



ASSOCIATION OF
PUBLIC &
LAND-GRANT
UNIVERSITIES

FY2020 Appropriations Priorities

ENERGY AND WATER DEVELOPMENT

ABOUT THE ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities.

With a membership of 241 public research universities, land-grant institutions, state university systems, and affiliated organizations, APLU's agenda is built on the three pillars of increasing degree completion and academic success, advancing scientific research, and expanding engagement.

Annually, its 199 U.S. member campuses enroll 4.2 million undergraduates and 1.2 million graduate students, award 1.1 million degrees, employ 1.1 million faculty and staff, and conduct \$42.4 billion in university-based research.

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DEPARTMENT OF ENERGY (DOE)

OFFICE OF SCIENCE

APLU FY2020 Request: \$7 billion

(FY2020 PBR = \$5.500B; FY2019 = \$6.585B; FY2018= \$6.260B)

The Department of Energy's Office of Science plays a critical role in enhancing energy security, building our future economy and ensuring America remains a leader in various fields of science and technology. APLU urges Congress to fund the DOE Office of Science with an appropriation of \$7 billion in FY2020, a four percent real growth increase from FY2019. This increase would continue support for leading-edge energy research and for educating the next generation of scientists. The Office of Science is our country's largest supporter of foundational research in the physical sciences, helping to advance the fundamental science knowledge base and train future scientists. This request of \$7 billion aligns with the American Academy of Arts and Sciences report *Restoring the Foundation* which recommends annual real growth of four percent for federal basic research to close our nation's scientific research shortfall, ensure we prevent an innovation deficit, and keep the U.S. a global leader in science and technology.

The United States risks falling behind as economic competitors like China recognize the value of research and science and aggressively grow their investments in these areas. The risks aren't only economic, however. National security officials, law enforcement representatives, and policy-makers are all expressing intense concerns that other nations may be usurping the American lead in key fields of science and research such as quantum information sciences, strategic computing, artificial intelligence, biotechnology, and others. In light of those concerns, the U.S. faces a security and economic imperative to support our basic research agencies at a level sufficient to restore our global leadership. If we intend to maintain our position as the global innovation leader, funding scientific research at the Office of Science should be a priority. The technological advances that federal science agencies like the DOE yield are the basis of our nation's economic growth and aid in our national defense; it is essential that we continue to grow these investments.

Additionally, the science projects that universities conduct for the Office of Science are key to effectively training the science, technology, engineering, and mathematics (STEM) workforce. As policy-makers voice concern with foreign talent recruitment and development programs that lure scientists to other countries, the U.S. must consider how to counteract those efforts and continue to make America an attractive option for those who want to pursue STEM careers.

APLU FY2020 ENERGY AND WATER DEVELOPMENT PRIORITIES (con't)

ADVANCED RESEARCH PROJECTS AGENCY FOR ENERGY (ARPA-E)

APLU FY2020 Request: \$400 million

(FY2020 PBR = \$0; FY2019 = \$366M; FY2018 = \$353M)

APLU supports funding ARPA-E at \$400 million in FY2020. ARPA-E assembles some of the country's brightest minds in cross-disciplinary research teams to focus on creative, high-risk/high-reward energy research and the rapid development of transformational clean energy technologies. By leveraging talent in all sectors—from private industry, to universities, to government labs—ARPA-E fosters a robust and cohesive community of energy researchers and technology developers in the U.S.
