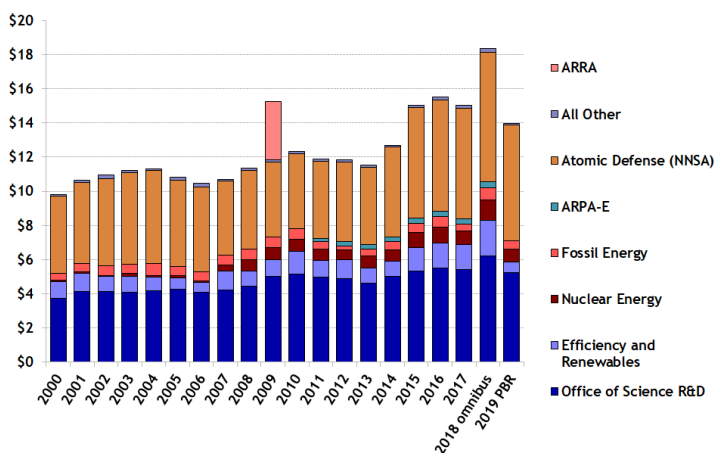




The Department of Energy Office of Science is critical to advancing U.S. science and energy frontiers. DOE is the leading source of federal investment in basic physical science research, providing nearly 47 percent of total funding. In fields such as high energy and nuclear physics, nuclear medicine, 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 2000-2018**  
in billions of constant FY 2018 dollars



NOTE: FY 2018 omnibus figures are AAAS estimates. Source: AAAS analyses of agency and OMB budget data and documents, and FY 2018 appropriations. R&D includes conduct of R&D and R&D facilities. © 2018 AAAS

Source: AAAS, 2018

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 \$6.6 billion for the Department of Energy Office of Science in FY19

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 one-megawatt silicon carbide transistor the size of a human fingernail;
- Microbes that use hydrogen and carbon dioxide to create more energy efficient fuels for transportation; and
- A compressed air system that significantly improves energy storage.

### AAU recommends \$375 million for ARPA-E in FY19.

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 founding in 2009.**

Source: arpa-e.energy.gov