

Organization Submitting Testimony: Business Council for Sustainable Energy, 805 15<sup>th</sup> Street, NW, Suite 708, Washington, DC 20005  
Appropriations Subcommittee: Energy and Water Development  
Agency: U.S. Department of Energy

**Ms. Lisa Jacobson, President**  
**Business Council for Sustainable Energy**  
**Written Testimony Submitted to the**  
**Senate Energy and Water Development Subcommittee, Committee on Appropriations**  
**In Support of Fiscal Year 2018 Funding for the Department of Energy Offices of**  
**Energy Efficiency and Renewable Energy (EERE), Fossil, Energy (FE), and**  
**Electricity Delivery and Energy Reliability (EDER)**

**May 25, 2017**

Chairman Alexander and Ranking Member Feinstein:

On behalf of the Business Council for Sustainable Energy (BCSE) I am writing to express support for energy programs at the Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE), Fossil Energy (FE), Office of Electricity Delivery and Energy Reliability (EDER), and other critical DOE programs. The Council requests at least level funding from 2017 funding levels for energy efficiency, renewable energy and natural gas programs in these offices.

BCSE is a coalition of companies and trade associations from the energy efficiency, natural gas and renewable energy sectors. It includes independent electric power producers, investor-owned utilities, public power, manufacturers, commercial end users and service providers in energy and environmental markets. Founded in 1992 the coalition's diverse business membership is united around the continued revitalization of the economy and the creation of a secure and reliable energy future in America.

We are gravely concerned that significant cuts to, or the elimination of, key DOE programs could undermine job creation and the goal to modernize the country's aging energy infrastructure. Therefore, as Congress moves forward with appropriations legislation for the Fiscal Year 2018 Energy and Water Appropriations bill, we request that you consider the value these programs provide to the reliability and security of the nation's energy system and to American consumers.

Since the inception of the energy efficiency, renewable energy, energy storage, and advanced natural gas programs at the DOE and the national laboratories, our industries have partnered with the federal government to bring new technologies and innovation into the global markets. This has given the United States worldwide competitive advantage and helps support over 3 million jobs<sup>1</sup> in energy efficiency, renewable energy and natural gas manufacturing and service sectors. This market dynamism and success is the result of a long-time bipartisan consensus of world class research, both pure and applied, successfully linked with industry.

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<sup>1</sup> <https://energy.gov/articles/doe-releases-second-annual-national-energy-employment-analysis-0>

### DOE Programs Provide Value to Taxpayers

Clean energy research, development, deployment, and commercialization activities, funded through the Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE), the Office of Fossil Energy (FE), and the Office of Electricity Delivery and Energy Reliability (EDER), have resulted in real market penetration of a wide range of sustainable energy technologies and resources, and have helped lower costs for consumers. In the past year, consumers devoted less than 4% of their total annual household spending to energy - the smallest share ever recorded - and retail electricity prices alone dropped 3% on average.<sup>2</sup>

The DOE's programs have helped make the United States one of the most attractive markets in the world for companies whose operations entail significant energy-related costs. The retail price of electricity for the industrial sector in the United States is lower than that in other major economies, such as Europe, China and Mexico. And In 2016, domestic natural gas production was at near record-highs, even as prices dropped during the first half of the year. The benchmark Henry Hub hit an 18-year low of \$1.70/MMBtu in March 2016.<sup>3</sup> Energy productivity also continues to improve as less and less energy is needed to grow the economy. Since 2007, in fact, the nation's gross domestic product (GDP) has increased 12% while overall energy consumption has fallen by 3.7%.<sup>4</sup>

### DOE Programs Assist with National Security and Grid Reliability

Reduced electricity demand through energy efficiency, smart grid technologies for improved grid management, and the growing role for distributed generation (from stationary fuel cells and other technologies for back up or base load power), as well as dispatchable resources such as natural gas plants, hydropower, and demand response, can help the electricity industry meet security challenges. Still, many market structures do not yet fully recognize the benefits of some of the technologies which offer increased flexibility, such as energy storage.

Research, development and deployment (RD&D) investments are needed to improve efficiency, demonstrate performance and spur new innovations that will be required to meet the evolving needs of the power grid. For example, investment being made in smarter and more efficient technologies such as voltage sensors can help utilities better pinpoint what is happening on the grid and speed power restoration efforts when outages occur.

### The Federal Role for Energy

As a neutral player, rather than one with a financial interest, DOE can help analyze policy options for deploying new energy technologies and their potential impacts on the grid. In addition, DOE can help streamline the processes of permitting, inspection, and interconnection of new energy technologies. DOE works to address market barriers to the adoption of new technologies that are market ready – such as a lack of reliable information, inconsistent regulatory environments, and workforce training gaps – through activities that include providing best practice information, stakeholder outreach, sustaining and enhancing the workforce and providing reliable, objective data. These efforts can help these technologies to the edge of widespread market adoption and should be continued. Furthermore, the natural gas and utility industries are risk adverse.

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<sup>2</sup> Sustainable Energy in America Factbook at <http://www.bcse.org/sustainableenergyfactbook.html>

<sup>3</sup> Sustainable Energy in America Factbook at <http://www.bcse.org/sustainableenergyfactbook.html>

<sup>4</sup> Ibid

Public-private partnerships reduce this risk to enable industry to tackle tougher challenges that have greater upside, the benefits of which are shared by taxpayers and consumers. The public-private partnership that introduced technology that brought about the shale gas revolution, is a prime example.

To continue growth in these sectors, long-term, stable policies will be needed to level the playing field and to provide market access to new technologies. Continued investment in energy RD&D is needed to increase the efficiency of our energy generation and use, and to spur new innovations.

### *Energy is Critical Infrastructure*

The extensive power grid and natural gas system in the United States have fueled the nation's economic growth and ensured its global competitiveness. However, more investment is needed in certain areas of the country to get clean energy and natural gas to consumers. There is an estimated gap of over \$560 billion needed in additional spending for energy infrastructure, between now and 2040. BCSE has written a white paper to explore federal infrastructure priorities and to make recommendations to expand energy efficiency, natural gas and renewable energy. For a copy of the BCSE principles on federal infrastructure priorities, please visit the Council's website at [www.bcse.org](http://www.bcse.org).

The Trump Administration and Congress have an unprecedented opportunity to help improve our nation's aging infrastructure. Through public-private partnerships, siting, permitting, and regulatory reforms; targeted research, development, and deployment investments; and financing tools that leverage private capital, the federal government can upgrade and expand U.S. infrastructure and create well-paying jobs for Americans.

### *Conclusion*

Thank you for your consideration of the Council's views. Please feel free to reach out to me at [ljacobson@bcse.org](mailto:ljacobson@bcse.org), or to Ruth McCormick on the Council's staff at [rmccormick@bcse.org](mailto:rmccormick@bcse.org), for additional information.