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.

Fiscal Year 2017 Funding Statement for the Department of Energy Office of Science

Federal investment in the U.S. Department of Energy’s (DOE) Office of Science is critical to enhancing energy security, building the economy of the future, and restoring America’s competitive edge through support for science and technology. Two recent studies rank the United States either 5th (Global Innovation Index 2015) or 10th (ITIF) among world leaders in innovation. Improving America’s global position requires robust support for scientific research and research facilities.

The Energy Sciences Coalition (ESC) urges Congress to provide the DOE Office of Science at least $5.672 billion in FY17, an increase of $325 million. This will enable the Office of Science to do things like optimize the operation of its unique scientific facilities which are used by tens of thousands of university, industry and government scientists and engineers; expand university research through a dedicated, competitive university grants program; and achieve the development of exascale computing systems by the early 2020s – the cornerstone of the National Strategic Computing Initiative. We also ask Congress to restore proposed cuts to the domestic research budget within the Fusion Energy Sciences program without compromising the integrity and vitality of all DOE Science programs.

 Leading Sponsor of Research in Important Fields: The DOE Office of Science is our Nation’s primary supporter of basic physical sciences research. It also plays a critical role in U.S. leadership in other fields including the biological sciences, advanced materials, geosciences, computing and engineering. In subfields such as high energy and nuclear physics, heavy-element chemistry, plasma physics, magnetic fusion, and catalysis the Office of Science is the primary government sponsor.

Prepares the Next Generation of American Scientific and Engineering Talent: The DOE Office of Science supports a diverse portfolio of research at colleges and universities. It sponsors half of all university physics research and more than 24,000 Ph.D. scientists, engineers, graduate students, undergraduates and technical personnel at over 300 institutions through competitively awarded grants. DOE-funded research and education programs strengthen our Nation’s scientific knowledge base and prepare the next generation of scientists and engineers.

Stewards World-Leading Scientific Facilities: The DOE Office of Science also supports the operation of the largest collection of major scientific user facilities in the world. Annually, more than 33,000 researchers from U.S. industry, universities and federal agencies rely on these facilities to meet their scientific and engineering needs. Located at national laboratories and universities around the country, these facilities include particle accelerators, experimental reactors, high-precision instruments, synchrotrons and light sources, leadership-class supercomputers, and high-resolution mass spectrometers. Nearly half of the DOE facility users are university and federal researchers working to answer fundamental science questions. Industry uses these facilities to do the underlying research required to develop new pharmaceuticals, advanced materials for use in manufacturing, telecommunications equipment, and new industrial products that drive the economy. Without these state-of-the-art facilities, U.S. scientists and engineers will carry out their research elsewhere in the world and contribute to the innovation ecosystem abroad.

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China, India, South Korea, the European Union, and others copy our approach to innovation and are expanding their investments in research programs and facilities. Strong and sustained funding for DOE science programs is needed to maintain scientific leadership, build a world-class technical workforce, improve the nation’s energy security, and ensure continued U.S. competitiveness in the global economy.

Recognizing the importance of basic research to the DOE’s energy mission, the Department has dedicated $1.8 billion within the DOE Office of Science budget as that office’s contribution to the Mission Innovation initiative, a worldwide effort to accelerate the development of clean energy technologies and reduce associated costs over the next five years. Mission Innovation includes a broad spectrum of disciplines supported by the Office of Science. In particular, the focus on fully optimizing all current DOE user facilities – as well as providing funding for the continued development and construction of new user facilities – will enable scientists and engineers to achieve breakthroughs in critical areas of discovery and energy production, conversion, storage and use.

For these reasons we request Congress provide at least $5.672 billion for the DOE Office of Science in FY17.