

**Statement of Matt Rogers  
Senior Advisor to the Secretary of Energy  
Before the  
House Committee on the Budget**

**Recovery Act Implementation Hearing  
July 14, 2010**

Chairman Spratt, Ranking Member Ryan, and Members of the Committee, thank you for the opportunity to appear before you today to report on the progress of the American Recovery and Reinvestment Act (the Recovery Act). I want to thank the Committee for your leadership on this legislation.

**Impact of the Recovery Act**

When President Obama took office last January, we were facing the greatest economic crisis since the Great Depression. This crisis demanded a quick and forceful response, and Congress acted by passing the Recovery Act. Although we still have a long way to go, our economy is now growing again, and we have seen the economy create private sector jobs for six months in a row. A new Council of Economic Advisors report being released today estimates that about 3 million jobs have been created or saved by the Recovery Act.

The Recovery Act came in three pieces that were designed to have an impact at different times. The first part was direct tax cuts for the American people. The second part was emergency relief for families, businesses, and state governments. The third part, reinvesting in America's economic infrastructure, required longer lead times and was designed to pay off as the first two pieces receded. That is the period we are in now.

Contained in that third part of the Recovery Act were the seeds of a clean energy economy. The legislation made a \$90 billion down payment on our clean energy future, with historic investments in energy efficiency, renewable energy, transportation, carbon capture and storage, and a smarter electric grid. We have been working to invest the Department of Energy's share of this funding quickly and wisely, and I'm pleased to report that we are beginning to see the green shoots of a green economy along with the strong clean energy job creation the Act envisioned.

Let me give you three examples.

First, an advanced vehicle industry is beginning to take root in America. One year ago, American businesses had just 2 percent of the market for the advanced batteries that will power the vehicles of the future. Over the next five years, thanks to the Recovery Act, American factories are projected to have up to 40 percent of the world's capacity to produce these batteries. We are supporting 10 battery plants, 20 component plants and 3 electric-drive vehicle plants. President Obama will be at Compact Power in Holland, Michigan tomorrow, and Secretary Chu will visit Delphi Automotive in

Kokomo, Indiana on Friday as part of a day of travel by Cabinet members to highlight this momentum.

Second, a renewable energy industry that was being battered by tight credit markets is bouncing back and growing again. Because of the Recovery Act, we are on track to double America's renewable energy generation capacity by 2012 and to dramatically increase domestic clean energy manufacturing. By partnering with private industry, the Department of Treasury and the Department of Energy have already funded renewable energy projects with enough capacity to power more than one million homes; that is enough clean energy to power the homes of everyone living in Boston, Seattle, Atlanta, Kansas City, and Cincinnati combined. Factories are whirring to life to manufacture the parts these projects require.

Third, we are jumpstarting a new home weatherization industry in America. After a slow start due to the difficulty of expanding a program ten-fold, the Weatherization Assistance Program is now approaching its target of improving the energy efficiency of 25,000 - 30,000 homes per month. More than 10,000 Americans were directly hired as a result of retrofitting homes through the Recovery Act in the first quarter of this year, and that number continues to grow. Many of these people were trained with the help of Recovery Act-sponsored grants.

Across the country, the Recovery Act is putting Americans to work making our homes and businesses more energy efficient, increasing the use of clean and renewable electricity, cutting our dependence on oil, and modernizing the electric grid. We are also accelerating the clean-up of Cold War legacy nuclear sites, and supporting technological and scientific innovation.

We are approaching our top rate of job creation. In the first quarter of this year, the Department's investments created or saved nearly 30,000 jobs. We expect final numbers will show we created or saved more than 40,000 full-time equivalent direct jobs last quarter. We expect to create or save 50,000 - 60,000 jobs per quarter this summer and to remain at this rate through Spring of 2011. Meanwhile, nearly 23,000 additional jobs were reported by recipients who received grants-in-lieu of tax credits for renewable energy projects.

### **Status of Recovery Act Implementation**

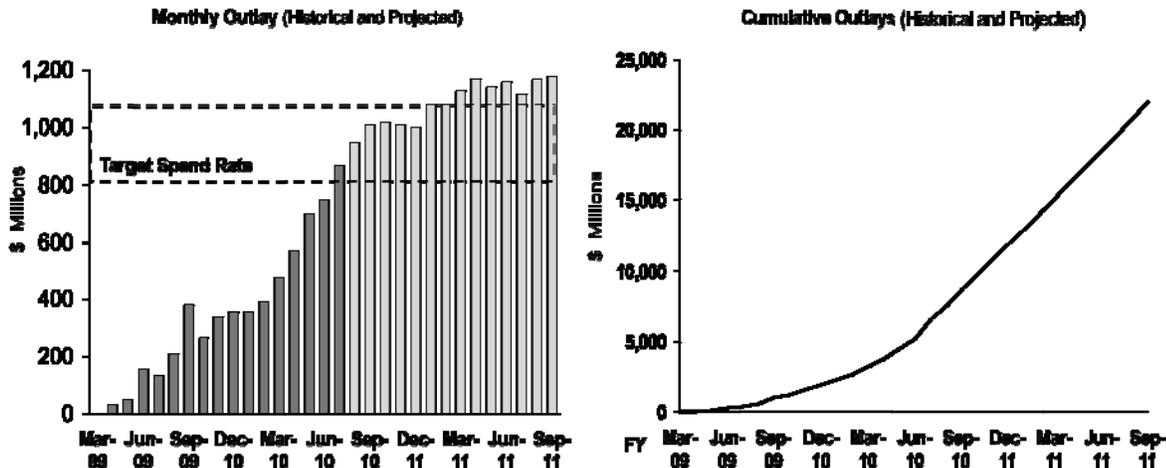
Overall, Congress entrusted the Department of Energy with \$36.7 billion in appropriations and \$6.5 billion in power marketing administration borrowing authority through the Recovery Act. The Recovery Act also directed the Department to work with Treasury to provide clean energy manufacturing tax credits and generation tax grants; to date these have amounted to more than \$7 billion.

We have already made selections for 98 percent (\$32 billion) of the Department's \$32.7 billion in contract and grant authority. We have obligated 90 percent (\$29.4 billion) of this money. For remaining obligations, we are using a "SWAT Team" approach that was piloted in the early days of competitive selections. At times, there

have been 125 people working out of the basement of the Department, talking directly on the phone with any applicant who seeks assistance to minimize bureaucratic back and forth. For example, a small group of finance and program staff work with applicants to ensure adequately detailed budgets and financing plans are submitted right from the start, and our lawyers and environmental compliance officers work directly with applicants to expedite environmental impact determinations. Twenty-five headquarters staff traveled to the site offices of the “Retrofit Ramp-up” selectees of the Energy Efficiency and Conservation Block Grant Program to complete all final required documentation. These efforts allowed \$450 million in Retrofit Ramp-up funds to be obligated in just five weeks, instead of the expected five months. SWAT Teams are now being used across the Department to finish selections in a timely manner and to obligate every dollar entrusted to us by Congress.

The SWAT Teams are just one example of how we have used the Recovery Act as an opportunity for Department-wide innovation. We have also overhauled our competitive processes by drawing upon the leading experts in their fields to help select the most worthy projects. We have streamlined our operating processes across the board and have placed a new emphasis on sharing best practices internally. We are providing unprecedented transparency through public reporting on [recovery.gov](http://recovery.gov) and [energy.gov/recovery](http://energy.gov/recovery), and we are insisting that projects come in on time and on budget with strict accountability.

The Department has outlayed more than 16 percent (\$5.2 billion) of our Recovery Act funds, and our primary focus now is accelerating our outlay rates to our 5,000 recipients. Our outlays have been steadily increasing: we spent \$472 million in March, \$569 million in April, \$695 million in May, and \$747 million in June. We will soon be operating at our target rate of \$800 million a month. You might think of this process as analogous to accelerating onto the highway: go too quickly and you risk a mistake; go too slowly and you won’t get to your destination on time. At our optimal pace, we will be able to minimize risk to taxpayers, while maximizing their return in jobs created or saved and projects accomplished. By the end of the fiscal year, we expect to have outlayed about \$8 billion.



A few programs are performing above expectations. In recent months, the vehicles program has ramped up significantly, and the battery manufacturing grant program is now spending at its target rate. The Weatherization program has had a remarkable turnaround. Office of Science construction projects have been performing well consistently. Several of the Cold War legacy clean-up projects in the Environmental Management program are coming in under budget, allowing the program to reallocate these funds to additional projects.

We are working with all of our 5,000 recipients to achieve our agreed-upon goals, and we are addressing three programs in particular that have notable challenges. The State Energy Program has been successful in obligating funds but slow to outlay due to the states' reimbursement processes. The Loan Guarantee Program has been making great strides but can do even better. The carbon capture and storage projects in the Fossil Energy program are moving at a slower pace than we would like. These issues have my and the Department's full attention.

Finally, I want to mention the strong and close collaboration we have had with the Department of Treasury. Together, we have awarded nearly \$4.7 billion in grants-in-lieu of tax credits for renewable energy installations (the 1603 program) and \$2.3 billion in tax credits for renewable energy manufacturing (the 48C program). We have seen overwhelming demand for these initiatives.

The remainder of this statement provides additional details on key areas of the Recovery Act.

## **Energy Efficiency**

Under the Recovery Act, we are making an historic investment in low-income home energy efficiency. The Recovery Act provided \$5 billion for the Weatherization Assistance Program to fund local agencies to perform home energy audits and weatherization services for low-income families. This program had a slow start, but I am pleased to report that we are now meeting our targets for both homes weatherized and monthly spending. Since last September, the monthly pace of Recovery Act-funded home weatherization has increased ten-fold. We are now approaching between 25,000 - 30,000 homes weatherized per month and expect to weatherize nearly 600,000 homes with Recovery Act funds by March of 2012. This March, the program spent its targeted \$125 million per month and is now spending \$150 million each month.

The Recovery Act also provided \$3.2 billion to fund the Energy Efficiency and Conservation Block Grant program for the first time. This injection of funding is helping more than 2,300 cities, counties, states, territories and Indian tribes develop their own efficiency programs, including building code development, energy audits and retrofits, efficient public lighting, and landfill gas capture. Payments for this program have increased significantly, and we doubled payments from May to June. The program is now 99 percent obligated, and it is creating jobs now while making a meaningful difference in energy usage at the local level. Our nation's mayors have been especially diligent in getting this funding out into their communities.

We are particularly excited about the competitive portion of the Energy Efficiency and Conservation Block Grant program, known as Retrofit Ramp up. The leading projects under this program will define new approaches to make energy efficiency services available to all Americans at significantly lower cost. Vice President Biden kicked off the White House's Earth Day activities this year by announcing the 25 communities that received the \$452 million in awards.

The Recovery Act also included \$3.1 billion for the State Energy Program. This program is poised to make significant contributions through innovative state-level projects. For example, Michigan is supporting 14 manufacturers to fill gaps in the clean energy supply chain. Indiana is supporting nearly 500 wind manufacturing jobs. Idaho is improving energy efficiency in 210 K-12 schools across the state, putting money back into school budgets.

However, the program has been slower to outlay than we would like. We have obligated all of the funding to the states, and the states have obligated \$2.1 billion of that money to their competitive grant recipients. Each state runs its own competitive process and only reimburses once projects are complete, making outlay rates a lagging indicator. We are focused on accelerating the outlay rate of the SEP program with our state partners and are holding weekly stakeholder calls with the National Governors Association, the National Association of State Energy Officials, and state representatives to ensure we address issues as they happen. We expect to see an acceleration of outlay rates this summer.

The states also received \$300 million for energy efficient appliance rebates. All of the states have their funds, and most have completed their program offerings.

These programs have created additional opportunities to improve the performance of the Department of Energy. Our expanded call center has handled more than 30,000 calls from formula grant recipients. We have provided service continuity by assigning dedicated account representatives for each state. We collaborate with the national weatherization and state energy organizations weekly. These improvements are helping accelerate Recovery Act programs, and they will also make a lasting difference in the Department's operations.

## **Renewable Energy**

Recovery Act investments and incentives have put us on track to double our renewable electricity generating capacity (excluding conventional hydropower) by 2012. As we deploy more renewable technologies, we are also quickly expanding high technology, clean energy manufacturing in the U.S.

One of the Administration's most successful programs under the Recovery Act has been the payments-in-lieu of tax credits program (1603), which pays developers as soon as a renewable energy project is placed in service. Working with the Department of Energy, the Department of Treasury has provided \$4.7 billion in payments to nearly

1,400 renewable energy generation projects across the country. The projects will have the capacity to produce enough electricity to power more than one million homes; that is enough clean energy to power the homes of everyone living in Boston, Seattle, Atlanta, Kansas City, and Cincinnati combined. The projects are expected to create nearly 23,000 jobs.

We are also supporting our domestic clean energy manufacturers – companies that are making solar panels, wind turbines, geothermal equipment, nuclear plant components, and energy efficient building products. With Treasury, we have awarded \$2.3 billion in tax credits for 183 clean energy manufacturing projects in 43 states under the 48C program. This investment will be matched by as much as \$5.4 billion in private sector funding, and these projects will generate more than 25,000 jobs.

For example, Cardinal Fastener in Bedford Heights, Ohio, received a \$480,000 tax credit to produce bolts for wind turbines and will double its workforce within the next year. Itron in West Union, South Carolina received more than \$5 million in tax credits to help it reequip its plant to keep up with the demand for advanced smart meters. CalStar Products received \$2.4 million in tax credits for a plant in Caledonia, Wisconsin, to manufacture bricks and pavers that have 40 percent post-industrial recycled content and use almost 90 percent less energy than traditional products.

The interest in this program was extraordinary, with almost four times as much in funding for worthy projects requested as we had tax credits to offer. The Administration has asked Congress for an additional \$5 billion to expand the program. These funds could be deployed quickly to create jobs and drive clean energy development.

We are also supporting clean energy deployment through the loan guarantee program. When President Obama took office, the program had not made a single loan guarantee offer in two years of being funded. We were able to make the first offer within two months of taking office and have made a total of \$23 billion in conditional commitments over the past 18 months. Some of those commitments are for nuclear and auto loans outside of the Recovery Act.

We have announced more than \$4.1 billion in loans or conditional commitments to build renewable energy and grid electrification projects, such as BrightSource (CA), Abound (CO), Beacon (NY), First Wind (HI) and Blue Mountain (NV). These commitments have proven effective in bringing private capital off the sidelines and into the market. Last week, the Department made a conditional commitment to Abengoa Solar, Inc. in Arizona to finance the construction of a concentrating solar power generation facility that will have 250 MW of capacity using parabolic trough solar collectors and innovative thermal energy storage system.

Still, the program is not moving fast enough and is not yet flexible enough to handle smaller projects. We will continue to improve the program and accelerate its pace.

We are also investing more than \$600 million in grants toward the research, development, and deployment of renewable energy. We are working to accelerate innovation in the marketplace by supporting large-scale user facilities, including a biofuels facility at the National Renewable Energy Laboratory; a wind turbine blade testing facility in Boston; batteries facilities at Argonne and Idaho National Laboratories; and a net-zero buildings research facility at Lawrence Berkeley National Laboratory.

## **Reducing Oil Use**

Our dependence on fossil fuels is a drain on our economy and a risk to our security and our environment. The BP oil spill has underscored the urgent need to reduce our reliance on oil.

Through \$3.9 billion from the Recovery Act and \$8.4 billion from Department's Advanced Technology Vehicle Manufacturing loan program, we are supporting a broad portfolio of transportation technologies. We are investing in everything from plug-in hybrids and all-electric vehicles to natural gas vehicles, advanced biofuels, hydrogen, and improvements in internal combustion engine efficiency. We're supporting manufacturers like Tesla, Ford, Fisker, and Nissan through the ATVM program and component suppliers like A123, Enerdel, and Celgard through battery manufacturing grants.<sup>1</sup>

These investments are creating jobs and helping to boost the U.S. auto manufacturing industry. In the coming years, we expect to construct the first-ever electric vehicle plants in the United States, as well as 30 new battery and electric-vehicle component manufacturing plants. By 2015, these plants should be able to produce 250,000 electric-drive cars and batteries to power 500,000 plug-in hybrid electric vehicles. To support these advanced vehicles, the Department is also helping put in place the necessary infrastructure, including more than 20,000 charging locations in a dozen cities.

Additionally, the Department has awarded \$300 million in Clean Cities grants to help 25 cities expand their efforts to cut oil consumption by using high-efficiency cars, trucks, and buses that run on alternative fuels. These cities will deploy more than 9,000 alternative-fuel vehicles – 70 percent of which will run on natural gas. The Recovery Act also includes \$100 million for projects that will improve the efficiency of heavy-duty trucks and passenger vehicles.

To meet our energy challenges, we must also develop new, clean, domestic sources of fuel. That is why the Recovery Act included funding to help develop the next generation of biofuels. More than \$700 million from the Recovery Act has been obligated to support 19 bio-refinery projects. For example, Enerkem received \$50 million to build a plant in Pontotoc, Mississippi to convert waste into biofuels that will create 210 construction jobs and 130 permanent jobs. Enerkem's process reduces the volume of waste going to the landfill by 90 percent while creating useful fuels.

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<sup>1</sup> Ford, Nissan, Tesla and Fisker are funded by the Advanced Technology Vehicle Manufacturing Program, which is not part of the Recovery Act.

I'm pleased to appear today with Secretary Vilsack. Our agencies have been working together closely to advance the biofuels industry in America. Our goal is to more than triple America's biofuels production in the next twelve years, cutting oil imports by \$41 billion.

## **Smart Grid**

The more than \$4 billion in Recovery Act Smart Grid investments are helping modernize our grid. Our grid wastes too much energy, and it is too susceptible to outages and blackouts. By modernizing our grid we can increase reliability and efficiency, allow smart metering, enable two-way flows of electricity, and accommodate larger amounts of energy from intermittent renewable sources such as solar and wind power.

Matched by more than \$5.7 billion in private sector funding, we are supporting 132 projects that will increase reliability and give consumers more choice and control over their energy use. We're funding the installation of more than 850 sensors to improve reliability and security and provide visibility and control across the entire U.S. transmission system. 200,000 new smart transformers and nearly 700 automated substations will prevent failures and allow power companies to respond more effectively when power lines are knocked down by bad weather. By 2013, we expect to more than double the number of smart meters to 18 million nationally through a combination of public and private investment.

There were initial delays in obligating the Smart Grid investment awards over discussion on tax treatment for grantees. We worked expeditiously with the Treasury Department to clarify the tax status and determine they are non-taxable. Since the March resolution of the tax issue with Treasury, we have almost fully obligated the Smart Grid awards.

## **Carbon Capture and Storage**

The Recovery Act included an unprecedented \$3.4 billion investment in carbon capture and storage technologies. By attracting significant private capital, we are pursuing projects that will capture more than 10 million tons of CO<sub>2</sub> annually by 2015 and help demonstrate the economic viability of carbon capture and storage by 2020.

We've selected five projects to accelerate the development of advanced coal technologies with carbon capture and storage at commercial-scale. For example, American Electric Power is demonstrating a chilled ammonia process that is expected to effectively capture at least 90 percent of the CO<sub>2</sub> from a flue gas stream. As part of our industrial carbon capture program, Archer Daniels Midland is demonstrating an advanced amine process to capture CO<sub>2</sub> from industrial flue gases and sequester the CO<sub>2</sub> in a sandstone reservoir. We're also exploring converting captured CO<sub>2</sub> into products such as chemicals, fuels, building materials, and other commodities.

It must be noted that these projects are not moving as quickly as we had hoped. We received fewer applications than expected, and the selected projects are facing significant market barriers, including constrained capital markets and the difficulty inherent in financing a new technology without a long-term price on carbon.

### **Cold War Legacy Clean-up**

The Department of Energy is also charged with cleaning up the legacy of our nation's nuclear weapons program. Our Office of Environmental Management (EM) received \$6 billion in the Recovery Act to accelerate cleanup work at 17 sites, reducing the lifecycle costs to taxpayers. The EM projects were among the first to start, and more than 90 percent of the funds have been obligated and more than 40 percent has been spent. Several of the projects are coming in under budget, allowing the program to reallocate these funds to additional projects.

In the first quarter of 2010, EM projects created or saved more than 5,600 direct jobs at the prime contractor level in communities like Hanford, Washington; Savannah River, South Carolina; and Oak Ridge, Tennessee. Thousands of additional jobs have been reported to EM by subcontractors and vendors. We are on track to permanently dispose of nearly 8,400 cubic meters of transuranic waste and nearly 73,000 cubic meters of low-level waste; more than 3 million square feet of contaminated facilities will be demolished. By September, we will have reduced the footprint of land and structures requiring cleanup by 20 percent, and our goal is to reduce the footprint by 40 percent by September 2011.

This program has contracted with a particularly high number of small businesses. In Fiscal Year 2009, EM Prime Small Business contractors were awarded about \$396 million, far exceeding EM's goal of \$288 million. The program and site prime contractors have obligated approximately \$1.4 billion in Recovery Act Small Business contracts.

### **Science and Technology**

The Recovery Act included \$1.6 billion to advance basic research through the Department's Office of Science. We are accelerating work on key priorities, including the National Synchrotron Light Source II at Brookhaven National Laboratory, a new Continuous Electron Beam Accelerator Facility at The Thomas Jefferson National Accelerator Facility, and new battery user facilities at Argonne National Laboratory. We are supporting 16 new "Energy Frontier Research Centers" and upgrades to the world's fastest supercomputer at Oak Ridge National Laboratory. And we are increasing funding for promising early career scientists. This funding is nearly 95 percent obligated, and the program has spent 31 percent of its funds.

The Recovery Act also included \$400 million for high-risk, high reward research through the Advanced Research Projects Agency – Energy (ARPA-E). ARPA-E is pursuing truly transformational solutions to our energy problems. With ARPA-E, we are swinging from the heels and trying to hit home runs, not just base hits.

We have completed three rounds of funding through ARPA-E. The first round was a broad call for the best ideas in any area that could have a transformational impact on energy. We funded 37 projects ranging from as an all-liquid metal battery that could provide grid-scale storage and cut costs by 90 percent to a novel carbon capture process that emulates the processes of the human body. The second funding solicitation focused on developing better batteries, carbon capture processes, and “electrofuels,” which use microorganisms to harness energy and convert carbon dioxide into liquid fuels. We funded an additional 37 projects.

On Monday, we announced the final round of awards for work in grid-scale energy storage, highly efficient cooling technologies and air conditioners, and advanced power converters. We funded 43 projects.

To date, we have obligated 82 percent of first and second round funding. We will obligate all ARPA-E awards by September. Award recipients from the first funding round have already begun conversations on establishing manufacturing facilities in the U.S., and we are highly optimistic about the future return on these investments.

## **Conclusion**

The bottom line is that the Department of Energy is on track to deliver on the goals of the Recovery Act. We have been steadily ramping up our activities, while minimizing risk to the taxpayers. We are now poised to reach our optimal rate of spending, project performance, and job creation, and we expect to maintain that pace consistently for the next year and a half. These projects are driving economic growth now, while laying the foundation for our long term prosperity through a clean energy economy.

We are off to a good start, but this momentum will need to be sustained when the Recovery Act is finished. To truly transform how we use and produce energy, we will need comprehensive energy and climate legislation that will provide stable, long-term incentives that will unleash America’s inventors, entrepreneurs, and industries. Indeed, it is the private sector that will ultimately drive this revolution and bring it to scale.

I commend the House of Representatives for passing comprehensive legislation last year. As you know, there are now several different pieces of legislation before the Senate. President Obama has called for an approach that puts a price on carbon pollution and makes clean energy the profitable kind of energy. Only comprehensive legislation will give industry the direction and certainty it needs to start creating jobs today, while guiding investments over a generation.

I look forward to working with this Congress and this Committee in the weeks and months ahead. Thank you, and I’m happy to take any questions.

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