

Alternative Fuels & Chemicals Coalition

Advocating for Public Policies to Promote the Development & Production of Alternative Fuels, Renewable Chemicals, Biobased Products, and Sustainable Aviation Fuels

AFCC'S FY2022 CJS Appropriation Subcommittee Request

AFCC Contacts:

CJ Evans, Executive Director, Tel. 202-922-0144, email: <u>cj@AltFuelChem.org</u>
Rina Singh, PhD., Executive Vice President, Tel. 202-922-0144, email: <u>rina@AltFuelChem.org</u>

Appropriations Subcommittee:

Commerce, Justice, and Science (CJS)

CJS Priority:

#1 of 1

Federal Agency:

National Science Foundation

Agency Account:

Research and Related Activities

NEW PROGRAM

Implementation of the <u>Sustainable Chemistry Research and Development Act of 2019</u> (H.R 2051, S.999), sponsored in the U.S. Senate by Senator Chris Coons (D-Del) and cosponsored by Senators Susan Collins (R-Maine), Amy Klobuchar (D-Minn), and Shelley Moore Capito (R-WV), which was included in the FY2021 National Defense Authorization Act (P.L. 116-283), enacted January 1, 2021.

Program Description:

This bill directs the Executive Office of the President's Office of Science and Technology Policy to convene an interagency entity under the National Science and Technology Council with the responsibility of coordinating federal programs and activities in support of sustainable chemistry.

Agencies participating in the entity are required to carry out specified activities in support of sustainable chemistry, including incorporating sustainable chemistry into existing research, development, demonstration, technology transfer, commercialization, education, and training programs. Sustainable chemistry, also known as green chemistry, is focused on conserving resources and minimizing the generation and use of hazardous substances in chemical processes.

AFCC's Request:

 Create a National Science Foundation educational program for graduate students in the Division of Graduate Education to provide training in sustainable production of biobased products using industrial biotechnology tools such as synthetic biology and other microbial



conversion technologies in the industry. The program will educate students in conducting research and biobased manufacturing scale-up for sustainable production of renewable chemicals (including bioplastics), biogas, sustainable aviation fuels, and ground transportation biofuels. This will provide the students with course credits, job-training, experience, and create new generation of U.S. scientists to keep the U.S. globally competitive.

- Develop a public private partnership in sustainable chemistry for the development of U.S. biobased manufacturing programs and maintain domestic manufacturing experts. This program would be based on matching grants from the private sector and the Natural Science Foundation.
- Encourage employment in rural America by promoting rural employment in biobased manufacturing using sustainable chemistry. AFCC proposes that this federal program pay for a one-year employment to employees accepting positions in rural America.

Amount Requested by AFCC:

\$7,500,000 for:

- Of which \$1,000,000 shall be for establishing the training program in the Division of Graduate Education;
- Of which \$2,500,000 shall be for providing training in sustainable production of biobased products for an initial first-year pilot group of up to 25 students;
- Of which \$1,000,000 shall be for establishing the public-private matching grant program
 for the development of biobased manufacturing programs and training domestic
 manufacturing experts;
- Of which \$1,000,000 shall be for issuing a first-year solicitation for the development of biobased manufacturing programs and awarding four 50/50 matching grants of \$250,000 each; and
- Of which \$1,000,000 shall be for proving payment for one-year of employment for up to 10 graduates accepting positions in rural America.

Amount of Federal Funding Included in the President's Budget Request for the Coming Fiscal Year:

Not yet known.

Amount of Federal Funding Appropriated for the Program During Previous Fiscal Years:

N/A

AFCC's Justification / Rationale for This Request:

The Sustainable Chemistry Research and Development Act will create a cohesive national vision for sustainable chemistry research and development, improving training of chemists and other professionals, and building new partnerships with the private sector, to maintain the Nation's scientific leadership and ensure the sustainability of its chemical enterprises for years to come.



Sustainable chemistry is central to American innovation in advanced manufacturing. There is surging global demand for sustainable chemistry ingredients in consumer and commercial products and investors are increasingly rewarding companies that develop and source such products. The Sustainable Chemistry R&D Act will help position the US to capitalize on this burgeoning market demand, spurring innovation and job creation across a huge swath of the US economy.

The Sustainable Chemistry Research and Development Act has been endorsed by the GC3 Sustainable Chemistry Alliance, the American Chemical Society, the American Chemistry Council, the American Sustainable Business Council, 3M, Ashland, BASF, Beautycounter, the Biotechnology Innovation Organization (BIO), Chemours, Delaware Sustainable Chemistry Alliance, The Dow Chemical Company, DuPont, Environmental Working Group, The LEGO Group, Nohbo LLC, Procter & Gamble, and the University of Delaware