Daniel Bresette Executive Director Environmental and Energy Study Institute

Outside Witness Testimony U.S. House of Representatives Committee on Appropriations Subcommittee on Energy and Water Development, and Related Agencies

Support for Select Federal Programs that Address Climate Change Mitigation and Adaptation U.S. Department of Energy (Office of Energy Efficiency and Renewable Energy)

March 31, 2020

Thank you for the opportunity to submit written testimony for the record in support of programs under the Subcommittee's jurisdiction that support climate change mitigation and adaptation. The Environmental and Energy Study Institute (EESI) is a non-profit organization founded in 1984 by a bipartisan, bicameral group of members of Congress to inform the development and enactment of federal environmental and energy policies. Since its inception, EESI has been an influential voice on sustainable energy and environmental issues and a trusted resource for public briefings and publications that bring science and facts to the policymaking process. In 1988, EESI's board of directors declared that addressing climate change was a moral imperative, and this directive guides our work to this day.

No single policy or program can deliver the emissions reductions necessary to avoid the worst climate change impacts or help all affected communities adapt to a changing environment. Instead, the urgency of climate change requires a comprehensive set of policies and programs, funded and administered to ensure inter- and intra-agency coordination and deliver maximum results. The Subcommittee has within its jurisdiction several agencies and many programs that would continue to advance climate change solutions—mitigation and adaptation—if adequately funded. As the Subcommittee carries out its work, EESI respectfully requests at least level funding for these and other programs in fiscal year 2021 and clear direction to agencies to adhere to Congressional intent and obligate and expend resources in a timely way to support climate change mitigation and adaptation.

Thank you for your consideration.

U.S. Department of Energy—Office of Energy Efficiency and Renewable Energy

The U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is uniquely positioned to help the U.S. reach its climate change mitigation and adaptation goals. In partnership with its national lab partners; state energy offices; and private-sector partners in research and development, demonstration and deployment (RDD&D); the EERE has led advancements in energy efficiency technologies such as solid-state lighting, and renewable energy technologies such as solar photovoltaics that are achieving greater market penetration

today than ever before. Just as important are the programs that integrate energy efficiency and renewable energy, such as the Building America program within EERE's Building Technologies Office (BTO) that focuses on new residential construction. Building America teams are improving and implementing best practices in building science to achieve very "low-energy" structures that then enable cost-effective integration of renewable energy. This integration of energy efficiency and renewable energy is critical to net-zero energy home construction.

In addition, EERE supports RDD&D to integrate zero-energy (or energy-producing) buildings with sustainable transportation such as plug-in electric vehicles and the power grid. These building-grid integration initiatives are essential to reducing greenhouse gas emissions and improving community resilience and sustainability.

Specifically, we respectfully request FY2021 funding for the following EERE programs, as summarized below:

Buildings Technologies Office: At least \$300 million to develop innovative, cost-effective technologies, tools, and solutions that help U.S. homeowners, consumers, and businesses achieve peak energy efficiency performance in their buildings across all sectors of our economy. In particular, the residential and commercial building integration programs are critical to the race toward a low-emission building sector. The programs on Appliance and Equipment Standards and Building Energy Codes help ensure this cutting-edge work can be cost effectively deployed.

<u>Advanced Manufacturing Office</u>: At least \$395 million to enable the research, development, demonstration and deployment of industrial energy efficiency and advanced manufacturing technologies. These technologies will keep U.S. companies competitive in international markets and enable them to retain and continue to expand employment opportunities in local economies.

Federal Energy Management Program: At least \$44 million. \$28 million for the base program to provide project and policy expertise to all federal agencies. With minimal funding, Federal Energy Management Program (FEMP) supports all agencies of the Federal government in their quest to save energy and money for the American taxpayer while improving agency infrastructure and addressing deferred maintenance. FEMP is at the forefront of efforts to improve federal building energy performance, which is accomplished in part by accessing and leveraging private capital in performance contracts. The additional private capital has been used to finance hundreds of projects across two dozen agencies, creating 30,000 jobs and reducing energy outlays by \$8 billion over the next 18 years.

<u>Weatherization and State Energy Program</u>: No less than \$378.5 million, and within this account, we request funding allocations for the following priorities, including at least \$308.5 million for the Weatherization Assistance Program (WAP) (\$305 million in formula funds and at least \$3.5 million in training & technical assistance) and \$70 million for the State Energy Program (SEP). RDD&D investments will continue to make emerging technologies cheaper and

more accessible, but WAP is particularly important for bringing energy efficiency to communities that need it.

Since 1976, WAP has helped make more than 7.4 million homes more efficient, saving the average recipient about \$4,200 over the lifetime of their home. Each WAP dollar produces \$4.50 in benefits, including energy savings as well as improved health and safety. WAP also helps workers and small businesses, directly supporting more than 8,500 jobs and supporting thousands more in related industries. SEP leverages over \$10 for every federal dollar invested and saves over seven dollars for every federal dollar invested. In addition to energy efficiency and renewable energy programs, SEP is critical for dealing with cyber security and energy emergency preparedness and response.

Vehicle Technologies Program: At least \$410 million to pursue advanced

efficiency technologies for light- and heavy-duty vehicles and transportation system efficiency. This program supports RDD&D of efficient and sustainable transportation technologies that will improve energy efficiency, fuel economy, and enable America to use less petroleum. These technologies, which include advanced batteries and electric drive systems, lightweight materials, advanced combustion engines, alternative fuels, as well as energy efficient mobility systems, will increase America's energy security, economic vitality, and quality of life.

U.S. Energy and Employment Report: Two million dollars for the EERE Office of Policy to complete a U.S. Energy and Employment Report that includes a comprehensive statistical survey to collect data, publish the data and provide a summary report. The information collected will include data related to employment figures and demographics in the U.S. energy sector. The report presents a unique snapshot of energy efficiency employment in key sectors of the economy, including construction and manufacturing.

Energy Information Administration: \$135 million to continue important data collection, analysis, and reporting activities on energy use and consumption including the Commercial Buildings Energy Consumption Survey and the Residential Buildings Energy Consumption Survey.