



**Date:** April 15, 2023

**Submitted by:** Vincent Barnes, SVP Policy & Research, Alliance to Save Energy, on behalf of the Energy Efficiency Strategy Group (EESG) and undersigned organizations.

**Prepared for:** Senate Subcommittee on Energy and Water Development

**Subject:** U.S. Department of Energy (DOE) FY2024 Appropriations

The Alliance to Save Energy, a bipartisan, non-profit organization representing a coalition of businesses, government, environmental, and consumer leaders, respectfully submits this testimony alongside the undersigned allied organizations to urge you to support robust energy efficiency (EE) investments in critical programs managed by the U.S. Department of Energy (DOE). Increasing investment in these programs can deliver significant emissions reductions, grow jobs in the clean energy sector, and provide savings to American consumers.

Energy efficiency, a key domestic resource, is critical to ensuring safe, reliable, and affordable energy to Americans now and in the future. Efficiency measures have cut our energy use in half relative to the size of the U.S. economy since 1980. This energy waste reduction has effectively delivered more than \$2,000 in annual savings per American. According to the American Council for an Energy-Efficient Economy, scaling up key energy efficiency-related policies and programs can slash U.S. energy use and greenhouse gas emissions by about 50% by 2050. These energy savings would amount to more than \$700 billion in 2050.

The U.S. energy efficiency workforce is comprised of over 2.1 million Americans, which is the largest share of the entire U.S. energy sector and is more than all combined jobs in clean and fossil energy generation. Most of these jobs provide good compensation and cannot be shipped overseas, ensuring that future generations of Americans can pursue competitive careers in energy efficiency.

The importance of the U.S. DOE in research, technical assistance, and market integration efforts that have driven gains in energy efficiency cannot be overstated. U.S. DOE EE programs provide exceptional value to American consumers and businesses, yielding benefits that far outweigh the relatively nominal outlays appropriated by Congress. According to various impact evaluation studies, DOE's innovation investments have had a benefit-to-cost ratio of 33 to 1 and generated billions of net economic benefits for the country.

We respectfully request FY2024 regular appropriations funding for the following DOE programs, as summarized below:

**Buildings Technologies (BTO): \$399 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.** Within this account, robust funding is needed for:

- **Residential Buildings Integration (RBI):** \$91 million for DOE to collaborate with the residential building industry to improve the energy efficiency of both new and existing homes. At least \$10 million should be provided for residential grid-interactive efficient buildings (GEBs) activities and information sharing on associated technologies, costs, and benefits to position American companies to lead in this area. RBI develops critical technologies, tools, and solutions that help U.S. consumers and businesses achieve peak efficiency performance in residential buildings across the country. RBI's work supports workforce development and training and has partnerships with thousands of small businesses in this sector, the construction trades, equipment, smart grid technology and systems suppliers, integrators, and state and local governments. The integration research, demonstration, and market transformation activities of RBI are critical as we

transform America's new and existing residential buildings and work towards the Administration's goal of weatherizing 2 million homes.

- **Commercial Building Integration (CBI):** \$91 million for the program's research, development, and evaluation help advance a range of innovative building technologies and solutions, paving the way for high performing buildings that could use between 50% and 70% less energy than typical buildings. At least \$10 million should be provided for commercial grid-interactive efficient buildings (GEBs) activities and information sharing on associated technologies, costs, and benefits to position American companies to lead in this area. CBI works with industry, small businesses, academia, national labs, and other entities to advance energy efficiency solutions and technologies for commercial buildings. The program, which considers buildings as systems and as part of the electric grid, continues to be transformative in moving industry partners to embrace innovation.
- **Efficiency Standards, Building Codes, and Test Procedures:** \$90 million for equipment and building standards, including \$60 million for appliance standards and at least \$30 million for the Building Energy Codes Program. DOE is responsible for setting minimum energy efficiency standards for appliances, equipment, and lighting to ensure new models continue to make progress on efficiency as technology matures. The Department is far behind in issuing new appliance standards, making an increased focus critical. DOE plays an important support and technical assistance role in the development and implementation of building energy codes, which are adopted by states and local governments for new construction and renovations of residential and commercial buildings, that reflect developments in building energy efficiency and "lock in" savings for the life of the building. Education, training, and technical assistance have been woefully underfunded over the past several years and can be very impactful in assisting in codes' adoption and effective implementation.
- **Emerging Technologies (ET):** \$127 million for the program to enable cost-effective, energy-efficient technologies to be developed and introduced into the marketplace. ET funds and directs applied research and development (R&D) for technologies and tools that support building energy efficiency, particularly electric technologies for a carbon-free grid.

**Advanced Manufacturing: At least \$636 million, the amount requested in the President's budget for Advanced Materials and Manufacturing Technologies (AMMTO) and Industrial Efficiency and Decarbonization (IEDO), to enable the research, development, demonstration, and deployment of industrial energy efficiency and advanced manufacturing technologies. This level of funding is intended to accommodate an ambitious agenda of decarbonizing U.S. manufacturing by the midcentury. This goal of dramatic reductions requires increases in activity levels across EERE and some important changes in the orientation of the Office's goals. We also urge consideration of the President's budget request for Manufacturing and Energy Supply Chains, as well as Clean Energy Demonstrations.** EERE should expand its efforts from promoting energy efficiency to include efforts to reduce carbon emissions for manufacturing and reduce the embodied carbon in manufactured products. Additionally, as EERE rebuilds its staffing, the Office should focus on adding expertise in important decarbonization technology areas identified in its research road mapping.

- **Energy Management:** Efforts to promote Strategic Energy Management practices and the establishment of a program to provide competitive grants to companies for the hiring or designation of plant energy managers. For Strategic Energy Management, EERE should focus efforts on small and medium-sized manufacturing plants.
- **Save Carbon Now:** Expansion of the Better Plants program to offer comprehensive assessment and engagements to the 1,500 largest greenhouse gas emitting manufacturing facilities. These engagements should include, but not be limited to, targeted assessments, staff training, technical analyses of opportunities, and education.
- **Existing Low-Carbon Technology:** Establishment of a grant program for manufacturing plants to install underutilized existing low-carbon technologies.

- Smart Manufacturing: Support the development and adoption of smart manufacturing practices directed toward small and medium-sized manufacturers. This includes but is not limited to, expanded funding for the Clean Energy Smart Manufacturing Innovative Institute (CESMII) to increase educational and technical assistance activities directed toward smart manufacturing adoption.
- Industrial Process Heating Decarbonization: Establishment of a research, development, and deployment effort by EERE to promote the adoption of technologies that can dramatically reduce the GHG emissions from process heating applications.
- Industrial Assessment Centers: Support for the Industrial Assessment Centers (IAC) program to expand the program at MESC and increase the number of university-based centers to 40; to establish satellite centers at community colleges, technical schools, and union training facilities; and to establish an apprenticeship program with matching funding for IAC students at facilities that have received assessments in the recent past to facilitate the implementation of recommendations.
- Flex Tech: Establishment of a Flex-Tech program that provides grants to states and tribal governments partnered with educational institutions and trade associations to provide energy and greenhouse gas reduction assessments and loans to implement identified measures at small and medium-sized manufacturers.

**Federal Energy Management Program (FEMP): At least \$82.2 million, consistent with the President’s budget request, to provide project and policy expertise to all federal agencies, including not less than \$24 million for the Department to continue its work through the Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) program under the Federal Energy Efficiency Fund and \$2 million for the Performance Based Contract National Resource Initiative (PCNRC).** With minimal funding, 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. FEMP’s work has attracted private capital used to finance over 441 projects across two dozen agencies and resulted in approximately \$8 billion in investments in federal energy efficiency and renewable energy improvements. These improvements have generated approximately \$18 billion in cumulative energy cost savings for the federal government. Specified funding for AFFECT has been provided in prior fiscal years to provide small grants to federal agencies to help achieve energy savings and resilience goals. These grants are then leveraged through performance contracts, allowing agencies to utilize private finance to complete innovative and comprehensive energy and water conservation projects that would not otherwise be possible. The PCNRC is a hub for best practices and solutions for performance contracts implemented in state, local, and federal markets.

**Weatherization Assistance Program (WAP): At least \$442 million is recommended for the Weatherization Assistance Program, including \$375 million for the base Program, \$15 million for training and technical assistance, and \$52 million for the Weatherization Readiness Fund.** R&D investments will continue to make emerging technologies cheaper and more accessible, but DOE’s Weatherization Assistance Program is particularly important for bringing energy efficiency to communities and families that need it most. According to the Energy Information Administration, over 25 million American households report forgoing food or medicine to pay energy costs, while over 12 million households report being unable to use their heating or cooling equipment. Since 1976, WAP has helped make more than 8 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. Federal weatherization assistance also helps workers and small businesses.

**State Energy Program (SEP): At least \$90 million is recommended for State Energy Program grants.** The Department is directed not to utilize funds from the State Energy Program appropriation,

either from annual appropriations or IJJA or IRA funds for technical assistance. SEP leverages over \$10 for every federal dollar invested and saves over \$7 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. SEP is extremely flexible and is the basis for a variety of partnership programs.

**U.S. Energy & Employment Report (USEER): \$2 million for the Office of Policy to complete the annual U.S. energy 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 (EIA): \$157 million to continue important data collection, analysis, and reporting activities on energy use and consumption, including the Commercial Buildings Energy Consumption Survey (CBECS), the Residential Energy Consumption Survey (RECS), and the Manufacturing Energy Consumption Survey (MECS).** Sec. 40413 of the Bipartisan Infrastructure Law requires but does not provide funding for EIA to expand data collection for the CBECS, RECS, and MECS. We strongly support increased funding for these activities, which are foundational for improving the energy efficiency of sectors that account for more than two-thirds of U.S. energy consumption. The Energy Information Administration account should provide \$5 million in new funding to implement these activities.

We stand ready to work with Congress, the White House, and federal agencies to identify ways the U.S. can improve the affordability and access of energy-efficient technologies, unlock utility savings for consumers, reduce energy-related carbon emissions, and improve public health. We appreciate your consideration of our requests.

Sincerely,

Alliance to Save Energy  
Advanced Energy United (AEU)  
American Council for an Energy-Efficient Economy (ACEEE)  
ASHRAE  
Building Performance Association (BPA)  
Business Council for Sustainable Energy (BCSE)  
California Efficiency + Demand Management Council (CEDMC)  
E4TheFuture  
Environmental and Energy Study Institute (EESI)  
Federal Performance Contracting Coalition (FPCC)  
Institute for Market Transformation (IMT)  
International Code Council (ICC)  
National Association for State Community Services Programs (NASCSP)  
National Association of Energy Service Companies (NAESCO)  
National Association of State Energy Officials (NASEO)  
Natural Resources Defense Council (NRDC)  
Northeast Energy Efficiency and Electrification Council (NEEEEC)  
Northeast Energy Efficiency Partnerships (NEEP)  
Midwest Energy Efficiency Alliance (MEEA)  
Southeast Energy Efficiency Alliance (SEEA)  
Southwest Energy Efficiency Project (SWEEP)  
U.S. Green Building Council (USGBC)