



Using less. Doing more.

The American Energy Initiative:

One Page Summary of Testimony

Statement of Kateri Callahan, President, The Alliance to Save Energy
Before

House Energy and Commerce Committee, Subcommittee on Energy and Power and
Subcommittee on Oversight and Investigations

July 12, 2012

Energy efficiency measures are the quickest, cheapest, and cleanest way to tackle growing energy demand, which contributes to today's economic challenges. Wasted energy is a costly drag on our economy, but energy efficiency contributes more toward meeting our energy needs than any other resource. Without the numerous energy efficiency improvements made since 1973, the United States would require an additional 50% more energy to power the current economy.

At a time when too many Americans are suffering financial hardships, energy efficiency offers real solutions that not only help alleviate their pain, but also deal with the economic, environmental and national security problems associated with rising energy use. National energy efficiency policies save money, lessen dependence on imported energy sources, decrease pollution and improve our nation's global competitiveness. In addition, these initiatives enable domestic businesses to leverage private capital, reduce business risk from energy price volatility, spur economic growth, and create jobs.

Toward those ends, the Smart Energy Act would reduce barriers for the federal government and businesses seeking to adopt off-the-shelf energy efficiency technologies that will save money. It includes several provisions to reduce energy waste in federal buildings and to help improve industrial efficiency. Congressmen Bass and Matheson have drafted a bipartisan measure that will move our country significantly closer toward enactment of energy efficiency legislation this year that can create jobs and benefit the nation's economy.

**Opening Statement of Kateri Callahan
President
The Alliance to Save Energy**

**Hearing on “The American Energy Initiative”
Subcommittee on Energy and Power and the Subcommittee
on Oversight and Investigations
Committee on Energy and Commerce
U.S. House of Representatives
July 12, 2012**

Good morning, my name is Kateri Callahan and I am the President of the Alliance to Save Energy. It is my pleasure to be appearing before the Subcommittees on Energy and Power and Oversight and Investigations to testify in support of the Smart Energy Act. Chairmen Whitfield and Stearns, Ranking Members Rush and DeGette, thank you for affording me the opportunity to discuss the important role of energy efficiency policies – including those contained in this proposal – can play in helping create jobs, save businesses and consumers money, and increase the productivity of our economy.

For the past 35 years, the Alliance to Save Energy (“the Alliance”) has capably served as a bipartisan, nonprofit coalition of business, government, environmental, and consumer leaders committed to promoting energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security. Founded in 1977 by Senators Charles Percy, a Republican from Illinois, and Hubert Humphrey, a Democrat from Minnesota, the Alliance has worked tirelessly to improve the efficiency of America’s energy resources, and to make certain

that energy is not wasted. Our organization is currently led by Senator Mark Warner, as Honorary Chairman, and National Grid USA President, Tom King as Chairman of our Board of Directors. Representatives Michael Burgess, Ed Markey, Brian Bilbray, Steve Israel, Ralph Hall, and Paul Tonko, and Senators Jeff Bingaman, Lisa Murkowski, Mark Udall, Susan Collins, Mark Pryor, Richard Lugar, Jeanne Shaheen, Rob Portman and Chris Coons serve as Honorary Vice-Chairs. We are deeply honored that four members of the Energy and Commerce Committee serve as Honorary Board members of the Alliance. More than 160 companies and organizations support the Alliance as Associates.

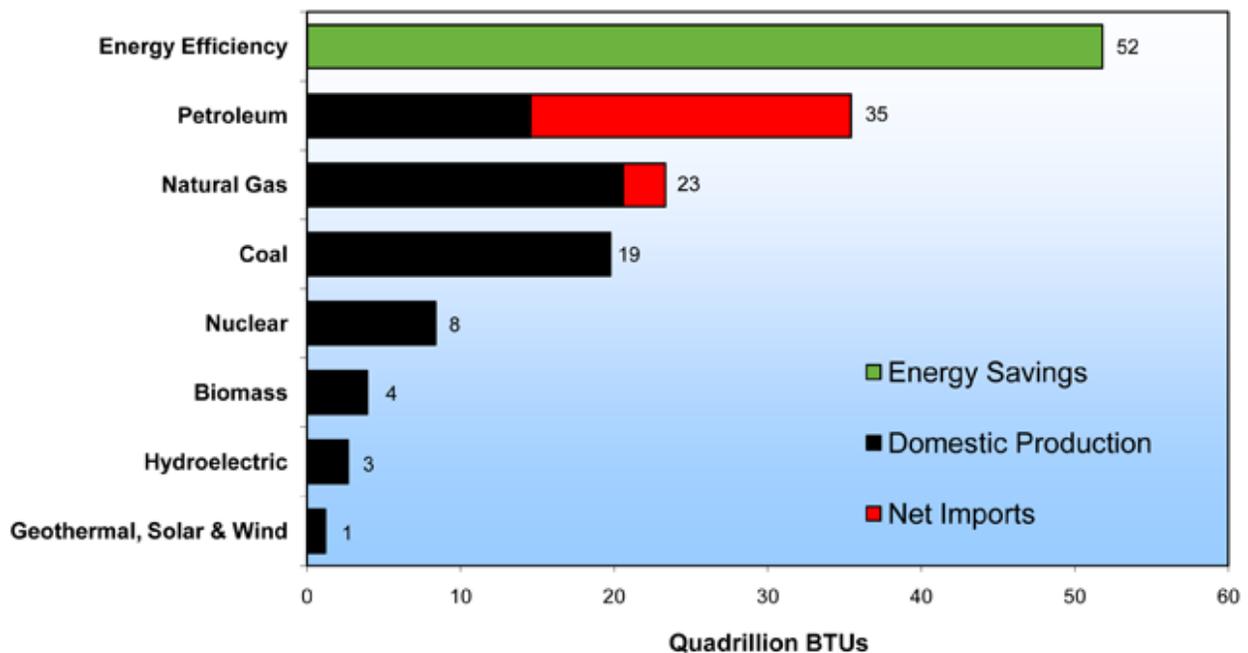
The Alliance commends Representatives Charles Bass and Jim Matheson for their outstanding leadership on H.R. 4017, the Smart Energy Act, which was the result of many months of hard work and collaboration. This important initiative would move our country significantly closer toward enactment of energy efficiency legislation this year, and assist our ongoing efforts to alleviate the economic, environmental and security problems associated with our country's current wasteful energy use. It has been publicly endorsed by a remarkable range of businesses, trade associations, consumers, environmentalists and energy efficiency advocates. Attached is a letter of support for this legislation from almost 60 businesses and organizations, including Honeywell, Ingersoll Rand Company, Johnson Controls Incorporated, United Technologies Corporation and the Natural Resources Defense Council.

For nearly forty years, the Alliance has promoted federal policies to increase the nation's energy efficiency, which is the cheapest, quickest and cleanest energy resource. But there has

never been a more critical moment for the federal government to aid private industry's ability to tap the potential of energy efficiency to meet America's energy demands. Without the numerous energy efficiency improvements made since 1973, the United States would be employing 50% more energy to power the economy (see figure below). And even with those efficiency gains, domestic energy requirements are still projected to increase about 9% by 2035, according to the U.S. Energy Information Administration. Effective energy efficiency strategies will not only play a role in meeting this demand but will also incentivize greater technology development and cut energy costs.

Energy Efficiency: America's Greatest Energy Resource

Sources of U.S. Energy in 2009



Alliance to Save Energy, August 2010

At a time when too many Americans are suffering financial hardships, energy efficiency offers real solutions that would not only help alleviate their economic pain, but also deal with the short- and long-term problems associated with rising energy use. In 2012, the Alliance projects

that the average American household will spend a combined \$5,550 a year on residential and transportation energy consumption, a cost which has grown 1% since last year and increased by 14% since 2010. Besides lowering energy expenses for those who implement efficiency measures, energy efficiency reduces energy price pressure across the board, creates jobs, lessens dependence on imported energy sources, reduces pollution and its health and environmental impacts, improves America's global competitiveness, and alleviates stress to the electric grid and water infrastructure.

A 2009 report by McKinsey & Company estimated that – with government assistance – a \$500 billion investment in energy efficiency could result in savings of \$1.2 trillion and a 23% reduction in projected non-transportation energy use by 2020. And the Brookings Institute released an assessment last year indicating that in 2010 the energy and resource efficiency segment of the economy accounted for more than 830,000 jobs nationwide.

Federal Energy Management

As the nation's greatest energy consumer, the federal government – which spends in excess of \$7 billion annually to heat, cool and operate its more than 500,000 buildings and facilities – should play a unique role in promoting energy efficiency. Cost-effective energy efficiency improvements in Federal buildings, equipment, and vehicles would save taxpayer dollars, reduce dependence on foreign sources of energy, and improve the reliability and security of achieving federal agency missions, including those in national defense. Many agencies and managers have already begun targeting this portion of the federal government's energy usage

by providing additional opportunities for private sector utilization of energy efficient technologies and systems, but there is still room for significant improvement.

In 2006, data centers in the United States used about 61 billion kilowatt hours (kWh) of electricity, representing approximately \$4.5 billion in expense and accounting for 1.5% of total domestic electricity use. By the end of 2010, overall information technology (IT)-related energy needs consumed approximately 2.2% of all U.S. electricity and that number continues to increase. Mounting energy use presents an added cost to consumers and a risk for our nation due to an aging grid. As data centers require more energy, and as the number of data centers needed to meet consumer demand grows, it will become increasingly important to make them more efficient.

However, computers offer an important resource for increasing the nation's energy efficiency. As such, the federal government has the ability to use advanced tools that promote energy savings through the use of computer hardware, energy efficiency hardware and power management tools.

Section 101 under Title I of the discussion draft would expand the federal government's use of energy savings performance contracts (ESPCs) to meet existing energy management requirements, support the deployment of electric vehicles or electric vehicle supply equipment, and increase the scope of ESPCs to include electric vehicles and their charging infrastructure.

Other provisions under Title I would require the federal government to participate in demand response programs (**Section 102**); consolidate data centers (**Section 103**); adopt energy-saving techniques via computers (**Section 104**); implement advanced metering (**Section 105**) and publish energy use (**Section 106**).

Providing Opportunities for Energy Efficiency in Business and Industry

Since the 1970s, energy efficiency and energy management programs for manufacturers have evolved substantially. While many government and utility programs currently provide valuable tools, best practices, and guidance that can help industrial-end users save energy and improve competitiveness, there are other areas for other opportunities to embrace energy management and sustainability strategies.

Now with price volatility, climate change and other concerns, the business case for energy efficiency today is much broader. According to the studies reported by the National Research Council in 2009, the potential for improved energy efficiency in industry is large. Of the 34.3 quads of energy forecast by the U.S. Energy Information Administration to be consumed by American industries in 2020, 14 to 22 percent could be saved through cost-effective energy efficiency improvements.

Many industrial plants generate sizable amounts of heat from chemical reactions and burning fuel. The unused excess or waste heat from these processes is typically released into the environment via exhaust gas or coolant water. Besides presenting opportunities to reduce unnecessary heat, these waste heat streams often contain significant amounts of energy that

can be usefully recovered to pre-heat process materials and combustion air or to generate steam or electricity. According to the U.S. Department of Energy in 2007, domestic fuel-based process heating (excluding electricity and steam generation) consumes approximately 5 quadrillion British thermal units (Btu) annually – about 5 of U.S. energy use – of which as much as 50% is exhausted.

While capturing excess heat is not a new concept, its implementation has been uneven. And the broader application of industrial efficiency technologies that are available for deployment is impeded by barriers such as the up-front investment costs, and the lack of specialized knowledge and inadequate flow of information.

In response to market barriers that impede further energy efficiency investments, **Section 201 of Title II** of the discussion draft would call upon the U.S. Secretary of Energy to complete a study within a year outlining the legal, regulatory and economic barriers to the deployment of efficiency measures, and include examples of successful state, federal and foreign efficiency policies combined with combined with Department recommendations. The legislation would also help manufacturers reduce energy use and increase competitiveness by creating collaborative research and commercialization partnerships within the U.S. Department of Energy to promote innovative manufacturing processes (**Section 202**), and direct the Department to develop a strategic plan to double the production of electricity from combined heat and power and waste heat recovery by 2020 (**Section 203**).

The Alliance to Save Energy and its Associate members support the objectives of H.R. 4017, the Smart Energy Act, and hope that energy efficiency stakeholders will be included in the forthcoming dialogue on the discussion draft and ways in which to advance it through the committee process.

Conclusion

While today's economic and political challenges make it increasingly difficult to advance national energy policies, bipartisan initiatives that stop energy waste can move the country forward in creating jobs, saving businesses and consumers money, and increasing the productivity of our economy.

With similar energy efficiency legislation in the form of the Energy Savings and Industrial Competitiveness Act (S. 1000), which was approved on a bipartisan 18-3 vote last summer by the Senate Committee on Energy and Natural Resources and served as a model for H.R. 4017, both chambers could have the basis for increasing our nation's energy efficiency this year. The authors of the bipartisan Smart Energy Act – and the many businesses, consumers, environmental and efficiency advocates who worked with the authors to craft this measure – understand that efficiency technologies are available today. More importantly, the provisions contained in the bill can be fully deployed in every state across the country, and pay for themselves from the energy savings.

The Alliance to Save Energy looks forward to working with the Energy and Commerce Committee to enhance the discussion draft, and hopes that the Committee will work with

House leadership to bring a bipartisan energy efficiency initiative to the floor for a vote as soon as possible.

Thank you for your time and attention, and I would be glad to respond to any questions that you may have.

March 15, 2012

The Honorable Charles Bass
United States House of Representatives
2350 Rayburn House Office Building
Washington, DC 20515

The Honorable Jim Matheson
United States House of Representatives
2434 Rayburn House Office Building
Washington, DC 20515

Dear Congressmen Bass and Matheson,

As a broad coalition of energy efficiency and environmental organizations, small and large businesses, and public interest and faith based groups, we applaud your introduction of the Smart Energy Act of 2012 (H.R. 4017), and look forward to working with you to ensure that this important bipartisan measure is enacted into law.

Wasted energy is an obvious costly drag on the economy. As we emerge from the economic recession, it bears re-emphasizing that energy efficiency is the quickest, cheapest and cleanest way to meet our nation's energy demands.

As the nation's greatest energy consumer, the federal government – which spends in excess of \$7 billion annually to heat, cool and operate its more than 500,000 buildings and facilities – should play a unique role in promoting energy efficiency. By targeting this portion of the federal government's energy usage and providing additional opportunities for private sector utilization of energy efficient technologies and systems, the Smart Energy Act would help improve U.S. energy efficiency, reducing costs for consumers and businesses and making American industry more competitive and lessening our dependence on imported sources of energy at a critical time.

Toward those ends, H.R. 4017 would reduce barriers for the federal government, businesses and consumers seeking to adopt off-the-shelf energy efficiency technologies that will save money by:

- Expanding the federal government's use of energy savings performance contracts to meet existing energy management requirements and support the deployment of electric vehicles or electric vehicle supply equipment;
- Requiring the federal government to participate in demand response programs, adopt energy-saving techniques via computers, implement better building standards and advanced metering and benchmark energy use through data collection and management practices;
- Boosting private sector investments in building efficiency upgrades by enlarging the U.S. Department of Energy's (DOE) Loan Guarantee Program;
- Helping manufacturers reduce energy use and increase competitiveness by creating collaborative research and commercialization partnerships within DOE to promote innovative manufacturing processes; and

- Establishing a strategic plan to double the production of electricity from combined heat and power and waste heat recovery by 2020.

Without the numerous energy efficiency improvements made since 1973, the United States would be using 50 percent more energy to power the economy. And even with those efficiency gains, our nation's energy requirements are still projected to increase about 20 percent by 2035, according to the U.S. Energy Information Administration.¹

We recognize the significant challenges facing the federal government, yet we strongly believe that your legislation should be considered as a component of our continuing efforts to alleviate the country's economic, environmental and security problems associated with growing energy use. Moreover, the Smart Energy Act would apply practical, cost-effective measures to tackle federal energy consumption, and spur private sector utilization of energy efficiency technologies and systems. It would also help create new jobs and assist those American families and businesses who are struggling to lower their energy expenses.

We commend you again for your leadership in developing this proposal, and offer our support to help enact this measure in the 112th Congress.

Sincerely,

Alliance to Save Energy
Alliance for Industrial Efficiency
American Council for an Energy-Efficient Economy
American Institutes of Architects
American Public Power Association
ASHRAE
Center for the Celebration of Creation
Ceres
Citizens for Pennsylvania's Future (PennFuture)
Colorado Green Building Guild
Council on North American Insulation Manufacturers Association
Danfoss
Demand Response and Smart Grid Coalition (DRSG)
Digital Energy & Sustainability Solutions Campaign
Earth Day Network
Energy Future Coalition
Environment America
Environmental and Energy Study Institute
Environmental Law and Policy Center
Federal Performance Contracting Coalition
FlexEnergy Inc.
Fresh Energy

¹ Alliance to Save Energy, America's Greatest Resource, 2011. <http://ase.org/resources/energy-efficiency-americas-greatest-energy-resource>.

Habitat for Humanity International
Honeywell
Information Technology Industry Council
Ingersoll Rand Company
Institute for Market Transformation
Intel Corporation
Interfaith Power & Light
Johnson Controls Incorporated
Legrand
Midwest Energy Efficiency Alliance
National Association for State Community Services Programs (NASCSPP)
National Association of Energy Service Companies (NAESCO)
National Association of State Energy Officials (NASEO)
National Electrical Manufacturers Association (NEMA)
National Grid
Natural Resources Defense Council
Owens Corning
Pacific Gas & Electric Company
Panasonic Corporation of North America
Polyisocyanurate Insulation Manufacturers Association (PIMA)
Rebuilding Together
Republicans for Environmental Protection
Schneider Electric
Sheet Metal and Air Conditioning Contractors National Association
Siemens
Southeast Energy Efficiency Alliance
Southern Alliance for Clean Energy
Telecommunications Industry Association
The Center for Environmental Innovation in Roofing
The Dow Chemical Company
The Stella Group, Ltd.
U.S. Clean Heat & Power Association
U.S. Green Building Council
Union of Concerned Scientists
United Technologies Corporation
Utah Clean Energy