



**ENERGY SCIENCES
COALITION**

Statement in Support of the DOE Science of the Future Act

June 11, 2021

The Honorable Eddie Bernice Johnson
Chairwoman
Committee on Science, Space, and Technology
2321 Rayburn House Office Building
Washington, DC 20515

The Honorable Frank Lucas
Ranking Member
Committee on Science, Space, and Technology
2321 Rayburn House Office Building
Washington, DC 20515

Dear Chairwoman Johnson and Ranking Member Lucas:

On behalf of the more than 100 organizations involved in the Energy Sciences Coalition (ESC), we write in strong support of the bipartisan DOE Science of the Future Act, H.R. 3593. This bill makes bold new investments in fundamental research, world-class science facilities, and workforce development efforts supported by the DOE Office of Science. In particular, new investments and science initiatives in the bill are needed to stay ahead of international competition, maintain U.S. competitiveness, support a highly skilled and diverse science and technology workforce, and create American jobs of the future in key energy sectors as well as new technology areas such as high-performance computing, artificial intelligence, biotechnology, and quantum information science.

We believe the legislation is consistent with prior ESC recommendations and supports several key aspects critical to the future success of the Office of Science: 1) growing core research in the physical sciences and other Office of Science-supported scientific disciplines, 2) investing in new research initiatives to maintain U.S. leadership, 3) accelerating the construction of world-class scientific user facilities and 4) expanding workforce development programs. Specifically, the ESC supports:

- **An authorized appropriation level of \$8.729 billion in FY 2022—a 24 percent increase above FY 2021 enacted levels—accompanied by 7 percent growth annually through FY 2026 to sustain core activities and science facilities.** This includes a 7 percent annual increase for all six Office of Science core research programs over the next five years. This type of investment will reverse declines in research funding over the last several years and take into account inflationary pressures and declining purchasing power. Robust investments in core research programs are necessary to maintain U.S. leadership in science and technology, form the foundation for advancing critical industries of the future and major research initiatives, train the next-generation workforce, and fully utilize our investments in world-class scientific infrastructure.

The Energy Sciences Coalition (ESC) is a broad-based coalition of organizations representing scientists, engineers and mathematicians in universities, industry and national laboratories who are committed to supporting and advancing the scientific research programs of the U.S. Department of Energy (DOE), and in particular, the DOE Office of Science.

- **New research initiatives.** ESC strongly supports the new research initiatives proposed in the bill to address pressing energy, climate, and environmental challenges. These include program-specific initiatives such as the Coastal Zone Research Initiative, the Next Generation and Energy Efficient Computing programs, the Quantum Networking and Quantum Computing and Cloud programs, and the Milestone-Based Fusion Energy Development program, as well as cross-cutting initiatives such as a High Intensity Laser Research program. ESC also strongly supports new funding mechanisms, such as climate and environmental mid-scale research centers and a mid-scale instrumentation program, that will take advantage of new world-class scientific user facilities.
- **Accelerating construction of world-class user facilities.** ESC supports the bill's authorization levels to accelerate construction and upgrades of major, large-scale scientific facilities. The authorization levels are based on technically-driven schedules rather than funding-limited schedules to stay ahead of international competition. These projects are necessary to maintain U.S. leadership and help attract and retain the best scientific talent.
- **Increased funding for workforce development programs and new programs to address diversity, equity and inclusion.** ESC supports efforts to grow existing programs, such as the Graduate Student and the Science Undergraduate Laboratory Internship programs, to meet growing needs for a highly-trained STEM workforce. ESC also supports new, dedicated efforts to expand opportunities to increase the number and the diversity, equity, and inclusion of highly skilled STEM professionals working in DOE mission-relevant disciplines and broaden the recruitment pool to increase diversity, including expanded partnerships with minority-serving institutions, emerging research institutions, and scientific societies. ESC also supports efforts to coordinate with the National Science Foundation on its Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science National Network (INCLUDES) program.
- **Alternative financing of research facilities and infrastructure.** ESC supports the inclusion of new provisions that allow DOE and the national labs to utilize alternative financing to modernize critical infrastructure at the national labs. The Office of Science faces close to \$1 billion in deferred maintenance across the 10 Office of Science national labs. Alternative financing is a potential tool to help address aging general-purpose infrastructure – such as office space, general laboratory space, storage space and utilities – which forms the backbone of the DOE enterprise. Proposing new ways to maintain, repair, upgrade and replace general purpose infrastructure would foster safe, efficient, reliable and environmentally responsible operations, while also boosting morale of the scientific and engineering workforce at the national laboratories.

ESC thanks you for advancing this important legislation and looks forward to continue working with the Committee to support the DOE Office of Science.

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