



Progress Report: The Department of Energy

For decades, politicians of both parties have failed to adequately address the energy crisis, which imperils our economy, our security, and our planet. But in the first 100 days of his Administration, President Barack Obama has begun to make the tough decisions necessary to create millions of clean energy jobs, break our dependence on foreign oil, and reduce the threat of deadly pollution.

The dramatic changes underway at the Department of Energy are central to this effort. A Department often criticized in the past for moving too slowly has, under Secretary Steven Chu, moved with remarkable speed to implement nearly \$39 billion through the American Recovery and Reinvestment Act that will jumpstart the economy and create new jobs.

Secretary Chu is reforming the Department and cutting red tape to make these investments quickly, and these projects will provide lasting value by making a down payment on our clean energy future.

For example, under Secretary Chu, a program that can help critical renewable energy projects get off the ground made its first conditional loan guarantee within two months – something that hadn't previously been accomplished in the two years since the program was funded. That loan will help a cutting-edge solar power company build a manufacturing plant, and the company estimates it will create thousands of new jobs in the U.S.

Secretary Chu is helping fulfill the President's pledge to restore science to its rightful place. The Department of Energy is, at root, a scientific agency, and it is now being led by a Nobel Prize-winning scientist. Secretary Chu is refocusing the Department's scientific mission to seek new answers to the energy crisis.

Solving the energy challenge will take years of hard work. But that work finally began in earnest during the first 100 days of this Administration.

The American Recovery and Reinvestment Act: New Jobs and New Energy Solutions

President Obama's American Recovery and Reinvestment Act began a new era at the Department of Energy.

President Obama has set clear goals for this bill: creating or protecting 3.5 million jobs over the next two years, while lifting our country out of this economic crisis and

reducing our dependence on foreign oil. To achieve those aims, the Department of Energy was given new resources and new responsibilities.

These initiatives will put Americans back to work, improve our country's competitiveness, and begin to transform the way we produce and use energy. We will create entire new industries based on America's resources, America's ingenuity, and America's workers – and these will be jobs that can't be outsourced.

In the first 100 days, the Department outlined its plans for the vast majority of its \$38.7 billion in Recovery Act funds. These investments are driving major changes in renewable energy, energy efficiency, smart grid electricity transmission, environmental clean-up, carbon capture, and scientific research.

Generating New Clean Energy

Secretary Chu made it a personal priority to jumpstart a loan guarantee program that can help clean energy projects get off the ground. As a result, the Department offered the first conditional loan guarantee within 56 days.

The Recovery Act included \$6 billion to support guarantees of tens of billions in loans through the program. Congress had funded the loan program two years ago, but the program had not guaranteed a single loan. Under Secretary Chu the first conditional loan guarantee for \$535 million went to Solyndra, Inc. of Fremont, California in less than two months.

Solyndra plans to construct a manufacturing plant to bring its cutting-edge solar technology to the commercial market. The company expects to create thousands of new jobs in the U.S.

Secretary Chu also increased transparency and communication between applicants and the Department. The Department now works with applicants early in the process to help bring their proposals in line with our nation's energy needs.

Using Energy More Wisely

Secretary Chu traveled to Wisconsin in March to announce significant new funding for weatherizing homes. Energy efficiency improvements like weatherization are the fastest, cheapest, and cleanest way to reduce our energy use. They create jobs immediately as Americans do the work of weatherizing homes and buildings or upgrading lighting and appliances. They directly reduce greenhouse gas emissions. And they save families money on their energy bills each month.



President Obama and Secretary Chu at the U.S. Department of Energy.

President Obama included more than \$12 billion for energy efficiency in the Recovery Act. \$5 billion of that funding is going to help families earning less than \$44,000 a year weatherize their homes and cut their energy bills. States will also receive \$3 billion to address their own energy priorities. The Department of Energy expects these two efforts alone will create up to 87,000 jobs across the country. An additional \$3.2 billion from the Recovery Act is going to state and local energy efficiency and conservation efforts. This funding will be used to improve the efficiency of homes and buildings like schools, libraries, and fire stations and for other projects that reduce energy use, such as upgrading traffic signals and street lighting and developing smarter building codes.

For example, Pittsburgh, Pennsylvania – where Secretary Chu announced this funding – will accelerate its plan to convert street lights to LEDs, building on its successful effort to upgrade its traffic lights. The city expects this will cut its energy bill for street lights by about half, using lights manufactured locally in Western Pennsylvania.

100 days into the Obama Administration, the Department of Energy has already made available more than \$1 billion of this energy efficiency funding.

Restoring Science to its Rightful Place

As a scientist himself, one of Secretary Chu's highest priorities is to focus the Department's research mission on finding breakthrough technologies to help solve the energy problem. The Recovery Act included \$2 billion for advanced science.

Within the first 100 days, Secretary Chu launched a new agency in the Department of Energy called the Advanced Research Projects Agency – Energy (known as ARPA – E). President Obama announced the first \$400 million in funding for ARPA-E through the Recovery Act on April 27.



Secretary Chu and Wisconsin Governor Jim Doyle speak with Milwaukee homeowner Barbara Ostovich.

Cutting Energy Bills, Improving Lives

Secretary Chu announced the weatherization funding by taking part in a home weatherization in Milwaukee. The woman who owned the home said she often couldn't eat in her kitchen because it was too drafty.

The improvements made to her home through the Weatherization Assistance Program will save her about \$1,700 a year on her energy bills and will pay for themselves in just five years. And her home will be warmer in the winter and cooler in the summer.

Because of the Recovery Act, Wisconsin will be able to double the number of homes it weatherizes.

ARPA-E will fund high-risk, high-reward research that could lead to transformational new energy technologies. It was authorized by Congress in 2007, but had not been organized or funded. This new effort will tap into the great American spirit of innovation by supporting worthy projects wherever they are found.

On that same day, President Obama also announced the selection of 46 new multi-million-dollar Energy Frontier Research Centers (EFRCs), which will be established in conjunction with universities, national laboratories, nonprofit organizations, and private firms across the nation.

Supported in part by \$277 million from the Recovery Act, the EFRCs will bring together groups of leading scientists to address fundamental issues in fields ranging from solar energy and electricity storage to materials science, biofuels, advanced nuclear systems, and carbon capture and sequestration.

Secretary Chu is also working to harness the intellectual horsepower of the Department of Energy's incredible national laboratories.

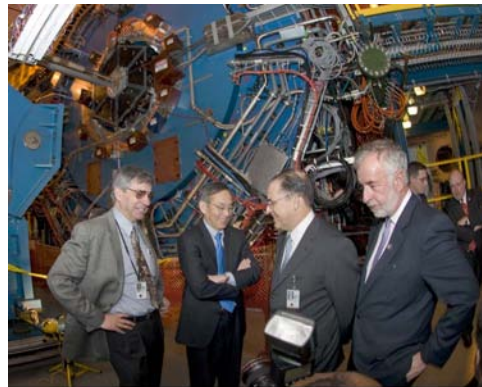
On March 23, Secretary Chu announced the first \$1.2 billion in new science funding under the American Recovery and Reinvestment Act for major construction, laboratory infrastructure, and research efforts.

These projects will create thousands of jobs and breathe new life into many local economies, while helping to accelerate new technology development, renew our scientific and engineering workforce, and modernize our nation's scientific infrastructure.

Rallying Scientists to Action

Included in the funding for our national labs is \$150 million to accelerate ongoing construction on the National Synchrotron Light Source-II at Brookhaven National Laboratory, in Upton, New York. This new, state-of-the-art, high intensity light source is expected to lead to major breakthroughs in next-generation energy technologies, materials science and biotechnology. Ultimately, it could lead to advances in battery technology and photovoltaic solar cells.

Secretary Chu announced this funding with a visit to the Brookhaven lab during which he urged the scientists to focus on finding breakthroughs in energy technology.



Energy Secretary Steven Chu at the STAR Detector at Brookhaven's Relativistic Heavy Ion Collider with (from left) Steven Vigdor, Associate Laboratory Director for Nuclear & Particle Physics; Lab Director Sam Aronson; and U.S. Representative Tim Bishop.

A Better, Smarter Electric Grid

To truly solve the energy challenge, we not only need better ways to produce clean energy but better ways to move that energy around the country.

A new smart grid that is more reliable and more efficient is an infrastructure challenge for the 21st century. We need to be able to transport renewable energy from the places it can be produced to the places it will be used. The new grid will also save consumers money by letting them draw power when it is cheaper and by reducing the number of power plants that need to be built.

On April 16, Vice President Joe Biden announced nearly \$4 billion in funding for a new smart grid. Improving the electric grid with thousands of miles of new or modernized transmission lines will create jobs immediately and pave the way for a clean energy future.

Transforming Transportation

Moving to a clean energy economy also means changing how we power our cars and trucks. On March 19, President Barack Obama announced \$2.4 billion in funding through the Recovery Act to put American ingenuity and America's manufacturers to work producing and demonstrating next generation electric-drive vehicles, such as plug-in hybrid electric vehicles, and the advanced batteries and components they run on.

The initiative will create tens of thousands of U.S. jobs and help us end our addiction to foreign oil. Americans who decide to purchase Plug-in Hybrid vehicles can claim a tax credit of up to \$7,500.

Cleaning Up the Cold War Legacy

Under Secretary Chu, the Department of Energy will meet its moral and legal obligations to clean up facilities from Cold War era nuclear programs. Not only is that the right thing to do, but clean-up efforts will create jobs immediately and enhance the long-term livability and economic prospects of the surrounding communities.

On March 31, Secretary Chu announced \$6 billion in new funding under the American Recovery and Reinvestment Act to accelerate environmental cleanup work and create thousands of jobs across 12 states. Projects identified for funding will focus on accelerating cleanup of soil and groundwater, transportation and disposal of waste, and cleaning and demolishing former weapons complex facilities.

This investment is already having an impact. Last week, fifty new employees – skilled workers including carpenters, electricians, and iron workers – reported to work at the Department's Savannah River Site because of Recovery Act funding.

Reforming the Department to Rise to this Moment

To achieve President Obama's clean energy goals, Secretary Chu is committed to running the most efficient and effective Department in history. He is changing the culture at the Department to emphasize speed, collaboration, sound science, and long-range thinking.

The Recovery Act implementation effort has been on the leading edge of his reform initiative. It has been marked by a strong focus on project management, following best practices from the private sector.

For example, major potential risks were identified early on and risk mitigation plans were developed. Key leaders – including state governors, contractors, and senior Department staff – signed letters acknowledging their personal responsibility for success. Senior managers meet daily to review progress, and the Department's progress is updated regularly on www.energy.gov/recovery.

The Department developed a plan to release Recovery Act funding in stages, with performance benchmarks that all fund recipients must meet to continue to receive funds. And each of the projects has specific impact measures, so the Department can assess the direct effect of the Recovery Act on the economy and the environment.

The Department will measure tangible outcomes such as the number of jobs created and saved, number of homes weatherized, and megawatts of renewable energy produced. This data will both hold the Department accountable and help establish the Recovery Act's contributions to our clean energy future.

The Recovery Act team reports daily to the Office of Management and Budget, twice a week to the Vice President's office, and weekly to the American public, tracking funding and major announcements. These are posted, along with several other reports and a detailed set of Frequently Asked Questions, at www.energy.gov/recovery/reports.htm. The Department has also established a call

Case Study in Reform: Chu Cuts Red Tape, Taxpayers Save on Federal Energy Bills

Within the first 100 days, Secretary Chu restarted contract talks on 42 energy modernization projects in federal buildings. The contracts are part of the Department's Energy Savings Performance Contract program – which attracts private investment to make federal buildings more energy efficient and which can only proceed if they save money for the government. They were awarded years ago through an open, competitive bidding process.

Secretary Chu's decision cleared a roadblock so that the projects can proceed and be awarded before the end of the year. When completed, these modernization projects will save an estimated 12 trillion BTUs of energy – an annual energy savings equivalent to a trainload of coal 50 miles long.

center – 1-888-DOE-RCVY (1-888-363-7289) – and online clearinghouse to answer questions about the Recovery Act.

Beyond the Recovery Act, Secretary Chu has made a concerted effort to reform project management throughout the Department and specifically in the Environmental Management program office, which has historically suffered major cost overruns. Secretary Chu has urged sharing best practices among project offices, and he has reassigned a project management expert from the highly regarded Office of Science program to assist the Environmental Management program.



President Obama addresses DOE employees.

Following the President's lead, Secretary Chu has also taken steps to drive a new culture of accountability and transparency. He launched an internal reform initiative to seek out the best ideas from employees on the frontlines. With a video and a letter to staff, he asked for concrete short-term and long-term suggestions on how to make the Department more effective, and those suggestions are currently being reviewed.

Finally, Secretary Chu ordered his staff to root out waste and inefficiencies throughout the Department. The following is a partial list of steps his team has identified and begun to address within the first 100 days:

- Developing an audit and review process for identifying poorly performing contractors and ensuring those contractors are not rehired;
- Eliminating non-essential travel and encouraging conference calls, web-based training, and video-conferencing;
- Eliminating routine printing and distribution of many documents and forcing paper-intensive bureaucratic processes to go electronic;
- Evaluating the Department's fleet of vehicles to determine whether it can save taxpayers money and move toward a more fuel efficient vehicle fleet; and
- Accelerating internal lighting upgrades, including installing motion sensors and high efficiency bulbs.

New Policies to Achieve New Goals

The Obama Administration has also made significant policy changes at the Department in the first 100 days.

Bringing Appliances into the 21st Century

Shortly after taking office, President Obama visited the Department of Energy and announced a presidential memorandum asking the Department of Energy to set new energy efficiency standards for household appliances.

In the past, the Department has missed the deadlines set by Congress for issuing standards and even ended up in court over the issue. But, under Secretary Chu's leadership, the Department met the first of these deadlines in March when it issued standards for gas ranges and ovens. That same month, the Department also codified standards for electric motors and dishwashers and signed off on proposed new standards for lamps, commercial boilers, and air conditioners.

The Department will eventually bring all of our appliances into the 21st century and beyond. These new energy efficiency standards will cover a broad range of household appliances and will save consumers money, spur innovation, and conserve tremendous amounts of energy.

A New Era of Energy Diplomacy

Secretary Chu also ushered in a new era of energy diplomacy at the Department. He has departed from his predecessors as Secretary of Energy by pursuing an energy diplomacy that goes beyond oil and OPEC – and focuses instead on meeting our shared energy, economic, and climate challenges.

In talks with representatives of dozens of nations – both net oil exporting and importing countries – Secretary Chu has reinforced the Obama Administration's commitment to energy independence and stressed the shared opportunities to create jobs and boost the global economy. He joined President Obama for bilateral talks with Mexico on energy and other issues, and participated with the President at the Summit

In the first 100 days, the Obama Administration's pace of nominations to the Department of Energy has matched or exceeded the pace set by the two previous Administrations:

Nominees Announced by April 29th:

Obama: 11

Bush: 9

Clinton: 9

Nominees Sent to Senate by April 29th:

Obama: 9

Bush: 3

Clinton: 6 or less¹

¹ Available DOE records indicate at least three of the eight nominations announced by President Clinton in the first 100 days were not sent to the Senate until May. It is unknown when the other nominations were sent.

of the Americas in Trinidad and Tobago.

Secretary Chu continues to send a strong and clear message to OPEC nations about the importance of protecting the world economy from oil price spikes. But he has stressed that the ultimate answer is to depend less on oil and more on clean and renewable energy.

A Workable Nuclear Storage Solution

Finally, Secretary Chu has been clear that the federal government will not use Nevada's Yucca Mountain as a nuclear waste repository. He has made a strong commitment to finding an appropriate solution for our nuclear waste storage needs. He is scaling back the Department's funding for Yucca Mountain to answer inquiries from the Nuclear Regulatory Commission and to support an effort by the Administration to devise a new strategy toward nuclear waste disposal.

In consultation with Senate Majority Leader Harry Reid, Secretary Chu announced plans for a blue ribbon commission to develop a new strategy for safe and secure isolation of the nation's nuclear waste.

Collaborating Across the Government

One of Secretary Chu's guiding principles is that bureaucratic barriers can't be allowed to stand in the way of progress – barriers both within the Department of Energy and among the federal agencies.

The Recovery Act gave the Department an opportunity and a responsibility to work with its sister agencies across jurisdictional lines. The Department of Energy began to work almost immediately with the Departments of Labor and Education to coordinate job training opportunities for new green jobs such as home energy auditing and weatherization. As part of this effort, the Department is reaching out to other federal agencies and organizations such as AmeriCorps, the National Science Foundation, and trade associations to identify existing effective training programs and curricula on which to build.

Meanwhile, the Department is collaborating with the Department of Housing and Urban Development to identify the public housing and Native American housing sites that may be eligible for weatherization funding.

The Secretary is also convening a working group of the Department of Energy, the Department of the Interior, the Department of Agriculture, and the Federal Energy Regulatory Commission to develop a streamlined approach to siting and permitting renewable energy and transmission projects on federal lands.

Likewise, he is working with the Department of Commerce and the Federal Energy Regulatory Commission to develop common standards for the new smart grid so that there is seamless integration of power plants, electric lines, and home users.

Conclusion: New Vision and New Vigor

The story of the first 100 days at the Department of Energy is a story of new vision and new vigor in tackling the energy challenge.

The Department has an historic role to play in creating a new, clean energy economy that will spark job creation and reduce our dependence on oil, while saving the planet in the process. Secretary Chu knows that there is not a moment to waste.

Under his leadership, the Department is finally working to address the energy challenge with the urgency it requires.