



ENERGY SCIENCES COALITION

April 5, 2021

Dear Chairwoman DeLauro, Chairman Leahy, Ranking Member Granger, and Ranking Member Shelby,

As you begin consideration of fiscal year (FY) 2022 appropriations bills, the Energy Sciences Coalition (ESC) urges you to provide a robust funding allocation for the Energy and Water Development Appropriations bill that takes into account funding needed to support the U.S. Department of Energy (DOE) Office of Science. **ESC urges Congress to appropriate at least \$7.7 billion in FY 2022 for DOE Office of Science, an increase of 9.6 percent above FY 2021.**

Bold new investments in fundamental research are needed to bolster the economy, stay ahead of international competition, maintain U.S. scientific and technological leadership, 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. ESC's FY 2022 funding recommendation is needed to maintain a funding trajectory that ensures continued support for groundbreaking scientific discoveries, building and operating world-class scientific facilities, helping advance energy technologies needed for the nation to meet net-zero carbon emissions economy wide, developing Industries of the Future and emerging technologies, and maintaining the highly skilled science and technology workforce that is essential for the United States to compete globally.

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.

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 economic prosperity and national 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 biotechnology and bioengineering.

The U.S. faces increasing competition from our counterparts in Europe and Asia, as they invest heavily 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. It would also ensure that the U.S. remains the most attractive country

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.

in the world for scientists and researchers to come in order to advance scientific discovery and innovation. With a strong record of completing major construction projects on time and on budget, the Office of Science has been an excellent steward of taxpayer dollars.

The DOE Office of Science will also continue to play an important role in the COVID-19 response as well as future pandemics. The DOE Office of Science established multi-disciplinary teams from all 17 national labs to address critical needs, such as improving capabilities for and ensuring effective detection of infection; expediting discovery of therapeutic drugs, including antibodies and antivirals, to complement vaccine development; providing epidemiological and logistical support to Federal, state and local decision-makers to more accurately forecast disease transmission; addressing supply chain bottlenecks for PPE, test kits, and ventilators; and understanding the spread of the virus in buildings and public spaces to assist in reopening the economy. Having demonstrated significant impact, robust annual funding as well as research infrastructure investments will help DOE Office of Science maintain capabilities to respond to COVID-19 and future biological threats.

The United States must maintain its leadership in science, technology and innovation, and the DOE Office of Science plays a pivotal and leading role in addressing this country's energy, national security, and environmental challenges. We look forward to working with you in advancing the critical missions of the DOE Office of Science.

Sincerely,

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ESC Membership

American Association for the Advancement of Science
American Association of Physicists in Medicine
American Association of Physics Teachers
American Astronomical Society
American Chemical Society
American Crystallographic Association
American Geophysical Union
American Geosciences Institute
American Institute of Physics
American Mathematical Society
American Nuclear Society
American Physical Society
American Society for Engineering Education
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Acoustical Society of America (ASA)
American Society of Mechanical Engineers
American Society for Microbiology
American Society of Plant Biologists
American Vacuum Society
Arizona State University
Association of American Universities
Association of Public and Land-grant Universities
AVS – The Society for Science and Technology of
Materials, Interfaces, and Processing
Battelle
Binghamton University
Bioenergy Association of America
Biophysical Society
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The California Council on Science and Technology
Case Western Reserve University
City College of CUNY
Clemson University
Coalition for Academic Scientific Computation (CASC)
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Columbia University
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Crop Science Society of America
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East Bay Economic Development Alliance
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Geological Society of America
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IEEE-USA
Iowa State University
Jefferson Science Associates, LLC
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Lehigh University
Long Island University
Louisiana Tech University
Massachusetts Institute of Technology
Materials Research Society
Michigan State University
Michigan Technological University
New York University
Northeastern University
Northern Illinois University
Northwestern University
Oakland Chamber of Commerce
Oak Ridge Associated Universities (ORAU)
OSA—The Optical Society
Pace University
Penn State University
Princeton University
Purdue University
Rensselaer Polytechnic Institute
Rochester Institute of Technology
Rutgers, The State University of New Jersey
Society for Industrial and Applied Mathematics
Soil Science Society of America
South Dakota School of Mines
Southeastern Universities Research Association
SPIE
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University of Michigan
University of Missouri System
University of Nebraska
University of North Texas
University of Oklahoma
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University of Southern California
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University of Virginia
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Vanderbilt University
Washington State University
West Virginia University
Yale University

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