

To: The Next President

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Environment Northeast (ENE)

Re: Energy Efficiency
as Economic Stimulus

With the U.S. economy officially in recession, Americans are anxiously awaiting your plan to stimulate a robust recovery. The key is to identify federal initiatives that deliver economic benefits quickly, reliably, and at substantial scale. Energy efficiency—a huge economic category that includes the design and installation of “green” insulation, lighting, building materials, appliances, vehicles, heating-and-cooling systems, and countless other technologies—fits your economic-stimulus needs ideally, with important additional benefits for the health of our environment and the security of our nation.

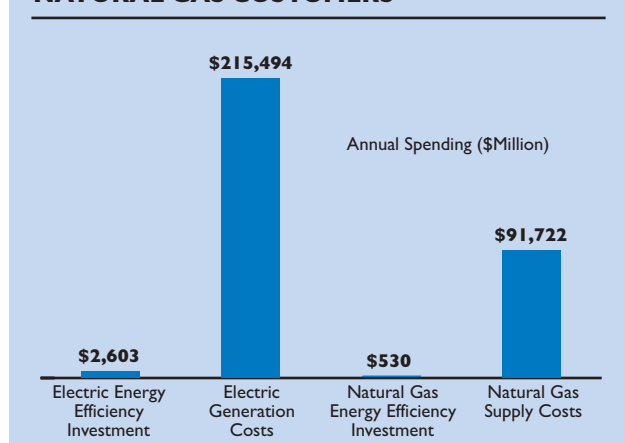
For all the excitement surrounding clean technology and renewable fuels, efficiency is the best near-term energy investment for creating jobs, reducing consumer-energy bills, spurring economic growth, and increasing energy independence. New spending on efficiency will create



employment in the here and now—and produce savings that last for years to come. And, as you look ahead to next year's Copenhagen conference on climate change, it is worth noting that gains in energy efficiency also provide the most immediate way to reduce greenhouse-gas emissions.

Yet even with all of these obvious benefits, we are radically underinvesting in low-cost efficiency resources (see Figure 1). We need to rebalance our investment choices in order to stimulate the economy, create jobs, increase our energy independence, and reduce greenhouse-gas emissions.

FIGURE 1: CURRENT U.S. EFFICIENCY VS. SUPPLY SPENDING FOR ELECTRIC AND NATURAL GAS CUSTOMERS



SOURCE: CEE, 2008 EE Industry Report; & EIA for supply costs using H-Hub gas prices and total RC&I consumption and total electric revenues x 66% (estimate of energy/generation cost)

In the time-honored tradition of American federalism, the states are leading the way on energy efficiency. From Hawaii to Maine, new programs are saving energy at a fraction of the cost required to produce new units of energy for customers. In truth, however, the states' efficiency investments remain underfunded. Therefore, we urge you to consider including a matching-grant program for state efficiency programs in your economic recovery plan.

Despite the documented economic gains from investing in efficiency, competing

short-term demands for necessary capital often win out. What's worse, traditional utility pricing methods reward utilities for maximizing energy consumption rather than for helping customers meet their energy needs at the lowest possible cost.

This is especially counterproductive given the fact that energy-efficiency measures are cheaper than efforts to increase energy supply. As shown in Figure 1, Americans spend \$200 billion annually on generating electricity, at a price of 6 cents to 12 cents per kilowatt hour (kWh). But we invest only \$2.6 billion in making more efficient use of electricity, an enhancement that costs just 3 cents per kilowatt hour saved.

For natural gas investment, the picture is even more imbalanced. We have a simple choice between low-cost efficiency and high-cost supply—yet each year we choose to spend more than a hundred times more on the more expensive resource.

Furthermore, energy-efficiency investments produce direct employment in installation of equipment and building retro-fits. They also create a multiplier employment effect in the wider economy, as money saved on energy bills flows to goods and services more likely to support local jobs than spending on fossil fuels.

In all, efficiency programs require an enormous range of different jobs and skills. Program administrators hire energy-service companies to help consumers evaluate existing opportunities in their homes and businesses and to deliver incentives and assistance in making efficiency upgrades. For example, an energy service company might use advanced equipment to identify energy leaks in a home, and then seal and insulate to reduce energy losses that drive up heating and cooling costs.

For a business customer, such firms might evaluate the benefits of making upgrades to lighting, motors, or roof insulation, and then provide technical and financial assistance in making those improvements.

Expanding efficiency programs would spur the hiring of additional program administrators and energy service company technicians. These jobs require training but often utilize existing skills. An out-of-work contractor, for example, already knows how to install insulation or weatherize a home, and would require little additional training.

According to a recent study of efficiency efforts in California, for every job not created in the field of energy supply, thanks to reduced fuel use, more than 50 jobs are created in other parts of the state's economy. Between 1976 and 2006, efficiency investments saved households \$56 billion and generated 1.5 million jobs with a total payroll of more than \$45 billion.¹

Increasingly, state policymakers and other stakeholders are recognizing that efficiency programs should be considered on a level playing field with other energy resources as states and utilities make choices about how to meet the energy needs of consumers and society as whole. In addition to energy savings and job creation, the total direct benefits to consumers—including lower wholesale-energy prices and the reduced need for costly new generating plants, power lines, and pipelines—exceed costs by three to four times.

Recently, several states passed laws that require increasing investments in energy efficiency, with some issuing a sensible mandate for utilities to invest in all energy-efficiency measures that cost less than traditional energy-supply options.

In Connecticut, Maine, Massachusetts, and Rhode Island, emphasizing the economic logic of efficiency earned the support of large utilities, business organizations, low-income advocates, labor organizations, consumer groups, and environmental interests. Other states like California and Vermont have similar requirements.

Efficiency programs do require upfront investments to deliver long and persistent benefits. States that are increasing investments have recognized that high energy costs are not simply the result of rising prices for oil and other fuels. There is another, potentially even more important factor driving up energy expenses—our unnecessarily high rates of consumption. This is where efficiency programs come in. By driving down consumption, they enable us to reduce energy costs while at the same time allowing us to sustain the same (or even higher) levels of economic activity. A very small increase in rates to fund expanded efficiency programs reduces consumption and thus dramatically reduces total energy bills.

In addition, other sources of revenue are being used in the Northeast to increase efficiency-program investments. The most important is the Regional Greenhouse Gas Initiative, the nation's first carbon cap-and-trade program, which auctions pollution allowances to area power plants. A majority of the auction revenue is being reinvested in efficiency programs that deliver even greater economic and environmental benefits.

A good example of state innovation can be found in Connecticut, where two major utilities, Northeast Utilities and United Illuminating, have developed a plan to increase total efficiency-program investments from \$120 million to more than \$300 million annually, for a total of \$1 billion invested over the next five years.

Under this near-tripling of investment, net savings to the state's consumers are projected at \$2.5 billion.

Program costs will directly support new energy-service jobs and assist consumers in making efficiency upgrades. Also, the net benefit of \$2.5 billion includes only the avoided costs of the energy sector, and does not consider the multiplier effect of billions reinvested in other parts of the state's economy.

A similar plan has been developed by National Grid in Rhode Island to triple the level of efficiency investment over the next three years. A recent study for Rhode Island indicates that the state could increase investments from \$15 million to \$75 million per year at a cost still under 3.5 cents per kilowatt hour saved.² Similar studies exist in other states. This suggests an opportunity to save consumers billions of dollars nationwide.

A stimulus of this size in a small state's economy will deliver real benefits. The federal government can adopt the logic that won over diverse stakeholders in the Northeast, helping these states and the country as a whole make these important investments more quickly. This would help stimulate the national economy and put us on track to recovery.

How much federal investment are we talking about? We recommend that Washington direct somewhere between \$3 billion and \$3.5 billion every year for the next three years to existing state-level public or private energy-efficiency programs based on a 100 percent matching-funds program. For every dollar of current state-run or utility-run efficiency investments, federal funding would provide an additional dollar to allow programs to double in size.

Energy efficiency should be your administration's highest priority for stimulus investment. It builds on existing infrastructure; can be deployed rapidly; and has large and continuing economic, employment, and environmental benefits. The federal government should harness states' innovations and require electric and natural-gas utilities to advance any energy-efficiency measures that prove to be more effective than simply increasing energy supplies.

In addition, Washington should set minimum targets for energy savings and require that efficiency be procured whenever it is available at lower cost than energy supply options. This commitment should supplement our nation's necessary quest for larger, more reliable supplies of renewable fuels. These long-term efficiency program commitments should also draw on revenue raised through a carbon cap-and-trade program, as reducing energy consumption through expanded energy-efficiency investments is the best way to reduce the overall cost of any cap-and-trade initiative.

The United States is currently one of the least energy-efficient countries in the world. Energy-efficiency programs allow homeowners and businesses to become more efficient and productive while freeing up capital for job creation and economic growth. We should learn from business associations in the Northeast that have recognized the link between energy efficiency and competitiveness. By investing in energy efficiency, they harness the potential to drive down wasteful energy use and invest saved energy dollars in their core business.

The lesson is clear: Energy efficiency equals economic growth. Mr. President, the time is right to implement this vital lesson nationwide.

Endnotes

1. Holst, David R., 2008, *Energy Efficiency, Innovation, and Job Creation in California*, UC Berkeley, available at: http://www.next10.org/research/research_eeijc.html.
2. Kema, Inc., 2008, *The Opportunity for Energy Efficiency that is Cheaper than Supply in Rhode Island*, prepared for the Rhode Island Energy Efficiency and Resources Management Council.



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