

**STATEMENT OF**

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**BEFORE THE**

**COMMITTEE ON ENERGY AND NATURAL RESOURCES**

**UNITED STATES SENATE**

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Good morning Chairman Bingaman, Ranking Member Murkowski, and distinguished members of the Committee. Thank you for the opportunity to appear before you today. I consider it an honor to lead the Administration's efforts to advance and deploy energy efficiency and renewable energy solutions at this historic time. As this Committee knows, we are in a moment of time that poses great challenges and opportunities in the energy field. I am excited about the opportunity to harness ideas and innovation to ensure our economic security, national security, and environmental security. Despite challenges, I am optimistic about the future and in particular about the areas where the Administration and Congress can work together to meet the Nation's energy challenges.

With tremendous support from Congress, both through the American Recovery and Reinvestment Act of 2009 (Recovery Act) and annual appropriations, we are transforming the clean energy landscape in the United States. In the Office of Energy Efficiency and Renewable Energy (EERE) alone, we are investing more than \$16 billion in Recovery Act funding toward projects ranging from geothermal demonstrations in Alaska, New Mexico, and Utah to electric drive component manufacturing in Fargo, North Dakota, to large wind turbine blade testing in Boston, and the development of biorefineries in Ohio, Oregon, and elsewhere, and much more. These programs are creating jobs with investments in 56 states and U.S. Territories to encourage deployment of a full range of renewable energy sources and energy savings measures. In addition, EERE has provided support to the Department of the Treasury for \$2.3 billion of grants in lieu of tax credits for projects that are expected to deploy more than 4 gigawatts of renewable energy, and another \$2.3 billion in tax credits to domestic manufacturers of clean energy products.

In addition to investing in renewable technologies, EERE is engaging in a full court press on energy efficiency. As Secretary Chu is fond of saying, energy efficiency isn't just low-hanging fruit; it's fruit lying on the ground. By reducing our energy consumption, we can create and support clean energy jobs, reduce our reliance on foreign sources of energy and reduce greenhouse gas (GHG) emissions while saving money on the energy bills of everyday Americans.

## **HOME ENERGY RETROFITS**

As you know, one of the best opportunities for energy efficiency is right in our own homes. Home energy retrofits can be a win-win-win. Consumers can win by cutting their utility bills and saving money, while getting a healthier, more comfortable living space for their families. Communities, employers, and employees can win by creating good jobs in the retrofit industry and at manufacturers that produce energy efficiency products, spurring the local economy and putting people back to work. The Nation can win by creating jobs, reducing our reliance on energy from foreign sources, reducing our carbon emissions, and slowing the effects of climate change.

There are approximately 130 million homes in the United States. These homes account for about 33 percent of the Nation's total electricity demand<sup>1</sup> and consume approximately 22 percent of the Nation's energy<sup>2</sup> while generating 21 percent of the Nation's overall carbon footprint.<sup>3</sup> Roughly half of these homes were built before 1973, long before modern residential building codes came into effect.<sup>4</sup> With so many older homes, and with advances in building technologies, there is a tremendous opportunity to upgrade home energy efficiency by insulating; caulking; improving heating, ventilation, and air conditioning equipment (HVAC); tightening the building envelope; and adding other energy efficiency improvements. Existing techniques and technologies can reduce energy use by up to 40 percent per home and reduce associated GHG emissions by up to 160 million metric tons by 2020.<sup>5</sup>

This vast potential for savings can be tapped only with a strong, well-trained American work force. The overall construction sector currently faces a 27.1 percent unemployment rate.<sup>6</sup> Insulation-blowing trucks are standing idle, and many construction workers are anxious to find ways to apply their skills to new jobs. At the same time, Americans are paying over \$200 billion per year in energy costs—money that could pay for housing, tuition, or other basic necessities.<sup>7</sup> As the President has said, if you saw \$20 bills flying out your window, you would try to grab them. So let's try to make it easier for American families to prevent their hard-earned cash from flying out the doors, windows, and ceilings of inefficient homes.

## CHALLENGES

To realize job creation, energy savings, and environmental benefits, making energy retrofits must be easier for homeowners. Three key barriers prevent Americans from taking advantage of cost-effective retrofits to their homes: difficulty finding information about which retrofit upgrades are best for their home; difficulty covering the up front cost of these investments; and difficulty finding knowledgeable, skilled workers.<sup>8</sup>

These three barriers were outlined in the *Recovery Through Retrofit* strategy document released by Vice President Biden's Middle Class Task Force. In close collaboration with other agencies, DOE is pursuing a comprehensive approach to address these three barriers, which includes:

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<sup>1</sup> Percentage derived from figures in the *Annual Energy Review*. Energy Information Administration. <http://www.eia.doe.gov/aer/txt/ptb0201a.html>. February 2010.

<sup>2</sup> Percentage derived from figures in the *Annual Energy Review*. Energy Information Administration. <http://www.eia.doe.gov/aer/txt/ptb0201a.html>. February 2010.

<sup>3</sup> Pew Center on Global Climate Change. *Climate Change 101: Technological Solutions*. January 2009.

<sup>4</sup> Energy Information Administration. *Residential Energy Consumption Survey 2005: Home Energy Uses and Costs*. <http://www.eia.doe.gov/emeu/recs/>

<sup>5</sup> President's Middle Class Task Force and Council on Environmental Quality. *Recovery Through Retrofit* report. October 2009.

<sup>6</sup> United States Bureau of Labor Statistics. *Industries at a Glance: Construction: NAICS23*. March 5, 2010. <http://www.bls.gov/iag/tgs/iag23.htm>

<sup>7</sup> Energy Information Administration. *Residential Energy Consumption Survey 2005: Home Energy Uses and Costs*. <http://www.eia.doe.gov/emeu/recs/recs2005/c&e/summary/pdf/tableus5.pdf>

<sup>8</sup> McKinsey & Company. *Unlocking Energy Efficiency in the U.S. Economy*. July 2009.

- The creation of a home energy performance labeling system in collaboration with the *Recovery Through Retrofit* to provide consumers with building energy information;
- The expansion of rebate programs and appropriate financing mechanisms to provide homeowners with access to affordable mechanisms to cover the up front cost of energy efficiency improvements; and
- The establishment of voluntary national standards for retrofit workforce training and certification to help protect consumers.

## **DEPARTMENTAL RETROFIT SUPPORT**

The inter-agency *Recovery Through Retrofit* initiative, coordinated by the President’s Council on Environmental Quality, seeks to lay the groundwork for a self-sustaining home energy efficiency retrofit industry. Additionally, the Department actively supports home energy retrofits in other ways, including a new Retrofit Ramp-Up program and the ongoing Weatherization Assistance and State Energy Programs.

The Retrofit Ramp-Up program, the competitive portion of the Energy Efficiency and Conservation Block Grant program funded through the Recovery Act, could deliver important energy and monetary savings to communities that win awards. However, its greatest impact may be in demonstrating sustainable, replicable business models that other communities across the Nation can copy so that they can also drive job creation and energy savings in their own areas. The lessons learned from these projects—both successes and challenges—could enable the rest of the Nation to ramp up its energy efficiency efforts, fundamentally transforming the way the U.S. consumes energy.

DOE will soon award up to \$390 million of Recovery Act funds for this program, targeting whole-neighborhood building retrofits. The Department’s goal is to fund projects demonstrating models for providing cost-effective energy upgrades for a large percentage of the residential, commercial, and public buildings in communities. EERE received a large volume of excellent proposals, far more than we will be able to fund. There is no shortage of good ideas or enthusiasm, and we hope to leverage the Recovery through Retrofit experience into a long term model where communities can sustain the efforts to retrofit whole blocks at a time.

The Weatherization Assistance Program is currently retrofitting thousands of homes each month, utilizing \$5 billion of Recovery Act funds and \$210 million from Fiscal Year 2010 appropriations. This program primarily reaches low-income families, the elderly and the disabled, helping those with significant financial need save money on their energy bills.

Some states are using portions of the \$3.1 billion in Recovery Act funds allocated to the State Energy Program to create revolving loans funds that finance the deployment of energy efficiency technologies and support long lasting job creation.

## CURRENT PROPOSALS

During the State of the Union, the President called on Congress to pass a program of incentives for homeowners who make energy efficiency investments in their homes. Last week, the President outlined more details of a new “HOMESTAR” program that would help create jobs by encouraging American families to invest in energy saving home improvements.

Key components of the HOMESTAR Program include:

- **Rebates delivered directly to consumers:** Like the Cash for Clunkers program, consumers would be eligible for direct HOMESTAR rebates at the point of sale for a variety of energy-saving investments in their homes. A broad array of vendors, from small independent building material dealers, large national home improvement chains, energy efficiency installation professionals and utilities (including rural utilities) would market the rebates, provide them directly to consumers and then be reimbursed by the Federal Government. The rebates would also be marketed by the Environmental Protection Agency and trade associations whose member contractors participate in the program.
- **\$1,000 - \$1,500 Silver Star Rebates:** Consumers looking to have simple upgrades performed in their homes would be eligible for 50% rebates up to \$1,000 - \$1,500 for doing any of a straightforward set of upgrades, including: insulation, duct sealing, water heaters, HVAC units, windows and doors. Under Silver Star, consumers can chose a combination of upgrades for rebates up to a maximum of \$3,000 per home. Rebates would be limited to the most energy efficient categories of upgrades—focusing on products made primarily in the United States and installed by certified contractors.
- **\$3000 Gold Star Rebates:** Consumers interested in more comprehensive energy retrofits would be eligible for a \$3,000 rebate for a whole home energy audit and subsequent retrofit tailored to achieve a 20% energy savings in their homes. Consumers could receive additional rebate amounts up to \$8,000 for energy savings in excess of 20%. Gold Star would build on existing whole home retrofit programs, like the Environmental Protection Agency’s successful Home Performance with Energy Star program.
- **Oversight to Ensure Quality Installations:** The program would require that contractors be certified to perform efficiency installations. Independent quality assurance providers would conduct field inspections after work is completed to ensure proper installation so consumers receive energy savings from their upgrades.
- **Support for financing:** The program would include support to State governments to provide financing options for consumers seeking to make efficiency

investments in their homes. This will help ensure that consumers can afford to make these investments.

The program may result in the creation of tens of thousands of jobs while achieving substantial reductions in energy use—up to the equivalent of the entire output of three 500 megawatt coal-fired power plants each year. Consumers in the program are anticipated to save between \$200 - \$500 per year in energy costs, while improving the comfort and value of their homes.

I am sincerely grateful to the members of this Committee and other Senators who have been working tirelessly on efforts to create legislative language that is consistent with the President's vision. I believe they have done a tremendous job turning a concept into language, and I have the utmost admiration for them and their staffs. As the legislative process moves forward, we will continue to work with the Committee on this bill until it is enacted.

I am happy to answer any questions members of this Committee may have regarding the proposal or how the Department would administer such a program were it to be signed into law.

Additionally, I understand that a panel later today will also examine S. 3079, Senator Merkley's "Building Star" bill, and S. 1320, a bill introduced by Senator Tester for homes built before 1976. As I mentioned earlier in my testimony, both commercial buildings and older homes are major challenges in terms of energy efficiency, and I salute these Senators for their efforts to find solutions. While I plan to focus on the Home Star proposal today, I am happy to provide feedback on these additional proposals for the record.

## **CONCLUSION**

Retrofitting millions of American homes may truly transform energy consumption throughout the Nation. It may also put people to work in good, domestic jobs while saving Americans money and enabling significant contributions toward GHG emissions reduction targets. Public investments can lay the foundation for a vibrant private-sector led retrofit industry. Workers can get trained and certified, small contractors can grow their businesses, and millions can save money on their energy bills.

On October 19, 2009, Secretary Chu stated, "In the next several decades, I believe that energy efficiency is our most powerful tool for reducing our carbon emissions and reducing our energy bills." Home energy retrofits could be critical to realizing both of those goals, while supporting American job creation. I thank the Committee for its hard work on energy efficiency and specifically in crafting the legislative proposal being considered today. I sincerely hope I have the opportunity to implement this program soon with the aim of achieving our interconnected goals of creating good clean energy jobs, reducing our reliance on foreign sources of energy, and reducing our greenhouse gas emissions.

Thank you again for the opportunity to testify on this topic. I will gladly answer your questions.