



Carpe Diem on Earth Day

How to Use Executive Authority to Boost Investments, Create Jobs, and Save Oil

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The first Earth Day was April 22, 1970, and was launched at a time when rivers caught fire, smog choked many cities, and pollution went untouched into the air, land, and water. Today our air, land, and water are significantly less polluted due to federal safeguards established since that day. As Earth Day's 40th anniversary approaches, we are faced with new global economic and security challenges in addition to the continuing need to reduce the same pollutants. These challenges call for comprehensive national action to transition to a clean energy economy.

Greenhouse gas pollution, for example, is altering weather patterns across the globe. NASA reports that the past decade was the hottest on record, beating out the 1990s, which were hotter than the 1980s. Glaciers are melting away in Glacier National Park, Montana, and New Moore Island in the Indian Ocean, fought over by India and Pakistan, is no longer in dispute because it is underwater due to sea level rise.

The world is shifting to low-carbon clean energy technologies in response to this real and present danger, particularly energy efficiency and renewable electricity. Many of our economic competitors, including China and Germany, have made significant clean energy investments to increase energy efficiency, become more competitive, lower oil dependence, reduce global warming pollution, and reap the economic benefits that come from these investments. President Barack Obama said in his 2010 State of the Union Address that "Providing incentives for energy efficiency and clean energy are the right thing to do for our future because the nation that leads the clean energy economy will be the nation that leads the global economy. And America must be that nation."

President Obama has seized this opportunity and taken many actions to invest in American-made energy. These investments will create jobs, increase energy security by reducing foreign oil use, and help us keep pace with our economic competitors.

The House of Representatives has done its part by passing the American Clean Energy and Security Act, H.R. 2454, which would create a net 1.7 million jobs (in combination with the American Recovery and Reinvestment Act). The Senate Environment and Public Works

Committee passed a similar bill, [S. 1733](#). The full Senate has yet to act on clean energy and global warming legislation, but Sens. John Kerry (D-MA), Lindsay Graham (R-SC), and Joe Lieberman (I-CT) are poised to introduce their bipartisan, comprehensive energy legislation later this month.

In the meantime, President Obama can continue the shift to clean, American-made energy by using existing executive authority to spur investments in the clean energy industries and technologies of the future. He could also take steps to reduce climate change's impact on the United States. These steps do not require congressional action and would be a productive way to honor Earth Day's 40th anniversary.

Such actions would also build on the successful set of [executive orders](#), White House actions, and agency decisions the Obama administration has already taken—many of which the [Center for American Progress proposed](#) prior to President Obama's inauguration. There is still a plethora of opportunities to promote domestic clean energy investments, cut foreign oil use, and address global warming through executive action.

Below we propose a series of policies that the administration could adopt to launch additional innovative approaches to clean energy and climate solutions. We also track the administration's progress on our 10 pre-inauguration proposals for executive action on clean energy and global warming.

New executive actions

Reduce oil use and increase national security

- Establish more efficient fuel economy and more protective greenhouse gas pollution standards for passenger and light-duty trucks for model years 2017-2021. These vehicles should become 4 percent more efficient every year as envisioned by the [Energy Independence and Security Act of 2007](#).
- Accelerate the purchase of natural gas, plug-in hybrid, hybrid, and electric vehicles for federal fleets.
- Issue a challenge to state, local, and private fleet operators to increase their purchase of these vehicles.

Reclaim and retrofit foreclosed homes

- [Convert](#) many of the more than 75,000 foreclosed homes already owned by the federal government into thoroughly energy efficient rental homes that can be resold as portfolios of affordable rental properties to private investors.

Increase the Defense Department's clean energy investments

- The Air Force should establish a demonstration program to build or retrofit hangars that are LEED certified and generate solar energy.
- Assuming this is successful, solar panels could then be added to hangars at western Air Force bases, and energy efficiency measures should be implemented at all hangars.
- Require military contractors to reduce their energy use in producing military hardware.
- Increase natural gas's use as a fuel in military vehicles.
- Expand research and development of cleaner alternative fuels use in military vehicles.

Use energy efficiency to increase competitiveness at U.S. manufacturing facilities

- Legislation is pending that would set up a Clean Energy Deployment Administration (CEDA or "Green Bank"), but in the meantime the administration could establish a "virtual" CEDA to assist businesses with deploying new clean energy technologies. This would include identifying participating lenders inclined to provide capital for such technologies as well as publicizing the availability of existing federal financial assistance programs.
- Create a database of clean energy component manufacturers for major clean energy industries (wind, solar, geothermal, biofuels, etc.), and establish a database of U.S. clean energy equipment manufacturers and the specifications necessary for their component parts. This would make it easier for renewable energy developers and large component assemblers (like wind turbine builders) to find domestic sources for their component parts, thereby invigorating the U.S. clean energy manufacturing sector.
- Revitalize the U.S. industrial sector's focus on energy efficiency by:
 - Conducting an analysis on the potential for efficiency at industrial facilities, including projections of energy and dollar savings.
 - Convening a summit of senior executives from manufacturing companies, union officials, and federal and state leaders to promote these findings, and develop policies to boost efficiency.
 - Educating the press, industry officials, and the public about best efficiency practices through visits by senior administration officials to efficient manufacturing plants.

Use government procurement to create jobs and increase clean energy

- Increase energy savings goals for federal building retrofits.
- The federal government should invite state and local governments to join regional clean electricity purchasing pools to build regional markets for clean and renewable energy. It could also offer long-term Power Purchasing Agreements for newly dedicated renewable energy resources with the goal of renewables becoming 25 percent of all federal energy use. This would help create market certainty for investments in renewable energy sources and expand their availability.

Clean tech for the federal government

- The federal government should link its more than 1,000 data centers into a more efficient computing “cloud” like large users in the private sector. This shared cloud would enable agencies to more efficiently use computing capacity rather than purchasing additional servers to meet each agency’s new needs. Cloud computing could save the federal government as much as \$16 billion annually—and drastically reduce energy consumption use.

Create clean energy jobs in rural areas

- Ensure that the U.S. Department of Agriculture’s Home Repair Loan and Grant Program and related programs aimed at low-income households prioritize assistance for energy efficiency-related repairs and retrofits.
- Expand USDA’s Rural Energy for America Program to create jobs in energy efficiency retrofitting and rural-based clean energy.
- Create an Energy Regional Innovation Cluster that focuses on agricultural-based renewable energy technologies such as advanced sustainable biofuels and biomass.
- Pool federal agency resources for related clean energy job-creating efforts in rural areas through Manufacturing Extension Partnerships, Department of Labor training grants, Agricultural Extension services, Rural Utility agencies, and other regional federal offices.

Create clean energy jobs through trade expansion

- Reinvalidate international negotiations by adding to current efforts to lower tariffs on low carbon technologies and services, and urge our allies to do the same.

Assist small businesses with energy efficiency projects

- Require and allow the Small Business Administration to provide loan guarantees to businesses for efficiency or renewable energy projects. The administration should also call for the SBA to provide loan guarantees for start-up clean energy companies.

Increase community resilience to global warming's effects

Global warming will increase the frequency and/or severity of extreme weather events such as storms and floods. The Federal Emergency Management Agency and other agencies should address these threats with proactive emergency planning.

- Redraw FEMA flood maps to incorporate projected climate change impacts.
- Create a clearinghouse for employment opportunities in infrastructure repair or enhancement efforts designed to increase community resilience to climate change effects.
- Reestablish FEMA's Project IMPACT to assist communities with pre-disaster mitigation.
- Create a global warming preparedness planning process for federal, state, and local cooperation, and create regional disaster preparedness plans that respond to climate change threats.
- Establish guidelines for disaster relief assistance that reward disaster mitigation efforts.

Establish a national goal for building efficiency retrofits

- Establish a goal to retrofit at least 40 percent of all U.S. buildings within the next decade to achieve 25 percent energy efficiency reductions, with a goal of retrofitting 50 million homes and offices.

Add clean energy to YouthBuild U.S.A.

- YouthBuild U.S.A. is a federally funded program run by public or private agencies that enables low-income young people to earn their high school diploma or GED “while learning job skills by building affordable housing” for those who need it. YouthBuild should add a clean energy program that includes installing efficiency measures and renewable energy technologies such as solar panels or geothermal heat pumps in some of these homes.

More climate science

- Complete the creation of a new National Climate Service, similar to the National Weather Service, to aggregate information on climate impacts for the public.

Set a national recycling target to create jobs and save energy

- Establish a national recycling rate goal of 75 percent of all municipal solid waste by 2015.

International pollution reductions

- Conduct an analysis of EPA's authority to achieve international reductions in global warming pollution under the international provisions of the Clean Air Act.
- EPA and USDA should develop protocols to measure and verify global warming pollution reductions from tropical forest protection.

Protect wild places from oil and gas production

The administration can act to protect federal lands in a variety of ways and should do so to preserve our nation's most precious resources.

- Settle the lawsuit over the Bush administration's sale of oil and gas leases on Colorado's Roan plateau, with protection from drilling for the top of the plateau.
- Pursue national monument designations per the preliminary list drawn up by the Interior Department. Federal properties on this list deserve a thorough look for getting monument status.
- Either withdraw the Otero Mesa in New Mexico from mineral development or designate it a national monument.
- The Forest Service should finalize the Environmental Impact Statement on drilling in the Wyoming Range by endorsing the no leasing alternative that prevents drilling.

Progress on CAP recommendations

Mandate that auto companies boost the production of superefficient cars under the auto loan program

Status: Complete. General Motors and Chrysler sought federal assistance to prevent bankruptcy in November 2008. President George W. Bush provided \$17 billion in loans before he left office, and President Obama provided another \$62 billion to prevent the destruction of the domestic auto industry, which is responsible for 1 in 10 American jobs. The Obama administration provided loans to these two companies with the provision that they restructure their operations and manufacture “the fuel-efficient cars and trucks that will carry us towards an energy-independent future.”

GM’s assistance and restructuring plan requires it to “have a significant focus on developing high fuel-efficiency cars that have broad consumer appeal because they are cost-effective, have good performance and are reliable, durable and safe.” Chrysler’s merger with Fiat “could lead to Chrysler manufacturing fuel-efficient vehicles using Fiat’s technology.”

Additionally, the Obama administration set a new fuel efficiency standard beginning in model year 2012 automobiles. The standards require an average mileage of 39 miles per gallon for cars and 30 mpg for light trucks by 2016, making the average fuel efficiency of the entire fleet 35.5 mpg. This is a one-third increase from the current average for all vehicles of 25 mpg.

The EPA could grant California the vehicle emissions waiver

Status: Complete. After years of delay the EPA announced on June 20, 2009 that it is granting California’s waiver request to reduce its greenhouse gas emissions from vehicle tailpipes. The administration made this announcement as part of a suite of steps to clean up our vehicle fleet, and this was part of the more efficient fuel economy standards mentioned above. It was developed in collaboration with states, auto companies, unions, and environmentalists.

California requested the waiver in 2005 and while waiting for its approval 16 other states adopted the same emissions limits. These standards provided the blueprint for the federal greenhouse gas tailpipe standards proposed in May 2009 as part of the fuel economy proposal. The entire package was finalized on April 1, 2010.

The EPA could find that carbon dioxide endangers public health and welfare

Status: Complete. On December 7, 2009 the [EPA found](#) that “the current and projected concentrations of the six key well-mixed greenhouse gases... in the atmosphere threaten the public health and welfare of current and future generations.”

The Supreme Court ruled in *Massachusetts v. EPA* in 2007 that the EPA has the authority and responsibility to treat carbon dioxide as a pollutant under the Clean Air Act. The Court’s decision directed the EPA to determine whether carbon dioxide pollution endangers public health and welfare because of their contribution to global warming.

EPA scientists recommended that then-Administrator Steven Johnson make the endangerment finding, but the [Bush administration blocked efforts to do so](#)

Now that Administrator Lisa Jackson complied with the law by making the finding, the EPA can begin to establish greenhouse gas pollution limits under the Clean Air Act. [EPA has indicated](#) that it would only limit pollution from the very largest polluters, beginning with those that spew 75,000 tons of carbon pollution or more annually.

But President Obama, Administrator Jackson, and others have made it clear that their preference is for Congress to pass comprehensive clean energy legislation to reduce global warming pollution rather than have EPA establish these limits.

The Department of Housing and Urban Development could create an Office of Sustainable Housing

Status: Complete. HUD Secretary Shaun Donovan [announced the creation](#) of an Office of Sustainable Housing and Communities within the Department of Housing and Urban Development during a trip to the Pacific Northwest in February 2010. Congress funded the office in its FY 2010 budget. The office will support regional integrated planning initiatives, HUD’s energy and location efficient mortgage options, and energy efficiency retrofits for HUD’s single and multifamily housing units.

Require the federal government to consider greenhouse gas pollution when complying with the [National Environmental Policy Act](#)

Status: In progress. The Council on Environmental Quality, or CEQ, issued [draft guidelines](#) for consideration of greenhouse gas emissions under the National Environmental Policy Act—a law that established a U.S. national policy promoting the enhancement of the environment and also established the CEQ—on February 18, 2010. The proposal would require that federal agencies consider the impact of their major actions on global

warming, in addition to their impact on air, water, and land. The proposed guidelines are open for public comment for 90 days—until around May 17, 2010—and then CEQ can issue its final guidelines.

CEQ Chairwoman Nancy Sutley responded to an October 2009 [letter from Sens. James Inhofe \(R-OK\) and John Barrasso \(R-WY\)](#) about NEPA's scope and use in December 2009. She [wrote](#) that while NEPA “cannot be used to regulate greenhouse gas emissions” there is “no basis for excluding greenhouse gas emissions” from the federal government’s consideration of the environmental impact of its actions.

Use government purchasing power to increase efficiency and renewable energy

Status: In progress. President Obama signed [Executive Order 13514](#) on federal sustainability on October 5, 2009. The order calls for the federal government to reduce its greenhouse gas pollution 28 percent by 2020. Each individual agency submitted a report proposing an emissions reduction target and outlining a sustainability plan, and many [agencies have already begun implementing their plans](#). The Office of Management and Budget will track and publicly post the government’s progress by agency.

The [administration determined](#) that the executive order will “spur clean energy investments that create new private-sector jobs, drive long-term savings, build local market capacity, and foster innovation and entrepreneurship in clean energy industries.”

Reinstate protection for the remaining national forest roadless areas

Status: In progress. [President Bill Clinton issued safeguards to protect nearly 60 million acres](#) in our national forests that are unscarred by logging roads. This would prevent most logging and other harmful development while allowing hiking, camping, and hunting, as well as protect the ultimate source of drinking water for 60 million Americans.

President George W. Bush attempted to eviscerate protection for these unlogged areas. An initial federal court decision blocked the bulk of Bush’s rewrite (except for protection of the Tongass National Forest in Alaska and national forests in Idaho). The Obama administration argued before the 10th Circuit Court of Appeals in Denver to uphold this ruling. A court victory would restore most of the protection provided in the 2001 rule.

The Obama administration should also reinstate the rule to protect the Tongass, America’s only temperate rainforest as well as reject a proposal to reduce protection of roadless national forests in Colorado.

Launch a “green the White House” initiative

Status: In progress. The White House could set an example on sustainability by lowering the carbon pollution from its own facilities through such measures as efficiency retrofits and renewable electricity generation, and then publicly document and publicize the efforts. This would demonstrate that energy efficiency measures save money and create jobs.

The administration took two steps in this direction through the executive order to reduce the federal government’s emissions and by challenging federal employees to examine and reverse their own impact.

A handful of other measures also highlight ways the White House can serve as a model. For example, the White House transitioned away from the “Bush-era cup” in which staff stacked two paper cups. Staff now uses cups that are primarily made from post-consumer recycled content and specially coated to avoid the use of two cups.

First Lady Michelle Obama has demonstrated the potential for sustainable living with the organic vegetable garden she planted. She involved the community and used it as an educational opportunity for children to learn about food and nutrition.

The administration has emphasized energy efficiency retrofits as a way to create jobs, save energy, and lower consumers’ utility bills and still has the opportunity to turn the White House into an illustration of these benefits on the national stage.

The EPA could lower mercury pollution from power plants

Status: In progress. Coal-fired power plants are the largest source of domestic mercury pollution. The EPA announced in October 2009 that it would require oil- and coal-burning power plants to reduce emissions and that it would issue mercury reduction standards in 2011. The measure will prompt power plants to install scrubbers or other pollution control technologies that capture heavy metal emissions such as mercury.

Additionally, in April 2009 the EPA announced a proposal to reduce mercury emissions from Portland cement kilns—the most common type of cement kiln and the fourth-largest source of mercury emissions in the country. EPA’s proposal also sets stricter standards for new cement kilns.

Finally, the administration built international consensus among over 140 countries to agree to a legally binding treaty to control mercury contamination and emissions.

Create an Energy Innovation Council

Status: Incomplete. CAP recommended that the White House create an Energy Innovation Council, an interagency body to coordinate a multiyear funding strategy and effort for research, development, and deployment of clean energy technologies at commercial scale. The Obama administration has not adopted this as we originally conceived, but Secretary of Energy Steven Chu has aggressively used the Department of Energy's existing authority to plant the seeds of a comprehensive clean energy innovation agenda.

For example:

- Secretary Chu announced \$377 million in funding for 46 Energy Frontier Research Centers located at public, private, and university labs around the country to “support multiyear, multi-investigator scientific collaborations focused on overcoming hurdles in basic science that block transformational discoveries.”
- Secretary Chu began using recovery funds and annual appropriations to implement the Advanced Research Projects Agency-Energy or ARPA-E, which Congress allocated \$400 million to under the American Recovery and Reinvestment Act. ARPA-E recently made available \$100 million in funding for pre-commercial technologies that could transform our energy economy but that are seen as too risky to attract private investors.
- Finally, Secretary Chu requested \$366 million to fund four regional energy innovation hubs through 2013, including \$34 million in fiscal year 2011 for a new advanced batteries hub and \$77 million in FY 2011 to be split up among the three hubs established in 2009 focusing on solar fuels, advanced nuclear modeling, and energy efficient building systems.

Investment in clean energy technologies to jumpstart emerging industries is an indispensable priority for the future long-term economic prosperity and well-being of our country. The administration must find innovative and effective ways to continue to channel investments in addition to these agency efforts. An Energy Innovation Council still offers an advantageous way forward.

Conclusion

President Obama has seized the clean energy opportunity by adopting policies to boost investment in energy efficiency and renewable energy. He is also working with the Senate to pass legislation that limits carbon pollution and establishes a price on this waste. This price signal would drive investment toward clean energy technologies and services.

In the meantime, he can build on his record of success by taking additional executive actions to reduce oil use, increase security, save the government money, provide incentives and assistance to manufacturers and other businesses who want to create clean energy jobs, and otherwise speed the transition to a clean energy economy. This would be a fitting way to honor the first Earth Day, and it would speed the clean energy transformation in time for the 50th observance.