Globethics Repository



The first one hunderd days

This page was generated automatically upon download from the Globethics Repository. More information on Globethics see https://www.globethics.net. Data and content policy of Globethics Repository see https://repository.globethics.net/pages/policy.

Item Type	Article
Authors	Parenteau, Patrick
Publisher	UC Berkeley School of Law
Rights	With permission of the license/copyright holder
Download date	2026-11-03 11:24:51
Link to Item	http://hdl.handle.net/20.500.12424/175844

The First One Hundred Days: Ten Things President-Elect Obama Should Do to Confront the Climate Crisis

Patrick Parenteau[*]

In a recent speech, former Vice President and Nobel laureate Al Gore challenged the nation to produce 100 percent of its electricity from non-carbon sources within ten years.[1] Linking the issues of climate, energy, economy and national security, Mr. Gore stated: "We're borrowing money from China to buy oil from the Persian Gulf to burn it in ways that destroy the planet. Every bit of that's got to change."

Critics immediately dismissed the idea as wacky, given the fact that the nation currently gets less than 10 percent of its electricity from renewable sources.[2] Other energy experts commented that a 50 percent goal might be achievable within ten years, but only with an Apollo-scale commitment of money and brainpower.[3] Texas oilman T. Boone Pickens has proposed a plan to generate 20 percent of America's power through wind turbines on the Great Plains.[4] His estimate is that it would cost $1 trillion to build that capacity and another $200 billion to update our electrical grid to transmit that energy around the country. Such is the magnitude of the changes required to de-carbonize just the electricity sector.

Why would Al Gore propose something that sounds so impractical? Because the science of climate change is telling us that the magnitude of the

Copyright © 2008 by the Regents of the University of California.

[*] Patrick Parenteau is a Professor of Law at Vermont Law School and Senior Counsel in the Environmental and Natural Resources Law Clinic.

1. Al Gore, Speech at Constitution Hall in Washington, D.C.: A Generational Challenge to Repower America (July 17, 2008) (transcript and video of the speech available at http://www.wecansolveit.org/content/pages/304/).

2. ENERGY INFORMATION AGENCY, ELECTRIC POWER ANNUAL WITH DATA FOR 2006 (2007), *available at* http://www.eia.doe.gov/cneaf/electricity/epa/epa_sum.html (estimating that renewable energy sources accounted for approximately 9.5 percent of net U.S. electricity generation in 2006). For a critique of Gore's energy challenge, see Dissecting Gore's $5 Trillion Energy Plan, http://www.usnews.com/blogs/capital-commerce/2008/7/18/dissecting-al-gores-5-trillion-energy-plan.html (July 18, 2008).

3. *See, e.g.,* Gore Calls for 100 percent Renewable Power in 10 Years, http://climateprogress.org/2008/07/17/gore-calls-for-100-renewable-electricity-in-10-years/ (July 17, 2008, 10:19 EST).

4. The Plan, http://www.pickensplan.com/theplan/ (last visited Nov. 2, 2008).

threat demands unprecedented actions to reduce GHG emissions and stabilize atmospheric concentrations of GHG. Scientists project that a 2º Celsius increase above pre-industrial levels will cause the climate system to pass a critical tipping point that will inevitably and irreversibly lead to massive loss of the Greenland ice sheet and a rise in sea levels of up to 20 feet. While it will take many centuries or more for the ice sheet to melt, a consequence of this generation's actions will be a legacy of rising seas and coastal inundation for future generations. And that is just one of the negative consequences of exceeding the 2º C threshold.[5] To have even a 50/50 chance of holding temperatures below this threshold would require limiting CO2 concentrations, which are currently at about 380 PPM, to roughly 450 PPM.[6] More recent observations, for example the accelerating rate of melting in the Arctic, strongly suggest that the IPCC models are significantly understating the effects of global warming because the models do not include certain critical feedback loops like the loss of the albedo effect and darkening of the oceans from ice melt.[7] Even though anthropogenic warming has increased average temperatures by only .08º C since the Industrial Revolution, the observed effects in nature have been fairly dramatic—increased droughts, flooding, wildfires, spread of diseases like malaria and dengue fever, more intense tropical storms, ocean acidification, earlier bird migrations and so on.[8] Furthermore, the models only use average temperatures, which do not take account of the substantial but as yet unquantified variation in regional and local effects of climate change. The respected Hadley Centre in Great Britain stated that a rise of 2-3º C this century "means that the Earth will experience a greater climate change than it has for at least 10,000 years and it would be difficult for many people and ecosystems to

5. In particular, temperature increase above 2º C poses a critical threat to coral reefs, often referred to as the "rainforests of the seas" because they are home to more than one-quarter of marine species. Ocean acidification and bleaching related to rising ocean temperatures and carbon deposition are growing threats. According to a recent report by the International Union for the Conservation of Nature, nearly one-third of the 704 species of corals studied are listed as "Critically Endangered," "Endangered," or "Vulnerable." Matt Kallman, Climate Change Putting Coral Reefs At Risk, http://earthtrends.wri.org/updates/node/322.

6. Jenny Hogan, *Only Huge Emissions Cuts Will Curb Climate Change*, NEW SCIENTIST, Feb. 3, 2005, http://environment.newscientist.com/channel/earth/dn6964-only-huge-emissions-cuts-will-curb-climate-change.html. Some scientists, such prominent Australian climatologist Tim Flannery, believe that we may have already crossed that threshold. Gregory M Lamb, *A Key Threshold Crossed*, CHRISTIAN SCIENTIST MONITOR, Oct11, 2007, at 11, *available at* http://www.csmonitor.com /2007/1011/p11s01-wogi.html.

7. The IPCC acknowledges this uncertainty: "Climate-carbon cycle coupling is expected to add carbon dioxide to the atmosphere as the climate system warms, but the magnitude of this feedback is uncertain. This increases the uncertainty in the trajectory of carbon dioxide emissions required to achieve a particular stabilization level of atmospheric carbon dioxide concentration." IPCC WORKING GROUP I, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS 16 (2007), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf.

8. *See* Francis Zwiers & Gabriele Hegerl, *Climate Change: Attributing Cause And Effect*, 453 NATURE 296 (May 15 2008); Bill Hare, *Relationship Between Increases in Global Mean Temperature and Impacts on Ecosystems, Food Production, Water and Socio-Economic Systems*, in AVOIDING DANGEROUS CLIMATE CHANGE 177, 177 - 186 (Hans Joachim Schellnhuber et. al, eds., 2006).

adapt to this rapid change."[9] For example, studies have estimated that a temperature increases in that range could consign one-third of the species on earth to extinction.[10]

In sum, Al Gore is simply the messenger, bearing the unwelcome news that we have dug ourselves into a very deep hole and we had best stop digging and start climbing out. The daunting task of building the ladder now falls to the new president. He should use his Inaugural address to make the case for urgent action on climate change, rally the American people to the cause, and outline the immediate steps his administration will take to begin the job of remaking the American and global economies to insure both prosperity and a livable planet for current and future generations. Here are ten steps the president should take within the first one hundred days to launch this new "green revolution."[11]

1. Set a national goal of reducing CO2 emissions by 40 percent by 2020 and 80 percent by 2050, and make passage of climate change legislation a top priority.

A recent study by the American Solar Energy Society shows that reductions of carbon emissions of 60-80 percent from today's levels by 2050 are possible with policies that promote energy efficiency and the increased use of renewable energy.[12] Federal legislation that is serious in intent should be based on a combination of an economy-wide cap and trade program[13]and

9. Met Office: Climate Change- Fact 5, http://www.metoffice.gov.uk/corporate/pressoffice/myths/5.html (last visited Nov. 2, 2008).

10. *See, e.g.,* Chris Thomas et al, *Extinction Risk From Climate Change*, 427 NATURE 145 (8 January 2004).

11. See generally THOMAS L. FRIEDMAN, HOT, FLAT AND CROWDED: WHY WE NEED A GREEN REVOLUTION AND HOW IT CAN RENEW AMERICA (2008).

12. AMERICAN SOLAR ENERGY SOCIETY, TACKLING CLIMATE CHANGE IN THE US: POTENTIAL CARBON EMISSIONS REDUCTIONS FROM ENERGY EFFICIENCY AND RENEWABLE ENERGY BY 2030 37 (Charles F. Kutscher, ed., 2007), available at http://www.ases.org/images/stories/file/ASES/climate_change.pdf. Google has proposed a $4.4 trillion plan to wean the United States off coal and oil for electricity generation by 2030. The Clean Energy 2030 proposal calls for a 38 percent cut in the amount of oil used for vehicle fuels; raising the automobile fuel efficiency standard from 31 mpg to 45 mpg; increasing the use of plug-in hybrids and electric cars; replacing combustion engine cars much faster; and improving electrical energy efficiency. The plan also calls for replacing all power generation plants that use coal and oil and half of those that use natural gas with wind, solar, and geothermal sources of power. Although the cost of the plan is significant, the company estimates it could result in savings of approximately $1 trillion while creating hundreds of thousands of new jobs over the next twenty years. GOOGLE, CLEAN ENERGY 2030 (2008), available at http://knol.google.com/k/-/-/15x31uzlqeo5n/1#.

13. Though cap and trade seems to command the most political support in Congress, many economists believe that a tax on the carbon content of fossil fuels would be a more efficient approach to reducing GHG emissions. *See* CONGRESSIONAL BUDGET OFFICE, POLICY OPTIONS FOR REDUCING CO_2 EMISSIONS viii (2008) ("A tax on emissions would be the most efficient incentive-based option for reducing emissions and could be relatively easy to implement."). Advocates of a carbon tax point out that it could be phased in to give businesses and individuals time to adapt; it also could be made "revenue neutral" by, for example, providing "rebates" or reducing federal payroll taxes. Carbon Tax Center, http://www.carbontax.org/ (last visited Nov. 2, 2008. Proponents of cap and trade argue that it

targeted sectoral policies (e.g. more stringent fuel economy standards). Neither set of policies will be sufficient on its own; a combined approach will ensure that emissions reductions occur at the lowest cost. The Lieberman-Warner bill ("America's Climate Security Act") is the likely starting point for negotiations, but there are a number of other proposals, such as the Dingell-Boucher economy-wide cap and trade program, that deserve serious consideration.[14] President-elect Obama should use the Inaugural address to rally the nation behind a bold plan to restore the economy and protect the planet

2. Appoint Al Gore as a UN Special Envoy on Climate to negotiate a post-Kyoto agreement at the Copenhagen meeting in December 2009.

The US is the sole holdout among industrialized nations when it comes to binding greenhouse gas reductions. A post-Kyoto agreement must include the fast developing nations of China and India. China participated in the talks held in Bali a year ago, and has signaled its intent to engage in serious negotiations provided the US and other industrial nations honor the principle of "common but differentiated responsibilities" as embodied in the United Nations Framework Agreement on Climate Change, to which the US is signatory.[15] The US per capita emissions are at least six times those of China and thirteen times India.[16] The US must pass comprehensive climate legislation in order to establish its bona fides with the world community. Implementation of any new legislation will take several years, but it is vitally important that it be passed as quickly as possible so that the new administration will have the credibility necessary to engage with China and India and other developing nations to facilitate their participation in a more comprehensive and effective international protocol.

---

provides greater certainty of reductions than a tax. *See* Eileen Claussen & Judith Greenwald, Op-Ed., *Handling Climate Change*, MIAMI HERALD, July 12, 2007, at 19A, *available at* *http://www.pewclimate.org/press_room/opinion_editorials/oped_miamih07122007*. However, "a straight carbon tax on energy production – at an oil wellhead or refinery for instance – would be simpler and cheaper than putting a cap on tens of thousands of polluters." Timothy Gardner, *Carbon tax seen as best way to slow global warming*, REUTERS UK, October 9, 2008, http://uk.reuters.com/article/idUKN0931221320081009 (noting opinion of economist Jeffrey Sachs).

14. According to its proponents, the bill "covers approximately 88 percent of U.S. greenhouse gas emissions, and would reduce covered emissions to six percent below 2005 levels by 2020, 44 percent below 2005 levels by 2030, and 80 percent below 2005 levels by 2050." HOUSE COMMITTEE ON ENERGY AND COMMERCE, EXECUTIVE SUMMARY OF THE DISCUSSION DRAFT (2008), available at http://energycommerce.house.gov/Climate_Change/Executive-Summary-Discussion-Draft.pdf (summarizing the Dingell-Boucher draft climate change legislation).

15. The convention has been ratified by 192 countries and entered into force on March 21, 1994. Status of Ratification, http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php. Among other things it commits the U.S. and other signatories to prevent "dangerous anthropogenic interference with the climate system." United Nations Framework Convention on Climate Change, Art 2, March 21, 1994, 1771 U.N.T.S. 107, *available at* http://unfccc.int/resource/docs/convkp/conveng.pdf.

16. WORLD RESOURCES INSTITUTE, NAVIGATING THE NUMBERS: GREENHOUSE GAS NUMBERS AND INTERNATIONAL CLIMATE POLICY 21 (2007).

3. Appoint a strong Administrator for the Environmental Protection Agency and direct that person to use all available authorities under the Clean Air Act (CAA) and other statutes to reduce greenhouse gas emissions.

Specifically, the new EPA Administrator should immediately make the "endangerment finding" required by the U.S. Supreme Court decision in *Massachusetts v EPA*, [17] and start to implement the actions that will be required as outlined in the Advance Notice of Proposed Rulemaking "Regulating Greenhouse Gas Emissions Under the Clean Air Act."[18] For example, the Administrator should start regulating greenhouse gas emissions from new or modified stationary sources under the "new source performance standards" requirements of the CAA.[19] The Administrator should also be directed to reverse EPA's current litigation posture and approve California's request to set more stringent vehicle emission standards under the CAA which would result in putting more fuel efficient vehicles on the road faster than the proposed revisions to the CAFÉ standards.[20]

4. Call for a moratorium on construction of new coal power plants pending commercial scale demonstration of carbon capture and storage systems (CCS), and commit to upgrading or phasing out existing plants as soon as practicable.

Coal currently supplies over 50 percent of the nations' electricity and over 100 new coal plants have been proposed to meet future demand.[21] Coal is the most carbon-intensive fuel and accounts for 40 percent of U.S. CO2

17. 549 U.S. 497 127 S. Ct. 1438, 1462-63 (2007).

18. Regulating Greenhouse Gas Emissions Under the Clean Air Act: Proposed Rule, 73 Fed. Reg. 44353 (July 30, 2008).

19. New Source Performance Standards (NSPS) are federal standards adopted by the U.S. Environmental Protection Agency (EPA) to regulate air emissions by many types of industrial facilities. 42 U.S.C. § 7411 (2006); 40 C.F.R. § 60 (2008).

20. CAFE standards are fleet-wide fuel economy averages that manufacturers must meet each model year. Currently, separate CAFE standards are established for passenger cars and light trucks, which include sport utility vehicles (SUVs), vans, and pickup trucks. BRENT D. YACOBUCCI & ROBERT BAMBERGER, CONGRESSIONAL RESEARCH SERVICE, CORPORATE AVERAGE FUEL ECONOMY (CAFÉ): A COMPARISON OF SELECTED LEGISLATION IN THE 110TH CONGRESS 1-2 (2007). A recent report by the California Air Resources Board concludes that the California standards would cut GHG emissions by 411 million metric tons (MMT) between 2009-2016, which is thirty six percent more than the 303 MMT of GHG prevented if the proposed federal fuel economy rules are implemented. CALIFORNIA AIR RESOURCES BOARD, COMPARISON OF GREENHOUSE GAS REDUCTIONS FOR THE UNITED STATES AND CANADA UNDER ARB GHG REGULATIONS AND PROPOSED FEDERAL MODEL 2011-2015 MODEL YEAR FUEL ECONOMY STANDARDS 1 (2008), *available at* http://www.arb.ca.gov/cc/ccms/reports/final_pavleyaddendum.pdf . California's standards would reduce emissions 1,283 million metric tons between 2009 and 2020 if implemented nationwide, compared to 912 MMT under the federal plan. *Id.* at 2 Fourteen states have adopted California's standards. *Id.*

21. ENERGY INFORMATION ADMINISTRATION (EIA). ANNUAL ENERGY OUTLOOK 2007 9 (2007), *available at* http://www.eia.doe.gov/oiaf/archive/aeo07/index.html; NATIONAL ENERGY TECHNOLOGY LABORATORY (NETL), TRACKING NEW COAL-FIRED POWER PLANTS 6 (2007), *available at* http://www.netl.doe.gov/coal/refshelf/ncp.pdf.

emissions.[22] Prominent climate scientists such as Dr. James Hansen warn that we may already be at a critical "tipping point" and are calling for a moratorium on coal plants that cannot fully capture and sequester carbon.[23] According to a recent study by the Union of Concerned Scientists it will take several years of expensive R&D projects to determine whether CCS can be successfully demonstrated at the scale required.[24] The National Energy Technology Laboratory within the U.S. Department of Energy has laid out a "roadmap" for development and deployment of CCS calling for development of a "pilot project" by 2012 and a "field" demonstration project by 2020.[25] In the words of prominent climate scientist Dr. Wallace Broecker, the amounts of CO2 that must be permanently sequestered are "stupefying."[26] Building coal plants before geologic sequestration has been demonstrated is an exceedingly risky gamble. Because power plants will be operational for 50-60 years, we cannot afford to build a massive new electricity infrastructure without assurances that it will be carbon-free. In the interim the premium must be on investing in improving the productivity of existing energy supplies – in other words, doing more with less. Studies by Mckinsey & Co and others show that the US and the world can cut energy demands in half by 2020.[27] Efficiency is the fastest, cleanest and cheapest way to address energy demands and reduce GHG emissions, and it will more than pay for itself over time.[28]

5. Create a Council on Energy and Climate within the White House.

The purpose of the Council would be to provide leadership across the federal agencies in making energy and global warming top administration priorities. It should have a status equal to the Council of Economic Advisers. The Council's first task should be to support the president in preparing energy

22. EIA, EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES 2006 11, Table 4 (2007), *available at* http://www.eia.doe.gov/oiaf/1605/ggrpt/pdf/0573(2006).pdf.

23. *See* James Hansen, *The need for an international moratorium on coal power*, BULLETIN OF THE ATOMIC SCIENTISTS, January 21, 2008, http://www.thebulletin.org/web-edition/features/the-need-international-moratorium-coal-power.

24. UNION OF CONCERNED SCIENTISTS, COAL POWER IN A WARMING WORLD: A SENSIBLE TRANSITIONS TO CLEANER ENERGY OPTIONS 23 (2008*), available at* http://www.ucsusa.org/assets/documents/clean_energy/Coal-power-in-a-warming-world.pdf. UCS recommends building 5-10 demonstration projects to test various carbon capture and storage technologies to determine "whether CCS is as promising as its backers claim or whether we should invest in other, more promising technologies." *Id.*

25. NATIONAL ENERGY TECHNOLOGY LABORATORY, CARBON SEQUESTRATION TECHNOLOGY ROADMAP AND PROGRAM PLAN 2007 11 (2007*), available at*: http://www.netl.doe.gov/technologies/carbon_seq/refshelf/project%20portfolio/2007/2007Roadmap.pdf .

26. WALLACE S. BROECKER & ROBERT KUNZIG, FIXING CLIMATE: WHAT PAST CLIMATE CHANGES REVEAL ABOUT THE CURRENT THREAT – AND HOW TO COUNTER IT 213 (2008). Dr Broecker estimates that if all of the CO_2 currently being emitted was liquefied and spread over Manhattan it would bury the island to the eighty-fourth floor of the Empire State Building.

27. MCKINSEY GLOBAL INSTITUTE, CURBING GLOBAL ENERGY DEMAND GROWTH: THE ENERGY PRODUCTIVITY OPPORTUNITY 9 (2007), *available at* http://www.mckinsey.com/mgi/publications/Curbing_Global_Energy/index.asp.

28. *Id.* at 12.

legislation for delivery to Capitol Hill within 100 days of the inauguration. Unlike the energy task force headed by Vice President Dick Cheney that was cloaked in secrecy and heavily skewed towards the petroleum industry, this process should be transparent with broad representation across the energy spectrum incorporating both demand side and supply side alternatives.

6. Issue an Executive Order on Climate Change.

The purpose of an executive order is to provide clear policy direction for cabinet officers and other agency heads on how to "faithfully execute" the nation's laws and implement a myriad of federal programs including procurement activities.[29] Specifically, the order should direct federal agencies to fully utilize their existing authorities to: (1) establish a zero net emissions goal for federal buildings by, for example, adopting Leadership in Energy and Environmental Design (LEED) standards for construction and rehabilitation of federal buildings, and purchase Energy Star products for lighting, heating and cooling systems; (2) adopt California's vehicle emission standards for the federal fleet and use the power of the purse to drive the market for cleaner cars and trucks;[30] (3) submit annual "carbon footprint" reports to the Office of Management and Budget showing results of agency actions to reduce GHG emissions; (4) use the NEPA process to fully consider the climate change impacts of federal actions and to identify and adopt alternatives that are carbon-neutral;[31] and (5) prioritize the carbon sequestration and biological values of public forests and grasslands managed by agencies such as the U.S. Forest Service and Bureau of Land Management.

29. The source of authority for executive orders derives from the Constitution. Article II, section 1 of the Constitution reads, in part, "The executive power shall be vested in a president of the United States of America." Article II, section 3 asserts that, "The President shall take care that the laws be faithfully executed..."Executive orders cannot override statutory requirements but can provide direction on how discretionary authority is to be exercised by Executive Branch agencies. *See, e.g.,* Exec. Order 13,101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition, 63 Fed. Reg. 49,642 (Sep. 16, 1998).

30. The federal government owns the largest fleet of vehicles in the world, totaling over 642,000 in 2007. GENERAL SERVICES ADMINISTRATION, FEDERAL FLEET REPORT, FISCAL YEAR 2007 3 (2008), *available at* http://www.gsa.gov/graphics/ogp/FFR2007_508.pdf. This data contained in this report is required under Executive Order 13,149 "Greening the Government Through Federal Fleet and Transportation Efficiency," The Energy Policy Act of 1992, as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388), and the General Services Administration's SF82, "Agency Report of Motor Vehicle Data."

31. One way to achieve carbon neutrality is to purchase "renewable energy credits" (RECs) from suppliers of carbon-free energy sources like wind, solar and biomass. Questions and Answers About Carbon Offsets and Renewable Energy, http://www.nativeenergy.com/pages/faq_s/15.php#4 (last visited Nov. 2, 2008).

7. Rescind the eleventh-hour rule being rammed through by the Bush Administration that would eviscerate the Endangered Species Act (ESA).

The U.S. Supreme Court has called the Endangered Species Act "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."[32] The Court noted the legislative policy underlying the ESA is the "institutionalization of [ ] caution."[33] Yet, in the waning days of its term, the Bush Administration has proposed a rule that would grant broad exemptions from the consultation and habitat conservation requirements of the ESA, and prohibit federal agencies from considering the impact of their actions on GHG emissions.[34] Federal agencies such as the Rural Utilities Service provide loans and loan guarantees for the construction of coal plants, transmission lines and other fossil fuel projects here in the US, [35] while international monetary agencies such as the Overseas Private Investment Corporation[36] finance and insure fossil fuel projects worldwide. Contrary to the position of the Bush administration, the ESA does have an important role to play in addressing the threats of climate to the most imperiled species on the planet.[37]

8. Direct the Securities and Exchange Commission to issue guidelines for disclosure of climate risks.

The details of what is required to inform investors about the risks of climate change are spelled out in the petition filed with the SEC by a broad coalition of investors, state officials and environmental organizations.[38] Scientific, legal and regulatory developments make it unavoidably clear that the risks and opportunities many corporations face in connection with climate change fall squarely within the category of material information that is required to be analyzed in many corporate filings. Investors need disclosure of climate risks to make informed investment decisions.

---

32. Tennessee Valley Auth. v Hill, 437 U.S. 153, 180 (1978).

33. *Id.* at 178.

34. *See* Interagency Cooperation Under the Endangered Species Act: Proposed Rule, 73 Fed. Reg. 47868 (August 15, 2008). DOI is rushing to process over 200,000 comments, many of them opposing the changes, in time to publish a final rule before the Bush administration's term expires. Dina Cappiello, Interior rushing species act changes, Seattle Post-Intelligencer, October 21, 2008, *available at* http://seattlepi.nwsource.com/national/384397_species22.html.

35. USDA Rural Development's Electric Programs, http://www.usda.gov/rus/electric/ (last visited Nov. 2, 2008).

36. Overseas Private Investment Corporation, http://www.opic.gov/ (last visited Nov. 2, 2008).

37. *See* Friends of the Earth v. Mosbacher, 488 F.Supp.2d 889, 908 (N.D. Cal. 2007) (holding that OPIC is subject to NEPA); Defenders of Wildlife v. Lujan, 911 F.2d 117,123-24 (8th Cir. 1990) (holding that the ESA applies to actions of federal agencies that have consequences abroad), *rev'd on other grounds*, Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

38. For the petition and background information, see Coalition Asks SEC for Climate Risk Disclosure, http://www.edf.org/page.cfm?tagID=13094 (last visited Nov. 2, 2008).

9. Direct the Federal Trade Commission (FTC) to issue guidance governing green marketing and carbon offsets.

Experience with offset programs in Europe shows that they are prone to fraud and double-counting unless they are well designed and verifiable.[39] Corporations and consumers in the United States spent more than $54 million in 2007 on carbon offset credits toward tree planting, wind farms, solar plants and other projects to balance the emissions created by, say, using a laptop computer or flying on a jet. The FTC has opened an investigation and invited public input.[40] FTC has not updated its environmental advertising guidelines, known as the Green Guides, since 1998. Back then, the agency did not create definitions for phrases that are common now — like renewable energy credits, carbon offsets and sustainability. In the long run, a mandatory offset market subject to government oversight and enforcement would be preferable, but in the short run FTC should move swiftly to provide guidance to protect consumers from a green rip-off.

10. Appoint a reform-minded Secretary of Agriculture committed to shifting federal subsidies away from a fossil-fuel based food supply and dubious "biofuels" such as corn-ethanol.[41]

In his groundbreaking book, *The Omnivore's Dilemma,*[42] best-selling author Michael Pollan shows how our oil-dependent food supply is environmentally and economically unsustainable, and not very healthy to boot. In a more recent article, Pollan issues a clarion call to "[r]esolariz[e] the American farm" by emphasizing cropping patterns and animal husbandry that rely more on photosynthesis and recycled nutrients than oil.[43] Agriculture subsidies impact the emissions of CO2 (by direct energy consumption), nitrous oxide (by land use alteration and manure management), and methane (by ruminant digestion and manure treatment). According to a new report published by the United Nations Food and Agriculture Organization, the livestock sector

39. *See generally* CARBON TRADE WATCH, THE CARBON NEUTRAL MYTH: OFFSET INDULGENCES FOR YOUR CLIMATE SINS (2007), *available at* http://www.carbontradewatch.org/pubs/carbon_neutral_myth.pdf.

40. *See* 2007 FTC Workshop: Carbon Offsets & Renewable Energy Certificates, http://www.ftc.gov/bcp/workshops/carbonoffsets/index.shtml.

41. Corn ethanol was sold as a climate-friendly "biofuel." In fact it has been shown to be an environmental and economic disaster. *See generally* TIM SEARCHINGER, TRANSATLANTIC FELLOW, THE GERMAN MARSHALL FUND OF THE UNITED STATES, POLICY BRIEF: THE IMPACTS OF BIOFUELS ON GREENHOUSE GASES: HOW LAND USE CHANGES ALTERS THE EQUATION (2008). Life cycle analyses show that corn ethanol generates more CO2 than it saves. Further it has contributed to food shortages and high prices, not to mention destruction of native ecosystems converted to energy, water and chemical intensive industrial agriculture. *See generally* David Pimentel, *Ethanol Fuels: Energy Balance, Economics, and Environmental Impacts are Negative*, 12 NAT. RESOURCES RES. 127 (2003).

42. MICHAEL POLLAN, THE OMNIVORE'S DILEMMA: A NATURAL HISTORY OF FOUR MEALS (2006).

43. Michael Pollan, *Farmer in Chief*, NEW YORK TIMES MAGAZINE, Oct. 9, 2008, at 62, 66-68, *available at* http://www.nytimes.com/2008/10/12/magazine/12policy-t.html.

generates more greenhouse gas emissions as measured in CO2 equivalent – 18 percent – than the transportation sector.[44] Factory farms, also known as concentrated animal feeding operations, are significant sources of air and water pollution as well as ecosystem degradation.[45] The role of the federal government should be to strictly regulate these industrial operations, not promote them at taxpayer expense.

Conclusion

Climate change is arguably the most serious challenge facing the next president with potential consequences that dwarf even the current crisis in global financial markets.[46] Climate change is not simply an environmental problem. It is an economic and national security problem. It is a public health and safety problem. It is a human rights problem. It is an unprecedented threat to human civilization. But it is also an opportunity for the United States to both revitalize and de-carbonize our economy and lead the world towards a more sustainable future.

Climate change demands a complete rethinking of environmental law and comprehensive new legislation to spur fundamental changes in every sector of the economy, starting with energy. It will take more than one term for any president to make significant progress. But the urgency of the crisis requires that the new president take immediate actions to send a clear signal to the nation and the world that he intends to make climate change a signature issue of his administration. The actions outlined above would send a signal of hope and resolve to a nation and a world community hungry for strong leadership in challenging times.

---

44. HENNING STEINFELD ET AL., FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, LIVESTOCK'S LONG SHADOW: ENVIRONMENTAL ISSUES AND OPTIONS xxi (2006), *available at* ftp://ftp.fao.org/docrep/fao/010/A0701E/A0701E00.pdf.

45. For example, agricultural runoff in the Mississippi River watershed is the principal cause for the expanding "dead zone" in the Gulf of Mexico which now covers 8,000 square miles, nearly the size of New Jersey. *See* NOAA's National Ocean Service: Hypoxia in the Gulf of Mexico, http://oceanservice.noaa.gov/products/pubs_hypox.html; NATIONAL SCIENCE AND TECHNOLOGY COUNCIL, COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, INTEGRATED ASSESSMENT OF HYPOXIA IN THE NORTHERN GULF OF MEXICO 2-3 (2000), *available at* http://oceanservice.noaa.gov/products/hypox_final.pdf. According to the United Nation's Environment Programme, there are over 200 dead zones around the world, constituting one of the prime threats to ocean fisheries and marine biodiversity. Further Rise in Number of Marine 'Dead Zones,' http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=486&ArticleID=5393&l=en.

46. Sir Nicholas Stern, former British Treasury economist and author of the influential Stern Report on the economic consequences of climate change, commented: "The risk consequences of ignoring climate change will be very much bigger than the consequences of ignoring risks in the financial system." James Pomfret, *Risks Of Global Warming Greater Than Financial Crisis-Stern*, REUTERS, Oct. 27, 2008, http://www.reuters.com/article/homepageCrisis/idUSHKG98951._CH_.2400