



**ENERGY SCIENCES
COALITION**

July 6, 2020

The Honorable Nancy Pelosi
Speaker
United States House of Representatives
Washington, D.C. 20515

The Honorable Kevin McCarthy
Minority Leader
United States House of Representatives
Washington, D.C. 20515

Dear Speaker Pelosi and Leader McCarthy,

The Energy Sciences Coalition (ESC) respectfully requests that you consider including \$100 million to support COVID-19 research efforts and \$3 billion in supplemental appropriations for the Department of Energy (DOE) Office of Science in the next coronavirus relief package. Additional resources are needed to support unique DOE science facilities and research and technology efforts at DOE national laboratories and research universities to help with the COVID-19 response, such as vaccine development, and to restart operations and research projects at leading research laboratories and facilities that have been disrupted due to COVID-19.

As the United States recovers from the pandemic and you look for opportunities to jumpstart the economy, ESC strongly encourages you to also include an investment in Office of Science research infrastructure as part of any economic recovery or infrastructure bill. ESC recommends at least \$10 billion to ensure our nation's continued scientific and economic competitiveness, create thousands of high-quality, well-paying construction jobs, and attract the best and brightest scientists to national service.

COVID-19 Response

ESC thanks you for including \$99.5 million in the Coronavirus Aid, Relief, and Economic Security Act (CARES) Act as an important down payment on DOE Office of Science's ability to assist federal efforts in finding therapeutics, diagnostics, and vaccines and modeling the spread of the COVID-19 virus. DOE Office of Science established the National Virtual Biotechnology Laboratory as a hub to coordinate COVID-19 related activities. Light sources and neutron sources, for example, are being made available to understand the underlying structure of the virus. High performance computing platforms, coupled with artificial intelligence and machine learning, are being used to rapidly screen thousands of chemical compounds to help develop a vaccine and antiviral compounds. They are also being used to model how COVID-19 infections spread and how people behave during outbreaks to improve public health responses.

However, an additional \$100 million is needed during this time to support DOE user facilities, high performance computing capabilities, and enabling infrastructure, and new resources are necessary to support research efforts at DOE national laboratories and research universities to help with the COVID-19 response. Additionally, partnerships with the National Institutes of Health and the Department of Health and Human Services should be further expanded to share available data and fully leverage scientific machine learning capabilities.

COVID-19 Recovery

While the Office of Science research network – including the 17 DOE National Laboratories, world-class scientific tools and facilities, and world-leading researchers at national labs and research universities across the country – is playing a critical role in the COVID-19 response, this pandemic has impacted DOE Office of Science research efforts, facility and lab operations, and construction projects. Consistent with H.R. 7308, the Research Investment to Spark the Economy Act (RISE Act), ESC recommends \$3 billion to support the energy research workforce, mitigate the disruptions to research and core research facilities, and ramp up research that has been halted or slowed. These funds do not expand the nation’s investment in new DOE research, but are desperately needed just to preserve the current investment.

DOE should also be given additional resources and management flexibility in extending existing research grants as well as reimbursing researchers, faculty, students, contractors and subcontractors associated with DOE grants, cooperative agreements, and contracts, including those that could not report to work as a result of COVID-19. Due to COVID-19 disruptions at universities and national labs, undergraduate and graduate research work associated with DOE programs and grants were stalled or stopped. ESC requests that supplemental funds are used to extend or continue undergraduate internships and graduate and postdoctoral fellowships and traineeships at the DOE to preserve our nation’s future research workforce.

Research Infrastructure

An investment in DOE Office of Science, shovel-ready research infrastructure at national laboratories and university research facilities would immediately create construction jobs and stimulate the economy, as well as enable future scientific breakthroughs and discoveries vital to continuing American prosperity and security. This includes the construction of world-class user facilities and instruments that currently support 36,000 researchers from academia, industry and federal agencies; upgrades to and replacement of increasingly obsolete and unreliable support infrastructure to address growing deferred maintenance issues at DOE national laboratories; and expanded research initiatives to attract the best and brightest scientists and engineers to critical fields of science, including industries of the future, such as quantum information science, artificial intelligence, next-generation high performance computing, advanced communications networks, future energy technologies and engineering biology.

The U.S. faces increasing competition from our counterparts in Europe and Asia, as they race to build their own state-of-the-art facilities to attract the best minds and lead the world in science and technology. An additional infrastructure investment would accelerate the construction of world-class facilities and scientific instruments to stay ahead of this competition and make sure the U.S. remains the most attractive country in the world for scientific discovery and innovation. With a strong record of completing major construction projects on time and on budget, the Office of Science has been a good steward of taxpayer dollars.

Thank you for your continued leadership in science and technology. We look forward to working with Congress on advancing Office of Science investments related to COVID-19 research and restarting disrupted research operations and activities in the short-term and seeking opportunities for targeted infrastructure investments at Office of Science-supported facilities in the longer-term.

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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.

ESC Membership

American Association for the Advancement of Science	Jefferson Science Associates, LLC
American Association of Physicists in Medicine	Krell Institute
American Association of Physics Teachers	Lehigh University
American Astronomical Society	Massachusetts Institute of Technology
American Chemical Society	Materials Research Society
American Crystallographic Association	Michigan State University
American Geophysical Union	Michigan Technological University
American Geosciences Institute	New York University
American Institute of Physics	Northeastern University
American Mathematical Society	Northern Illinois University
American Physical Society	Northwestern University
American Society for Engineering Education	Oak Ridge Associated Universities (ORAU)
American Society of Agronomy	OSA—The Optical Society
Acoustical Society of America (ASA)	Pace University
American Society of Mechanical Engineers	Penn State University
American Society for Microbiology	Princeton University
American Society of Plant Biologists	Purdue University
American Vacuum Society	Rensselaer Polytechnic Institute
Arizona State University	Rutgers, The State University of New Jersey
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Binghamton University	Southeastern Universities Research Association
Biophysical Society	SPIE
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Case Western Reserve University	Stony Brook University
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Coalition for Academic Scientific Computation (CASC)	University of California System
Consortium for Ocean Leadership	University of Chicago
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Health Physics Society	University of Virginia
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	West Virginia University
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