

# United States Senate

WASHINGTON, DC 20510

May 4, 2022

Senator Dianne Feinstein  
Chairman  
Subcommittee on Energy and Water  
Development  
Senate Committee on Appropriations  
188 Dirksen Senate Office Building  
Washington, DC 20510

Senator John Kennedy  
Ranking Member  
Subcommittee on Energy and Water  
Development  
Senate Committee on Appropriations  
142 Dirksen Senate Office Building  
Washington, DC 20510

As you begin work on the Fiscal Year (FY) 2023 Energy and Water Appropriations bill, we write to express our strong support for robust and sustained funding for the Department of Energy (DOE) Office of Science.

In March 2022, the bipartisan DOE Science for the Future Act (S. 3699) was introduced in the Senate as a complement to similar House-passed legislation. This legislation provides a bold vision for how the DOE Office of Science can maintain U.S. competitiveness, drive innovation that creates jobs and bolsters our economy, and train a highly-skilled science and technology workforce. This legislation also includes authorized funding levels necessary to support new and expanded research initiatives and the timely construction of world-class science facilities. We believe these proposed authorization levels should guide FY 2023 appropriations.

As the nation's primary sponsor of research in the physical sciences, the DOE Office of Science built and now maintains a collection of 28 large-scale, cutting-edge, user facilities relied on by more than 36,000 researchers annually. Nearly half of these users are university faculty and students from all 50 states. Others come from industry and many are conducting research for other key federal science agencies, such as the National Institutes of Health, the National Science Foundation, and the Department of Defense. Without these critical facilities, thousands of users would be forced to move their job-creating research activities overseas or terminate their research altogether.

The DOE Office of Science also supports a workforce of more than 22,000 research scientists, engineers, and support personnel who work to solve some of the nation's greatest challenges, often at a moment's notice. For example, as part of the nation's response to the COVID-19 pandemic, DOE mobilized multi-disciplinary teams from national laboratories, industry, and academia to, among other things, expedite discovery of antivirals; provide more accurate disease transmission forecasts to Federal, state, and local decision-makers; and address supply chain bottlenecks for PPE, test kits, and ventilators. Moreover, the Office of Science plays a unique and critical role in the education of the next generation of American scientists, including thousands of graduate students and postdoctoral researchers at hundreds of institutions who depend upon DOE Office of Science support and facilities for their research and training.

This collection of research, facilities, and scientific talent enables the DOE Office of Science to contribute greatly to our quality of life, health, and security. The DOE Office of

Science has been integral to the development of countless innovative technologies, including MRI machines and PET scans; new composite materials for military hardware and motor vehicles; medical and industrial isotopes; drop-in biofuel technologies; DNA sequencing technologies; more aerodynamic and fuel efficient long-haul trucks; electric vehicle battery technology; an artificial retina; newer and safer nuclear reactor designs; tools to manufacture nanomaterials; and better sensors and detectors for biological, chemical, and radioactive materials. The DOE Office of Science's long-standing leadership in high performance computing has enabled innumerable scientific discoveries.

Looking ahead, Office of Science-supported research will form the foundation for future energy technologies. Developing energy systems that meet our security, economic, and environmental challenges will require robust investment in fundamental research. The DOE Office of Science works at the forefront of energy storage; negative emission technologies; advanced nuclear, hydrogen, fusion, and renewable energy; carbon capture; storage and utilization; and next-generation fuels. These technologies constitute major pillars of local and regional economies and can serve as the foundation for a just transition to a cleaner, more secure energy system.

The Office of Science also leads on critical industries of the future, including quantum information science, artificial intelligence, high performance computing, microelectronics, advanced communications networks, and biotechnology. Continued innovation and the jobs of the future depend on the Office of Science's ability to maintain U.S. leadership in these critical areas. As other countries invest significantly in science and technology, and specifically in the physical sciences, it is more important than ever to sustain funding for the Office of Science.

Investing in the DOE Office of Science will preserve our capacity to innovate, reduce our dependence on foreign sources of energy, enhance our competitive edge in the global economy, ensure our national security, and create good American jobs well into the future. For these reasons, we urge you to make strong and sustained funding for the DOE Office of Science one of your highest priorities in FY 2023.

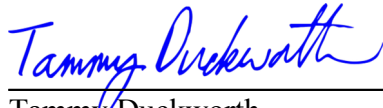
Sincerely,



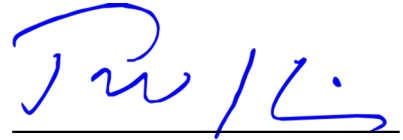
Richard J. Durbin  
United States Senator



Marsha Blackburn  
United States Senator



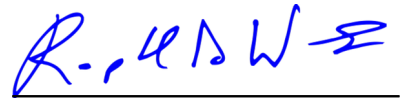
Tammy Duckworth  
United States Senator



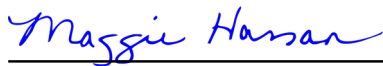
Tim Kaine  
United States Senator



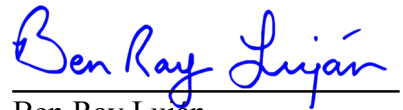
Maria Cantwell  
United States Senator



Raphael G. Warnock  
United States Senator



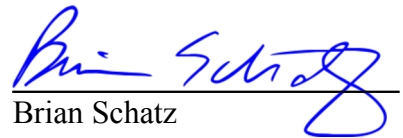
Margaret Wood Hassan  
United States Senator



Ben Ray Lujan  
United States Senator



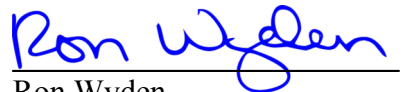
Benjamin L. Cardin  
United States Senator



Brian Schatz  
United States Senator



Chris Van Hollen  
United States Senator



Ron Wyden  
United States Senator



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Tammy Baldwin  
United States Senator



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Kirsten Gillibrand  
United States Senator



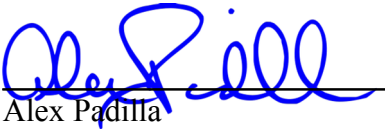
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Tina Smith  
United States Senator



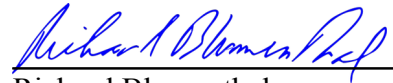
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Joe Manchin III  
United States Senator



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Alex Padilla  
United States Senator



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Richard Blumenthal  
United States Senator



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Sheldon Whitehouse  
United States Senator



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Michael F. Bennet  
United States Senator



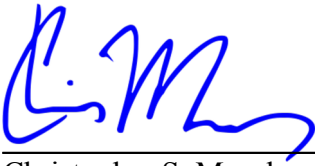
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Mark R. Warner  
United States Senator



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Debbie Stabenow  
United States Senator



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Christopher S. Murphy  
United States Senator



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Jacky Rosen  
United States Senator



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Elizabeth Warren  
United States Senator



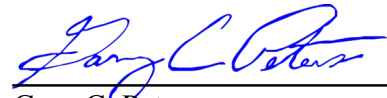
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Jack Reed  
United States Senator



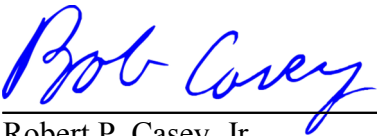
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Christopher A. Coons  
United States Senator



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Gary C. Peters  
United States Senator



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Robert P. Casey, Jr.  
United States Senator



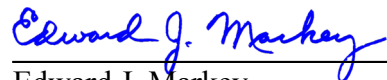
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Catherine Cortez Masto  
United States Senator



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Sherrod Brown  
United States Senator



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Edward J. Markey  
United States Senator

