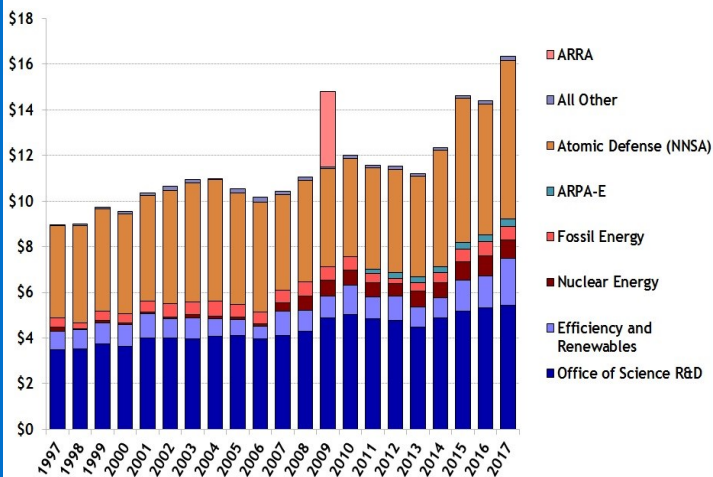




The Department of Energy Office of Science is critical to advancing U.S. science and energy frontiers. DOE is the leading source of federal investment in basic physical science research, providing nearly 47 percent of total funding. In fields such as high energy and nuclear physics, nuclear medicine, heavy element chemistry, plasma physics, and magnetic fusion, DOE is the primary government sponsor. In addition to the physical sciences, DOE plays a key role in ensuring continued U.S. leadership in other fields of scientific research including the biological sciences, computing, and engineering.

Trends in DOE R&D, FY 1997-2017
in billions of constant FY 2016 dollars



Source: AAAS, 2017

The DOE Office of Science supports the world's largest collection of major scientific user facilities across the country. Annually, DOE supports more than 33,000 researchers from universities, industry, and federal agencies at 28 user facilities. These facilities include particle accelerators, experimental reactors, high-precision instruments, synchrotrons and light sources, supercomputers, and high-resolution mass spectrometers.

AAU urges Congress to provide at least \$5.67 billion for the Department of Energy Office of Science in FY18

The Advanced Research Projects Agency-Energy (ARPA-E) supports high-risk, high-reward research that the private sector will not conduct. Since 2009, ARPA-E has funded more than 400 Potentially transformational energy technology products including:

- A 1 megawatt silicon carbide transistor the size of a human fingernail;
- Microbes that use hydrogen and carbon dioxide to create liquid transportation fuel; and
- A Near-isothermal compressed air energy storage system.

AAU recommends \$350 million for ARPA-E in FY18. This funding level will allow the agency to continue making awards to university-based researchers for high-risk projects that are too far from product development to be supported by industry.

***74 project teams have attracted
over \$1.8 billion in private sector
follow-on funding since ARPA-E's
funding in 2009.***

Source: arpa-e.energy.gov