

**Statement of the American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA)**

Submitted to the Senate Appropriations Subcommittee on Energy and Water Development  
On the Fiscal Year 2019 Appropriation for the United States Department of Energy

March 30, 2018

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) **urge the Committee to provide \$6.6 billion for the Department of Energy's (DOE) Office of Science in fiscal year 2019 appropriations.**

These three societies represent over 18,000 scientists in academia, industry and government. They support more than 13,300 Certified Crop Advisers (CCA), and over 700 Certified Professional Soil Scientist (CPSS). Society members and certified professionals are dedicated to meeting the demands of a growing world population through the pursuit of agronomic, crop and soil science knowledge and application.

The Nation's agricultural system must sustainably produce the food and fuel America relies on for national and economic security. Growing global competition is putting America's agricultural economy at risk. The U.S. has lost its spot as the top global funder of public agricultural R&D, falling behind China in 2009. Today, the U.S. trails Western Europe and is outspent nearly 2:1 by China.

Energy is inextricably linked to agriculture and food production. Not only do farmers produce energy crops, bolstering rural communities and sustaining America's energy independence, but on-farm energy use is tied to sustainable agricultural practices developed by agronomists and crop and soil scientists. American farmers depend on scientific advancements to sustainably achieve reliable yields while their crops efficiently use water and nutrients and effectively withstand pests and disease. The DOE Office of Science uses the latest physical, computational, and biological technologies to understand the principles of plant and microbial systems important to bioenergy and environmental applications.

Within the DOE Office of Science, the Societies specifically support:

**Biological and Environmental Research (BER).** The BER program produces advanced environmental and biological knowledge that supports national security through improved energy production, international scientific leadership, and research that improves the quality of life for all Americans. BER supports these vital missions through competitive and peer-reviewed research at national laboratories, universities and private institutions.

The Societies also **request \$375 million for ARPA-E.**

The Advanced Research Projects Agency – Energy invests in cutting-edge science, making advancements in biofuel crops and soil carbon sequestration that help farmers keep their crops and lands healthy and the bioenergy market profitable. ARPA-E is leading the development and commercialization of high-throughput plant phenotyping, a leap-frog technology that propels the U.S. to the world leader in this area, and ARPA-E-funded researchers are developing crops that can move more carbon from the atmosphere into the soil, improving crop yields and climate resilience while mitigating greenhouse gas emissions.

Energy science research is an essential component of America's energy independence. A strong commitment to federally funded energy research will boost the Nation's capacity for innovation, agricultural productivity, and economic prosperity.