically engineered animals will contribute to improving the environment and human health with the consumption of fewer resources and the production of less waste.

4. Genetic engineering offers tremendous benefit to the animal by enhancing health, well-being and animal welfare.

5. Finally, genetically engineered animals have produced high-value industrial products such as spider silk used for medical and defense purposes.”

Genetically engineered animals promise safer and lower cost medical treatments

Dr. Scott Gottlieb (MD, former FDA official, and Resident Fellow at the American Enterprise Institute) and Dr. Matthew B Wheeler (PhD in Physiology and Biophysics), 2008, “Genetically Engineered Animals and Public Health,” <http://www.aei.org/docLib/20080619_GEAnimalBenefitsReport.pdf>

“Genetically engineered animals promise not only safer, lower-cost proteins and drugs that could increase access and enable essential changes in medical practice but also fundamentally better medical products that can provide substantial improvements over today’s medicines. The drugs that genetically engineered animals can produce – blood components, replacement proteins, antibodies, and xenotransplants – remain among the most expensive drugs to produce in the world. Genetically engineered animals can deliver substantial improvements in terms of cost, safety and availability of urgently needed drugs and treatments, bringing substantial public health benefits. Likewise genetically engineered animals can also sustainably and in an environmentally friendly and pro-welfare friendly manner, meet the growing global demand for high quality and safe animal food products.”

PRO: GROWTH IMPROVES THE ENVIRONMENT

By Matthew Baker

Survey of 64 developing countries shows deforestation declines with rising income

National Center for Policy Analysis, September 8, 2006, “Economic Growth, Not Climate Change Should Be Priority For Developing Countries,” <http://environment.ncpa.org/news/economic-growth-not-climate-change-should-be>

“A study of deforestation in 64 developing countries found the rate at which land was cleared declined as incomes reached $7,900 to $9,100 (2001 dollars).”

Air pollutants decline when GDP increased in multiple countries

National Center for Policy Analysis, September 8, 2006, “Economic Growth, Not Climate Change Should Be Priority For Developing Countries,” <http://environment.ncpa.org/news/economic-growth-not-climate-change-should-be>

“In one survey, levels of sulfur dioxide in 42 countries and smoke (soot) in 19 countries declined as per capita gross domestic product (GDP) rose to between $6,700 and $8,450 (2003 dollars) -- other surveys have found similar results for a broader array of air pollutants.”

A survey of 10 countries showed that water pollutants declined as income rose

National Center for Policy Analysis, September 8, 2006, “Economic Growth, Not Climate Change Should Be Priority For Developing Countries,” <http://environment.ncpa.org/news/economic-growth-not-climate-change-should-be>

“A survey of 10 countries found that 11 of 14 water pollutants declined as income rose; for example, nitrates declined after per capita income reached $3,400 and total fecal coliform bacteria declined at $5,000 (2003 dollars).”

Environmental quality has improved in the US due to its wealthy base

National Center for Policy Analysis, September 8, 2006, “Economic Growth, Not Climate Change Should Be Priority For Developing Countries,” <http://environment.ncpa.org/news/economic-growth-not-climate-change-should-be> [brackets added]

"Environmental quality has significantly improved in the U.S. as a direct consequence of enormous and sustained investments that only a rich nation can afford," said [NCPA Adjunct Scholar Pete] Geddes. "As a result of this wealth and investment, U.S. air quality has improved remarkably."

The advancements in methods and technology associated with growth create efficiency that helps the environment

Jerry Taylor (senior fellow at the CATO Institute specializing in environmental policy), 2009 “44. Environmental Policy,” CATO Handbook for Policy Makers, 7th Edition, <http://www.cato.org/pubs/handbook/hb111/hb111-44.pdf>

“Third, advances in technology, production methods, and manufacturing practices—both a cause and a consequence of economic growth—have historically resulted in less, not more, pollution. Even advances in nonenvironmental technologies and industries have indirectly resulted in more efficient resource consumption and less pollution.”

Economic growth creates consumer demand for environmental luxury goods

Jerry Taylor (senior fellow at the CATO Institute specializing in environmental policy), 2009 “44. Environmental Policy,” CATO Handbook for Policy Makers, 7th Edition, <http://www.cato.org/pubs/handbook/hb111/hb111-44.pdf>

“Second, growing consumer demand for environmental goods (parks; recreational facilities; land for hunting, fishing, and hiking; and urban air and water quality) is largely responsible for the improving quantity and quality of both public and private ecological resources. Virtually all analysts agree that, for the vast majority of consumers, environmental amenities are ‘‘luxury goods’’ that are in greatest demand in the wealthiest societies. Economic growth is thus indirectly responsible for improving environmental quality in that it creates the conditions necessary for increased demand for (and the corresponding increase in supply of) environmental quality.”

Economic growth allows countries to afford environmental protection technology

Jerry Taylor (senior fellow at the CATO Institute specializing in environmental policy), 2009 “44. Environmental Policy,” CATO Handbook for Policy Makers, 7th Edition, <http://www.cato.org/pubs/handbook/hb111/hb111-44.pdf>

“There are a number of reasons why economic growth is perhaps the most important of all environmental policies. First, it takes a healthy, growing economy to afford the pollution control technologies necessitated by environmental protection. A poorer nation, for example, could scarcely have afforded the nearly $200 billion this nation has spent on sewage treatment plants over the past 30 years.”

Economic development has caused increased access to both safe water and sanitation

Dr. Indur M Goklany (Ph.D. in Electrical Engineering from Michigan State Universit and official in the US Department of the Interior Office of Policy of Anlysis), 2009, “Have increases in population, affluence and technology worsened human and environmental well-being?,” The Electronic Journal of Sustainable Development, <http://www.ejsd.org/docs/HAVE_INCREASES_IN_POPULATION_AFFLUENCE_AND_TECHNOLOGY_WORSENED_HUMAN_AND_ENVIRONMENTAL_WELL-BEING.pdf>

“Analysis of cross country data indicates that with economic development and time, access to both safe water and sanitation generally increases in terms of absolute numbers and, more significantly, as a proportion of total population (Goklany 2007a, 2007b). Because of higher levels of economic development and technological diffusion, such access, although not yet universal, has never been higher. Between 1990 and the early 2000s, for example, the proportion of the population with access to safer water increased from 70 to 84 percent in South Asia and 49 to 53 percent in Sub-Saharan Africa, while with regard to sanitation, it increased from 16 to 35 percent in South Asia, and 32 to 36 percent in Sub-Saharan Africa (World Bank 2008b).”

Air quality in developing countries is worse than the developed world

Dr. Indur M Goklany (Ph.D. in Electrical Engineering from Michigan State Universit and official in the US Department of the Interior Office of Policy of Anlysis), 2009, “Have increases in population, affluence and technology worsened human and environmental well-being?,” The Electronic Journal of Sustainable Development, <http://www.ejsd.org/docs/HAVE_INCREASES_IN_POPULATION_AFFLUENCE_AND_TECHNOLOGY_WORSENED_HUMAN_AND_ENVIRONMENTAL_WELL-BEING.pdf>

“Notably, air quality in the currently industrializing (or developing) countries is substantially worse than in developed countries. Beijing, Mexico City, New Delhi and Cairo, for instance, are among the most polluted cities in the world. Nevertheless, developing countries.”

Increased income would save thousands of lives in the developing world by decreasing indoor air pollution

Dr. Indur M Goklany (Ph.D. in Electrical Engineering from Michigan State Universit and official in the US Department of the Interior Office of Policy of Anlysis), 2009, “Have increases in population, affluence and technology worsened human and environmental well-being?,” The Electronic Journal of Sustainable Development, <http://www.ejsd.org/docs/HAVE_INCREASES_IN_POPULATION_AFFLUENCE_AND_TECHNOLOGY_WORSENED_HUMAN_AND_ENVIRONMENTAL_WELL-BEING.pdf>

“The major air pollution problems in developing countries are, however, indoors. Half of the world’s population continues to use solid fuels such as coal, dung and wood. The World Health Organization*’s Global Burden* *of Disease 2000 (Version 2)* study estimates that in 2000 air pollution was responsible for 2.4 million premature deaths (or 4.3 percent of all deaths). Two-thirds of these deaths were attributed to indoor pollution from particulate matter in developing countries – from cooking and heating with coal, dung and wood – and the remainder to outdoor air pollution (WHO 2002a, 2002b; Bruce *et al*. 2000). On the basis of disability-adjusted life years (DALYs), a measure which discounts every year of life lived under a disability by the severity of that disability, indoor air pollution accounts for 2.7 percent of annual lost DALYs worldwide, and outdoor air for 0.5 percent. If the currently poor inhabitants of less developed countries were to grow richer, they would have the means to switch out of dirty solid fuels and into cleaner established technologies such as natural gas, oil or even electricity, which would help reduce the disease burden in these countries significantly. It would essentially allow today’s developing countries to follow the same path so successfully taken by the rich nations in reducing population exposure to air pollutants. This is essentially the opposite of the claim made by opponents of affluence.”

Pollution concentrations fall with rising income

Jay Johnson (Assistant Professor of Economics at Southeastern Louisiana University), Gary Pecquet (Assistant Professor of Economics at Central Michigan University), and Leon Taylor (Associate Professor and Director of Graduate Program at the Kazakhstan Institute of Management, Economics, and Strategic Research) Fall 2007, “Potential Gains From Trade In Dirty Industries: Revisting Lawrence Summers’ Memo,” CATO Journal, Vol. 27, No. 3, <http://www.cato.org/pubs/journal/cj27n3/cj27n3-6.pdf>

“However, once average income rises to some level, pollution concentrations then begin to fall. When annual incomes rise to roughly $5,000 to $8,000 per capita, then people are able to survive and thus may now focus on environmental problems that arose from their growing capacity to produce (Dasgupta, LaPlante, Wang, and Wheeler 2002). For example, air pollution in the major cities of the U.S. has declined steadily for at least 30 years as average incomes have increased (Simon 1996: 241–50). From 1982 to 1991, ambient concentrations of lead, which contribute to brain damage in children, dropped 89 percent in the U.S. through a program that allowed oil refineries to trade lead permits in order to reduce the cost of controlling the pollutant (Hahn 1989: 101–3).”

PRO: LANDFILLS

By Matthew Baker

INHERENCY

Waste management companies working to make their truck use less fossil fuels

The Environmental Industry Association, April 21, 2009, “On Earth Day, Solid Waste Industry Reaffirms Commitment to Environmental Innovation,” <http://www.environmentalistseveryday.org/news-solid-waste-industry/Earth-Day-042109.php>

“Today, just about every waste collector is examining its fleet of trucks to conserve energy. That includes working with manufacturers to develop more fuel efficient, cleaner-burning vehicles powered with alternative fuels and using hybrid engines,” said Parker. Hybrid technology is particularly promising for garbage trucks because of their stop-and-go nature. “The industry has for years invested in trucks fueled by liquefied natural gas, ultra-low sulfur fuel and other low-emission fuels. Now, many operators are looking to alternative fuels like biodiesel and even methane gas from landfills to run their trucks,” said Parker. Both alternative fuel and hybrid trucks have been used in many cities, including San Diego, San Francisco, Seattle, Fort Worth and Denver. Waste companies are also using routing software and GPS systems to make routes more efficient, regularly checking tire pressure, and being vigilant about routine maintenance in order to make fleets more efficient than ever before, said Parker.”

Waste going to landfills on the decline

James Hannah, April 26, 2009, “Thriftiness Hurting Landfills,” The Washington Times, <http://www.washingtontimes.com/news/2009/apr/26/landfills-hurting-in-recession-as-thrifty-consumer/>

“Thom Metzger, spokesman for the National Solid Wastes Management Association, said that while national figures won't be available for months, the association is hearing about the decline from many members. Landfills in Ohio received 15 percent less waste from August to January than they did for the same period a year earlier. The waste stream at Miramar Landfill near San Diego has dropped 35 percent over the past year. Waste at Puente Hills Landfill near Los Angeles is down from 12,500 tons of trash a day to about 8,500.”

The recession is causing waste being sent to landfills to plunge extending their lives

James Hannah, April 26, 2009, “Thriftiness Hurting Landfills,” The Washington Times, <http://www.washingtontimes.com/news/2009/apr/26/landfills-hurting-in-recession-as-thrifty-consumer/>

“Thrift-driven Americans are fixing up, making do and reusing so much to cope with the recession that the drop in throwaways means less fill for landfills. To deal with the drop-off in drop-offs, landfills are laying off workers, reducing hours of operation and hiking disposal fees, with the increases passed along to cities, businesses and consumers. "You can look at waste and see what the economy is doing," said Tom Houck, manager at the Defiance County Landfill in northwest Ohio. He's watched the amount of trash arriving at the landfill plunge by 30 percent in the past year. With consumers cutting back on new purchases, there is less packaging to throw away. The downturn in new housing means less waste from construction materials such as insulation and from discarded drywall and lumber. Restaurant waste is down because people are eating out less. "We're seeing this all over the country," said Bruce J. Parker, president and CEO of the National Solid Wastes Management Association. Environmentalists applaud the trash slash. "That will mean the landfills will last longer," said Ed Hopkins, director of the Environmental Quality program for the Sierra Club.”

SIGNIFICANCE: SPACE

Space: Ted Turner’s ranch could handle all America trash for the next 100 years

Max Borders (Policy analyst specializing in Energy and the Environment at the National Center for Policy Analysis and former Program Director at the Institute for Humane Studies), January 13, 2008, “State Has Made a Religion out of Recycling,” <http://greenyes.grrn.org/2008/01/msg00047.html>

“But won’t recycling prevent us from eventually being buried in garbage? According to environmental economist Dan Benjamin, “Ted Turner’s flying D ranch outside Bozeman, Montana, could handle all of America’s trash for the next century—with 50,000 acres left over for his bison.” Of course, trash deposited closer to its point-of-origin will lower transportation costs and make landfill spots even more diffuse, nationwide. But the point is: we shouldn’t worry about space.”

Plenty of landfill space (1,000 years of trash could be stored in a 44 square mile landfill

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“In any case, worrying about landfill space isn't worth your time either. Landfill space is plentiful despite what claims have been made to the contrary. In the 1990s, greens said we would run out of landfill space in five years, professor Clark Wiseman of Gonzaga University pointed out that, given projected waste increases, we would still be able to fit the next 1,000 years of trash in a single landfill 120 feet deep, with 44-mile sides. Wiseman's point is clear: land disposal needs are small compared with the land available in the 3 million square miles of the contiguous United States. And while there has been some political wrangling over where to place landfills, enough are sited anyway. There is no landfill shortage.”

Fewer landfills but their size is increasing and we have 18 years of capacity remaining

James M. Taylor, February 1, 2006, “Lake County, Ohio Scraps Flagship Recycling Program,” The Heartland Institute, <http://www.heartland.org/publications/environment%20climate/article/18439/Lake_County_Ohio_Scraps_Flagship_Recycling_Program.html> [brackets added]

"Contrary to what the activists claim, we are not running out of landfill space," said [Dr. Daniel] Benjamin [PhD in Economics from UCLA and Professor of Economics at Clemson University]. "The number of landfills in the United States is falling, but the landfills are getting bigger, and the total capacity is increasing. Today we have 18 years' worth of landfill capacity nationwide--even if no other landfills are built.”

US has more landfill capacity than ever before

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2>

“Clemson Professor Daniel K. Benjamin notes that rather than running out of space, overall capacity is growing. "In fact," he says, "the United States today has more landfill capacity than ever before." He adds that the total land area required to contain every scrap of this country's garbage for the next 100 years would be only 10 miles square. The Nevada Policy Research Institute's numbers are even more dramatic: an area 44 miles square and 120 feet deep would handle all of America's garbage for the next millennium.”

SIGNIFICANCE: ENVIRONMENTAL IMPACT

Modern landfills pose basically zero risk of cancer for someone exposed to their chemicals

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“According to one study conducted by academic researchers Kenneth Clinton and Jennifer Chilton modern sanitary landfills pose a theoretical one in 10 billion risk of cancer for someone exposed to the chemicals for 70 years. This risk levels is so low is it unfathomable, especially when you compare it to the much higher risks associated with things we consider relatively safe every day life.”

According to EPA’s own estimates landfills will cause only 1 death every 50 years

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2> [brackets added]

“Fresh Kills [closed landfill on Staten Island] also looked dangerous, a veritable soup of deadly poisons and nasty chemicals, seeping and dissolving and dispersing. But that's not the case with new landfills. Daniel Benjamin writes, "According to the EPA's own estimates, modern landfills can be expected to cause 5.7 cancer-related deaths over the next 300 years--just one death every 50 years. To put this in perspective, cancer kills over 560,000 people every year in the United States."

Landfills, especially with modern technology, pose no risk

Max Borders (Policy analyst specializing in Energy and the Environment at the National Center for Policy Analysis and former Program Director at the Institute for Humane Studies), January 13, 2008, “State Has Made a Religion out of Recycling,” <http://greenyes.grrn.org/2008/01/msg00047.html>

“Don’t landfills poison people? Ironically, not even the EPA sees fit to regulate municipal solid waste disposal. Indeed, according to 30-year EPA veteran David Schnare: “EPA regulates the toxic stuff through its hazardous waste disposal regulations. Municipal waste isn’t hazardous, and the only regulations that apply are [landfill] siting, construction and air emissions regulations for methane. The EPA doesn’t regulate risks from these sites because the risks, if any, are undeserving of regulation.” Given the advent of high-density polyethylene and geotextile technologies, modern landfills are able to contain leachate (the only landfill pollutant) very effectively. In short, you have a greater chance of being hit by a recycling truck than being harmed by a landfill.”

Modern landfills have multiple mechanism to protect surface and ground water

Pam Kasey, March 9, 2006, “Landfill Economics,” The State Journal (West Virginia Newspaper), <http://statejournal.com/story.cfm?func=viewstory&storyid=9259>

“Today's landfill is not the hole in the ground we used to call the county dump. It's a structure that's carefully engineered to protect surface and ground water. The Raleigh County landfill has been "dual composite lined" since long before regulations required it, according to Operations Director James Allen. Its just-constructed 9.2-acre cell illustrates. Because the landfill is built on a 1940s coal mine, landfill workers excavated about 40 feet down to the coal seam, Allen said. They compacted everything to collapse the undermined area and then graded it in the first of a series of steps to manage drainage. On top of the compacted area they placed a "geogrid," a kind of wide screen that distributes the load in case any part of the underlying area collapses further, Allen said. Then they placed the first impermeable layer: a 6-inch sub-base of clay that was excavated on site. They rolled out over that a liner of 40-mil high-density polyethylene, textured to prevent slippage on slopes, and double heat-sealed the 22-foot-wide strips together. On top of that, a leak detection liner, Allen said. And on top of that, a 4-inch detection pipe network surrounded and topped by another foot-thick layer of clay, a geosynthetic clay blanket that plugs leaks by swelling 100 times if it gets wet and another, thicker polyethylene liner. That's 18 inches of clay interspersed with two plastic liners, two highly engineered leak detection and stoppage textiles and a system of pipes to drain away any moisture that might get through. Over all that impermeability lies the real business of the landfill: a 6-inch collection pipe network for draining liquids, or leachate, to a 300,000-gallon storage tank, topped by 18 inches of clean gravel then fully 8 feet of household trash -- "fluff waste" -- so the whole thing isn't punctured by a long, sharp piece of construction debris.”

Modern landfills built with technologies that eliminate environmental impacts previously associated with landfills

Sam Zaitlin, Fall/Winter 2008, “Landfill: Gas to Energy,” Maine Policy Review, Issue 17, Number 2, <http://mcspolicycenter.umaine.edu/?q=zaitlin_V17N2>

“Modern landfills such as Pine Tree Landfill or Juniper Ridge are designed, built, and operated with barriers that eliminate the environmental impacts previously associated with landfills. These barriers are constructed with soil (usually clay) and synthetic liners that prevent leachate and landfill gases from escaping.”

Municipal solid waste landfills are required by federal standards to have linters, monitor groundwater, and develop protective operating practices

Environmental Protection Agency, September 11, 2008, “Landfills,” <http://www.epa.gov/waste/nonhaz/municipal/landfill.htm>

“Municipal solid waste landfills (MFWLFs) receive household waste. MSWLFs can also receive non-hazardous sludge, industrial solid waste, and construction and demolition debris. All MSWLFs must comply with the federal regulations in 40 CFR Part 258 (Subtitle D of RCRA), or equivalent state regulations. Federal MSWLF standards include:

* **Location restrictions**—ensure that landfills are built in suitable geological areas away from faults, wetlands, flood plains, or other restricted areas.
* **Composite liners requirements**—include a flexible membrane (geomembrane) overlaying two feet of compacted clay soil lining the bottom and sides of the landfill, protect groundwater and the underlying soil from leachate releases.
* **Leachate collection and removal systems**—sit on top of the composite liner and removes leachate from the landfill for treatment and disposal.
* **Operating practices**—include compacting and covering waste frequently with several inches of soil help reduce odor; control litter, insects, and rodents; and protect public health.
* **Groundwater monitoring** **requirements**—requires testing groundwater wells to determine whether waste materials have escaped from the landfill.
* **Closure and postclosure care** **requirements**—include covering landfills and providing long-term care of closed landfills.
* **Corrective action provisions**—control and clean up landfill releases and achieves groundwater protection standards.
* **Financial assurance**—provides funding for environmental protection during and after landfill closure (i.e., closure and postclosure care).”

New patented bioreactor can significant reduce greenhouse gases, and reduce air and water pollution

Reuters, January 30, 2008, “New Landfill Technology Offers Green- and Cost-Effective- Solutions,” <http://www.reuters.com/article/pressRelease/idUS155082+30-Jan-2008+PRN20080130>

“Viridis Waste Control, LLC, announced today that the U.S. Patent application for the proprietary bioreactor process was granted by the United States Patent and Trademark office. With the patent, Viridis now has available the Bioreactor Landfill Technology that is the best available technology for America's solid waste disposal landfills. The patented technology provides significant advances and dramatic enhancements in the reduction of greenhouse gasses, delivers substantially greater air and water pollution reduction, and increased methane production and recovery from landfills. Additionally, the Viridis patented technology enables more useable capacity in landfills for solid waste disposal.”

No land pollution: parks, industrial developments, or golf courses built over old landfills

James Thayer (JD from the University of Chicago), January 26, 2006,“Recycle This,” The Weekly Standard, <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/603wxcce.asp?pg=2> [brackets added]

“[Clemson Professor Daniel K] Benjamin says that new landfills are located far from groundwater supplies, and are built on thick clay beds that are covered with plastic liners, on top of which goes another layer of sand or gravel. Pipes remove leachate, which is then treated at wastewater plants. Escaping gas is burned or sold. A park or golf course or industrial development eventually goes over the landfill.”

IMPACT TURNS

A) Costs

Lanfill is generally the least expensive waste disposal option

Disposal Consultant Services (full-service environmental firm serving hazardous and industrial waste generators throughout the eastern United States), January 4, 2008, “Where Does My Waste Go?,” <http://www.labpack.net/pdf/where%20does%20my%20waste%20go.pdf>

“In addition to local market conditions, the cost of disposal of your hazardous waste will depend upon the type of waste you create and the process necessary to treat it properly. Landfill is generally the least expensive disposal option, while incineration tends to be the most expensive.”

Less wastes, means higher disposal costs

James Hannah, April 26, 2009, “Thriftiness Hurting Landfills,” The Washington Times, <http://www.washingtontimes.com/news/2009/apr/26/landfills-hurting-in-recession-as-thrifty-consumer/>

“Landfill operators rely on disposal fees to fund operations. If the amount of waste decreases, operators have to cut costs, dip into reserve funds or increase the fees, which are passed along to consumers.”

B) Energy Independence

Waste management companies operate 470 landfill-gas-to-energy projects

The Environmental Industry Association, April 21, 2009, “On Earth Day, Solid Waste Industry Reaffirms Commitment to Environmental Innovation,” <http://www.environmentalistseveryday.org/news-solid-waste-industry/Earth-Day-042109.php>

“In addition to reducing the impact of its fleet, waste management companies continue to pioneer technologies that turn trash into sources of clean, renewable energy. The industry currently operates 470 landfill-gas-to-energy projects, providing electricity and heat for corporate and government users in 44 states.”

Landfill gas is a reliable and renewable source of energy

The Environmental Protection Agency, November 2008, “Landfill Gas,” [http://nepis.epa.gov/Exe/ZyNET.exe/P1003UCU.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=3&TocRestrict=n&Toc=&TocEntry=&QField=pubnumber%5E%22430F08028%22&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=pubnumber&IntQFieldOp=1&ExtQFieldOp=1&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000008%5CP1003UCU.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=10&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x](http://nepis.epa.gov/Exe/ZyNET.exe/P1003UCU.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=3&TocRestrict=n&Toc=&TocEntry=&QField=pubnumber%5E%22430F08028%22&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=pu)

“Did you know that your community’s landfill can be valuable source of energy? The gas emitted from your local landfill is a reliable and renewable fuel option.”

Landfill gas can provide power to thousands of homes plus reduce dependence on foreign oil

Reuters News, April 18, 2008, “Waste Management Opens Landfill Gas-to-Energy Facility at Hampton’s Bethel Landfill,” <http://www.reuters.com/article/pressRelease/idUS157561+18-Apr-2008+PRN20080418>

“The landfill gas-to-energy (LFGTE) facility at the Bethel Landfill will produce 4.8 megawatts of green electricity, which will produce enough energy to power more than 4,700 homes. The plant is the first such facility in Virginia for Waste Management as a solo venture. In the Commonwealth, the company has plans to construct two more landfill gas-to-energy (LFGTE) plants - at their landfill in King George County and the Middle Peninsula Landfill in Gloucester County - together they will generate an additional 19.2 megawatts of green electricity, enough to power more than 20,000 homes. "Waste Management's gas-to-energy project at its Bethel Landfill is an example of how we can develop and utilize alternative means to lessen our dependence on foreign oil as well as reduce our greenhouse gas emissions," said Virginia's Secretary of Natural Resources L. Preston Bryant, Jr. “

Pennsylvania’s landfill gas projects alone provide the equivalent of 1 billion gallons of gasoline

Pennsylvania’s Department of Environmental Protection, 2006, “DEP Lauds Lebanon County Landfill Gas Project, Education Center Receiving National Recognition,” <http://www.depweb.state.pa.us/news/cwp/view.asp?Q=535048&A=3>

“Pennsylvania is home to nearly 46 active landfill gas projects, including seven that produce high-Btu (British Thermal Unit) pipeline quality gas, 25 that collectively generate more than 110 megawatts of electrical power, and 14 that provide fuel for thermal use in businesses. Total landfill gas use statewide is estimated at 42,951 million cubic feet annually, which reflects the nearly 70 percent of current state landfill gas that is captured. According the EPA’s environmental benefits calculator, this level of capture is equivalent to eliminating emissions from 1.9 million cars or planting 2.7 million acres of trees. The commonwealth’s landfill gas projects, combined, provide energy the equivalent of 22.7 million barrels of oil, or enough to displace almost 1 billion gallons of gasoline—enough to heat 614,000 homes for a year.”

PRO: OCS

By Nicholas Bruno and Renee Davis

INHERENCY

3-15 billion barrels of oil can be produced offshore Louisiana

Rick Jervis, William M. Welch and Richard Wolf (Reporters at USA Today), 14 July 2008, “Worth the risk? Debate on offshore drilling heats up”, USA Today, <http://www.usatoday.com/money/industries/energy/2008-07-13-offshore-drilling_N.htm>

The United States consumes nearly one-fourth of the world's oil but produces only about 10%. Its 1.76 billion-acre Outer Continental Shelf, which extends from about 3 to 200 miles offshore, is prime hunting ground. In 2006, a consortium led by Chevron proved that oil could be produced from a geological area about 175 miles from Louisiana that's estimated to hold 3 billion to 15 billion barrels of oil.

Over 18 billion barrels of oil can be produced from areas off-limits

Rick Jervis, William M. Welch and Richard Wolf (Reporters at USA Today), 14 July 2008, “Worth the risk? Debate on offshore drilling heats up”, USA Today, <http://www.usatoday.com/money/industries/energy/2008-07-13-offshore-drilling_N.htm>

By most estimates, at least 18 billion barrels of oil can be produced from areas that are off-limits, on top of 68 billion barrels in areas where drilling is allowed. The 18 billion barrels would be enough to fuel the country for 2½ years. Randall Luthi, director of the Minerals Management Service, says the estimate is "extremely conservative, because it's been 20 or 30 years since we've had the opportunity to look and see what's there."

18 billion barrels of untapped oil & 76 trillion cubic feet of natural gas off US coastlines

Jeremy Alford (journalist), 14 July 2008, “Repeal of OCS drilling ban picking up support”, The Independent Weekly, <http://www.theind.com/index.php?option=com_content&task=view&id=2802&Itemid=97>

The United States is the only country that has closed more than 80 percent of its outer continental shelf to drilling. Outdated estimates, last assessed in the late 1980s, assume there are as much as 18 billion barrels of untapped oil and 76 trillion cubic feet of natural gas off of U.S. coastlines.

A/T: DISADVANTAGES

Environmentally safe: offshore drilling weathered Hurricane Katrina and represents only a miner % of total pollution

Bryan Walsh, 18 June 2008, “Will More Drilling Mean Cheaper Gas?,” Time Magazine, <http://www.time.com/time/business/article/0,8599,1815884,00.html>

Though offshore drilling conjures up fears of catastrophic spills, the petroleum industry rightly argues that safety measures have improved considerably in recent years. A 2003 report by the National Research Council found that only 1% of the oil that polluted U.S. waters came from petroleum operations, like the offshore drilling platforms that run in the Gulf of Mexico — which also weathered Hurricane Katrina without massive spills. “

Better technology and regulations have resulted in minimal spills

Rick Jervis, William M. Welch and Richard Wolf (Reporters at USA Today), 14 July 2008, “Worth the risk? Debate on offshore drilling heats up”, USA Today, <http://www.usatoday.com/money/industries/energy/2008-07-13-offshore-drilling_N.htm>

There are 26 oil and gas drilling platforms off the southern California coast and 1,500 active wells. Those in federal waters have produced more than 1 billion barrels of oil and 1.5 trillion cubic feet of natural gas since the 1960s, says John Romero of the Minerals Management Service. Since the 1969 spill, he says, they've spilled only 852 barrels of oil, the result of better technology and regulatory vigilance.

Offshore drilling is safe due to new technologies

Rick Jervis, William M. Welch and Richard Wolf (Reporters at USA Today), 14 July 2008, “Worth the risk? Debate on offshore drilling heats up”, USA Today, <http://www.usatoday.com/money/industries/energy/2008-07-13-offshore-drilling_N.htm>

Today's technology, such as automatic shutoff valves on the seabed floor and mechanical devices that can prevent blowouts caused by uncontrolled buildups of pressure, has greatly reduced the risk of oil spills. "Offshore drilling is the safest way to go," Guidry says. "Those guys don't spill oil."

More oil leaks into sea naturally than from drilling

Robin Nixon (Special Livescience), 25 June 2008, " Oil Drilling: Risks and Rewards”, Livescience (chronicles the daily advances and innovations made in science and technology), <http://www.livescience.com/environment/080625-oil-drilling.html>

Today, according to the Mineral Management Service, of the billions of oil transported in U.S. water, 0.001 percent is spilled. Far more oil seeps naturally into the sea, reports the National Research Council (NRC). According to the NRC's most recent analysis, almost half of oceanic oil worldwide arises from natural processes. [Oil spills](http://www.livescience.com/technology/080530-nanowire-paper-towel.html) contribute about 12 percent.

Environmentalists acknowledge industry has improved over the years

Rick Jervis, William M. Welch and Richard Wolf (Reporters at USA Today), 14 July 2008, “Worth the risk? Debate on offshore drilling heats up”, USA Today, <http://www.usatoday.com/money/industries/energy/2008-07-13-offshore-drilling_N.htm>

Environmentalists see two basic problems from offshore drilling: pollution from everyday operations and oil spills from platforms, pipelines and tankers. On both fronts, they acknowledge, the industry has improved through the years.

New techniques reduce need for large number of wells

Robin Nixon (Special Livescience), 25 June 2008, " Oil Drilling: Risks and Rewards”, Livescience (chronicles the daily advances and innovations made in science and technology), <http://www.livescience.com/environment/080625-oil-drilling.html>

Radford described advances that reduce oil drilling’s environmental footprint. For instance, oil companies are now able to drain several oil fields from one platform. And new horizontal drilling techniques allow more oil to be extracted from a single well. Major infrastructure – such as roads, jet landing strips, repair shops, homes and industrial complexes – is, of course, still necessary and could disturb wildlife that is accustomed to pristine land, said Charles Clusen, director of National Parks and Alaska Projects for the Natural Resources Defense Council.

Drilling for oil reduces natural seepage

Drew Thornley (an independent policy analyst focused primarily on energy, environmental, and natural resources; professor of business law at Concordia University; B.A. in Economics, J.D. from Harvard Law School), Manhattan Institute Center for Energy Policy and the Environment, April 2009, “Energy and the Environment: Myths and Facts, Second Edition,” Myth 8, <http://www.manhattan-institute.org/pdf/EnergyMyth_2ndEdition.pdf>

Ironically, research shows that drilling can actually reduce natural seepage, as it relieves the pressure that drives oil and gas up from ocean floors and into ocean waters. In 1999, two peer-reviewed studies found that natural seepage in the northern Santa Barbara Channel was significantly reduced by oil production. The researchers documented that natural seepage declined 50 percent around Platform Holly over a twenty-two-year period, concluding that, as oil was pumped from the reservoir, the pressure that drives natural seepage dropped.

Oil spills are small and infrequent

Drew Thornley (an independent policy analyst focused primarily on energy, environmental, and natural resources; professor of business law at Concordia University; B.A. in Economics, J.D. from Harvard Law School), Manhattan Institute Center for Energy Policy and the Environment, April 2009, “Energy and the Environment: Myths and Facts, Second Edition,” Myth 8, <http://www.manhattan-institute.org/pdf/EnergyMyth_2ndEdition.pdf>

Since 1975, offshore drilling in the Exclusive Economic Zone (within 200 miles of U.S. coasts) has a safety record of 99.999 percent, meaning that only 0.0001 percent of the oil produced has been spilled. With regard to the Outer Continental Shelf (U.S. waters under federal, rather than state, jurisdiction), between 1993 and 2007 there were 651 oil spills, releasing 47,800 barrels of oil. Given 7.5 billion barrels of oil produced during that period, one barrel of oil has been spilled in the OCS per 156,900 barrels produced. Research published in 2000 by the U.S. Minerals Management Service (MMS)[106] documents the decreasing occurrence of crude-oil spills in the OCS. Revising previous estimates first published in 1994, the authors analyzed data through 1999 and concluded that oil-spill rates for OCS platforms, tankers, and barges continued to decline. Additionally, the number of oil spills from platforms, tankers, and pipelines is small, relative to the amount of oil extracted and transported.

Oil “pollutes” naturally—41 million gallons of oil seep naturally into US ocean waters

Ben Arnoldy and Amy Green, (Staff writer and Correspondent), June 20, 2008, “On U.S. coasts, a rethink on oil drilling?,” The Christian Science Monitor, <http://www.csmonitor.com/2008/0620/p02s02-usgn.html> [brackets added]

A lot of undeveloped leases may not have a lot of resources, counters H. Sterling Burnett, senior fellow at the National Center for Policy Analysis in Washington. He argues that expanding drilling in US waters would add to the pool of oil from stable, reliable sources – helping curb speculation. He says opponents of drilling overestimate the time frame for new development, and some projects have turned around in 18 months. As for environmental impact, each year 47 million gallons of oil seep out naturally into US ocean waters. That far exceeds the 870,000 gallons of petroleum leaked in offshore exploration and drilling, according to the National Academies of Sciences.

Ocean floors naturally leak more oil into the ocean than drilling accidents or spills

Drew Thornley (an independent policy analyst focused primarily on energy, environmental, and natural resources; professor of business law at Concordia University; B.A. in Economics, J.D. from Harvard Law School), Manhattan Institute Center for Energy Policy and the Environment, April 2009, “Energy and the Environment: Myths and Facts, Second Edition,” Myth 8, <http://www.manhattan-institute.org/pdf/EnergyMyth_2ndEdition.pdf>

Certainly, any amount of oil spilled into the ocean is undesirable, but offshore oil operations contribute relatively little of the oil that enters ocean waters each year. For example, ocean floors naturally seep more oil into the ocean than do oil-drilling accidents and oil-tanker spills combined. (However, such seepage generally does not rise to the surface or reach the coastlines and, thus, is not as apparent as oil-drilling spills.) According to the National Academies’ National Research Council, natural processes are responsible for over 60 percent of the petroleum that enters North American ocean waters and over 45 percent of the petroleum that enters ocean waters worldwide. Thus, in percentage terms, North America’s oil-drilling activities spill less oil into the ocean than the global average, suggesting that our drilling is comparatively safe for the environment.

PRO: OIL DEPENDENCE

By Renee Davis and Matthew Baker

INHERENCY

Canada and Mexico are the top two suppliers to the US in 2009

Amanda DeBard, May 19, 2009, “Countries Rated on Oil Security,” The Washington Times, <http://www.washingtontimes.com/news/2009/may/19/countries-rated-on-oil-security/print/>

“As of February, the U.S. imported the most oil from Canada, 2.5 million barrels a day, followed by 1.3 million barrels a day from Mexico and around 1 million barrels a day from both Venezuela and Saudi Arabia. With the exception of Mexico, all of these countries are more energy secure than the U.S., at least when viewed from the perspective of production.”

61% of petroleum consumed in the US comes from either the US, Mexico, or Canada

The Manhattan Institute, April 2009, “Myth 1 The US gets the largest share of its oil form the Middle East,” <http://www.manhattan-institute.org/energymyths/myth1.htm>

In 2007, the U.S. consumed 20.68 million barrels per day (MMbd) of petroleum products (including crude oil), while net imports totaled just under 12.04 MMbd[[6](http://www.manhattan-institute.org/energymyths/notes.htm)]. *Note that this means that the U.S. itself is our own largest supplier of petroleum, producing almost 42 percent of the petroleum we consumed in 2007.* Moreover, of the imported portion, Canada and Mexico accounted for 2.455 MMbd and 1.532 MMbd, respectively;[[7](http://www.manhattan-institute.org/energymyths/notes.htm)] so, in 2007, over 61 percent of the petroleum consumed in the U.S. was either produced in the U.S. or imported from Canada or Mexico, our immediate neighbors. By contrast, imports from the Persian Gulf accounted for just 10.5 percent of U.S. petroleum consumption.[[8](http://www.manhattan-institute.org/energymyths/notes.htm)]

Only 16.1% of imports coming from the Persian gulf

The Manhattan Institute, April 2009, “Myth 1 The US gets the largest share of its oil form the Middle East,” <http://www.manhattan-institute.org/energymyths/myth1.htm>

“According to the Energy Information Administration (EIA),[[1](http://www.manhattan-institute.org/energymyths/notes.htm)] the statistical agency of the Department of Energy, the U.S. imported 58.2 percent of its petroleum (including crude oil) in 2007,[[2](http://www.manhattan-institute.org/energymyths/notes.htm)] yet only 16.1 percent of all imports came from Persian Gulf countries.[[3](http://www.manhattan-institute.org/energymyths/notes.htm)] This figure is noteworthy, considering the oft-repeated refrain that the U.S. is held hostage by Middle East oil.[[4](http://www.manhattan-institute.org/energymyths/notes.htm)] Forty-nine percent of our imports came from the Western Hemisphere, while 21 percent was imported from African nations. In terms of importers’ shares of all U.S. imports of crude oil and petroleum products, America’s largest suppliers in 2007 were as follows:[[5](http://www.manhattan-institute.org/energymyths/notes.htm)]

Canada: 18.2 percent

Mexico: 11.4 percent

Saudi Arabia: 11 percent

Venezuela: 10.1 percent

Nigeria: 8.4 percent”

SIGNIFICANCE: ABIOTIC OIL

Abiogenic oil theory could mean petroleum is a self-renewing resource

Dr. Ken Green (Doctorate in Environmental Science from UCLA and resident scholar at the American Enterprise Institute), February 1, 2008, “Oil Not a Fossil Fuel?” <http://planetgore.nationalreview.com/post/?q=OTY0NzIzMzQ0YTA1NWJkOWQ1ZmYwNzE2NTU1YjQ2Mjg>=

In the biogenic theory, oil can only form in certain places over historical periods, and can only be formed and exist in a certain range of temperatures and pressures called the oil window, which generally corresponds to a layer of the earth from about 4-6 km under the surface, and then rise upward from there. In a biogenic framework, oil and natural gas are temporally finite, that is, they're non-renewable, and they are geographically constrained. That is, the place to look for oil and natural gas is in areas where oil-windows are possible, with geological formations that would retain the hydrocarbons (porous reservoirs and capstones). In the abiogenic theory, by contrast, hydrocarbons form perpetually at greater depths from carbon that was present from Earth's formation, and are then utilized by micro-organisms that convert the short-chain hydrocarbons into longer chains as they move through what Gold called the "deep hot biosphere." Depending on formation rates, the abiogenic theory might allow for self-renewing petroleum reservoirs, all over the globe, taking petroleum out of the category of "fossil fuel."  An article in *Science* today seems to suggest that the abiotic theory is correct. In a fairly dense article entitled "[Abiogenic Hydrocarbon Production at Lost City Hydrothermal Field](http://www.sciencemag.org/cgi/content/short/319/5863/604)," researchers Proskurowski et al., find evidence of the abiogenic formation of short-hydrocarbon chains in an area where hydrocarbons would not otherwise be able to form by the biogenic theory.”

Petroleum Engineers: oil from fossil fuels is a myth and 60% is abiotic

Robert Langreth, 11/13/2008, “Endless Oil?,” Forbes, <http://www.forbes.com/2008/11/13/abiotic-oil-supply-energenius08-biz-cz_rl_1113abiotic.html> [ellipses in original]

“The idea that oil comes from fossils "is a myth. … We need to change this myth," says petroleum engineer Vladimir Kutcherov, at the Royal Institute of Technology in Sweden. "All kinds of rocks could have oil and gas deposits." Alexander Kitchka of the Ukrainian National Academy of Sciences brashly estimates that 60% of the content of all oil is abiotic in origin, and not from fossil fuels. He says companies should drill deeper to find it.”

Researchers such as Thomas Gold have demonstrated oil can be extracted from solid rock

Robert Langreth, 11/13/2008, “Endless Oil?,” Forbes, <http://www.forbes.com/2008/11/13/abiotic-oil-supply-energenius08-biz-cz_rl_1113abiotic.html> [brackets added]

“[Alexander] Kitchka [of the Ukrainian National Academy of Sciences] says oil may be found in all sorts of geological structures such as volcanic rock or deep-sea thermal vents where companies aren't looking today. [Vladimir] Kutcherov [at the Royal Institute of Technology in Sweden] points to a handful of productive oil fields in Vietnam and elsewhere that lay in hard rock such as granite. Traditional theory says oil shouldn't be present there. Certain wells in the Gulf of Mexico have produced more oil than expected. The abiotic crowd says they are slowly being refilled from a deeper source. The abiotic oil theory goes back centuries and includes as its prominent champions Dimitri Mendeleev, best known for inventing the periodic table. It didn't gain much visibility in America until the late Cornell University astronomer Thomas Gold championed it in the 1980s. He said that oil contains organic compounds not because it is derived from fossils but because giant colonies of deep-earth bacteria feed on deep hydrocarbon pools way down in the mantle. In the 1980s, he convinced the Swedish government and investors to drill four miles through solid granite in central Sweden. They eventually recovered 84 barrels of oil. Gold considered it a scientific success, even though the project was a commercial failure.”

Research by Vladimir Kutcherov proves abioitc oil is possible

Robert Langreth, 11/13/2008, “Endless Oil?,” Forbes, <http://www.forbes.com/2008/11/13/abiotic-oil-supply-energenius08-biz-cz_rl_1113abiotic.html> [ellipses in original]

“To prove that abiotic oil is possible, in 2002 [Vladimir] Kutcherov [at the Royal Institute of Technology in Sweden] superheated calcium carbonate, water and iron in a pressure chamber and then cranked it up to produce 30,000 times atmospheric pressure, simulating the conditions present in the earth's mantle. Sure enough, about 1.5% of the material converted into hydrocarbons, according to results in the *Proceedings of the National Academy of Sciences*. Most of it was methane and other gases, but about 10% was heavier oil components. Since then, in work slated for publication, Kutcherov has shown that methane will convert into more complicated hydrocarbons under certain extreme conditions. Small amounts of natural gas that could be abiotic in origin have also been found in deep-sea vents. Kutcherov says methane is probably generated in the mantle, and depending on the conditions, it turns into heavier hydrocarbons as it bubbles up towards the surface.”

NASA says Carbon-13 on Saturn moon is abiotic

Dr. Jerome R Corsi (PhD in Political Science from Harvard University, February 1, 2009, “Discovery Backs Theory Oil Not ‘Fossil fuel,” World Net Daily, <http://www.wnd.com/news/article.asp?ARTICLE_ID=59991>

“Finding abiotic hydrocarbons in the Lost City sea vent fluids is the second discovery in recent years adding weight to the abiotic theory of the origin of oil. As WND reported in 2005, , a NASA probe to Titan, the giant moon of Saturn, discovered abundant Carbon-13 methane that the agency declared to be abiotic in origin.”

New study by American research supports the existence of constantly generated abiotic oil

Dr. Jerome R Corsi (PhD in Political Science from Harvard University, February 1, 2009, “Discovery Backs Theory Oil Not ‘Fossil fuel,” World Net Daily, <http://www.wnd.com/news/article.asp?ARTICLE_ID=59991>

“A study published in Science Magazine today presents new evidence supporting the abiotic theory for the origin of oil, which asserts oil is a natural product the Earth generates constantly rather than a "fossil fuel " derived from decaying ancient forests and dead dinosaurs. The lead scientist on the study, Giora Proskurowski of the School of Oceanography at the University of Washington in Seattle, says the hydrogen-rich fluids venting at the bottom of the Atlantic Ocean in the Lost City Hydrothermal Field were produced by the abiotic synthesis of hydrocarbons in the mantle of the earth.”

SIGNIFICANCE- Trade Deficit

Historically, the economy grew twice as fast in years were the current account deficit grew sharply

Daniel T. Griswold (M.Sc in polticis of the world economy from the London School of Economics and Director of the Cato Institute’s Center for Trade Policy Studies), March 12, 2007, “Are Trade Deficits a Drag on the U.S. Economic Growth?,” Center for Trade Policy Studies, <http://www.cato.org/pubs/FTBs/ftb27.pdf>

“As the comparison shows, there is no evidence that an expanding current account deficit is associated with slower economic growth. In fact, data show the opposite correlation:

* In those years since 1980 in which the current account deficit actually shrank as a share of GDP, real GDP growth averaged 1.9 percent.
* In those years in which the deficit grew modestly, between 0.0 and 0.5 percent, GDP growth averaged 3.0 percent.
* And in those years in which the current account deficit expanded by more than 0.5 percent of GDP, real GDP growth grew by an average of 4.1 percent.

In other words, economic growth has been more than twice as fast, on average, in years in which the current account deficit grew sharply compared to those years in which it actually declined. If trade deficits drag down growth, somebody forgot to tell the economy.”

The Clinton boom years were associated with a high trade deficit

Daniel T. Griswold (M.Sc in polticis of the world economy from the London School of Economics and Director of the Cato Institute’s Center for Trade Policy Studies), March 12, 2007, “Are Trade Deficits a Drag on the U.S. Economic Growth?,” Center for Trade Policy Studies, <http://www.cato.org/pubs/FTBs/ftb27.pdf>

“Many Democratic leaders tout the strong growth of the economy when Democratic president Bill Clinton and his economic team were in office, especially in the second half of the 1990s through 2000. The U.S. economy performed well during that period by almost every measure: GDP growth, manufacturing output, net job creation and real incomes surged while unemployment and poverty rates fell. What is almost never acknowledged by trade-deficit critics is that the same period also witnessed a rapid “worsening” of the trade deficit. The current account deficit grew as a share of GDP in every year beginning in 1996 through 2000, rising from 1.5 percent of GDP in 1995 to 4.2 percent in 2000. Many of today’s critics of the trade deficit claim credit for the strong economy of the late 1990s while demonizing the growing current account deficits that quite naturally accompanied the expansion.”

Petrodollars are going into treasury bonds keeping interest rates low

Daniel Kruger, July 14, 2008, “Oil Brings Americans Closer to OPEC Debtor Dependence,” Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601087&sid=a6Wvs4IX.Et0&refer=home>

“Petroleum-exporting nations from Saudi Arabia to Russia are not only charging Americans record high prices for fuel, they are also poised to become the biggest creditor to the U.S. government. Holdings of Treasuries by oil producers and institutions such as U.K. banks that are proxies for Middle East nations rose 44 percent this year to $510.8 billion through April, four times faster than the rest of the world, according to the Treasury Department's most recent data. At the current pace, they'll surpass Japan, which holds $592.2 billion, as the largest owner this month. While the investment of so-called petrodollars into government debt is helping to temper a rise in borrowing costs as the U.S. finances a record budget deficit, it highlights America's dependence on foreign money. New York's Chrysler Building was bought last week by Middle East investors ``We should be very happy that they're buying U.S. Treasuries because they're keeping interest rates low, and that's a positive for bond investors,'' said Gary Pollack, who helps oversee $12 billion as head of fixed-income trading at Deutsche Bank AG's Private Wealth Management unit in New York.”

SIGNIFICANCE- Oil Embargo

Oil suppliers not interested in an embargo

Babak Farrahi, May 14, 2009, “Re-evaluating US Oil Dependence, International Relations and Security Network, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?ots591=4888CAA0-B3DB-1461-98B9-E20E7B9C13D4&lng=en&id=100148>

“Those who believe that Arab states are eager to impose another embargo have not paid sufficient attention to the first embargo, which clearly was not successful. The US managed to import more oil than before the embargo and has not ceased to support Israel. It was not possible to block the sale of oil to one country in 1973 and it remains impossible now. Nor does it serve the interests of oil suppliers to punish anyone, as Pietro Nivola puts it, the fortunes of leaders and their regimes such as Mahmoud Ahmadinejad and Hugo Chavez are to be made in “pumping oil, not hoarding it”.”

Shortages and gas lines in 1973 were due to excessive government intervention in energy markets

Babak Farrahi, May 14, 2009, “Re-evaluating US Oil Dependence, International Relations and Security Network, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?ots591=4888CAA0-B3DB-1461-98B9-E20E7B9C13D4&lng=en&id=100148>

“Additionally, all those who argue that the United States remains vulnerable to another embargo, have learned the wrong lessons from the embargo of 1973. According to information form the Energy Information Administration, American crude oil imports increased in both 1973 and 1974, and it would appear that the shortages and queues at gas stations were caused by excessive government intervention in the energy market.”

Middle Eastern must sell oil in order to remain solvent

Jerry Taylor (senior fellow at the CATO Institute specializing in Energy and the Environment) and Peter Van Doren (editor of the quarterly journal Regulation and an expert in the regulation of housing, land, energy, the environment, transportation, and labor), 26 September 2007, CATO Institute, <http://www.cato.org/pub_display.php?pub_id=8720>

Oil producers will provide for their own security needs as long as the cost of doing so results in greater profits than equivalent investments could yield. Because Middle Eastern governments typically have nothing of value to trade except oil, they must secure and sell oil to remain viable. Given that their economies are so heavily dependent upon oil revenues, Middle Eastern governments have even more incentive than we do to worry about the security of production facilities, ports, and sea lanes.

Selective embargos are unenforcable

Jerry Taylor (senior fellow at the CATO Institute specializing in Energy and the Environment) and Peter Van Doren (editor of the quarterly journal Regulation and an expert in the regulation of housing, land, energy, the environment, transportation, and labor), 26 September 2007, CATO Institute, <http://www.cato.org/pub_display.php?pub_id=8720>

Selective embargoes by producer nations on some consuming nations are unenforceable unless (i) all other nations on Earth refuse to ship oil to the embargoed state, or (ii) a naval blockade were to prevent oil shipments into the ports of the embargoed state. That's because once oil leaves the territory of a producer, market agents dictate where the oil goes, not agents of the producer, and anyone willing to pay the prevailing world crude oil price can have all he want.

Oil producing countries do not use oil as a political tool

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“Do oil producing nations allow their feelings towards oil consuming nations to affect their production decisions? Historically, the answer has been “no.” The record strongly indicates that oil producing states, regardless of their feelings toward the industrialized West, are rational economic actors. After a detailed survey of the world oil market since the rise of OPEC, oil economist M.A. Adelman concluded, “[w]e look in vain for an example of a government that deliberately avoids a higher income. The self-serving declaration of an interested party is not evidence.”15 Prof. Philip Auerswald of George Mason University agrees, stating “For the past quarter century, the oil output decisions of Islamic Iran have been no more menacing or unpredictable than Canada’s or Norway’s.”16”

Even if a radical regime cut oil exports from Saudi Arabia, the impact would be managable

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“What if a radical new actor were to emerge on the global stage? For example, if the House of Saud were to fall and the new government consisted of Islamic extremists friendly to Osama bin Laden, the new regime might reduce production and increase prices.18 But that scenario is by no means certain given that Iran – despite all its anti-western rhetoric – has not reduced oil output out of hostility towards the West.19 Regardless, the departure of Saudi Arabia from world crude oil market would probably have about the same effect on domestic oil prices as the departure of Iran from world crude oil markets in 1978. The Iranian revolution reduced oil production by 8.9 percent, whereas Saudi Arabia accounts for about 13 percent of global oil production today.20 Oil prices increased dramatically after the 1978 revolution, but those higher prices set in motion market supply and demand responses that undermined the supply reduction and collapsed world prices eight years later.21 The short term macroeconomic impacts of such a supply disruption would actually be less today than they were then given the absence of price controls on the U.S. economy and our reduced reliance on oil as an input for each unit of GDP.22”

SIGNIFICANCE- National Security

Terrorists Funding: We haven’t traded Iran, the only oil state that supports terrorism since 1979

Babak Farrahi, May 14, 2009, “Re-evaluating US Oil Dependence, International Relations and Security Network, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?ots591=4888CAA0-B3DB-1461-98B9-E20E7B9C13D4&lng=en&id=100148>

“The only country on the State Department’s list of state sponsors of terrorism which is a significant oil trader is Iran, which has not traded with the US since its revolution in 1979. This further undermines the argument that US money is funding terrorism as well as showing that oil exporting countries do not rely on the US and that the global demand is such that many countries would gladly buy the crude oil that America does not want.”

Only 15.5% of world oil is produced from nation states accused of funding terrorism

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“Before we go on, it’s worth noting that only 15.5 percent of the oil in the world market is produced from nation-states accused of funding terrorism.23 Hence, the vast majority of the dollars we spend on gasoline do not end up on this purported economic conveyer belt to terrorist bank accounts.”

No correlation between terrorism and oil prices

Jerry Taylor (senior fellow at the CATO Institute specializing in Energy and the Environment) and Peter Van Doren (editor of the quarterly journal Regulation and an expert in the regulation of housing, land, energy, the environment, transportation, and labor), 26 September 2007, CATO Institute, <http://www.cato.org/pub_display.php?pub_id=8720>

If American dollars spent on foreign oil actually increased the fighting strength of Islamic terrorists, then one would expect to see a correlation between oil prices (a good stalking horse for oil profits) and Islamic terrorist activity. But there is no such correlation to be found. In a recent study, we estimated two regressions using annual data from 1983 to 2005: the first between fatalities resulting from cross-border Islamic terrorist attacks and Saudi oil prices and the second between the number of cross-border Islamic terrorist incidents and Saudi oil prices. In neither regression was the estimated coefficient on oil prices at all close to being significantly different from zero.

SIGNIFICANCE- Oil Spills

New Ships Solve

Single-hulled ships may only operate in US ports until 2015

Alaric Nightingale and Tony Hopfinger, March 24 2009, “Valdez Ghost Haunts Exxon With Spill-Prone Ships,” Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601102&sid=aBlNZuzlHXOM&refer=uk>

The U.S., under the Oil Pollution Act of 1990, will allow single-hull tankers to sail in its waters either to unload at the Louisiana Offshore Oil Port or at dedicated unloading areas out at sea until 2015. The International Maritime Organization, the shipping division of the United Nations, will ban single- hull tankers starting next year.

Double-hulled ships have almost perfect track record—zero spills in most accidents

Alaric Nightingale and Tony Hopfinger, March 24 2009, “Valdez Ghost Haunts Exxon With Spill-Prone Ships,” Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601102&sid=aBlNZuzlHXOM&refer=uk>

In deciding to restrict single hulls, the U.S. Congress considered design studies provided to the IMO that found spills from double-hull tankers would be “zero in most accidents,” said Robert Gauvin, Washington-based technical adviser at the U.S. Coast Guard. A 1992 report to Congress by the Coast Guard found that double hulls are unequalled for avoiding spills and prevent them in “all but the most severe incidents.”

Double-hulled description

Alaric Nightingale and Tony Hopfinger, March 24 2009, “Valdez Ghost Haunts Exxon With Spill-Prone Ships,” Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601102&sid=aBlNZuzlHXOM&refer=uk>

“Double-hull tankers have an outer layer of steel, normally about an inch thick and 6.5 feet from the inner one, that acts as a buffer in an accident. When tankers with one shell are ruptured, the only place for the oil to go is into the sea.

Manufacturers are slowing production of single-hulled supertankers

Alaric Nightingale and Tony Hopfinger, March 24 2009, “Valdez Ghost Haunts Exxon With Spill-Prone Ships,” Bloomberg News, <http://www.bloomberg.com/apps/news?pid=20601102&sid=aBlNZuzlHXOM&refer=uk>

The proportion of single-hull supertankers has shrunk to 21 percent from 100 percent before Valdez, according to Lloyd’s Register-Fairplay, as shipbuilders such as Hyundai Heavy Industries in Ulsan, South Korea, the world’s largest, stopped making them.

SOLVENCY- National Security

Reducing oil imports would not affect foreign policy: US troops in the Middle East for other reasons

Joseph Bast (President of the Heartland Institute), June/July 2008, “The Mystery of Energy Indpendence,” The Heartland Institute, <http://www.heartland.org/policybot/results/23416/The_Mystery_of_Energy_Independence.html>

“Reducing oil imports would not affect U.S. foreign policy. Oil from the Mideast accounts for only 17 percent of all U.S. oil imports. Canada and Mexico are the two largest sources of oil imported to the U.S. Oil is bought, sold, and consumed globally. According to some experts, newly discovered oil reserves in Russia, Central Asia, and West Africa are larger than those in Saudi Arabia and Iraq, and as they come online the U.S. will rely less on the Mideast. The U.S. has historically maintained a military presence in the Mideast for several reasons, including to stop Soviet expansionism, protect Israel from its Arab neighbors, and most recently to stop the spread of Islamic terrorism.”

Reducing US oil imports would not defund terrorists

Joseph Bast (President of the Heartland Institute), June/July 2008, “The Mystery of Energy Indpendence,” The Heartland Institute, <http://www.heartland.org/policybot/results/23416/The_Mystery_of_Energy_Independence.html>

“If the U.S. stopped buying oil from the Mideast, other countries would buy it instead, freeing up oil that the U.S. would then import. The U.S. cannot unilaterally “de-fund” Islamic fundamentalists by reducing its oil imports from the Mideast.”

Since terrorists attacks are low costs operations, energy policy will not affect them

Jerry Taylor (senior fellow at the CATO Institute specializing in Energy and the Environment) and Peter Van Doren (editor of the quarterly journal Regulation and an expert in the regulation of housing, land, energy, the environment, transportation, and labor), 26 September 2007, CATO Institute, <http://www.cato.org/pub_display.php?pub_id=8720>

Hence, belief that cutting oil profits would cut Islamic terrorism is a matter of faith, not a matter of fact. Given the low-cost nature of terrorism (the 9/11 attacks, for instance, cost only about $500,000), there is little chance that anyone's energy policy is going to bother al Qaeda very much.

Saudi Arabia and Iran would continue funding madrassas and Hezbollah even without oil revenue

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“Producer states do use oil revenues to fund ideological extremism, and Saudi financing of *madrassas* and Iranian financing of Hezbollah are good examples. But given the importance of those undertakings to the Saudi and Iranian governments, it’s unlikely that they would cease and desist simply because profits were down. They certainly weren’t deterred by meager oil profits in the 1990s.26”

Even reducing oil sales 90% would leave states that fund terrorism with $29 billion

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“The futility of reducing oil consumption as a means of improving national / energy security is illustrated by the fact that states accused of funding terrorism earned $290 billion from oil sales in 2006.27 Even if that sum were cut by 90 percent, that would still leave $29 billion at their disposal – more than enough to fund terrorism given the minimal financial needs of terrorists.28”

SIGNIFICANCE- Foreign Policy

Oil revenues not a significant factor for bad states (they had bad regimes before the oil booms)

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“Denuding Iran and Libya of oil revenues might produce a government that looks a lot like Syria; denuding Venezuela of oil revenues might produce a government that looks a lot like Cuba; and denuding Russia of oil revenues might produce a government that looks a lot like Russia used to be. After all, all of these “bad-acting” petro-states yielded unsavory regimes even when oil revenues were a small fraction of what they are today.”

Even if US become independent, foreign policy would still be constrained as long as partners were dependent

Dr. John Deutch (PhD in Chemistry from MIT, former Director of Central Intelligence and Deputy Secretary of Defense) and Dr. James Schlesinger (PhD in Economics from Harvard, former Secretary of Defense and former Secretary of Energy) [Chairs], 2006, “National Security Consequences of US Oil Dependency,” Indpendent Task Force Report No. 58, Council on Foreign Relations, <http://www.cfr.org/content/publications/attachments/EnergyTFR.pdf>

“Yet even if the United States were self-sufficient in oil (a condition the Task Force considers wholly infeasible in the foreseeable future), U.S. foreign policy would remain constrained as long as U.S. allies and partners remained dependent on imports because of their mutual interdependence. Thus, while reducing U.S. oil imports is desirable, the underlying problem is the high and growing demand for oil worldwide.”

Nothing short of rendering oil valueless will reduce bad petro-regime behavior

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“While we have no doubt that – all other things being a equal – a rich bad actor is more dangerous than a poor bad actor, the marginal impact that oil revenues have on “bad acting” might well be rather small. The fact that unsavory petro-states have been fully capable of holding on to power, oppressing their people, and menacing their neighbors during a decade associated with the lowest inflation-adjusted oil prices in history (the 1990s) suggests that nothing short of rendering oil nearly valueless will have any real effect on regime behavior.”

Even the ambitious cuts in oil consumption would not reduce bed acting from petro-states

Jerry Taylor (senior fellow at the CATO institute and member of the International Association for Energy Economics) and Dr. Peter Van Doren (senior fellow at the CATO institute, editor of the journal Regulation, PhD from Yale, and former professor of Public and International Affairs at Princeton) Summer 2008, “The Energy Security Obsession,” The Georgetown Journal of Law and Public Policy, Vol. 6, No. 2, <http://www.cato.org/pubs/articles/taylor_vandoren_energy_security_obsession.pdf>

“Given there was plenty of “bad acting” in 1998 when we saw the lowest real oil prices in world history, it’s unlikely that even the most ambitious set of policies to reduce oil consumption would have much effect on bad acting. Accordingly, we doubt that the foreign policy benefits that might accrue from anti-oil policies would outweigh the very real costs that such policies would impose on both consumers and innocent producers. We suspect that there are better remedies available to curtail bad behavior abroad.”

US doesn’t buy oil from bad states, other oil dependent countries will

The Manhattan Institute, April 2009, “Myth 1 The US gets the largest share of its oil form the Middle East,” <http://www.manhattan-institute.org/energymyths/myth1.htm>

“Of course, many Americans understandably oppose sending large sums of money to countries neither democratic nor allied with the U.S. Our withdrawal from these markets, however, while perhaps a worthy goal in itself, would not stop those nations from realizing revenues from the sale of oil to other buyers, particularly fast-growing, petroleum-hungry India and China.”

PRO: OIL PRICES HARM THE ECONOMY

By Matthew Baker

Doubling of the price of oil between June 2007 and June 2008 was an important factor in the 2007 recession

Professor James D. Hamilton (Professor of Economics at the University of California San Diego), May 20, 2009, “Oil Prices and the Economic Downturn,” Testimony Prepared for the Joint Economic Committee of the US Congress,” <http://www.house.gov/jec/news/2009/Hamilton_testimony.pdf>

“The price of oil doubled between June 2007 and June 2008, a bigger price increase than in any of those four earlier episodes. In my mind, there is no question that this latest surge in oil prices was an important factor that contributed to the economic recession that began in the U.S. in 2007:Q4.”

IMF: $5 increase in oil will reduce real GDP by 0.3%

Dr. Thomas E. Drennen (Ph.D. in resource economics from Cornell University) and Jennifer E. Rosthal (PhD candidate in economics at Rice University), 2007, “Pathways to a Hydrogen Future,” p. 80 [Google Books]

“Several models, including the International Monetary Fund (IMF) and ORNL, use historical data to predict the economic effects of oil price increases on various components and measures of the United States and the global economy. The IMF model (Mussa 2000) predicts that a $5 increase in the price of oil per barrel initially would reduce real GDP by about 0.3% and reduce demand by 0.4% among industrialized countries. This impact is slightly higher in the United States and Euro regions than in other industrialized countries (Mussa 2000).

Nearly all post-WWII recessions linked to oil price increases and $50 spike in oil would cut real GDP

Dayton Business Journal, September 5, 2008, “Economist: Oil prices hurt GDP,” <http://dayton.bizjournals.com/dayton/stories/2008/09/01/daily32.html>

“Nearly all post-World War II recessions in the United States were preceded or accompanied by an increase in oil prices, which is why oil price shocks, or unexpected increases that affect firms’ and households’ economic decisions, are viewed with alarm, said Kevin Kliesen, an economist with the St. Louis Fed. Kliesen found that an additional $50-per-barrel increase in the price of crude oil would cut real GDP growth by about 0.25 percentage points in 2008, although by only 0.1 percentage points in 2009.”

Oil price increases hurts GDP through uncertainty, investment delay, and resource reallocation

Dayton Business Journal, September 5, 2008, “Economist: Oil prices hurt GDP,” <http://dayton.bizjournals.com/dayton/stories/2008/09/01/daily32.html>

“An oil price increase may lower real GDP through several ways: It raises uncertainty about future oil prices, causing delays in business investment; and induces "resource reallocation,” such as automakers switching production from trucks and SUVs to smaller cars and hybrids, he said.”

A 33% increase in oil prices would cut real GDP by 0.2 and then 0.5 over two years

The Energy Information Administration, 2006, “Economic Effects of High Oil Prices,” <http://www.eia.doe.gov/oiaf/aeo/otheranalysis/aeo_2006analysispapers/efhop.html>

A recent Stanford University Energy Modeling Forum (EMF) study by Hillard Huntington found that most macroeconomic models report similar economic effects of oil price increases [*21*]. Table 9 shows the results for real GDP, the GDP price deflator, and unemployment obtained from three models and their averages [*22*]. The results are shown for a 33-percent increase in the oil price, from $30 to $40. For example, the output results in Table 9 imply that a 33-percent increase in the oil price sustained for 2 years reduces real GDP relative to the baseline by 0.2 percent in the first year and 0.5 percent in the second year.

PRO: PESTICIDES

By Michael Bixby

SIGNIFICANCE

Pesticide residue does not represent a significant health risk

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“However, the evidence does not support the popular view that pesticide residues represent a significant health risk in Europe and the US.”

Pesticides levels in food are far below any level that could be hazardeous

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“Statutory maximum residue levels (MRLs) are the highest concentration of pesticide (expressed in mg/kg) legally permitted in or on food commodities and animal feed. They are set by measuring the residue levels on harvested produce after it has been grown using Good Agricultural Practice and in accordance with pesticide label instructions, provided this level does not constitute a hazard to consumers. In fact, contrary to public perception, MRLs are far below any level that would be hazardous to consumers—they are usually not approved unless they are a factor of at least 100 below the no observable adverse effect level (NOAEL).”

DISADVANTAGES

A) Lives

Bjorn and Lomborg: Abolishing pesticides would result in 1000s of lives lost for every one saved

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“There are some exceptions to the predominantly negative view of pesticides—Lomborg and Bjorn (2001) wrote ‘‘If pesticides were abolished, the lives saved would be outnumbered by a factor of around 1000 by the lives lost due to poorer diets.”

B) Economy

$20 billion in economic loss to the US without herbicides

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“Herbicides are the most widely used type of pesticide since weeds are the major constraint that limit yield in many crops. Herbicides represent around 50% of all crop protection chemicals used throughout the world, compared with insecticides and fungicides that are around 17% each (CropLife, 2004, personal communication). Without herbicides there would be an estimated US $13.3 billion loss in farm income in the US (Anon, 2003 b). Yancy and Cecil (2005) put the figure for benefits of herbicide use even higher at $21 billion annually, against a cost of $6.6 billion for the product and application that reduced losses to weeds by 23% and avoided a loss of farm income valued at $8 billion. Bridges (1992) reported that US losses due to weeds of $4 billion would be $20 billion without use of herbicides.”

C) Health

Pesticides reduce cancer by providing affordable fruits and vegetables

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

”Gattuso (2000) wrote that banning some pesticides would reduce the availability, affordability and overall consumption of fruit and vegetables—a vital protection against cancer. Lewis and Rund (2004, 2005) discussed the nutritional properties of apples and blueberries in the US diet and concluded that their high concentrations of antioxidants act as protectants against cancer, heart disease, and other chronic diseases associated with oxidative stress and ageing.”

Pesticides enhance human health by preventing diseases

Environmental Protection Agency, September 11, 2007, “Benefits of Pesticide Use” <http://www.epa.gov/oecaagct/ag101/pestbenefits.html>

“Pesticides contribute to enhanced human health by preventing disease outbreaks through the control of rodent and insect populations.”

D) Hunger

By reducing risk of catastrophic loss to pests and diseases, pesticides promote food security

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“Reliability of production is economically important to any producer, and to resource-poor communities with no financial or food reserves, it is critically import. It is no good having an adequate harvest for 3 years if there are large losses in the fourth year. By reducing risk of catastrophic loss to pests and diseases, pesticides are a tool to help deliver food security and dependable livelihoods from farming.”

35% of world food supply lost without crop protection products; for some crops losses would be 75% without pesticides

European Crop Protection Association, 2006, “What are the benefits of Pesticides” http://www.ecpa.be/en/pesticides/faq/\_related/faq-what-are-the-benefits-of-pesticides/

“Pesticides ensure a healthy crop and limit crop losses by keeping crops free of pests and diseases as they grow and during storage and transportation. For some foods, such as potatoes, the losses of yield would reach up to 75% if no pesticide were used. (See E.-C. OERKE, Crop losses to pest, Journal of Agricultural Science (2006), 144, 31–43. f 2005 Cambridge University Press ). Over 35% of the world’s food supply would be lost without the use of crop protection products. There will be 1.5 billion more mouths to feed by 2020. Pesticides will help to ensure that the productivity of the land can feed these people sustainability.”

E) Highway Fatalities

Pesticides help ensure safe roads leading to fewer accidents and reduced stress

Jerry Cooper (pest management specialist with 30 years experience in crop protection, lectures on Masters courses at Medway) and Hans Dobson (Advisor to the UK Government's Pesticide Safety Directorate, pest management specialist with 20 years experience of research & consultancy, Program & Operations Manager for the Yaounde Initiative Foundation), 2007, “The benefits of pesticides to mankind and the environment” Crop Protection, <http://landcarenetwork.org/planetFile/pdfs/PT/PesticideBenefitsResearchPaper.pdf>

“The transport sector makes extensive use of pesticides, particularly herbicides, to ensure that roads, railways and waterways are kept free of vegetation that might otherwise cause a hazard or nuisance. For example, if vegetation is allowed to grow too tall on roadsides, it reduces the drivers’ view at junctions, and deposits branches or vegetation onto the road that might be an obstruction or make it very slippery. The use of pesticides to manage this vegetation brings secondary benefits of safer transport systems with fewer accidents and less stress for users.”

PRO: PLASTIC BAGS

By Matthew Baker

INHERENCY

The recycling rate for plastic bags is growing

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“The recycling rate for plastic is growing quickly under the pressure of new mandates and markets. The actual amount recovered nationwide doubled between 2005 and 2006. Most of the plastic bags recycled are reclaimed for use in the United States or Canada to manufacture decking, railing and fencing which replace the use of virgin forest products.”

SIGNIFICANCE

Plastic bags better in landfills (take up less space)

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“Plastic bags can be better in a landfill because their compact size takes up the least space and, as opposed to biodegradable bags, they release zero greenhouse gas emissions.”

SOLVENCY

People pick plastic bags because they plan on reusing them

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“The good news is that, given a choice between plastic, paper and multi-use grocery bags, most people make the best available environmental choice: whichever bag they are most likely to reuse. In an informal online MSNBC survey last month, 38 percent of respondents said reusability was the most important factor in choosing what type of grocery bag to use. The plurality, 41 percent, choose plastic.”

People reuse paper bags (banning them increases sales of plastic garbage bags)

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“The vast majority of people reuse "single-use" plastic bags for household tasks like bagging garbage and cleaning up messes. Ireland's plastic bag tax, initiated in 2002 to combat the aesthetic impacts of litter on tourism, virtually eliminated the use of the targeted bags but also resulted in a 77 percent increase in the sale of kitchen garbage bags. San Francisco's first-in-the-nation ban on non-biodegradable plastic bags last year surely has had similar rebound affects.”

A/T Recyclability: Just because paper bags are more recyclable does not make them greener

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“It might be true that paper bags are more recyclable. However, that does not necessarily make them greener. For one thing, recycling doesn't always save resources because it is easy to use more energy and water and produce more pollutants recycling a product than you save recycling. In any case, "recyclable" is not the same thing as "recycled." Many paper bags still end up in the landfill.”

Paper is not more likely to decompose in a modern landfill

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“But - you may still ask - isn't paper better because it decomposes in landfill? Nope. Nothing really decomposes in a modern sanitary landfill because air and light are kept out. In a hundred years, we could probably mine the old waste if we needed it! Researchers at the University of Arizona showed back in the 1990s that landfills preserved the waste so well that they found perfectly intact 20-plus year old newspapers, hot dogs, and even lettuce!”

Paper poses zero chemical leaching benefits over plastic

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

What about the risks of chemicals leaking out of landfills? Doesn't paper leach less dangerous substances than plastic bags? Nope. Since most things don't decay much, there isn't much leaching. In fact, the risk of landfills causing health problems is slim to none.

DISADVANTAGE

A) Increased Dependence on Foreign Oil

Paper bags use 5 times more oil than plastic

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“One hundred million new plastic grocery bags require the total energy equivalent of approximately 8300 barrels of oil for extraction of the raw materials, through manufacturing, transport, use and curbside collection of the bags. Of that, 30 percent is oil and 23 percent is natural gas actually used in the bag-the rest is fuel used along the way. That sounds like a lot until you consider that the same number of paper grocery bags use five times that much total energy. A paper grocery bag isn't just made out of trees. Manufacturing 100 million paper bags with one-third post-consumer recycled content requires petroleum energy inputs equivalent to approximately 15,100 barrels of oil plus additional inputs from other energy sources including hydroelectric power, nuclear energy and wood waste.”

Paper bags require as much as 40 times more energy to make and transport

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“Then there is the issue of energy. Believe it or not, plastic bags are incredibly energy efficient. This very green attribute is probably the main reason they were winning in the marketplace to begin with - because lower energy costs mean lower costs for supermarkets and everyone else. Studies have shown that paper bags require as much as 40 times more energy to make and transport, which is reflected in their price.”

B) Higher Consumer Prices

Paper bags cost 5 times more

National Center for Policy Analysis, April 3, 2007, “Plastic Bag Ban Full of Holes,” <http://www.ncpa.org/sub/dpd/index.php?Article_ID=14385>

“Plastic bags cost about a penny each, paper costs about a nickel and compostable bags can run as high as 10 cents each. The California Grocers Association, which lobbied against the ban, doubts this new industry can produce enough of the compostable bags quickly.”

Retailers pass along costs of bags to consumers

Skaidra Smith-Heisters (policy analyst at Reason Foundation specializing in the Environment), April 17, 2008, “Paper Grocery Bags Require More Energy Than Plastic Bags,” Reason Foundation, <http://reason.org/news/show/1003006.html>

“Part of the invisible cost of shopping bags is passed down to consumers as retailers recoup the price they pay for the bags-pennies in the case of plastic, a nickel or a dime for paper bags (ones with handles cost more), and the same or more again for biodegradable plastic bags.”

C) Inset Pests

Paper bags more likely to carry cockroaches into your house

Dr. Angela Logomasini (Director of Risk and Environmental Policy at the Competitive Enterprise Institute and PhD in politics from the Catholic University of America), April 18, 2008, “The Whole Truth about Plastic Bags,” The Competitive Enterprise Institute, <http://cei.org/articles/whole-truth-about-plastic-bags>

“Plastic is also much less likely to carry cockroaches into your home, which can be a problem with paper bags. Common to supermarkets, cockroaches feed on the glue in paper bags and easily can hide in the crevices of paper bag.”

D) Increased Pollution

Paper bags generate 70% more air pollution and 50 times more water pollution

National Center for Policy Analysis, April 3, 2007, “Plastic Bag Ban Full of Holes,” <http://www.ncpa.org/sub/dpd/index.php?Article_ID=14385>

The bags also must be segregated from regular plastic, making recycling efforts more difficult. Meanwhile: Paper bags generate 70 percent more air pollutants and 50 times more water pollutants than plastic bags, according to the U.S. Environmental Protection Agency. This is because four times as much energy is required to produce paper bags and 85 times as much energy is needed to recycle them. Paper takes up nine times as much space in landfills and doesn't break down there at a substantially faster rate than plastic does.”

PRO: REGULATION: ENVIRONMENTAL

By Matthew Baker

SIGNIFICANCE- Economy

Small positive effect between environmental regulations and jobs

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf>

“Economist Eban Goodstein at the Economic Policy Institute has written substantially on the relationship of jobs and the environment. According to Goodstein, the jobs-environment trade-ff is largely a myth. Goodstein’s book Jobs and the Environment: The Myth of a National Trade-Off finds a small positive effect of environmental regulation on overall employment, especially in the area of manufacturing workers. Goodstein also finds that environmental regulation does not lead to manufacturing plant shutdowns.”

Air pollution abatement regulations had no effect on employment in refineries

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf>

“Berman and Bui also found that regulation had no impact on labor demands. The authors examined the impact on labor demand of increased air pollution abatement in the Los Angeles area. In looking at data from 1979 through 1992, a period that saw sharp increases in environmental regulation, they found that increased regulation had no effect on employment in refineries.”

Regulations improved productivity in Los Angeles refineries

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf>

“Berman and Bui also found that in meeting more stringent environmental standards, oil refineries in the Los Angeles Air Basin actually increased their productivity and efficiency. Interview with “plant managers and environmental engineers suggested that productivity increases were not accidental. They resulted from a careful redesign of production processes induced by the need to comply with environmental regulations.”

States with higher environmental regulations had higher GDP growth

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf> [brackets added]

“Stephen Meyer [Ph.D. in political science from the University of Michigan] compared regulation across states in the United States found that environmental regulation did impact economic prosperity. In fact, “states with stronger environmental regulations tended to have higher growth in the gross domestic products.” Though the correlation does not suggest causation, it does indicate that environmental regulation does not hinder state’s economies. The correlation held true even during times of recession. In an update focusing on the 1990-91 recession, Meyer found states with stronger environmental regulation were not more likely to face economic decline during a period of recession than states with weaker environmental standards.”

Multiple studies: environmental regulations do not result in loss of competiveness

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf>

“The Jaffe et al. study looked at all three indicators of competitiveness and found on all accounts that regulation was not a major factor in competitiveness. In the case of plant location decisions, Jaffe et al. found that there is little evidence to support the conclusion that stringent regulation is a major determinant in plant location decisions. This finding is corroborated by a host of other economists.

• Timothy J. Batrik studied the impacts of state government environmental regulation expenditures on plant location decisions and found that such expenditures had an insignificant effect on plant locations.

• Kevin Gallagher found that plants moving to Mexico are not the ones with highest pollution abatement costs; overseas movement of industries is affected more by labor costs than by regulation.

• A look at plant location within India found that increased government spending on environmental regulation not only did not deter plant location but actually had a positive impact.”

Regulations does not result in a loss of competitiveness and actually helps the US economy

Public Citizen, 2006, “The Truth Test: Regulation and Competitiveness,” <http://www.citizen.org/documents/FCT-TruthTest-RegulationVsCompetition.pdf>

“Anti-regulatory arguments claim that regulation is inherently a burden that weakens the competitiveness of American businesses in the global market. Yet a plethora of scholarly studies indicates that the opposite is true: regulation not only does not hinder U.S. competitiveness but actually may increase the competitive advantage of the United States. Overall, factors such as wages and trade agreements play a much larger role than regulation in determining U.S. competitiveness. Economists have been unable to find the strong negative correlation between regulation and competitiveness. This finding may run counter to intuition, but it suggests that protecting public health, safety and the environment can have real economic advantages; the United States does not have to sacrifice public protections in order to promote U.S. competitiveness.”

Environmental spending and regulation beneficial for companies

Professor Phil Brown (Professor of Environmental Studies at Brown University), 2007, “Toxic exposures,” p. 212 [Google Books]

“Environmental spending creates more manufacturing and construction jobs than the general economy’s average. Pollution prevention and control jobs are one of the nation’s highest growth sectors. States with stronger environmental regulation have greater job growth than other states; although this statistic does not mean such regulation produces jobs, it certainly shows that regulation does not reduce jobs.”

Environmental regulations not a primary driver of outsourcing

Professor Phil Brown (Professor of Environmental Studies at Brown University), 2007, “Toxic exposures,” p. 212 [Google Books]

“Environmental protection at present generally cost about 2-3 percent of companies expenses, thus not making them a reason for moving overseases, and those industries with the most overseas flight are not the ones with high environmental costs. Many fearful estimates of high compliance costs are exaggerated; oftentimes there are little no net costs because new technologies save costs in other ways.”

SIGNIFICANCE- Free Markets

The Panama Canal and the Great Depression were solved by non-free market mechanisms

Matthew Stein (BS in Engineering from MIT, author of When Technology Fails, and owner of Stein Design & Construction) October 16, 2008, “The Failure of the Free Market,” The Huffington Post, <http://www.huffingtonpost.com/matthew-stein/the-failure-of-the-free-m_b_135236.html>

“There are several areas that our governments consider too important to leave up to chance and a free market policy -- including public education, our country's military defense, large dams and bridges, plus the giant network of interstate freeways. Why do we feel that we must leave our most important assets, the health and natural resources of our planet's ecosystems, up to this sacred cow called "The Free Market"? Would Hitler have been stopped if we left it up to the free market? When the stock market collapsed in 1929, plunging the entire developed world into a financial crisis known as "The Great Depression," governments stepped in to implement economic regulations and policies designed to boost flagging economies and put people back to work, as well as to put in place legislative safeguards designed to prevent such a global economic catastrophe from ever occurring again. When it was deemed important to America's national security and financial future, the U.S. government, under the leadership of Theodore Roosevelt, bought the failed French attempt to build a canal across the Isthmus of Panama and subsequently completed the project over a 10-year period extending from 1904 to 1914.”

SOLVENCY- Regulatory Capture

Comparision of NOPR vs. Rules shows little business influence in federal agencies

Dr. Shelden Kamieniecki (PhD and Professor of political science at the University of Southern California, Dean of the Division of Social Sciences), “Navigating the maze: corporate influence over federal environmental rulemaking,” Environment, June 2006, <http://findarticles.com/p/articles/mi_m1076/is_5_48/ai_n16726155/pg_1> [brackets added]

“Among other things, public policy scholar Marissa Golden studies the influence of interest groups on the rulemaking process by investigating whether differences occur between an agency's NOPR [Notice of proposed rulemaking] and its final rule and the extent of these differences if they occur. (37) Because the Federal Register publishes the NOPR and the final rule as well as detailed explanations for any changes, it can be assumed with some confidence that the public comments submitted during the notice and comment period were responsible for these changes. Golden classifies the amount of change resulting from public comments into four categories, "none," "minimal," "some," and "a great deal." In general, she does not find "undue business influence" in the rules written by the various agencies she examines. The primary bias she finds is the tendency among all the agencies to favor supporters of its rules over detractors.

Businesses have little influence over environmental rules

Dr. Shelden Kamieniecki (PhD and Professor of political science at the University of Southern California, Dean of the Division of Social Sciences), “Navigating the maze: corporate influence over federal environmental rulemaking,” Environment, June 2006, <http://findarticles.com/p/articles/mi_m1076/is_5_48/ai_n16726155/pg_1> [brackets added]

“The results reported above suggest that interest groups have little influence over the structure and contents of proposed rules concerning environmental and natural resource issues. As Golden also finds, business interests do not exhibit excessive and unwarranted influence in the rulemaking process. (44) Environmental organizations, too, fail to alter proposed rules to their liking. Hence, the ability of business to mobilize their forces and the tendency of environmental organizations to counter mobilize have no major impact on final rules.”

Regulatory capture theory does not apply so well to the environment cause of counterbalancing groups and public interest

Dr. Daniel J. Fiorino (PhD in Political Science form Johns Hopkins University and Director of the Performance Incentive Division, in the Office of Policy, Economics, and Innovation at the EPA), 2006, “The New Environmental Regulation,” p. 38 [Google Books]

“Whatever relevance capture theory had for economic regulatory agencies (and this has been debated), it does not necessarily apply well to health and safety issues, such as the environment or occupational health. The latter issues are more salient for the public, and there are countervailing forces, such as environmental activist groups, that historically did not exist in economic regulation. Still, concerns about agency capture have had a major influence on the design of regulatory laws, processes, and relationships with industry. They are the source of much of the adversarial legalism that characterizes relationships among government, industry, and environmentalists.”

Major Bush EPA critic says corporate experience can be major plus in protecting the environment

Robin Bravender, May 15, 2009, “DOJ nominee’s industry experience a worry for some,” The Wall Street Journal, <http://www.nytimes.com/gwire/2009/05/15/15greenwire-doj-nominees-industry-experience-a-worry-for-s-12208.html>

“Eric Schaeffer, director of the nonprofit Environmental Integrity Project, disputed the notion that Moreno's corporate background makes her unfit to lead the DOJ office. Schaeffer resigned as chief of EPA's enforcement office in 2002 in protest of the Bush administration's enforcement tactics. "I think the idea that if you have industry experience, you can't be a good enforcer -- I don't really think that," he said, adding that he does not know Moreno personally. Schaeffer cited Granta Nakayama, EPA's top enforcement official under President George W. Bush, as an example of a good enforcer with industry experience. Nakayama worked at Washington lobbying firm Kirkland & Ellis LLP for 11 years prior to his 2005 appointment as EPA assistant administrator for enforcement. "If you have the right person who has industry experience, they can basically use that to the government's advantage," Schaeffer said, because the nominee comes with knowledge of industry's inner workings.”

Salazar has a rating of 100% from the extremist green organization League of Conservation Voteres

Kenneth P. Green (Resident Scholar at the American Enterprise Institute), January 16, 2009, “Obama’s Green Team,” The American, <http://www.american.com/archive/2009/obama2019s-green-team>

“At first blush, Democratic Senator Ken Salazar of Colorado, who has been tapped for interior secretary, looks like a moderate. As with Jackson, some environmentalists have opposed his selection, citing his support for the confirmation of Bush’s first interior secretary, Gale Norton, and his ill-defined ties to resource extraction industries. Salazar has also comes under fire for several votes unpopular with the environmental movement, such as his 2005 vote against tightened CAFE standards; his 2006 vote to remove congressional barriers to oil exploration off Florida’s Gulf Coast; and his 2007 vote against legislation that would have required the U.S. Army Corps of Engineers to consider global warming when planning water projects. Nevertheless, Salazar currently has a rating of 100 percent with the League of Conservation Voters, an extremist green outfit that has hailed him as an environmental hero for cleaving to their party line.”

Congress and the President can change environmental regulatory policy according to external signal theory

Dr. Michael R. Greenberg (PhD in medical geography from Columbia University and Professor at the School of Public Health at the University of Medicine & Dentistry of New Jersey), 2008, “Environmental policy analysis and practice,” Rutgers University Press, p. 245 [Google Books]

“Public interest theory assumes that agencies focus on the public interest mandated by their mission (Levine, 1981; Mitnick, 1980). Capture theory (Peltzman, 1976; Stigler, 1971) asserts that businesses, workers, and other interest groups capture agencies and their missions. Neither of these theories matches my experience with environmental policy, I have observed what the literature refers to as “external signals theory,” which predicts that agency staffs respond to signals from the surrounding political environment (Magat, Krupnic, and Harrington, 1986; Noll, 1971). If Congress and the Office of Management and Budget (OMB) support budget requests, if the courts uphold agency rules, and if constituents and the media applaud the poicies, then the agency is appropriately managed its mandate. If budget requests are challenged and constituents or the media are hostile or silent, then the agency must adjust to its environmental (Cyert and March, 1963). External signal theory implies that agencies should always be scanning the political environment for signals. Changes in leadership and budgets are not subtle messages. Moe (1982) showed how changes in Congress and the Executive Branch have changed policy. EPA is a case in point. Many friends and former students have worked for EPA or its state equivalents, and their performance, indeed, their continued employment, has been altered by new leaders and budget shifts.”

PRO: TOBACCO SMOKE

By Michael Bixby

INHERENCY

Teen smoking rates lower then they’ve been since the early 1990s

Roni Caryn Rabin, December 15, 2008 “Teen Smoking Rates Decline,” The New York Times, <http://www.nytimes.com/2008/12/16/health/research/16smoking.html>

“Teen smoking rates dropped in 2008 and are now lower than they’ve been since the early 1990s, according to an annual survey of adolscent behavior. Just 12.6 percent of high-school students this year said they’d had a cigarette in the last month, down from 13.6 percent last year, according to researchers at the University of Michigan, who conducted the survey.”

Teenagers have negative attitude about smoking

Roni Caryn Rabin, December 15, 2008 “Teen Smoking Rates Decline,” The New York Times, <http://www.nytimes.com/2008/12/16/health/research/16smoking.html>

“Many teenagers have negative attitudes toward cigarette smoking. The vast majority said they’d rather not date someone who smoked and two-thirds said that “becoming a smoker reflects poor judgment,” according to the survey. “That’s a very important message,” said Lloyd Johnston, a research professor at the Institute for Social Research at the University of Michigan and the study’s principal investigator. “For years and years, the industry pitch was that smoking makes you sexy and attractive to the opposite sex. It turns out the absolute opposite is true. It projects a negative image, for both girls and boys.”

SIGNIFICANCE

Most credible study: no causal relationship between ETS and tobacco-related mortality

Joseph Bast (President & CEO of the Heartland Institute, Founder of the State Policy Network, Member of the Board of Advisors at the Center for Medicine and Public Interest), November 2007, “Where's the Consensus on Secondhand Smoke?” The Heartland Institute <http://www.heartland.org/policybot/results/22150/Wheres_the_Consensus_on_Secondhand_Smoke.html>

“Did Carmona and coauthors cherry-pick the data? Absolutely. They ignore the largest and most credible study ever conducted on spouses of smokers, by Enstrom and Kabat, published in the May 12, 2003 issue of the *British Medical Journal*. The authors found: "The results do not support a causal relationship between environmental tobacco smoke and tobacco-related mortality. The association between tobacco smoke and coronary heart disease and lung cancer may be considerably weaker than generally believed."

Oxford epidemiologist: risks of ETS are small and unquantifiable

Dr. Gio Batta Gori (Ph.D. in Biological Sciences, MPH, former scientist and top official at the National Cancer Institute, Vice-President of the Franklin Institute Policy Analysis Center), Spring 2007 “Stoking the Rigged Terror of Secondhand Smoke” Regulation, <http://www.cato.org/pubs/regulation/regv30n1/v30n1-5.pdf> (ellipses in original)

“The antismoking crusade has studiously avoided or squelched any confrontation that could have forced the truth of ETS to emerge. That is, until the spring of 2006, when the highly competent Oxford epidemiologist Sir Richard Peto — a leading intellect of the campaign against ETS — was called to testify before the UK House of Lords Select Committee on Economic Affairs, which was inquiring with a critical eye about government policy on the management of risk, including the claimed risks of ETS. Asked to quantify the hazards of ETS, Sir Richard replied: *I am sorry, I know that is what you would like to be given, but the point is that these risks are small and difficult to measure directly…. I am sorry not to be more helpful; you want numbers and I could give you numbers…, but what does one make of them? …These hazards cannot be directly measured.* He declined any quantification of ETS risks, with the clear implication that quantification is impossible.”

Inherent flaws of ETS studies means that the link between cancer and ETS is illusory

Dr. Gio Batta Gori (Ph.D. in Biological Sciences, MPH, former scientist and top official at the National Cancer Institute, Vice-President of the Franklin Institute Policy Analysis Center), Spring 2007 “Stoking the Rigged Terror of Secondhand Smoke” Regulation <http://www.cato.org/pubs/regulation/regv30n1/v30n1-5.pdf>

“No epidemiologic study has ever measured actual lifetime doses of ETS, nor lifetime exposures to ETS. No study has determined the recall bias of people with lung cancer. No study could guarantee that some self-declared nonsmokers were, or had been, smokers. No study could exclude that the lung cancers observed might have been caused by many known risks and thus not by ETS. Most studies did not report differences of risk, and some implied a reduction of risk. Thus, the statistical analyses and the claimed lung cancer risks of ETS are illusory.”

People have a choice in secondhand smoke exposure

Thomas A. Firey (Managing Editor of Regulation Magazine, Senior fellow for the Maryland Public Policy Institute, Ph.D. candidate in economics at George Mason) and Jacob Grier (Manager of Media Relations at CATO Institute), January 20, 2008 “Please Do Smoke, If You Like” The Washington Post, <http://www.cato.org/pub_display.php?pub_id=9108>

“Of course, people have a right to avoid exposure to secondhand smoke, no matter what studies show. But they don't have the right to force everyone else to live according to their preference. Fortunately, the world can accommodate their desires along with those of people who don't mind tobacco smoke, just as it can accommodate people who like Chinese food and people who prefer hamburgers. Restaurant and bar owners want to make money, and they do so by catering to different market niches. In Northern Virginia, many restaurants and bars advertise that they are smoke-free, while others cater to a smoking crowd. This offering of many different choices is a virtue of open market.”

Studies on secondhand smoke/ETS are faulty

Dr. Gio Batta Gori (Ph.D. in Biological Sciences, MPH, former scientist and top official at the National Cancer Institute, Vice-President of the Franklin Institute Policy Analysis Center), Spring 2007 “Stoking the Rigged Terror of Secondhand Smoke” Regulation <http://www.cato.org/pubs/regulation/regv30n1/v30n1-5.pdf>

“Lung cancer develops slowly and generally manifests at advanced ages after cumulative lifetime experiences. Even if ETS exposure, alone, could measure risk — and it cannot — it should be measured as the sumtotal of instant exposure episodes over the lifetime of individual nonsmokers. Yet, as we have noted, the myriad momentary changes of exposure over lifetimes would be impossible to track, and therefore cumulative assessments of individual exposures are materially impossible. Still, this is what ETS studies disingenuously claim to have done. Yet how could they have generated continuous measures of exposures, starting from any person’s birth through the 60–70 years needed for lung cancer to develop, as the studies claim? So impossible are those assessments that no epidemiologic study has ever measured the ETS exposures of the people observed.”

No credible measurement of ETS has been done

Dr. Gio Batta Gori (Ph.D. in Biological Sciences, MPH, former scientist and top official at the National Cancer Institute, Vice-President of the Franklin Institute Policy Analysis Center), Spring 2007 “Stoking the Rigged Terror of Secondhand Smoke” Regulation <http://www.cato.org/pubs/regulation/regv30n1/v30n1-5.pdf>

“Typically, instead, the studies asked 60–70 year-old selfdeclared nonsmokers to recall how many cigarettes, cigars, or pipes might have been smoked in their presence during lifetime since early childhood, how thick the smoke might have been in the rooms, were the windows open, and similar vagaries. The resulting answers — usually elicited in a few minutes as part of an interview, a phone survey, or by proxy recalls provided by relatives of deceased persons — are then recorded as precise numerical measures of lifetime exposures, as if the digits recorded were error- and bias-free. In reality, it is well known how difficult it is to remember what one ate a week ago, never mind 20 years ago or during childhood. It is transparently impossible to summarize from a few momentary and vague recalls, and with an absurd expectation of precision, the total exposure to smoke over the 50–60 years of a prior lifetime. The plain truth is that no credible measure of ETS exposure has ever been possible. Therefore, epidemiologic studies of ETS have produced statistical estimates of risk based not only on improper exposure data, but also on exposure data that are illusory.”

IMPACT TURN

Smoking/ETS can be beneficial to health

IanPunnett, August 27, 2005 “[Health Benefits of Tobacco](http://www.coasttocoastam.com/show/2005/08/27)” Coast to Coast A.M. <http://www.coasttocoastam.com/guest/douglass-dr-william-campbell/6574>

“Medical maverick Dr. William Campbell Douglass, who himself smokes 3 to 4 cigars a day, discussed the therapeutic effects of moderate smoking and secondhand smoke. Campbell said he did not always view smoking in a positive light, recalling his early days of practicing medicine when he would refuse to treat patients who continued to smoke. "Smoking in moderation will not harm you," Campbell explained, citing several medical conditions, including cancer, that can be improved by smoking. In one study he referenced, women who smoked the most were found to have a statistically significant 54% decrease in incidents of breast cancer when compared to woman who never smoked. Campbell also said smoking in moderation can prevent arteries from becoming clogged, as well as relieve the symptoms of Alzheimer's and Parkinson's disease. According to Campbell, the health benefits of tobacco have been overlooked because of "extremely unreliable" statistics. He pointed out that in Greece and Japan, and other places where smoking is very prevalent, people tend to live longer and healthier lives than in places where smoking is restricted.”

Benefits of smoking outweigh the harms

Dr. William C. Douglass (M.D from the University of Miami, National Health Federation “Doctor of the Year”), 2004, The Health Benefits Of Tobacco. <http://www.fearlesspublishing.com/book/smokersparadox/index.htm>

**“The benefits of smoking tobacco have been common knowledge for centuries. From sharpening mental acuity to maintaining optimal weight, the relatively small risks of smoking have always been outweighed by the substantial improvement to mental and physical health. Hysterical attacks on tobacco notwithstanding, smokers always weigh the good against the bad and puff away or quit according to their personal preferences.”**

DISADVANTAGES

Social Service Costs

Current smoking levels reduce healthcare costs 7% among men and 4% among women

Professor Thomas A. Lambert (J.D. from University of Chicago Law School, Associate Professor at the University of Missouri—Columbia School of Law, former environmental policy analyst at the Center for the Study of American Business), Winter 2006/2007, “The Case Against Smoking Bans” Regulation <http://www.cato.org/pubs/regulation/regv29n4/v29n4-4.pdf>

“According to a comprehensive study in the *New England Journal of Medicine* in 1997, smoking probably has the effect of reducing overall health care costs because smokers die earlier than nonsmokers. The study’s authors concluded that in a population in which no one smoked, health care costs would be 7 percent higher among men and 4 percent higher among women than the costs in the current mixed population of smokers and nonsmokers. The authors further determined that if all smokers were to quit, health care costs would be lower at first, but after 15 years they would become higher than at present.”

PRO: WATER QUALITY

By Nicholas Bruno

INHERENCY

US EPA engages in a variety of activity to assist water systems

US Environmental Protection Agency, June 2004, “Drinking Water Monitoring, Compliance, and Enforcement”, <http://www.epa.gov/OGWDW/sdwa/30th/factsheets/pdfs/fs_30ann_monitoring_web.pdf>

States and US EPA engage in a variety of activities to help water systems remain in, or return to, compliance. These activities include: visiting water systems and reviewing their facilities, equipment, and operations; helping systems invest in preventive measures; providing financial assistance for system improvements; loaning specialized monitoring equipment; conducting training sessions; holding public information meetings; and publishing newsletters and bulletins.

US laws are enforceable by legal actions and fines

United States Environmental Protection Agency, June 2004, “Understanding the Safe Drinking Water Act”, <http://www.epa.gov/SAFEWATER/sdwa/30th/factsheets/pdfs/fs_30ann_sdwa_web.pdf>

National drinking water standards are legally enforceable, which means that both US EPA and states can take enforcement actions against water systems not meeting safety standards. US EPA and states may issue administrative orders, take legal actions, or fine utilities.

President Obama supports more water regulation

Kent Garber (covers energy, the environment, and agriculture issues at U.S. News & World Report ), 1 December 2008, “Obama Likely to Boost Water Quality Rules After Years of Lax Regulation”, U.S. News & World Report, <http://www.usnews.com/articles/news/campaign-2008/2008/12/01/obama-likely-to-boost-water-quality-rules-after-years-of-lax-regulation.html>

Many of these priorities appear to align with those of Barack Obama. In his remarks about a stimulus package last week, Obama stressed the need for infrastructure improvement. During the campaign, he touted his support for water protection in battleground states like Florida, pledging to help protect and restore the Florida Everglades. His campaign advisers, meantime, say he will support legislation [to restore the full scope of environmental laws that were weakened under the current administration](http://www.usnews.com/articles/news/national/2008/11/25/environmental-groups-hope-obama-will-rebuild-epa-after-bush-years.html).

$19.4 billion approved to improve water quality

American Water Works Association (international nonprofit and educational society and the largest and oldest organization of water professionals in the world), 17 March 2009, “With 2009 budget passed, eyes turn to new water bill”, <http://www.awwa.org/Publications/StreamlinesArticle.cfm?ItemNumber=46933#hr1262>

The Water Quality Investment Act of 2009 ([HR1262](http://www.thomas.gov/" \t "_blank" \o "HR1262)), passed by the House with a large bipartisan margin (317 to 101) March 12, authorizes $19.4 billion for wastewater infrastructure and other efforts to improve water quality. Its authorization for FY2010 for the CWSRF — $2.4 billion — matches President Obama’s requested appropriation, leading its sponsor, Rep. James Oberstar, D-Minn., to express optimism the authorization bill would receive full funding with the support of the Obama administration. CWSRF funding in the bill totals $13.8 billion for all five years — $2.7 billion in 2011, $2.8 billion in 2012, $2.9 billion in 2013 and $3 billion in 2014.

Water quality has improved since CWA (Clean Water Act)

Environmentally Protection Agency, 30 October 2007, “Progress in Water Quality”, <http://www.epa.gov/OWM/wquality/index.htm>

Where adequate water quality data are available to make before and after the CWA "Worst-Case" DO level comparisons over different spacial scales [i.e., river reaches (which average 10 miles in length), catalog units, and major river basins], it was found that:

* 214 of the 311 (69%) reaches below POTW outfalls (with comparable data) showed improvements in worst-case DO; the top 25 improving reaches had worst-case DO increase by 4.1 to 7.2 mg/l the number of reaches characterized by worst-case DO <5.0 mg/l decreased from 167 to 97 (from 54% to 31%).
* 167 of the 246 (68%) catalog units with reaches below POTW outfalls (with comparable data) showed improvement in worst-case DO; 53 catalog units improved by >2 mg/l; the number of catalog units characterized by worst-case DO <5.0 mg/l was reduced from 115 to 65 (from 47% to 26%).
* 8 out of 11 (73%) major river basins with comparable data had statistically significant improvements in worst-case DO after the CWA; none of the major river basins had any statistically significant degradation in worst-case DO.
* Results of this analysis show that there were significant after-CWA improvements in worst-case summer DO conditions in two-thirds of the hydrologic units at all three spatial data aggregation sales. However, this analysis only relates to those waters receiving discharges from point sources.

SIGNIFICANCE

US provide some of the safest water in the world

American Chemistry Council,© 2008, “Celebrating 100 Years of Safer U.S. Drinking Water”, <http://www.americanchemistry.com/100years/100yearsArticle.html>

Over the past 100 years, a national infrastructure has been developed using chlorine as a drinking water disinfectant. Chlorinated systems deliver water through nearly 900,000 miles of pipe to more than 200 million Americans. U.S. water systems provide some of the safest water in the world right to the home at a cost of up to 1,000 times less than bottled water – representing arguably the biggest bargain in a family budget.

90% of US water systems meet EPA standards

Environmental Protection Agency, 10 July 2009, “Ground Water & Drinking Water – Frequently Asked Questions”, <http://www.epa.gov/safewater/faq/faq.html> (accessed 7/26/09)

Q: How can I find out if my tap water is safe to drink? A: Because of water's different sources and the different ways in which water is treated, the taste and quality of drinking water varies from place to place. Over 90 percent of water systems meet EPA's standards for tap water quality.

94-100% of Americans have access to “improved drinking water sources”

World Health Organization, World health statistics 2008, “Core Health Indicators”, <http://apps.who.int/whosis/database/core/core_select_process.cfm?countries=usa&indicators=PopAccessImprovedWaterUrban&indicators=PopAccessImprovedWaterRural&indicators=PopAccessImprovedSanitationUrban&indicators=PopAccessImprovedSanitationRural>

United States of America

|  |  |
| --- | --- |
| **Indicator** | **Value (year)** |
| Population with sustainable access to improved drinking water sources (%) rural [?](http://www.who.int/whosis/indicators/compendium/2008/2wst" \t "_blank) | 94 (2006) |
| Population with sustainable access to improved drinking water sources (%) urban [?](http://www.who.int/whosis/indicators/compendium/2008/2wst" \t "_blank) | 100 (2006) |

Definition of Improved Drinking Water Sources

World Health Organization, © 2009, “Access to improved drinking-water sources and to improved sanitation (percentage)”, <http://www.who.int/whosis/indicators/compendium/2008/2wst/en/>

**Improved drinking water** sources are defined in terms of the types of technology and levels of services that are more likely to provide safe water than unimproved technologies. Improved water sources include household connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collections.

PRO: WETLANDS

By Matthew Baker

A) Water

Wetlands improve drinking water quality

Environmental Protection Agency Office of Water, May 2006, “Economic Benefits of Wetlands,” <http://www.epa.gov/owow/wetlands/pdf/EconomicBenefits.pdf>

“Wetlands improve water quality in nearby rivers and streams, and thus have considerable value as filters for future drinking water. When water enters a wetland, it slows down and moves around wetland plants. Much of the suspended sediment drops out and settles to the wetland floor. Plant roots and microorganisms on plant stems and in the soil absorb excess nutrients in the water from fertilizers, manure, leaking septic tanks and municipal sewage. While a certain level of nutrients is necessary in water ecosystems, excess nutrients can cause algae growth that’s harmful to fish and other aquatic life. A wetland’s natural filtration process can remove excess nutrients before water leaves a wetland, making it healthier for drinking, swimming and supporting plants and animals. For example, the Congaree Bottomland Hardwood Swamp in South Carolina removes a quantity of pollutants from the watershed equivalent to that which would be removed by a $5 million treatment plant. (Source: EPA832-R-93-005)”

If 15% of a watershed’s later are wetlands, flood peaks can be decreased by 60%

Environmental Protection Agency Office of Water, May 2006, “Economic Benefits of Wetlands,” <http://www.epa.gov/owow/wetlands/pdf/EconomicBenefits.pdf>

“One of the most valuable benefits of wetlands is their ability to store flood waters. Maintaining only 15% of the land area of a watershed in wetlands can reduce flooding peaks by as much as 60%.”

Wetlands help maintain stream flow during dry periods thus replenishing drinking water

Environmental Protection Agency, January 12, 2009, “Water Quality and Hydrology,” <http://www.epa.gov/owow/wetlands/wqhydrology.html> (July 28, 2009)

“In addition to improving water quality through filtering, some wetlands maintain stream flow during dry periods, and many replenish groundwater. Many Americans depend on groundwater for drinking.”

B) Environment

Wetlands are vital to fish health and provide an essential cycle of the life-cycle of a multi-billion dollar commodity

Environmental Protection Agency Office of Water, May 2006, “Economic Benefits of Wetlands,” <http://www.epa.gov/owow/wetlands/pdf/EconomicBenefits.pdf>

“The Nation’s wetlands are vital to fish health and thus to the Nation’s multibillion dollar fishing industry. Wetlands provide an essential link in the life cycle of 75 percent of the fish and shellfish commercially harvested in the U.S., and up to 90 percent of the recreational fish catch. Wetlands provide a consistent food supply, shelter and nursery grounds for both marine and freshwater species. Landings of crab, shrimp and salmon were valued at $1,167 billion in 2004. These species are dependent on wetlands for at least part of their life cycles. In 2004 the dockside value of fin fish and shellfish landed in the United States was $3.7 billion and was the basis for the $7.2 billion fishery processing business. U.S. consumers spent an estimated $54.4 billion for fishery products in 2000. (Source: U. S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)).”

1/3rd of all threatened and endangered species live only in wetlands and an additional 20% live there during part of their life

Environmental Protection Agency Office of Water, May 2006, “Economic Benefits of Wetlands,” <http://www.epa.gov/owow/wetlands/pdf/EconomicBenefits.pdf>

“Although wetlands make up only about 5 percent of the land area of the lower 48 states, more than one third of threatened and endangered species live only in wetlands. An additional 20% of the country’s threatened and endangered species use or inhabit wetlands at some time in their life. Some species must have a wetland in order to reproduce. Migrating waterfowl rely on wetlands for resting, eating and breeding areas, leading to increased populations.”

Wetlands help to moderate global climate conditions

Environmental Protection Agency, January 12, 2009, “Wetlands and Nature,” <http://www.epa.gov/owow/wetlands/vital/nature.html> (accessed July 28, 2009)

“Wetlands' microbes, plants, and wildlife are part of global cycles for water, nitrogen, and sulfur. Furthermore, scientists are beginning to realize that atmospheric maintenance may be an additional wetlands function. Wetlands store carbon within their plant communities and soil instead of releasing it to the atmosphere as carbon dioxide. Thus wetlands help to moderate global climate conditions.”

Wetlands essential to the life cycles of many birds and mammals

Environmental Protection Agency, January 12, 2009, “Wetlands and Nature,” <http://www.epa.gov/owow/wetlands/vital/nature.html> (accessed July 28, 2009)

“Wetlands play an integral role in the ecology of the watershed. The combination of shallow water, high levels of nutrients, and primary productivity is ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish, and insects. Many species of birds and mammals rely on wetlands for food, water, and shelter, especially during migration and breeding.”

Wetlands are among the most productive ecosystems comparable to rain forests and coral reefs

Environmental Protection Agency, January 12, 2009, “Wetlands and Nature,” <http://www.epa.gov/owow/wetlands/vital/nature.html> (accessed July 28, 2009)

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs. An immense variety of species of microbes, plants, insects, amphibians, reptiles, birds, fish, and mammals can be part of a wetland ecosystem. Physical and chemical features such as climate, landscape shape (topology), geology, and the movement and abundance of water help to determine the plants and animals that inhabit each wetland. The complex, dynamic relationships among the organisms inhabiting the wetland environment are referred to as food webs.This is why wetlands in Texas, North Carolina, and Alaska differ from one another.

C) Economy

Wetlands are inviting places for recreation which contribute $108 billion to the US economy

Environmental Protection Agency Office of Water, May 2006, “Economic Benefits of Wetlands,” <http://www.epa.gov/owow/wetlands/pdf/EconomicBenefits.pdf>

“Wetlands are often inviting places for popular recreational activities including hiking, fishing, bird watching, photography and hunting. More than 82 million Americans took part in these activities in 2001, spending more than $108 billion on these pursuits. (Source: USFWS, Ducks Unlimited). For example, over 34 million people went fishing in 2001, spending an average of $1,046 and 16 days each on the water. Anglers spent $14.7 billion in 2001 for fishing trips, $17 billion on equipment and $4 billion for licenses, stamps, tags, land leasing and ownership, membership dues, contributions and magazines. The overall economic impact of recreational fishing is estimated at $116 billion (American Sportfishing Association), and wetlands play a crucial role in the life cycle of up to 90 percent of the fish caught recreationally. In 2001, approximately 3 million people hunted migratory birds, and 6.5 million small mammals that are often found in wetlands. They spent more than $2.2 billion, including $111million paid by migratory bird and large game hunters to lease hunting areas and blinds, often located on private property with wetlands. (Source: U. S. Fish and Wildlife Service) Each year nearly $200 million in hunters’ federal excise taxes are distributed to state agencies to support wildlife management programs, the purchase of lands open to hunters and hunter education and safety classes. Proceeds from the federal Duck Stamp, a required purchase of migratory water fowl hunters, have purchased more than five million acres of habitat for the refuge system. (Source: Ducks Unlimited) Just watching the wildlife, many of which depend on wetlands, has become a popular pastime. More than 66 million people 16 years old and older--31% of all Americans-- fed, photographed and observed wildlife in 2001 and spent $40 billion on their activities. (Source: U. S. Fish and Wildlife Service).”

Wetland contribute millions to the economy

Environmental Protection Agency, January 12, 2009, “Natural Products for Our Economy,” <http://www.epa.gov/owow/wetlands/economics.html> (accessed July 28, 2009)

“We use a wealth of natural products from wetlands, including fish and shellfish, blueberries, cranberries, timber, and wild rice, as well as medicines that are derived from wetland soils and plants. Many of the nation's fishing and shellfishing industries harvest wetland-dependent species; the catch is valued at $15 billion a year. In the Southeast, for example, nearly all the commercial catch and over half of the recreational harvest are fish and shellfish that depend on the estuary-coastal wetland system. Louisiana's coastal marshes produce an annual commercial fish and shellfish harvest that amounted to 1.2 billion pounds worth $244 million in 1991. Wetlands are habitats for fur-bearers like muskrat, beaver, and mink as well as reptiles such as alligators. The nation's harvest of muskrat pelts alone is worth over $70 million annually.”

DA: BUSINESS CONFIDENCE SHELL

By Stephen Menesick

Uniqueness: Business Confidence is rising, more cash flow is the key

American Banker; 7/1/2009, “Small-Business Confidence Gain.” Vol. 174 Issue 125, p13 via EBSCO

Small-business owners' confidence in the economy rose slightly last month as cash flow concerns abated, according to Discover Financial Services. The Riverwoods, Ill., credit card company said Monday that its monthly Small Business Watch index increased to 80.9 in June from 78.1 in May. The index was pegged at 100 when it was created in 2006. Forty-two percent of small-business owners said in June that they had experienced temporary cash-flow problems during the previous 90 days, down from 49% who said so in May, and 26% of respondents said they believe economic conditions are improving, up from 23%. The percentage of people who said they think business conditions are getting worse was unchanged, at 57. About 51% of small-business owners said they are planning to reduce their spending on business development over the next six months, down from 53% who said that in May, while 22% said they expect to increase their expenditures and 24% do not expect any changes. "Cash flow problems are back to levels that are more in line with what we've typically seen since the Watch began nearly three years ago," Ryan Scully, the director of Discover's business card unit, said in a press release. "Cash flow concerns usually erode confidence because they represent something tangible to a business owner, more so than an expectation or perception about the economy."

Link: Environmental Regulations are among the most costly to businesses (especially small businesses)

Anne Field and Diana Rosenthal, 2007, “Ease the pain of government regulations”, July 9th, CNN Money, <http://money.cnn.com/2007/07/06/magazines/fsb/regulations_guide.fsb/>

It's no exagerration to say that entrepreneurs are being crushed by regulatory costs. A 2005 report by the Small Business Administration found that small firms spend $2,400 more per employee, on average, than bigger counterparts to keep up with the demands of Uncle Sam. The two most daunting burdens, according to the study, are environmental compliance and - you guessed it - taxes. Following rules set by the EPA and other agencies costs small businesses 364 percent more per worker than it does larger enterprises. Staying out of tax court takes 67 percent more out of their pockets per employee than it does in big corporations. Although most business owners don't want to break environmental or tax regulations, even the most well-intentioned can get confused by the fine print.

Link: Industry dislikes command and control regulations

Professor Stephen D. Sugarman (JD from Northwestern University, Law professor at UC Berkley’s Boalt Hall and former visiting professor at the London School of Economics), 2008, “No More Business as Usual: Enticing Companies to Sharply Lower the Public Health Costs of the Products They Sell,” <http://www.law.berkeley.edu/faculty/sugarmans/Sugarman%20No_More_Business_as_Usual_041908%20submission.pdf>

“Industry, of course, usually dislikes regulation, especially regulation of the conventional “command and control” sort that mandates precisely what to do and fines businesses for noncompliance. Industry witnesses before legislative and administrative bodies are often quick to challenge proposed legal mandates as unlikely to have the public health gains imagined by its sponsors. It is possible, however, to press industry to take responsibility for lessening the harmful consequences of its products but with the freedom to choose the best way to accomplish this.”

Link: Even if regulations don’t hurt businesses, firms will overreact – they will ignore any benefits

Patrick Bernhagen, Department of Politics and International Relations - University of Aberdeen, 8/15/05. “Business Political Power: Economic Voting, Information Asymmetry, and Environmental Policy in 19 OECD Countries,” American Political Science Association <http://www.allacademic.com//meta/p_mla_apa_research_citation/0/4/0/3/8/pages40383/p40383-1.php>

At the level of the individual firm, however, no matter what society-wide benefits and even the long-term benefits to the firm there may be, environmental policies add considerable compliance costs to firms. This may lead to cut- backs in research and development efforts, limit the innovative efforts of firms, or even endanger their general profitability. As a result, firms will generally tend to emphasize the costs of environmental policy, while underestimating the benefits and oppose environmental policy which they perceive to place them at a competitive disadvantage. Exceptions are cases where firms can achieve protectionist benefits through stricter environmental policies. In practice, however, these are rather rare (Murphy 2004)

Internal Link: Propping up the economy requires confidence

Jan Dennis, (Business and Law Editor) 7/25/08, “Confidence a key to recent economic initiatives, U. of I. expert says” University of Illinois New Bureau <http://www.news.uiuc.edu/news/08/0725economy.html>,

Restoring confidence in the sputtering U.S. economy is at the heart of recent moves to shore up the nation’s lagging financial and housing markets, a University of Illinois economist says. Anne Villamil says propping up faith in an economy teetering on the brink of recession is as important as more tangible initiatives such as financial lifelines for cash-strapped mortgage lending giants Fannie Mae and Freddie Mac. “Savers must be confident that they will have access to their funds,” she said. “Borrowers must be confident they can obtain credit. Maintaining the confidence of foreign lenders is especially important.”

Internal Link: A collapse in Business confidence leads to a recession

John Braithwaite (Australian Research Council Federation fellow, Australian National University, and is the chair of the Regulatory Institutions Network.) 2004 “IN THIS ISSUE: HOPE, POWER, AND GOVERNANCE: SECTION ONE: BUILDING INSTITUTIONS OF HOPE: Emancipation and Hope” The Annals of The American Academy of Political and Social Science, March, 2004, 592 Annals 79, via LexisNexis

The challenge of designing institutions that simultaneously engender emancipation and hope is addressed within the assumption of economic institutions that are fundamentally capitalist. This contemporary global context gives more force to the hope nexus because we know capitalism thrives on hope. When business confidence collapses, capitalist economies head for recession. This dependence on hope is of quite general import; business leaders must have hope for the future before they will build new factories; consumers need confidence before they will buy what the factories make; investors need confidence before they will buy shares in the company that builds the factory; bankers need confidence to lend money to build the factory; scientists need confidence to innovate with new technologies in the hope that a capitalist will come along and market their invention. Keynes's ([1936]1981) General Theory of Employment, Interest and Money lamented the theoretical neglect of "animal spirits" of hope ("spontaneous optimism rather than . . . mathematical expectation" (p. 161) in the discipline of economics, a neglect that continues to this day (see also Barbalet 1993).

Brink: World Economy faces significant risks

Reuters, July 8th, 2009, “Economy is still in Danger, G8 says,” <http://www.nydailynews.com/money/2009/07/08/2009-07-08_g8_warns_.html>

“G8 leaders believe the world economy still faces "significant risks" and may need further help, according to summit draft documents that also reflect failure to agree climate change goals for 2050. Progress on the environment was impeded by Chinese President Hu Jintao returning home due to unrest in northwestern China in which 156 people have died. Before he left, summit host Silvio Berlusconi spoke of Chinese "resistance" on climate goals. Documents seen by Reuters before the G8 summit began on Wednesday cautioned that "significant risks remain to economic and financial stability" while "exit strategies" from pro-growth packages should be unwound only "once recovery is assured." "Before there is talk of additional stimulus, I would urge all leaders to focus first on making sure the stimulus that has been announced actually gets delivered," Canadian Prime Minister Stephern Harper said. Leaders met in L’Aquila, a mountain town wrecked by April's earthquake and a fitting backdrop to talks on a global economy struggling to overcome the worst recession in living memory. The Group of Eight -- United States, Germany, Japan, France, Britain, Italy, Canada, and Russia -- kicked off with debate on the economic crisis, after what one analyst called a "reality check" in recent weeks on the prospects for rapid recovery. G8 leaders badly underestimated the economic problems facing them when they met in Japan last year and were expected to focus on what must be done to prevent another meltdown. "Although there have been signs of stability in the economy and the sentiment has improved, the real economy has not recovered yet with job and wage conditions still stagnant," said Takao Hattori, senior strategist at Mitsubishi UFJ Securities.”

Impact: War- If world economy fails to recover from current crisis it may force the US into conflict

Walter Russell Mead, Senior Fellow of US Foreign Policy at CFR, 2009, “Only Makes You Stronger” The New Republic, <http://www.tnr.com/story.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8&p=2>

As a result, developing countries and countries where capitalism has relatively recent and shallow roots tend to suffer greater economic and political damage when crisis strikes--as, inevitably, it does. And, consequently, financial crises often reinforce rather than challenge the global distribution of power and wealth. This may be happening yet again. None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

DA: BUSINESS CONFIDENCE EXTENSIONS

By Stephen Menesick

LINKS

Regulations that restrict energy options and reduce fossil fuel use can harm economic growth

Arthur Laffer And Wayne Winegarden, (Authors of The Adverse Economic Impacts from Cap & Trade Regulations on CO2, a recent study sponsored by the Free Enterprise Education Institute.) 2007, “Cap-and-trade fraud; Proponents misunderstand the dynamic marketplace” National Post, October 2, via Lexis Nexis

Global warming policies geared toward economizing our use of fossil fuels impose tremendous economic costs, especially when the positive externalities of economic growth and poverty reduction are not given appropriate consideration. Economic growth and pollution are intertwined in complex ways. As countries become wealthier, heavy industries develop, creating industrial wastes that increase pollution. However, there is ample evidence from recent history that greater economic growth, at least past a certain threshold, actually reduces the pollution a society creates. The United States, for example, has been consistently using less energy per dollar of economic output in times of both rising and falling oil prices. (See graph.) Rigid requirements to force nations and companies to focus exclusively on reducing negative externalities, while politically popular, may cause more harm than necessary. Carbon-based energy -- i.e., coal, natural gas and oil -- supplies the vast majority of global energy needs. Restricting energy options by significantly capping the amount of GHGs the United States emits will raise the country's energy costs.

New regulations can be harmful, especially in the fragile economy

Terence Corcoran, (writer for the Financial Post) May 22, 2008, “Oil Policies Threaten US,” National Post, via Lexis Nexis

What kind of impact do politicians expect to have if they go about policy with the idea that the few executives standing before them--and the media--are the powers behind the price of oil? Price controls, tax grabs and new regulations can only damage the few remaining market-based links in an industry that is now largely controlled and regulated by foreign governments. Shell president John Hofmeister tabled a report from the Argonne National Laboratory listing 40 U. S. laws and regulations that prevent, delay, limit and/or increase costs in the gas industry. Hundreds of lawsuits hamstring development. Similar obstacles to energy development are building in Canada, forcing oilsands projects into retreat. Imperial Oil's Nearl project is now before the federal Cabinet, awaiting a jumpstart following a botched legal processs. Will Canadian politicians behave any differently that their American counterparts? The oil industry's main message was aimed at getting U. S. politicians to act on policies that can actually increase oil and gas supplies: Remove obstacles to new exploration and development and resist the temptation to impose new taxes and constraints that will limit the oil industry's ability to operate. In the past, the United States could afford to shoot itself in the foot, confident that its economic power could repair the damage. The current state of the world energy markets are such that current misguided policies, let alone new ones, are much more than a shot in the foot.

Overhaul needed to comply with environmental regulations can harm reputations

Chris Rehl, ( director of marketing for CIMTEK Corp, June 23, 2008 “Going Green -- Without Losing Sight of Quality”, Industry Week, <http://www.industryweek.com/ReadArticle.aspx?ArticleID=16621&SectionID=3>

Manufacturers today are undergoing one of their most drastic shifts ever -- a major green movement that's re-defining the way products are brought to market. Stringent environmental regulations are asking manufacturers to do more, with less environmental strain. This can spell a series of challenges for manufacturers -- as they "re-invent the wheel" in this move to green. In some cases, it means overhauling existing design and assembly strategies. For others, it means eliminating the use of components that have driven product innovation for decades. Although environmentally effective, overhauling these traditional processes can leave serious gaps in product quality -- which can not only put dents in a manufacturer's reputation, but also spell the loss of critical customer service levels and revenue sources.

Endangerment finding would cost millions of dollars and compliance is resource intensive

Ben Lieberman (specialist in energy and environmental issues, is a Senior Policy Analyst at The Heritage Foundation) 2008, “EPA Should Avoid Regulating Carbon Dioxide Emissions” February 21, The Heritage Foundation, WebMemo #1822 <http://www.heritage.org/Research/EnergyandEnvironment/wm1822.cfm>

The bottom line is this: If the EPA declares an endangerment finding, the kind of industrial-strength red tape that routinely costs hundreds of thousands if not millions of dollars (and can take more than a year to comply with) could now be imposed for the first time on many commercial buildings, farms, and all but the smallest of businesses. The paperwork would also hamper federal and state environmental regulators, drawing resources away from more useful endeavors.

Regulating GHG is an “economy killer”

Ben Lieberman (specialist in energy and environmental issues, is a Senior Policy Analyst at The Heritage Foundation) and Nicolas Loris (Research Assistant) 2009 “Five Reasons the EPA Should Not Attempt to Deal with Global Warming” April 23, Heritage Foundation, WebMemo #2407 <http://www.heritage.org/Research/EnergyandEnvironment/wm2407.cfm>

Above anything else, any attempt to reduce carbon dioxide would be poison to an already sick economy. Even when the economy does recover, the EPA's proposed global warming policy would severely limit economic growth. Since 85 percent of the U.S. economy runs on fossil fuels that emit carbon dioxide, imposing a cost on CO2 is equivalent to placing an economy-wide tax on energy use. The Heritage Foundation's Center for Data Analysis study of the economic effects of carbon dioxide cuts found cumulative gross domestic product (GDP) losses of $7 trillion by 2029 (in inflation-adjusted 2008 dollars), single-year GDP losses exceeding $600 billion in some years (in inflation-adjusted 2008 dollars), energy cost increases of 30 percent or more, and annual job losses exceeding 800,000 for several years. Hit particularly hard is manufacturing, which will see job losses in some industries that exceed 50 percent.[1] High energy costs result in production cuts, reduced consumer spending, increased unemployment, and ultimately a much slower economy. But importantly, higher energy prices fall disproportionately on the poor, since low-income households spend a larger percentage of their income on energy.

Regulations are costly for firms, affecting them in direct and indirect ways

Satish Joshi (Assistant Professor, Department of Agricultural Economics, College of Agriculture and Natural Resources, Michigan State University) Ranjani Krishnan (Assistant Professor, Department of Accounting, Eli Broad School of Management, Michigan State University) Lester Lave (James Higgins Professor of Economics and University Professor Graduate School of Industrial Administration, Carnegie Mellon University), 2009 “Estimating the Hidden Costs of Environmental Regulation” SSRN Working Paper, Last revised: January 10, 2009 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=261508>

Environmental regulations affect firms’ costs in several ways (White et al. 1995). Typical accounting systems easily identify and hence separately capture and accumulate “visible” cost of environmental compliance, such as installation and maintenance of pollution-control equipment and end-of-pipe emission treatment costs. Regulations also affect costs indirectly, by imposing additional constraints on firm production technology. For example, environmental compliance may require firms to substitute less polluting inputs for more polluting inputs, or to change the production process to limit emissions. Accounting systems often fail to identify separately the incremental costs of such changes, and instead include them in other cost pools. These hidden costs can be quite large, distorting the costs reported by the firm's costing system.2 Regulations can also lead to external costs to society for which firms are not currently accountable but which may become material in the long run, such as contingent environmental liabilities for Superfund sites and toxic releases.

The large majority of compliance cost is hidden

Satish Joshi (Assistant Professor, Department of Agricultural Economics, College of Agriculture and Natural Resources, Michigan State University) Ranjani Krishnan (Assistant Professor, Department of Accounting, Eli Broad School of Management, Michigan State University) Lester Lave (James Higgins Professor of Economics and University Professor Graduate School of Industrial Administration, Carnegie Mellon University), 2009 “Estimating the Hidden Costs of Environmental Regulation” SSRN Working Paper, Last revised: January 10, 2009 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=261508>

The results indicate that visible costs, as reported by these firms’ accounting systems, identify only a minor portion of the overall costs associated with regulatory compliance. For firms in the integrated mill sector, a $1 increase in visible environmental operating expenditure is associated with an increase of $9.23 in total cost (at the margin), of which $8.23 is hidden, and embedded in accounts other than "regulatory costs." Similarly, for firms in the mini-mill sector, an increase of $1 in the visible environmental operating expenditure is associated with an increase in total cost of $10.68 (at the margin), of which $9.68 is hidden. Thus, considering only the visible costs of environmental regulation will seriously underestimate the effect of regulation on cost and profit.

Hidden costs of regulation can adversely affect investment

Satish Joshi (Assistant Professor, Department of Agricultural Economics, College of Agriculture and Natural Resources, Michigan State University) Ranjani Krishnan (Assistant Professor, Department of Accounting, Eli Broad School of Management, Michigan State University) Lester Lave (James Higgins Professor of Economics and University Professor Graduate School of Industrial Administration, Carnegie Mellon University), 2009 “Estimating the Hidden Costs of Environmental Regulation” SSRN Working Paper, Last revised: January 10, 2009 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=261508>

When asked about the types of decisions likely to be compromised by hidden costs, most managers initially replied that it was not a major problem because these costs are eventually captured in the total cost of production. However, further discussions revealed that hidden costs can adversely affect responsibility accounting for cost variances, pricing contracts, product profitability analyses, and plant-closure and investment decisions.

Action on Climate Change could devastate the economy

John Carey (BW Washington Correspondent), December 4, 2007 “The Real Costs of Saving the Planet” Business Week, <http://www.businessweek.com/bwdaily/dnflash/content/dec2007/db2007123_373996.htm> [brackets added]

But what are those costs? If you listen to opponents of action against climate change, the American economy will be brought to its knees by such efforts. The Chamber of Commerce, for instance, says the bill [Warner-Lieberman] would cost 3.4 million Americans their jobs; the nation's gross domestic product, now about $13 trillion, would drop to $12 trillion; and American consumers would pay as much as $6 trillion more because of higher prices for gas, heating oil, and many other goods. Other economic projections put the total price tag for preventing dangerous climate change at up to $20 trillion.

Cap-and-trade deters investment – investors fear unstable prices

LA Times, May 28, 2007. “Time to tax carbon,” <http://www.latimes.com/news/opinion/la-ed-carbontax28may28,0,2888366.story?coll=la-opinion-leftrail>

That kind of price volatility, which has been endemic to both the American and European cap-and-trade systems, doesn’t just hurt consumers. It actually discourages innovation, because in times when power demand is low, power costs are low, and there is little incentive to come up with cleaner technologies. Entrepreneurs and venture capitalists prefer stable prices so they can calculate whether they can make enough money by building a solar-powered mousetrap to make up for the cost of producing it.

CAFÉ standards kill the American auto industry

Jack Markowitz, July 12, 2009, “Kill CAFE before it kills GM” Pittsburgh Tribune-Review, <http://www.pittsburghlive.com/x/pittsburghtrib/business/s_633278.html>

The Obama administration and Congress seem bent on killing "our" company with absurd fuel standards. And this so soon after rescuing GM with bailout and bankruptcy. And hauling us, the taxpayers, kicking and screaming into a substantial part-ownership, costing about $50 billion. Unlike true shareholders, though, we'll never collect dividends. Break even, get repaid and get out is the best we can hope for. Washington's policy makers really are the wrong way on a one-way street with this one. Environmental extremists and a compliant news media are cheering all the way, too, foolishly enough. The government's about to adopt new CAFE requirements, for Corporate Average Fuel Economy, by 2016. All auto makers selling in the United States will have to get 35.5 miles per gallon as an average across all their models. A level playing field? Not quite, says car-watcher Alan Reynolds. Toyota, Hyundai and Volkswagen should be rubbing their hands. But not General Motors. Reynolds, a researcher at Cato Institute, the libertarian think tank, laid out the absurdities in a Wall Street Journal column. He said Asian and European automakers will have no trouble meeting stingy fuel standards. They're old hands at small cars for their home markets. General Motors, not. It does make decent subcompacts but makes all its money on big cars, sports cars, trucks and sport utility vehicles. More petite and "greener" products in its design pipeline won't substantially change the pattern, Reynolds argues. Here's the irony. With lower average miles-per-gallon numbers, Toyota, Hyundai and others will still be able to sell plenty of luxury cars, trucks and SUVs, very likely taking market share from our own hapless biggest of the Big Three. A related irony: India soon will produce the Jaguar; a Chinese company, the Hummer. Too big for Americans to handle. So kill CAFE before it kills GM, says Reynolds.

DA: COAL

By Matthew Baker

BRINKS

No credible pathway towards GHG stabilization without reducing emissions from coal plants

Professor John M. Deutch (Institute Professor at MIT, former US Deputy Secretary of Defense and former Director of Central Intelligence) and Professor Ernest J. Moniz (Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the MIT Energy Initiative), <http://web.mit.edu/newsoffice/coal-paper.pdf>

“There is today no credible pathway towards stringent GHG stabilization targets without CO2 emissions reduction from existing coal power plants, and the United States and China are the largest emitters.”

Coal plants account for 40% of US carbon emissions

Christopher Flavelle (Grad Student in Journalism and Public Policy at Columbia University), April 22, 2009, “The Hidden Carbon Solution,” Slate, <http://www.thebigmoney.com/print/1897>

“Coal-fired power plants account for some 40 percent of all carbon emissions in the United States, producing half the country's energy supply, according to Howard Herzog, the principal research engineer at MIT's Laboratory for Energy and the Environment [5].”

Coal plants generate 80% of CO2 from power production

H. Josef Hebert, June 19, 2009, “Path to Climate Solutions: Reduce Emissions,” The Huffington Post, <http://www.huffingtonpost.com/2009/06/19/path-to-climate-solution-_n_217842.html>

“Coal plants generate about half of the country's electricity and 80 percent of the nearly 2 billion tons of carbon dioxide released annually into the atmosphere from power production. China also relies heavily on **coal** for electricity production and in the last five years has been on a rush to build new **coal** plants none of them designed to capture carbon dioxide.”

IMPACTS

A) Replacing coal generated electricity with alternatives would cost hundreds of millions in GDP and millions jobs

Eugene M. Trisko (JD from Georgetown University, member of the EPA Clean Air Advisory Committee, member of the US Delegation on bilateral air quality negotiations with Canada and lecturer on the Clean Air Act and Climate Change at the Pennsylvania State University and the University of Virginia), September 27, 2006, “Economic and public Health Benefits of Coal-Based Energy,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba573/>

“Researchers at Pennsylvania State University estimated the economic benefits of coal and the potential impact of replacing coal with more expensive energy sources such as natural gas and a 10 percent mix of renewables. They netted out the positive offsetting impacts of investments in replacement fuels and electric generating capacity. By 2015:

* The annual benefit of coal use at currently projected levels is estimated at more than $1 trillion in gross domestic product (GDP), $360 billion in additional household income and nearly 7 million jobs.
* In contrast, a 33 percent reduction in coal-fired electric power generation would reduce GDP by $166 billion, household income by $64 billion and employment by 1.2 million below what it otherwise would be. [See the figure.]
* A 66 percent reduction in coal-fired electric power generation would reduce GDP by $371 billion, household income by $142 billion and employment by 2.7 million.

The negative impact of displacing coal would be felt nationally, regionally and in nearly every state, even after considering the positive impacts of replacement energy sources.”

B) Eliminating coal use would result in over 150,000 deaths annually

Eugene M. Trisko (JD from Georgetown University, member of the EPA Clean Air Advisory Committee, member of the US Delegation on bilateral air quality negotiations with Canada and lecturer on the Clean Air Act and Climate Change at the Pennsylvania State University and the University of Virginia), September 27, 2006, “Economic and public Health Benefits of Coal-Based Energy,” National Center for Policy Analysis, <http://www.ncpa.org/pub/ba573/>

“The impact of eliminating coal wouldn't be limited to the economy; indirectly, it would also negatively affect health. Harvey Brenner of Johns Hopkins University conducted the first major research on the impacts of unemployment on public health for the Joint Economic Committee of Congress in 1979 and 1984. In his 1984 study, Brenner found that every 1 percent increase in unemployment resulted in a 2 percent increase in premature deaths. In 2005, Brenner updated his 1984 study and developed estimates of the impacts of potential reduced coal use on pubic health. Brenner's research connects the dots between the economic benefits of coal use and the public health consequences of reduced coal utilization. His finding: the loss of jobs causes increased premature mortality. Brenner's econometric model, drawing on more than 50 years of U.S. health and economic data, firmly links changes in U.S. mortality to changes in economic variables such as GDP per capita, the unemployment rate and the interaction between GDP and employment. Brenner's analysis shows that the upward trend in real per capita income is the most important single factor explaining decreased U.S. mortality rates since the 1960s. Conversely, any reduction in GDP per capita, say, as a result of an increase in unemployment, increases the mortality rate. Brenner applied his model to the findings of two studies that estimated the adverse economic impacts of reduced coal use - a 2001 Penn State study and an analysis of the impacts of the Kyoto Protocol by DRI, a noted economic forecasting and consulting organization. Brenner adjusted the results of these studies to approximate the income and unemployment effects of a hypothetical complete elimination of coal. Brenner reports "the estimated additional mortality in the year 2010, based on four different variations of the model, ranges from an additional 170,507 to 368,915 deaths for the displacement of 100% of coal-based generation. The author's moderately conservative estimate is based on an annual change model at 195,308 deaths." Applying his analysis to specific climate change policies affecting coal-fired generation, Brenner says: "Given an estimated potential displacement of 78% of U.S. coal generation based on EIA's study of proposed climate change initiatives, the indicated premature mortality from reduced income and increased unemployment would exceed 150,000 deaths annually, absent direct and effective mitigation programs."

A/T: CLEAN COAL SOLVES

Clean Coal technology is feasible put would take 25 years to develop, $20 billion in R&D, and decades to build

Fred Pearce, October 30, 2008, “Time to Bury the ‘Clean Coal’ Myth,” The Guardian (major UK newspaper), <http://www.commondreams.org/view/2008/10/30-1>

“Is clean coal possible in future? Well, if you mean could we capture carbon dioxide emissions and bury them somewhere out of harm's way --- in old coal seams or oilfields or salt mines -- yes, it is possible. The former British chief scientist Sir David King called it "the only hope for mankind". But the most authoritative study, The Future of Coal, published last year by the Massachusetts Institute of Technology (MIT), concluded that the first commercial carbon capture and storage (CCS) plant wouldn't come on stream until 2030 at the earliest. Last year too, the Edison Electric Institute, which represents most US power generators, admitted to a House Select Committee in Washington DC that commercial deployment will require 25 years research costing at least $20bn. And that was before the US administration last December canned the biggest R&D project on the technology anywhere in the world. It said it was too costly and hinted that, for all their green talk, industry wasn't prepared to back it. Oh, and if the technology did one day work -- and could demonstrate that it could keep liquefied carbon dioxide buried for the thousands of years necessary -- it would take decades to build the vast infrastructure needed to deploy on a large scale. Infrastructure that could only be paid for by maintaining a vast dirty coal-burning industry for the duration.”

Clean Coal Technology will not be economical soon enough to avert catastrophic climate change

Eoin O’ Carroll, October 17, 2008, “What is ‘Clean Coal’ Anyway?,” The Christian Science Monitor, <http://features.csmonitor.com/environment/2008/10/17/what-is-clean-coal-anyway/> [brackets added]

“One leading management consulting firm, McKinsey & Company, said in a recent report that CCS [Carbon Capture and Storage] technology will not be economical until 2030. That will most likely be too late to help avert catastrophic climate change. Critics of CCS point out that the energy required to capture and sequester emissions will erase many of the efficiency gains made in recent decades.”

Clean Coal (through storage) would require so much energy it would not be feasible

Michelle Harris, February 5, 2009, “Clean Coal? Do You Think I am an Oxymoron?” The Huffington Post, <http://www.huffingtonpost.com/michelle-harris/clean-coal-do-you-think-i_b_164382.html>

“Around 600 coal plants in the U.S provide over half of our electricity and is a leading cause of global warming. Even the coal industry themselves do not have a way to reduce the carbon dioxide efficiently. For all their "clean coal" talk, the storing of these emissions would require so much energy that it would not be feasible to produce energy this way. In an ironic twist, "clean coal" would also increase the amount of waste coal plants create. Basically, this would pile up more of the type of sludge that is currently destroying ecosystems in Alabama and Tennessee.”

Despite over $2 billion from Bush there is not a single plant that has clean coal technology ready to use

Michelle Harris, February 5, 2009, “Clean Coal? Do You Think I am an Oxymoron?” The Huffington Post, <http://www.huffingtonpost.com/michelle-harris/clean-coal-do-you-think-i_b_164382.html>

“Under the Bush administration, the Department of Energy handed big coal just under two billion dollars to develop clean coal technology. Currently, there is not a single coal plant that has this technology ready to use, nor is there an immediate plan that could provide us with "clean coal" in the future.”

DA: FEDERALISM

By Matthew Baker

Editors Note: Additional supporting evidence for this disadvantage can be found in the 50 state counterplan.

LINKS

Since most environmental problems are local or regional in nature they should be addressed by states

Professor Jonathan H. Adler (Associate Professor of Law and Associate Director of the Center for Business Law and Regulation, Case Western Reserve University School of Law.), February 1, 2006, “Jurisdictional Mismatch in Environmental Federalism,” NYU Environmental Law Review Journal, Volume 14, <http://www1.law.nyu.edu/journals/envtllaw/issues/vol14/1/v14_n1_adler.pdf>

“The federalist structure of American government supports a general, albeit rebuttable, presumption that any given policy question should be addressed by state governments.5 This presumption is embodied in the structure of the Federal Constitution, which grants the federal government limited and enumerated powers while reserving all other matters to the states.6 For the federal government to act, it must demonstrate that a given policy is within the scope of its enumerated powers.7 Where the federal government does not act, matters will remain in state hands.8 This basic Constitutional structure suggests a principle of “subsidiarity”9—the principle that problems should be addressed at the lowest level at which they can be practically addressed. Subsidiarity is particularly appropriate in the context of environmental policy, and leads to the sort of “multitier regulatory structure” that Professor Esty suggests.10 Because most environmental problems are local or regional in nature,11 there is a strong case that most (though not all) environmental problems should be addressed at the state and local level.12 Given the nature of this nation’s federalist system, this approach would entail allocating responsibility for most environmental problems to state governments with the hope, if not the expectation, that state governments would leave many concerns to local or regional authorities.13”

Health and safety were areas which it appears the constitution gave to the people and thus the states

Dr. David J. Bodenhamer (PhD from the Indiana University, professor of history, and Director of the Polis Center at Indian University Purdue which focus on developing community based solutions), January 2, 2007, “Federalism and Democracy,” <http://www.america.gov/st/usg-english/2007/January/20071128094357abretnuH0.8318903.html>

“And in areas where the Constitution is silent regarding national authority, states may act provided they do not conflict with powers the central government may legally exercise. On large and important subjects that affect citizens in their daily lives -- education, crime and punishment, health and safety -- the Constitution fails to assign direct responsibility. According to the republican principles that guided the founding generation, especially the theories of 17th-century British philosopher John Locke, the people reserved these powers, which they delegated to the states through the various state constitutions.”

BRINKS

Obama’s position on federalism full of ironies and unclear (he supports in some and not in others)

Peter Harkness, July 2009, “Devolution? What’s That?: Right now, federalism means the feds running the show,” Governing, <http://www.governing.com/node/2397/>

“Unquestionably, the Obama administration is determined to reassert federal authority across a wide range of areas, particularly in the regulation of insurance, banking and finance. That is making state regulatory officials very nervous, even though the administration insists it wants to exert authority as a partner with the states, not as an adversary. The president personally has ordered federal agencies to stop preempting state laws and even to rescind past preemptions. “Throughout our history,” his recent directive read, “state and local governments frequently have protected health, safety and the environment more aggressively than has the national government.” One thing seems clear: The states that were more aggressive than Washington in regulating industry before this year are likely to be comfortable with the Obama approach. Those that tended to go light on regulation will have a hard adjustment. But the current situation abounds in ironies. A case in point: In May, the White House handed California and 13 other states a significant victory in their long battle with Washington over energy and environmental policy by adopting California’s tough standards for greenhouse gas emissions and automobile fuel efficiency. In a flash, the dispute was over, the states had prevailed, and longstanding federal resistance had been reversed.”

IMPACTS

States and locals govs frequently protect the environment more aggressively than the feds

President Barak Obama, May 20, 2009, “MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES- SUBJECT: Preemption,” <http://www.whitehouse.gov/the_press_office/Presidential-Memorandum-Regarding-Preemption/>

“From our Nation's founding, the American constitutional order has been a Federal system, ensuring a strong role for both the national Government and the States. The Federal Government's role in promoting the general welfare and guarding individual liberties is critical, but State law and national law often operate concurrently to provide independent safeguards for the public. Throughout our history, State and local governments have frequently protected health, safety, and the environment more aggressively than has the national Government.”

Federalism ensures that the feds focuses on its assigned functions (i.e. national security)

American Enterprise Institute, 2008, “The Future of Federalism,” <http://www.aei.org/EMStaticPage/1770?page=Summary>

“Federalism ensures that the federal government focuses on its own constitutional functions. "The Constitution created the federal government to protect national security, conduct foreign affairs, and promote economic competition because the states are not up to those tasks," [federal appeals court] Judge [William H.] Pryor said. "Whenever the federal government usurps a power of the states, it necessarily diverts its attention from its national responsibilities."

Federalism improves policy innovation

Dr. William G. Weissert (PhD from the Claremont Graduate School and professor of political science at Florida State University), 2006, “Governing Health,” 3rd Edition, p. 238 [Google Books]

“Federalism has another important policy strength: improving the possibility of policy innovation. States can try out new ideas and techniques or philosophies that, if successful, can later be adopted by other states or on a national scale. Indeed, states are regularly referred to as the “laboratories of democracy.”

By decentralizing power and policy, federalism contributes to democracy

Dr. David J. Bodenhamer (PhD from the Indiana University, professor of history, and Director of the Polis Center at Indian University Purdue which focus on developing community based solutions), January 2, 2007, “Federalism and Democracy,” <http://www.america.gov/st/usg-english/2007/January/20071128094357abretnuH0.8318903.html>

“Federalism's ability to accommodate local issues also contributes to democracy by decentralizing policies and politics. States can adopt widely varying policies on the same problem, thereby providing the means for citizens to live in a state where the policy suits their moral or cultural values.”

The states are empirically proven laboratories for democracy

Dr. David J. Bodenhamer (PhD from the Indiana University, professor of history, and Director of the Polis Center at Indian University Purdue which focus on developing community based solutions), January 2, 2007, “Federalism and Democracy,” <http://www.america.gov/st/usg-english/2007/January/20071128094357abretnuH0.8318903.html>

“The states often are called laboratories of democracy, and for good reason. Innovative programs and policies from welfare and educational reform to health and safety regulation repeatedly have come first from state governments. Long before the national government acted, a number of states abolished slavery, extended the right to vote to women, African Americans, and 18-year-olds, and provided for the direct election of U.S. senators, among other reforms.”

Federalism enhances democracy by providing a platform for effective criticism

Dr. David J. Bodenhamer (PhD from the Indiana University, professor of history, and Director of the Polis Center at Indian University Purdue which focus on developing community based solutions), January 2, 2007, “Federalism and Democracy,” <http://www.america.gov/st/usg-english/2007/January/20071128094357abretnuH0.8318903.html>

“Finally, federalism enhances democracy by providing a platform for effective criticism and opposition to governmental policies and practices. A political party out of power nationally still may capture state and local offices that allow it to challenge national priorities or decisions.”

Federal system key training grounds for future national leaders

Dr. David J. Bodenhamer (PhD from the Indiana University, professor of history, and Director of the Polis Center at Indian University Purdue which focus on developing community based solutions), January 2, 2007, “Federalism and Democracy,” <http://www.america.gov/st/usg-english/2007/January/20071128094357abretnuH0.8318903.html>

“A federal system also expands participation in politics and government: the more levels of government, the greater the opportunity to vote and hold office. Many of these offices are training grounds for future national leadership.”

EXTENSIONS

Cooperative federalism often precludes states from enacting best policies and does not allow flexibility

Professor Jonathan H. Adler (Associate Professor of Law and Associate Director of the Center for Business Law and Regulation, Case Western Reserve University School of Law.), February 1, 2006, “Jurisdictional Mismatch in Environmental Federalism,” NYU Environmental Law Review Journal, Volume 14, <http://www1.law.nyu.edu/journals/envtllaw/issues/vol14/1/v14_n1_adler.pdf>

“While the federal government may preempt state regulatory action, and may require state compliance with a general regulatory scheme that does not target states-as-states, it cannot force states to adopt federally desired regulations. It can, however, offer various inducements to encourage state “cooperation.” The federal government may, for instance, condition funding on state cooperation or threaten to preempt state and local regulations if such measures do not meet federal requirements. This approach is typically referred to as “cooperative federalism,”196 though many analysts question whether the relationship can be properly described as “cooperative.”197 Particularly where the consequence of state refusal to cooperate is the imposition of a federal regulatory scheme, the “cooperative federalism” model does not leave much flexibility in the scope and design of regulatory programs. Even where federal involvement is supposed to be “cooperative,” states are often precluded or at least discouraged from adopting environmental policies that would be more efficient or effective at addressing their particular environmental concerns and demands.”

DA: INTERNATIONAL TREATY VIOLATION

By Jared Rixstine

INTERNAL LINKS

US has international obligation to protect polar bear ecosystems

Agreement on the Conservation of Polar Bears, Article II, November 15, 1973, (Ratified by the US Senate on September 30, 1976) <http://sedac.ciesin.org/entri/texts/polar.bears.1973.html>

“Each Contracting Party shall take appropriate action to protect the ecosystems of which polar bears are a part, with special attention to habitat components such as denning and feeding sites and migration patterns, and shall manage polar bear populations in accordance with sound conservation practices based on the best available scientific data.”

US has agreed to limit (and as far as possible) reduce and prevent air pollution

Convention on Long-Range Transboundary Air Pollution, 1979 (Ratified by the United States on November 30, 1981), Article 2, <http://www.unece.org/env/lrtap/full%20text/1979.CLRTAP.e.pdf>

“The Contracting Parties, taking due account of the facts and problems involved, are determine to protect man and his environment against air pollution and shall endeavour to limit and, as far as possible, gradually reduce and prevent air pollution including long-range transboundary air pollution.”

US has agreed to promote the conservation of wetlands by establishing nature reserves on wetlands

Ramsar Convention, Article 4, Sectyion1 and Section 2, (Ratified by the United States on November 10, 1986), <http://www.ramsar.org/key_conv_e.htm>

“Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening. Where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat.”

US has agreed to protect the environments of migratory birds and to take steps to control invasive species that might be harmful to them

“Protocol Between the Government of Canada and the Government of the United States of America Amending The 1916 Convention Between the United Kingdom and the United States of America for the Protection of Migratory Birds in Canada and the United States,” Article IV, (ratified by the United States October 23, 1997) <http://www.treaty-accord.gc.ca/ViewTreaty.asp?Treaty_ID=101589>

“Each High Contracting Power shall use its authority to take appropriate measures to preserve and enhance the environment of migratory birds. In particular, it shall, within its constitutional authority:

(a) seek means to prevent damage to such birds and their environments, including damage resulting from pollution;

(b) endeavour to take such measures as may be necessary to control the importation of live animals and plants which it determines to be hazardous to the preservation of such birds;

(c) endeavour to take such measures as may be necessary to control the introduction of live animals and plants which could disturb the ecological balance of unique island environments; and

(d) pursue cooperative arrangements to conserve habitats essential to migratory bird populations.”

US has agree to maintain strict wilderness reserves inviolate as far as practicable

Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere, Article IV, 1940, (Ratified by the United States on April 15, 1941), <http://sedac.ciesin.org/entri/texts/wildlife.western.hemisphere.1940.html>

“The Contracting Governments agree to maintain the strict wilderness reserves inviolate, as far as practicable, except for duly authorized scientific investigations or government inspection, or such uses as are consistent with the purposes for which the area was established.”

The US has agreed to fight climate change

United Nations Framework Convention on Climate Change 1992 (Ratified by the US Senate on October 15, 1992) <http://unfccc.int/resource/docs/convkp/conveng.pdf>

In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following: The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

US signed treaty to take appropriate measures to protect the ozone layer

Vienna Convention for the Protection of the Ozone Layer Article II 1985 (Ratified by the US Senate on August 27, 1986) <http://www.unep.org/ozone/vc-text.shtml>

1. The Parties shall take appropriate measures in accordance with the provisions of this Convention and of those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer.
2. To this end the Parties shall, in accordance with the means at their disposal and their capabilities:
3. Co-operate by means of systematic observations, research and information exchange in order to better understand and assess the effects on human health and the environment from modification of the ozone layer;
4. Adopt appropriate legislative or administrative measures and co-operate in harmonizing appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction or control should it be found that these activities have or are likely to have adverse effects resulting from modification or likely modification of the ozone layer;
5. Co-operate in the formulation of agreed measures, procedures and standards for the implementation of this Convention, with a view to the adoption of protocols and annexes;
6. Co-operate with competent international bodies to implement effectively this Convention and protocols to which they are party.

IMPACT

Constitution Violated

US Constitution, Article VI, paragraph 2

“This Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.”

DA: POLLUTION HAVEN HYPOTHESIS

By Matthew Baker

LINKS

Emissions regulations will simply move economic activity into developing regions

National Center for Policy Analysis, February 28, 2006, “Kyoto would hurt Efficient Economies,” <http://www.ncpa.org/sub/dpd/index.php?Article_ID=2975>

“Burdening western economies with emissions regulations and taxes will simply move economic activity out of the West and into the developing regions. At best, the site of gas emission changes while total emissions remain constant. More likely, however, total emissions will increase, says Johnson.”

Environmental regulations just make manufacturers move out of the country that imposes the regulations

Nithin Coca (Grassroots Media Coordinator for the Sierra), January 9, 2006, “True Cost Econmics- Free Markets with the Environmental in Mind,” Associated Content, <http://www.associatedcontent.com/article/16532/true_cost_economics_free_markets_with.html?cat=48>

“Environmental regulations may have worked in the past, but in todays increasingly Globalized and trade-oriented world, it is evident that they are having unintended effects. For example, Norway may have the strictest eco-regulations in the world, but those regulations just mean that manufactures will just move their operations to countries with lax environmental regulations, such as China. And even companies that stay will have to pay higher costs (to meet regulations) and then have to compete with cheaper, environmentally destructive products from abroad. The system is inherently flawed – and is punishing those who try to protect the environment. Something needs to be changed.”

Americas environmental regulations are encouraging manufactures to relocate overseas

Paul Darst, October 30, 2008, “Blankenship: Government is the Biggest Risk to American Way of Life,” The State Journal (West Virginia News source), <http://statejournal.com/story.cfm?func=viewstory&storyid=46200> (Ellipses in original)

"The biggest risk to the American way of life is our own government," he [Don Blankenship Chairman of Massey Energy] said. "Our laws and regulations encourage gambling, but increasingly prevent coal mining. The government spends money to protect Indiana bats, but subsidizes windmills that kill the same bats. You explain that one to me." Blankenship took issue with the charge leveled by some that American business interests run contrary to the world's environmental concerns. "American business cares a great deal about the environment," he said. "Our definition of the environment is just a little bit different. ... We include the type of home you have, homeland security and making sure your kids are fed and clothed. Environment is not limited to trees and, if you will, bats." America's environmental policies are encouraging manufacturers to relocate overseas where there are fewer regulations, Blankenship said.”

The theory that environmental regulations effect plant decisions is strongly supported

Steven C. Hackett (Professor of Economics at Humboldt State University), 2006, “Environmental and natural resources economics,” p. 360 [Google Books]

“Copeland and Taylor (2004) use the phrase “pollution haven effect” to refer to the argument that an increase in environmental regulations will, at the margin, have an effect on plant location decisions and trade flows. This argument is strongly supported by economic theory and by recent empirical research. Thus there is the potential for some countries to weaken their environmental regulations as a way to out-compete other countries for new production plants and to enhance their international competitiveness.”

BRINKS

China (and to some extent Europe) turning away from environmental protection pledges

Ariana Eunjung Cha, November 19, 2008, “China’s Environmental Retreat: In Tough Economic Times, Promises Fall by Wayside,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2008/11/18/AR2008111803625.html>

“With the global economy at the edge of recession, China appears to be turning away from previous pledges to improve its record on environmental protection. In this, China is hardly alone: A climate-change proposal in Europe that a few months ago seemed like a sure thing has now divided the continent because of its anticipated expense, and worldwide, money for the development of renewable energy sources has been drying up.”

Officials in China’s Guangdong providence are relaxing enforcment of environmental regulations

Ariana Eunjung Cha, November 19, 2008, “China’s Environmental Retreat: In Tough Economic Times, Promises Fall by Wayside,” The Washington Post, <http://www.washingtonpost.com/wp-dyn/content/article/2008/11/18/AR2008111803625.html>

“For the past two years, Guangdong province, the country's richest and the cradle for China's export manufacturing industry, was among the most enthusiastic supporters of China's anti-pollution campaign. Now academics, company representatives and industry associations say that it may be pulling back. Eddie Leung, president of the Hong Kong Chamber of Commerce in China and owner of a watch factory on the mainland, said Guangdong officials as recently as several months ago strictly enforced environmental regulations. Now it is not uncommon for them to look the other way. "They relaxed the enforcement this year," he said. Budget priorities also appear to be changing. Money is increasingly needed to pay the salaries of workers whose companies have gone bankrupt and to provide social services to the rural poor, who are having trouble selling their crops. There has been less money left over for environmental initiatives.”

Millions of jobs CAN be outsourced

Jared Bernstein, James Lin, Lawrence Mishel, November 14, 2007, “The Characteristics of Offshorable Jobs,” The Economic Policy Institute, <http://www.epi.org/datazone/characteristics_of_offshorable_jobs.pdf> (underline added)

“Using data from table one and table two, we find, for example, that between 18 and 22 percent of today’s jobs—25 to 30 million—could potentially be offshored.4 Data from Table 1 reveal that the educational group most vulnerable to offshoring are those with at least a four-year college degree. While 29.5% of all jobs are staffed by those with at least a four-year college degree, 34% of *offshorable* jobs fall into this category. Over eight million highly educated workers are at risk from offshore competition.”

Study: French manufacturing firms locate in countries with more lenient environmental regulations

Sonia Ben Kheder (Université Paris-I Panthéon Sorbonne) and Natalia Zugravu (Ph.D. candidate in Economics at Centre d’Economomie de la Sorbonne- University of Paris), September 2008, “A Geographic Economy Model in a Comparative Study,” downloaded at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1266705> [SSRN]

“In this study we have tested the pollution haven hypothesis through an analysis of the impact of environmental regulation on French manufacturing firms location choice. Using firm-level data concerning French firms locations in the world, we have first tested this hypothesis for a pooled sample, and then tested it making a distinction between four country groups: transition CEECs, transition countries of CIS, emerging countries, and high-income OECD countries. By applying a geographic economy model, which has the advantage of considering a complete set of FDI determinants like market potential, production factors and governance quality, and by developing a complex index encompassing the different aspects of environmental regulation, we have succeeded in expressing the stringency of environmental regulation in a satisfying way and in revealing thus the existence of pollution havens. Empirical results of the base model show that in presence of heterogeneous countries, French manufacturing industries locate in countries with more lenient regulations, thus confirming the essential role played by environmental regulation in determining firms location. Moreover, this effect is reinforced for the most polluting firms.”

Study: More stringent environmental regulations deter French manufacturing investments

Sonia Ben Kheder (Université Paris-I Panthéon Sorbonne) and Natalia Zugravu (Ph.D. candidate in Economics at Centre d’Economomie de la Sorbonne- University of Paris), September 2008, “A Geographic Economy Model in a Comparative Study,” downloaded at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1266705> [SSRN]

“First, concerning our core variable in this study, environmental regulation, it seems to be an important factor for French manufacturing firms location decisions. The estimated coefficient of the environmental regulation index is negative and consistently significant at the 1% level, indicating that a more stringent environmental regulation deters French manufacturing investments. Everything else equal, all industries have interest to avoid additional costs induced by stricter environmental regulation, since there is generally no totally "clean" manufacturing industry.”

IMPACTS

The mere credible threat of outsourcing constrains workers wages

Dr. Thomas I . Palley (PhD in Economics from Yale University), June 24, 2008, “Barge Economics: The New Economics of Globalization,” <http://gop.science.house.gov/Media/hearings/oversight08/june24/palley.pdf>

“More importantly, job loss is not an adequate metric for measuring the impact of globalization and outsourcing on workers. Even if no jobs are lost, outsourcing can still have significant effects on wage levels by impacting workers’ sense of employment security and bargaining power. Jobs do not have to move for globalization to have a big effects. All that is needed is that the threat to move be credible.”

Outsourcing hurts communities, families, and the economy

Office of US Senator Byron Dorgan, 2008, “Stopping the Outsourcing of Jobs,” <http://dorgan.senate.gov/issues/economy/outsourcedjobs/index.cfm>

“When good-paying jobs are shipped to other countries, it hurts communities, families, and our economy. Senator Dorgan is working to stop the outsourcing of U.S. jobs to foreign countries and to create and keep good jobs here at home. He has been the lead proponent of eliminating the tax breaks enjoyed by U.S. companies that move their operations abroad.”

DA: RUSSIAN OIL

By Stephen Menesick

Internal Link: Policies aimed at reducing consumption of oil in the future will cause oil prices to fall today

Professor Martin Feldstein, Chairman of the Council of Economic Advisers under President Reagan, Professor at Harvard and a member of The Wall Street Journal's board of contributors, 2008 Wall Street Journal, “We Can Lower Oil Prices Now”, 07-01-08, <http://online.wsj.com/article/SB121486800837317581.html?mod=googlenews_ws>

Any policy that causes the expected future oil price to fall can cause the current price to fall, or to rise less than it would otherwise do. In other words, it is possible to bring down today's price of oil with policies that will have their physical impact on oil demand or supply only in the future. For example, increases in government subsidies to develop technology that will make future cars more efficient, or tighter standards that gradually improve the gas mileage of the stock of cars, would lower the future demand for oil and therefore the price of oil today.

Brink: Oil is foundation of Russia economy.

Maria Levitov, Moscow Times, 7-03-08, “Oil Tax Cuts Passes In Key 2nd Reading” <http://www.themoscowtimes.com/article/1009/42/368704.htm>

In May, Economic Development Minister Elvira Nabiullina called the country's oil industry "the foundation of the Russian economy, the foundation for its competitiveness," adding that even a slight stagnation would be "alarming."

Brink: Russia is a single track economy driven by energy

Robert Skidelsky (Emeritus Professor of Political Economy at the University of Warwick) 2007, “Essay: Putin’s Patrimony” Prospect | Thursday, March 01, 2007 <http://www.skidelskyr.com/site/article/essay-putins-patrimony/>

However, Russia is a single-track economy. Its boom is driven by rising energy and commodity prices. The dominance of the energy sector is the result of two factors: the failure of "shock therapy" to restructure the Soviet economy in the 1990s, and the belief that energy—oil, gas, pipelines—keeps Russia in the great power game. Since 2001, energy prices have more than doubled. By 2006, oil and gas made up 40 per cent of GDP; energy and minerals accounted for 60 per cent of Russian exports, and 40 per cent of government revenue. Commodity stocks comprised 80 per cent of the stock market. The economy is more dependent on the production and export of natural resources than it was in Soviet times, a unique case of de-industrialization.

Brink: High oil prices key to Russian economy

Steve Hargreaves, CNN Money, 2007 “Russia plays hardball, and markets take notice”, 1/12/07, <http://money.cnn.com/2007/01/12/news/international/russia_oil/index.htm> [Brackets Added]

"The [Russian] government has become much more empowered by high oil prices," said Andrew Neff, a senior energy analyst at the consultancy Global Insight. "They see that control and access to energy is their key to a seat at the top table" of the world's most powerful nations. The stakes are high. In addition to being the world's second largest oil exporter, at 9.6 million barrels per day, Russia accounts for over 10 percent of total world production. That makes it the world's second largest producer behind Saudi Arabia's 11.1 million bpd. And its natural gas reserves are the largest on earth, nearly double that of number two Iran. Yet most analysts see little danger of Russia shutting off its energy exports for any length of time. Indeed, up to a quarter of the country's gross domestic product is tied to energy, according to the Energy Information Administration. "It's not like Russia does whatever it wants to," said Denis Maslov, an analyst covering Europe and Eurasia for the Eurasia group, a political risk consultancy. "It does rely on selling its energy to sustain its budget."

Impact: The Russian economy vulnerable to calls in oil prices

Edward Hugh (Macro economist who specializes in growth and productivity theory and demographic processes) 7/9/08 “Russian Inflation: Is the Boom About To Bust?” SeekingAlpha . <http://seekingalpha.com/article/84286-russian-inflation-is-the-boom-about-to-bust>

As such, the Russian economy—despite the outward semblance of "you've never had it so good" boom times—has never been more vulnerable to sudden falls in oil and gas prices. The share of oil income in total fiscal revenue has increased substantially – from 10 to about 30 percent of GDP. Instead of diversifying, Russia has, de facto, been specializing in oil. Oil now also accounts for about 60 percent of total exports. Higher oil revenues allow for additional spending room, but they also complicate macroeconomic management and lead to an increased dependence on a highly volatile and uncertain source of income. While this has not been a problem during the period of high oil prices, it would be a major source of vulnerability if oil prices suffer any kind of rapid descent from the recent levels, and it does put in place a "ceiling" on Russia inflation-free level of growth capacity given the fact that the resources sector seem to have now reached its "peak output" level.”

Impact: US and Russian economies intertwined and chaos in a smaller economy can impact the US

William Cooper (Specialist in International Trade and Finance) May 30, 2008. “Russia’s Economic Performance and Policies and Their Implications for the United States,” the CRS Report for the U.S. Congress. <http://fpc.state.gov/documents/organization/106151.pdf>

The greater importance of Russia’s economic policies and prospects to the United States lie in their indirect effect on the overall economic and political environment in which the United States and Russia operate. From this perspective, Russia’s continuing economic stability and growth can be considered positive for the United States. Because financial markets are interrelated, chaos in even some of the smaller economies can cause uncertainty throughout the rest of the world. Such was the case during Russia’s financial meltdown in 1998. Promotion of economic stability in Russia has been a basis for U.S. support for Russia’s membership in international economic organizations, including the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO). “

SOURCE INDICTMENTS - CLIMATE CHANGE

 All Climate Change Experts can be wrong

Peter Montague (co-directs the Environmental Research Foundation in Annapolis, Maryland), 7 Feb 2008, "THE G8 PLAN OF ACTION FOR CLIMATE CHANGE" <http://www.camp-site.info/letter.html>

 In 2005, the Intergovernmental Panel on Climate Change (IPCC) issued a report (24 Mbyte PDF) devoted to the subject of carbon capture and storage. In it, this blue-ribbon body of leading scientists and engineers described pumping CO2 into the oceans, creating a "lake" of CO2 on the ocean floor. Clearly, the IPCC considered ocean disposal a viable option. That was in 2005. Less than three years later, we know that ocean disposal of CO2 would be a catastrophic error because it would lower the pH of the oceans, severly disrupting the marine food web. Yes, even the combined knowledge and judgment of the world's elite Nobel-prize-winning scientists and engineers can be catastrophically wrong.

Auto Industry and Oil Industry

Prof. Gary C. Bryner (Political Science, Brigham Young Univ.) 2007, Business and Environmental Policy - Corporate Interests in the American Political System, (brackets added, parentheses and italics in original) <http://books.google.com/books?id=H42pGSh8IIYC&pg=PA128&lpg=PA128&dq=delegation+congress+power+environment&source=bl&ots=Ck8Ob3XuOu&sig=1cwgX2DoYRJ4PindVD7UfsJF-YA&hl=en&ei=rfZDSoRSx8G3B5WWuL0C&sa=X&oi=book_result&ct=result&resnum=4>

The automobile and oil industries, in particular, have regularly overstated compliance costs and difficulties, and their credibility has suffered. Easterbrook, for instance, argues that one of the lessons from air pollution regulation is to “*never* believe Detroit.” For instance, after the 1990 CAA [Clean Air Act] Amendments, states began considering legislation to require a new round of emissions controls on new motor vehicles. In 1991, Ford executives told Maryland legislators that such standards would be a “nightmare” since “there are no cars in existence that could meet the standard,” and the legislature defeated the proposal. Three weeks later, Ford unveiled a production car that met the new standards at an increased price of only $100 (Easterbrook 1995, 187; emphasis in original).

**Climate Change Science Program (CCSP)**

Dr. Roger Pielke Sr., (Former Colorado State Climatologist, presently senior scientist at the University of Colorado -Boulder ) 20 June 2008, [New CCSP Report Appears “Weather and Climate Extremes in a Changing Climate” - Unfortunately, Another Biased Assessment](%22http:/), <http://climatesci.org/2008/06/20/new-ccsp-report-appears-weather-and-climate-extremes-in-a-changing-climate-unfortunately-another-biased-assessment/>

Since this assessment is so clearly biased, it should be rejected as providing adequate climate information to policymakers. There also should be questions raised concerning having the same individuals preparing these reports in which they are using them to promote their own perspective on the climate, and deliberately excluding peer reviewed papers that disagree with their viewpoint and research papers. This is a serious conflict of interest.

Dept of Energy

Chris Edwards (B.A. and M.A. in economics; expert on federal and state tax and budget issues; former senior economist on the congressional Joint Economic Committee examining tax, budget, and entrepreneurship issues) 18 May 2009, “Energy Mismanagement” <http://www.cato-at-liberty.org/2009/05/18/energy-mismanagment/>

Try as they might, supporters of big government spending cannot make federal programs work very well. The Department of Energy, for example, has been [plagued by mismanagement, cost overruns, and scandals for decades](%22http://www.downsizinggovernment.org/en). Today, the Washington Post reports on the poor performance of DoE’s environmental clean-up programs. As I reviewed in the linked essay, these enormously costly programs have been plagued by mismanagement for at least 25 years.

EPA

Prof. David Schoenbrod (professor of law at New York Law School and senior fellow at the Cato Institute) Fall 2006, “The EPA’s Faustian Bargain” REGULATION magazine, (ellipses in original) <http://www.cato.org/pubs/regulation/regv29n3/v29n3-5.pdf>

To further this myth, the agency pretends that the science is more certain than it is. Professor Wendy Wagner calls this the “science charade.” According to a Resources for the Future study: EPA’s norms, staffing patterns, and incentives subordinate science. Instead, EPA is a regulatory agency dominated by a legalistic culture. . . . Communications between scientists and policy makers within EPA are often poor or missing, and scientists do not always have a “seat at the table” when regulatory decisions are being hammered out. The EPA, moreover, misrepresents its scientific findings to suit political convenience. Its scientists measured dangerous levels of pollution around the World Trade Center after the September 11 attacks, but the agency said the air was safe.

If a private firm had done that, it would have been indicted.

 Prof. David Schoenbrod (professor of law at New York Law School and senior fellow at the Cato Institute) Fall 2006, “The EPA’s Faustian Bargain” REGULATION magazine, (ellipses in original) [www.cato.org/pubs/regulation/regv29n3/v29n3-5.pdf](http://www.cato.org/pubs/regulation/regv29n3/v29n3-5.pdf)

The agency thus found that it was safe to drink the river water all day, everyday, but its press release deleted those reassuring words. That pivotal information did not get into major newspapers. It was convenient to omit this information because it was politically imperative for the epa— under both Clinton and Bush, although for different reasons — to support dredging some of the pcbs from the river. Calling into question the need for dredging would have made it harder for the agency to do what was politic.

Al Gore

Dr. H. Sterling Burnett PhD (senior fellow with the National Center for Policy Analysis) 21 Mar 2007, “Truth about global warming too inconvenient for Gore,” <http://environment.ncpa.org/news/truth-about-global-warming-too-inconvenient-for-gore>

"A simple search of the hundreds of peer reviewed articles addressing climate issues belies his claim of a scientific consensus," said Burnett. "Almost every day a new report comes out citing scientists raising concerns about Gore's overstatements, radical exaggeration of the evidence and politicization of climate science."

James Hansen

Dr. John S. Theon ,(PhD in atmospheric science) 15 Jan 2009, James Hansen’s Former NASA Supervisor Declares Himself a Skeptic – Says Hansen ‘Embarrassed NASA’, ‘Was Never Muzzled’, & Models ‘Useless’ <http://wattsupwiththat.com/2009/01/27/james-hansens-former-nasa-supervisor-declares-himself-a-skeptic-says-hansen-embarrassed-nasa-was-never-muzzled/>

 Yes, one could say that I was, in effect, Hansen’s supervisor because I had to justify his funding, allocate his resources, and evaluate his results. I did not have the authority to give him his annual performance evaluation. He was never muzzled even though he violated NASA’s official agency position on climate forecasting (i.e., we did not know enough to forecast climate change or mankind’s effect on it). He thus embarrassed NASA by coming out with his claims of global warming in 1988 in his testimony before Congress. My own belief concerning anthropogenic climate change is that the models do not realistically simulate the climate system because there are many very important sub-grid scale processes that the models either replicate poorly or completely omit.

Humane Society

Center for Consumer Freedom (nonprofit organization devoted to promoting personal responsibility and protecting consumer choices) 2009, “Humane Society of the United States,” [www.activistcash.com/organization\_overview.cfm/oid/136](http://www.activistcash.com/organization_overview.cfm/oid/136)

Despite the words “humane society” on its letterhead, the Humane Society of the United States (HSUS) is not affiliated with your local animal shelter. Despite the omnipresent dogs and cats in its fundraising materials, it’s not an organization that runs spay/neuter programs or takes in stray, neglected, and abused pets. And despite the common image of animal protection agencies as cash-strapped organizations dedicated to animal *welfare*, HSUS has become the wealthiest animal *rights* organization on earth. HSUS is big, rich, and powerful, a “humane society” in name only. And while most local animal shelters are under-funded and unsung, HSUS has accumulated $113 million in assets and built a recognizable brand by capitalizing on the confusion its very name provokes. This misdirection results in an irony of which most animal lovers are unaware: HSUS raises enough money to finance animal shelters in every single state, with money to spare, yet it doesn’t operate a single one anywhere. Instead, HSUS spends millions on programs that seek to economically cripple meat and dairy producers; eliminate the use of animals in biomedical research labs; phase out pet breeding, zoos, and circus animal acts; and demonize hunters as crazed lunatics. HSUS spends $2 million each year on travel expenses alone, just keeping its multi-national agenda going.

  IPCC – Intergovernmental Panel on Climate Change

Dr. Roy W. Spencer, (PhD in meteorology; Principal Research Scientist, Univ of Alabama in Huntsville) 23 June 2009, public comments on Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act [www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&d=EPA-HQ-OAR-2009-0171-3371.1](http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&d=EPA-HQ-OAR-2009-0171-3371.1)

Research published by us since the IPCC 2007 4th Assessment Report (IPCC AR4) suggests that a major problem exists with most, if not all, of the IPCC models’ cloud parameterizations. Cloud parameterizations are greatly simplified methods for creating clouds in climate models. Their simplicity is necessary since the processes controlling clouds are too complex to include in climate models, and yet those same parameterizations are critical to model projections of future global temperatures and climate since clouds determine how much sunlight is allowed into the climate system. Significantly, all 21 IPCC climate models today decrease global average cloud cover in response to any warming influence, such as that from anthropogenic carbon dioxide emissions, thus amplifying the small, direct warming effect of more CO2. In stark contrast, though, new analyses of our latest and best NASA satellite data suggest that the real climate system behaves in exactly the opposite manner. This error, by itself, could mean that future warming projected by these models has been overstated by anywhere from a factor of 2 to 6.

  Margaret Kriz

Dave Kopel (former assistant attorney general for the state of Colorado, specializing in civil enforcement of state and federal hazardous waste laws), 19 June 2002, "Defunding Superfund," NATIONAL REVIEW ONLINE, <http://www.nationalreview.com/kopel/kopel061902.asp>

There was in fact no emergency, and subsequent scientific investigations have found no evidence that anyone has suffered any health problems from the Love Canal — except for problems resulting from the stress created by the panic-mongers. Not that the facts will stop the disinformation, even today; a frantically pro-Superfund article by Margaret Kriz in the June 1 National Journal repeats as fact the urban legend that half of all children born in the Love Canal neighborhood had birth defects. Ms. Kriz neglects to inform readers about the 1983 study by the Centers for Disease Control found no evidence of chromosomal abnormality or damage associated with Love Canal.

Bob Loux

NEVADA OBSERVER, 1 Oct 2008, “Bob Loux Resigns From Nuclear Office” <http://www.nevadaobserver.com/TNO%20Transfer%20Folder%20081001/bob_louxs_legal_woes.htm>

Nevada District Court and U.S. Federal Court cases have been filed against Bob Loux the head of Nevada’s Nuclear Projects Office, and calls for his resignation and/or dismissal were answered when the Nuclear Projects Commission accepted his resignation on Monday, September 29. Ethics investigations are underway as well into allegations that Loux, originally appointed to his position by former governor Richard Bryan, the current Nuclear Projects Office chairman, awarded himself and some of his employees pay raises that were not in the budget nor reported to anyone.

 Oil Industry

Prof. Gary C. Bryner (Political Science, Brigham Young Univ.) 2007, Business and Environmental Policy - Corporate Interests in the American Political System, <http://books.google.com/books?id=H42pGSh8IIYC&pg=PA128&lpg=PA128&dq=delegation+congress+power+environment&source=bl&ots=Ck8Ob3XuOu&sig=1cwgX2DoYRJ4PindVD7UfsJF-YA&hl=en&ei=rfZDSoRSx8G3B5WWuL0C&sa=X&oi=book_result&ct=result&resnum=4>

Another clean air initiative demonstrates the oil industry’s credibility. The Bush administration supported an amendment to the CAA [Clean Air Act] that would require that, by 1998, 10 percent of vehicles run on alternative fuels. Oil companies opposed this measure as they did others. One company, Arco, however, began working on reformulating gasoline. In less than ninety days company chemists had come up with a reformulated gas that cut smog precursors by 37 percent. The additional cost per gallon quickly fell to 4.3 cents. An Arco vice president reported in an interview that the company could have developed the cleaner fuel years before but “we were already selling all the gasoline we could make and there was no government requirement for a low-pollution product, so what was our incentive?” (Easterbrook 1995, 196-197). Congress quickly responded by including a reformulated gas mandate that was included in the 1990 amendments, and Arco suffered the wrath of the American Petroleum Industry, the oil companies’ trade association, for breaking ranks (Bryner 1995).

Carl Safina

Center for Consumer Freedom (nonprofit organization devoted to promoting personal responsibility and protecting consumer choices) 2009, “Carl Safina,” [www.activistcash.com/biography.cfm/bid/1955](http://www.activistcash.com/biography.cfm/bid/1955)

Carl Safina is a prime example of the interconnectedness of the modern environmental movement. A well-known biologist (and veteran tuna fisherman) from Long Island, Safina is Vice President for Marine Conservation at the National Audubon Society and founder of Audubon’s “Living Oceans” program. As early as 1990, he was telling the mass media that Atlantic swordfish would soon be extinct because they were being caught before reaching reproductive age. “We’re killing babies!” he complained openly in an Audubon fundraising letter, despite government figures showing increasing stocks of swordfish worldwide. So why is an Audubon Society bigwig flacking for SeaWeb, a relative unknown in enviro-warfare? Follow the money. Safina’s organization, like those of the rest of SeaWeb’s “spokesteam,” gets millions of dollars from well-heeled philanthropies like the Pew Charitable Trusts and the Packard Foundation – both of whom are SeaWeb’s primary funders as well.

Jeffrey M. Smith

Carey Gillam (journalist), 7 Mar 2008, REUTERS news service, “U.S. activist circles globe to fight biotech crops,” <http://www.seedsofdeception.com/Public/MediaCenter/ReutersProfile/index.cfm>

"The whole message that Jeffrey Smith has - that these crops are unsafe - there is no validity to that at all," said Mary Boote, executive director for pro-biotech Truth About Trade and Technology. "Jeffrey Smith is articulate and strong in his personal beliefs. But he has no science background at all."

Stern Review on the Economics of Climate Change

Prof. Craig Marxsen PhD (economics; Univ of Nebraska-Kearney), 22 March 2008, “Politically Contrived Gasoline Shortage,” <http://www.articlearchives.com/energy-utilities/oil-gas-industry-oil-processing/376080-1.html>

 The British government in 2006 released The Stern Review on the Economics of Climate Change, which provided a much higher estimate of the value of such damage, but Nordhaus (2007b) has recently shown that this result depends almost entirely on assumptions inconsistent with the interest rates actually observed in global capital markets. Unrealistically low discount rates produce grossly exaggerated estimates of the present value of future prospective damage from global warming and exaggerate the liability for which emitters of carbon dioxide might justly be required to pay compensation.

Univ. of Washington Climate Impacts Group study – relies on IPCC, which is indicted above

Climate Impacts Group, University of Washington, February 2009 “The Washington Climate Change Impacts Assessment” <http://cses.washington.edu/cig/files/waccia/wacciaexecsum_noncompr.pdf>

Temperature records indicate that Pacific Northwest temperatures increased 1.5°F since 1920. Climate models used in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report simulate the same historical warming by including both human and natural causes, and point to much greater warming for the next century. These models project increases in annual temperature of, on average, 2.2°F by the 2020s, 3.5°F by the 2040s, and 5.9°F by the 2080s (compared to 1970 to19992), averaged across all climate models.

RIGHT WING SOURCE INDICTMENTS

By Matthew Baker

1. THINK TANKS

Think tanks have become vehicles for business propaganda

Sharon Beder, 2006, “Suiting Themselves: How Corporations Drive the Global Agenda” p. 26 [Google Books]

“Think tanks have become essential vehicles of business propaganda and policy marketing. Rather than just react to proposed government policies, during the 1970s US corporations begin to initiative policies more actively and to shepherd them through the policy-making process until they became government policy. Think tanks enabled them to do this. The more that government was attacked and its role reduced, the more freedom and opportunities were provided to business.”

1. THE CATO INSTITUTE

CATO’s corporate sponsors include Big oil and Tobacco

People for the American Way, 2006, “Cato Institute,” <http://www.rightwingwatch.org/content/cato-institute>

“Cato's corporate sponsors include: Philip Morris, R.J. Reynolds, Bell Atlantic Network Services, BellSouth Corporation, Digital Equipment Corporation, GTE Corporation, Microsoft Corporation, Netscape Communications Corporation, NYNEX Corporation, Sun Microsystems, Viacom International, American Express, Chase Manhattan Bank, Chemical Bank, Citicorp/Citibank, Commonwealth Fund, Prudential Securities and Salomon Brothers. Energy conglomerates include: Chevron Companies, Exxon Company, Shell Oil Company and Tenneco Gas, as well as the American Petroleum Institute, Amoco Foundation and Atlantic Richfield Foundation. Cato's pharmaceutical donors include Eli Lilly & Company, Merck & Company and Pfizer, Inc.”

CATO founded by the Kochs (major oil/gas family)

Sharon Beder, 2006, “Suiting Themselves: How Corporations Drive the Global Agenda” p. 26 [Google Books]

“The Cato Institute was another of the new generation of Washington based think tanks established with business money in 1977. It was started with US$500,000 from Charles Koch, whose father Fred Koch, also a business man, had helped to found the John Birch Society. Koch was CEO of oil/chemical conglomerate Koch Industries.”

1. THE HERITAGE FOUNDATION

Heritage corporate sponsors include Ford, GM, and Mobile Oil

People for the American Way, 2006, “Heritage Foundation,” <http://www.rightwingwatch.org/content/heritage-foundation>

“Prominent right-wing figure Paul Weyrich was Heritage's first president. Heritage's start was financially supported by co-founder Joseph Coors, of Colorado's Coors Brewing Company. Right-wing financier Richard Scaife became a major funder of the Heritage Foundation after its first year, donating millions of dollars through the Sarah Scaife Foundation. Corporate sponsors of the organization have included: General Motors, Ford Motors, Proctor and Gamble, Chase Manhattan Bank, Dow Chemical, the Reader's Digest Association, Mobil Oil, and Smith Kline Corporation.”

Heritage funded by oil, coal, and chemical companies

Sharon Beder, 2006, “Suiting Themselves: How Corporations Drive the Global Agenda” p. 26 [Google Books]

“The Heritage Foundation is now the wealthiest Washington-based think tank, with an annual budget of around $35 million, thanks to direct corporate donations and indirect corporate donations through conservative foundations and individuals. Donor corporations include automobile manufactures and coal, oil, chemical and tobacco companies.”

1. AMERICAN ENTERPRISE INSTITUTE

AEI has clear ties to oil and chemcials

Sharon Beder, 2006, “Suiting Themselves: How Corporations Drive the Global Agenda” p. 27 [Google Books]

“AEI had an annual budget of around $18 million in 2002. Its board of directors is largely made up of CEOs of large corporations, including American Express, Dow Chemical, and ExxonMobil. Its major donors include various foundations such as the Olin Foundation, and many corporations, including General Electric, Ford, General Motors, Eastman Kodak, the Protector & Gamble Fund and Shell.”

1. NCPA

NCPA receives funding from Koch industries

Pegasus News, February 22, 2007, “Dallas thinktank claims US cutting greenhouse gases better than Europe,” <http://www.pegasusnews.com/comments/cr/38/5636/>

“The NCPA web site states that it "receives 70% of its funding from foundations, 20% from corporations, and 10% from individuals." Between 1985 and 2001, the Center received $4,031,000 in 75 separate grants from only twelve foundations, including the ExxonMobil Foundation, the Castle Rock Foundation (funded by Coors), the Koch Family Foundation (funded by Koch Industries, the nation's largest privately-held energy company), the Scaife Foundation (funded mostly by the oil, uranium and banking fortune made by Richard Mellon Scaife), and others.”

Contributors

Matthew Baker, Chief Editor

A three-time contributor to Blue Book Advanced, Matt competed in NCFCA’s Region 8 for 3 years. During that time, he qualified for nationals in team debate 3 times and won 2nd place team at the National Tournament in both the 2004 and 2005 seasons. In college, Matt led the Bob Jones University squad to three final round finishes at the NEDA (National Educational Debate Association) National Tournament culminating in the 2008 national championship, also winning first place speaker at the 2008 NEDA national tournament and named All-American. He holds over 65 team policy debate titles. In addition Matt has received multiple awards in both the NPDA (National Parliamentary Debate Association) and AMTA (American Mock Trial Association). Matt’s research skills have received recognition outside of the realm of forensics. His senior thesis was the 2008 receipt of the Leila R. Custard Award for historical research. In addition, He has won awards or published papers with the Fraser Institute, the Lincoln Forum, the Atlas Economic Research Institute, and the Association of Private Enterprise Education on subjects ranging from Islamic political-economy to the Mexican War. Currently a 1L at Washington & Lee University School of Law, Matt holds a BA in History, *magna cum laude* and a BS in Accounting, *summe cum laude* from Bob Jones University.

Michael Bixby

Michael debated in NCFCA from 2003-2006, competing on the national level multiple times. He went on to debate for the Bob Jones University Intercollegiate debate team, placing first at the NEDA Nationals in 2008 with his partner Matt Baker. Michael also received multiple top speaking awards in NEDA. His last semester at BJU he went to an NPDA Parlimentary debate tournament and also placed first. In all, Michael won more than ten debate tournaments during his time at BJU.

His teaching experience also includes founding and coaching the North Carolina speech and debate club B.A.D.D. (Born Again Debaters and Defenders). He taught debate at Tabernacle Christian School from 2004-2006. At Bob Jones, he was also elected Vice-President of the Inter-society Debate Association. In 2008 he was a staff member at the Illinois Christian Communicator’s SDI (Summer Debate Institute).

In 2006, he co-authored and edited the sourcebook Definitive Debate. Michael graduated from Bob Jones in May 2009 with a degree in Political Science. He now works as a legal assistant specializing in expert witnesses at the law firm Levin, Papantonio based in Pensacola, Fl.

Nicholas Bruno

Nicholas Bruno, 19, is from Richmond, Texas (Region 4). He has debated for 4 years, qualifying to Regionals with his partner his first year in Team Policy, winning multiple speech and debate awards in his two years of LD and finishing 5th in Region 4 in 2008. He qualified to the 2008 National tournament in Extemporaneous speaking. In 2009, he participated in Team Policy debate, receiving 3rd place in TP at the Texas National Open and 2nd at Nationals with his partner. Nicholas enjoys mentoring debaters at a local debate camp. Besides participating in speech and debate, Nicholas also plays trombone in a band, works in his family’s business, was a member of Eta Sigma Alpha National Home School Honor Society, and was one of the 2008 Financial Literacy Award winners. Next year, he will attend college studying economics and political science

Josh Craddock

Josh Craddock competed in the NCFCA for four years as a national-level Team Policy debater. He was a finalist at the largest-ever NCFCA tournament and finished as a quarterfinalist at the 2009 National Championships. In addition to receiving debate speaker awards at nationals in 2007 and 2009, he achieved several semifinalist and finalist speech finishes at nationals in 2008 and 2009. Last year, he served as the managing editor for Training Minds Ministry’s Blue Book Report, which aggregated news for NCFCA policy debaters. He is currently an intern with the Institute for Cultural Communicators, traveling on their Communicators for Christ tour. When he’s not participating in forensics, Josh loves outdoor adventures, especially snow-skiing and mountain biking in his home state of Colorado.

Renee Davis

From the beautiful hill country of central Texas, Renee has participated in competitive speech and debate for the past four years. As a participant, teacher, and coach, she enjoys helping other students learn how to better their communication skills. A recent high school graduate, she plans to begin her collegiate studies this fall in Houston, Texas, and perhaps debate on her university’s forensics team.

Alexandra Hebdon

Alexandra has been involved in competitive speech and debate on the state, regional, and national level through competition in the National Christian Forensics and Communications Association (NCFCA). Over six years of competition, she has amassed 79 titles, including 9 State Tournament wins, 3 Regional Championship wins, and 8 National Championship titles. At the 2008 National Championships, Alexandra was declared the National Champion in Extemporaneous Speaking and was subsequently inducted into the NCFCA Hall of Fame. She returned to Nationals in 2009, where she was declared the National Runner-up in Impromptu speaking. She will be a freshman in the Honors Program at the University of Georgia in the fall, where she is planning to study International Affairs.

Leanne Livingston

Leanne Livingston is an 18-year-old who competed in the NCFCA for 6 years as a Team Policy debater. Within the NCFCA, Leanne has placed first in Region in persuasive speaking and Duo Interpretation, as well as second, third, and fourth place debater at numerous state tournaments. At the regional level, she placed fifth team and fourth place speaker. In 2009, Leanne placed 21st team, and won 20th debate speaker at the National tournament. She also became the Georgia State Winner in the American Legion Oratorical Contest and went on to be a Semifinalist at the National competition, placing within the top nine speakers in the country. Leanne plans to take a “GAP” year between High School and College and is leaving to live in Ireland from September to May in order to study abroad while evangelizing. She’d like to wish Good Luck this debate season.

Philip Mayer

While a freshman, sophomore, and again as a junior, Philip Mayer qualified for the NCFCA National Debate Tournament. He and his partner Stefan Jorgensen were the 3rd place team at the Virginia National Open, and the NCFCA Team Policy Debate National Champions in 2008. In 2009, Philip and new partner Bob Rose were 25th at the Team Policy Debate Nationals Championships.

Philip enjoys baseball, golf, hunting and teaching team policy debate. For the last three years, Philip has assisted his older brother, Stephen, in teaching debate workshops to beginning and intermediate debaters and was a contributor to both Final Word and Blue Book Advanced evidence source books.

Stephen Menesick

Stephen competed in Speech and Debate from 2004-2008, qualifying to nationals each year. Throughout his time he won numerous awards at national opens, state tournaments and national championships. In 2008 He was the Region 8 Champion in Team Policy Debate and Extemporaneous Speaking. Stephen has also been coaching, mentoring and teaching debate since 2006 locally in North Carolina and by leading the Homeschooldeabte.com Research Club for two years and the Nationals Evidence Exchange for three years. Currently he is a Sophomore at the University of North Carolina Chapel Hill double majoring in Public Policy Analysis and Political Science.

Jared Rixstine

The 2009-2010 season will be Jared's fourth year of team policy debate. As much as he likes speech and debate, he likes piano even more. He has played piano since the age of 8 and has been hooked on it ever since. He still takes lessons and now teaches around 15 students. In speech and debate he received 3rd TP speaker at the 2009 Region 6 Regional Invitation, as well as other speaker awards at 2009 regional qualifying tournaments. Along with his partner, JulieAnne Bixby, he won the Region 6 Invitational 2009 in Team Policy debate while breaking to Octa-Finals in every single one of the 2009 Region 6 qualifiers. In speech, he received 3rd place Dramatic Interpretation at the Wisconsin Qualifier, 1st place Humorous interpretation at the Indianapolis Qualifier, and qualified to Regionals in Apologetics, Impromptu, Dramatic, and Humorous. He received 4th place in Humorous and qualified to nationals in 2009, also qualifying in Team-Policy debate. He also attended the 2009 NITC camp and found it very helpful! After compiling four comprehensive briefs and writing a few others, he received the first place research award at the camp. He debates, speaks and plays piano for the Glory of God. May He be praised!

Nic Townes

Nicolas did Speech & Debate in NCFCA for a combined six years, five of which was debate. He qualified for nationals 3 consecutive years. All three of those years he attended Blue Book camps and purchased Training Minds products. Nicolas has been blessed to be a part of Training Minds and Blue Book this year as a writer. He hopes that the quality material the writing staff slaves over can help you as the hard work of those during his years helped him. Nic will tell you: this year’s Blue Books are the best yet! The writing staff is making sure only the best evidence is published and you will enjoy many of the cases. Nic's partner and him came very close to the top of NCFCA’s debate mountain in 2009 when they took 3rd place at nationals. What most didn’t realize, the case they were running, which shocked most debaters, was a Blue Book case. They only lost one, very close round with it. The coaches will always tell you that 50% of winning is being a good debater, but Training Minds will make sure that the other 50% is covered.

Vance Trefethen

Coach Vance debated in the National Forensic League debate while in high school from 1979-1982. In college, he judged at high school NFL tournaments while getting his B.A. in economics at the University of North Carolina at Chapel Hill. After college, he moved around the country for various jobs, including some time with the Defense Department in the Washington, D.C., area and several years at the headquarters of Wal-Mart in Arkansas.

After moving back to North Carolina, he once again got involved in debate by volunteering as an assistant coach for public school NFL debaters. A homeschooling dad himself, he realized the growing potential and benefit of homeschool debate and switched over to coaching homeschoolers a couple years later. In 2001, he helped Chris Jeub bring Blue Book to a more advanced level. He has been co-authoring Blue Book, editing Blue Book Advanced, and writing Blue Book Midseason ever since. He currently resides in New Hampshire.