



ENERGY SCIENCES COALITION

April 27, 2026

The Energy Sciences Coalition (ESC) urges Congress to reject the proposed cut to the U.S. Department of Energy (DOE) Office of Science in the FY 2027 budget request. Instead, Congress should appropriate \$9.5 billion in FY 2027 to maintain U.S. competitiveness and unleash innovation in new energy and emerging technologies, consistent with ESC's February 2026 [FY 2027 funding statement](#).

The \$1.261 billion proposed cut to the Office of Science is not consistent with the Administration's goal of "unleashing a golden era of American energy dominance" and strengthening our national security. The proposed budget jeopardizes the foundational programs of the Office of Science and does not provide sufficient support to make significant progress in priority areas, such as artificial intelligence (AI), quantum computing, fusion, critical minerals, and geothermal energy, which require bold new investments in the basic science underpinning these fields. The Office of Science has a proven model of success in discovery and cutting-edge innovation leveraging unique science and technology strengths across all six major program areas. It also has an excellent track record of delivering major projects on time and on budget.

In the context of the proposed budget cuts, ESC does support a number of investments highlighted in the budget request:

- full funding for current research infrastructure projects consistent with DOE-approved project profiles, including the construction and upgrades of light sources, neutron sources, accelerators, and specialized equipment for biotechnology;
- targeted increases for the operations of some existing facilities and experiments to support researchers who use these facilities each year to make major scientific advancements;
- targeted increases to national lab infrastructure modernization projects to upgrade aging utilities and equipment, such as building HVAC systems, chilled water plants, electrical systems components, fire safety capabilities, and emergency generators, needed for the safe and reliable operations of world-class research facilities;
- targeted increases for AI and quantum science and technology to help address science, energy, and national security challenges; and
- targeted funding for a few new initiatives, such the plant transformation capability and the biotechnology grand challenge initiative; and

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- seed funding for high priority fusion projects, such as the design of an integrated blanket/fuel cycle facility, a neutron source test facility, and fusion test stands.

Despite these few positive developments, the proposed budget request would ultimately have a devastating impact on research, the STEM workforce, and the full operations of world-leading research facilities.

Research Funding and STEM Workforce

The FY 2027 budget request proposes a cut of \$890 million or 34% to major Office of Science research programs. This includes cuts to fundamental research in every major scientific discipline (except fusion energy sciences) as well as science and engineering research to develop new technologies for future world-class facilities. This cut would come on top of a \$200 million or 5% cut in fundamental research in the last three years.

Program (Funding in millions)	FY 2026 Enacted	FY 2027 Request	FY 2026 vs. FY 2027
Basic Energy Sciences	930	574	-356 (-38%)
Materials Sciences and Engineering	466	293	-173 (-38%)
Chemical Sciences, Geosciences, and Biosciences	418	250	-168 (-40%)
Accelerator and Facilities R&D	46	31	-15 (-33%)
High Energy Physics	431	284	-147 (-34%)
Research	189	90	-99 (-52%)
Accelerator and Technology R&D	242	194	-48 (-20%)
Advanced Scientific Computing Research	160	110	-50 (-31%)
Applied Mathematics	75	59	-16 (-21%)
Computer Sciences	85	51	-34 (-40%)
Nuclear Physics	210	148	-62 (-30%)
Biological and Environmental Research	562	199	-363 (65%)
Biological Systems Science	307	170	-137 (-45%)
Earth and Environmental Systems Science	255	29	-226 (-89%)
Fusion Energy Sciences	344	432	+88 (+26%)
Total, Research	2,637	1,747	-890 (-34%)

- The United States is already falling behind other competitors. Cutting research funding, which drives U.S. GDP growth, is not a winning strategy. Specifically, the proposed cuts would stop or delay progress toward science, energy, and national security goals, including:
 - applied math and computer science that harness exascale and other high performance computing facilities, advance the trustworthy, energy-efficient, and scalable use of AI and machine learning, and design the next-generation of semiconductors;

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- basic materials science, engineering, chemical, biosciences, and geosciences research to advance progress in rare earths and critical minerals, geothermal and other subsurface technologies, advanced nuclear and fusion, and novel approaches for advanced manufacturing;
 - biological and earth and environmental sciences focused on biotechnology, predictive weather impacts, and the destruction of nuclear and other legacy waste;
 - nuclear physics to explore the constituent forms of matter, representing 95% of U.S. funding in this field of science; and
 - high energy physics focused on exploring how the universe works and unraveling Nobel Prize winning mysteries related to the properties of neutrinos, dark matter and dark energy, and the expansion of the universe.
- The cuts in research would also translate into cuts in the domestic workforce in critical STEM fields at our national labs and research universities. **Based on DOE budget documents, the proposed research cuts would result in more than 5,000 fewer U.S. researchers engaged in DOE science and technology missions over the next year.** This would result in the layoffs of scientists, engineers, technicians, and other support staff at DOE national labs as well as the termination of research projects for faculty, graduate students, and postdoctoral researchers at research universities. The nation already faces a workforce shortage in STEM fields that address energy, environment, and national security. The proposed cuts would result in long-term damage to a critical pipeline of talent for U.S. scientific competitiveness.
- **ESC calls on Congress to reject the \$890 million proposed cut and instead add \$420 million to Office of Science research to increase all Office of Science programs by 16%.** This would bring research funding closer to FY 2024 funding levels and add \$100 million in new funds for research and development of next generation facilities. This additional funding is needed to help support the [new charge](#) by the DOE Under Secretary of Science to the Science Advisory Committee to prioritize new or upgraded facilities that are the most crucial to the needs of the nation for the next ten years (2026-2036). R&D is needed to provide the best options for future capabilities and drive down risk and cost. ESC also urges Congress to fully fund the Energy Frontier Research Centers at \$130 million and reject the \$11 million proposed cut in the budget request. These centers have been tremendously successful in addressing energy grand challenge problems.
- With research funding, ESC also recommends the following funding levels for **emerging technology initiatives**, including:
- **At least \$400 million for quantum information science (QIS) (+\$71 million compared to FY 2026 enacted), consistent with the FY 2027 budget request.** ESC recommends \$125 million to fully fund DOE National QIS Research Centers; \$100 million for quantum networking and communications research and development and regional test beds; \$70 million for innovative, high-risk quantum research; \$50 million for quantum foundries and novel quantum instrumentation; \$36 million for the Quantum User Expansion for Science and Technology program; \$20 million for

- an early-stage quantum high-performance computing research and development program; and \$5 million for a quantum-focused traineeship program.
- **\$400 million to advance AI for science, energy, and national security research and applications (+\$30 million compared to the budget request).** ESC recommends base appropriations within the Office of Science to support AI research and development, especially to fund new multi-disciplinary teams responding to AI grand challenge topics in science, energy and national security under the Genesis Mission. ESC is concerned about overreliance on prior year unobligated, reprogrammed, or rescinded funds to support AI research, especially if that funding is not available for use in FY 2027. AI can play a major role in finding important scientific and technological solutions for DOE missions, such as the search for new quantum materials for quantum computing, sensing, and networking applications; new nuclear and fusion reactor designs; and advanced manufacturing to maintain the nuclear stockpile. However, it requires sustained funding that does not come at the cost of pre-existing long-term research initiatives.
 - **\$200 million for microelectronics research and development (+\$127 million compared to FY 2026 enacted and the budget request),** including \$100 million for Microelectronics Science Research Centers.

Facility Operations and Research Infrastructure

ESC calls on Congress to provide additional funding for facilities operations and national lab infrastructure.

- While the budget request provides some increases, overall operations funding across the 28 world-leading, large scale research facilities would be down by \$76 million compared to FY 2026. With growing needs for maintenance and growing costs related to inflation, **DOE projects 14,800 fewer users in FY 2027.**
- **ESC recommends a \$280 million increase above FY 2026 for facility operations.** This is necessary to operate existing facilities and experiments and support more than 40,000 researchers from academia, industry, and federal agencies who rely on these facilities for their science and engineering pursuits. This level of funding would allow 91% of facility operations and fund critical maintenance activities to ensure long-term operation.
- While the budget request makes some targeted investments in national lab scientific infrastructure, **ESC recommends an additional \$200 million above FY 2026 to start new projects.** The FY 2027 budget request provides funding to complete ongoing projects but no new projects have started in the last 3 years. In the meantime, DOE estimates that 43% of general-purpose buildings at Office of Science national labs were rated as substandard or inadequate to meet mission needs, 71% of utility systems were rated as substandard or inadequate, and 35% of the remaining support infrastructure was rated as substandard or inadequate.

The United States must maintain its leadership in science, technology and innovation globally. The DOE Office of Science plays a pivotal and leading role in addressing our country's energy and national security challenges. For these reasons, we urge Congress to provide \$9.5 billion for the Office of Science in FY 2027. We look forward to working with you to advance the critical missions of this invaluable agency.

Sincerely,

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