



## ADVANCING CUTTING-EDGE (ACE) AGRICULTURE ACT OF 2023 (S. 834 & H.R. 2385)

The **Advancing Cutting-Edge (ACE) Agriculture Act of 2023** would reauthorize and reprioritize the Agriculture Advanced Research and Development Authority (AGARDA), the U.S. Department of Agriculture’s version of the Department of Energy’s Advanced Research Projects Agency - Energy (ARPA-E) and the Department of Defense’s Defense Advanced Research Projects Agency (DARPA), to support high-risk, high-reward, and long term research.

### SUMMARY

Agricultural innovation research is necessary to address unprecedented challenges in the industry such as increased input costs, supply-chain disruptions, and difficult-to-predict weather events that impact yields across the food and agriculture sector. The Agriculture Advanced Research and Development Authority (AGARDA) can address these challenges and help the United States increase yield and enhance efficiencies to maintain global competitiveness while also reducing emissions. AGARDA provides an opportunity to produce transformative innovations, initiate new ventures, and create new careers in the agricultural sector.

The ACE Agriculture Act of 2023 reauthorizes and reprioritizes AGARDA to enhance agricultural research and development for the purpose of providing American farmers with the innovations and practices they need to increase yields, improve efficiencies, reduce emissions, and address future agriculture challenges.

### HISTORY:

Senator Pat Roberts (R-KS) initiated the idea of AGARDA, and the program was initially authorized in the 2018 Farm Bill (Sec. 7132; amended Sec. 1473H). AGARDA is modeled after the successful Defense Advanced Research Projects Agency (DARPA) at the Department of Defense (DOD) and the Advanced Research Projects Agency - Energy (ARPA-E) program at the Department of Energy (DOE). Similar to establishing ARPA-E to maintain U.S. advantages in science and technology, AGARDA supports U.S. leadership in agriculture innovation, which is necessary because we are falling behind China and Brazil. AGARDA has received limited appropriations to date because there was a lack of a strategic plan. In March of 2023, the USDA published a strategic plan, which will help guide the direction of AGARDA moving forward.

### SPECIFICS:

The ACE Agriculture Act fuels innovative and novel agricultural research and development by bolstering U.S. agricultural leadership., strengthening American and global food supplies, and supporting producers in addressing agricultural challenges like high input costs, poor soil health, and extreme weather. Specifically, the ACE Agriculture Act:

- Reauthorizes AGARDA and strikes the term “pilot” from the AGARDA program to indicate more permanence.
- Emphasizes research for enhancing export competitiveness and the reduction, avoidance, sequestration, or mitigation of emissions from the agriculture sector.
- Addresses long-term and high-risk technological barriers in the development of agricultural technologies, research tools, and qualified products and projects.

**ORIGINAL SPONSORS:**

**S. 834**

Sen. Roger Marshall (R-KS)

Sen. Michael Bennet (D-CO)

**H.R. 2385**

Rep. Randy Feenstra (R-IA)

Rep. Jimmy Panetta (D-CA)

**COSPONSORS:**

Rep. Mariannette Miller-Meeks (R-IA), Rep. Donald Payne Jr. (D-NJ), Rep. Salud Carbajal (D-CA), Rep. Josh Harder (D-CA), Rep. Elissa Slotkin (D-MI), Rep. Zoe Lofgren (D-CA), Rep. Andrea Salinas (D-OR), Rep. Ann Kuster (D-NH).

**SUPPORT:**

ClearPath Action

National Corn Growers Association

Colorado Farm Bureau

National Pork Producers Council

Kansas State University

Iowa State University

Colorado State University

University of California, Santa Cruz

Bipartisan Policy Center Action

Breakthrough Institute

Food and Agriculture Climate Alliance

**CONGRESS.GOV LINK:** [S. 834](#), [H.R. 2385](#)