



# 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 FY2023 Legislative & Funding Request: Accelerating the Deployment of Clean Energy Technologies

### **AFCC CONTACTS:**

CJ Evans, Executive Director, Tel. 202-922-0144, email: [cj@AltFuelChem.org](mailto:cj@AltFuelChem.org)

Rina Singh, PhD., Executive Vice President, Tel. 202-922-0144, email: [rina@AltFuelChem.org](mailto:rina@AltFuelChem.org)

### **APPROPRIATIONS SUBCOMMITTEE:**

Energy and Water Development (E&W)

### **E&W PRIORITY:**

Additional E&W priority added to Priorities #1 and #2 (continued funding for the Title 17 loan guarantee and ATVM loan programs)

### **FEDERAL AGENCY:**

Department of Energy

### **AGENCY ACCOUNT:**

Energy Programs

### **PROGRAM TITLES:**

Office of Energy Efficiency and Renewable Energy (EERE)

### **PROGRAM DESCRIPTION:**

EERE is working to build a clean energy economy that benefits all Americans by investing in clean energy technologies through applied research, development, and demonstration activities to, as stated on pages 2 and 6 of the Department of Energy's *FY 2023 Congressional Budget Request, Budget in Brief*:

- **accelerate the RDD&D [Research, Development, Demonstration, & Deployment] of [clean energy] technologies and solutions ...**
- **improve energy efficiency and clean energy technologies for industrial facilities, clean vehicles and fuels, and buildings.**
- **equitably transition America to net-zero greenhouse gas emissions economy-wide by no later than 2050,**
- **create good paying jobs,** and
- **ensure the clean energy economy benefits all Americans, especially workers and communities impacted by the energy transition and those historically underserved by the energy system and overburdened by pollution.**



### **AMOUNT REQUESTED BY AFCC:**

\$340,000,000 for **Technology Readiness Levels (TRLs) 7 and 8 and Front-End Engineering & Design (FEED) grants** to support and expedite the scale up, piloting, demonstration, and pre-construction steps necessary for commercializing and deploying clean energy technologies.

- DOE's EERE has very limited funds to support TRL 7 and 8 grant requests for the scale up, piloting, and demonstration of promising technologies. As a result, EERE has awarded – and only can award – very few such grants.
- Moreover, there is no federal funding assistance available for the critical, must-complete design, engineering, and pre-construction steps that are required to begin construction on a facility using a first-of-its-kind, disruptive technology, nor qualify for the Department of Energy's and Department of Agriculture's loan guarantee programs.

### **AMOUNT OF FEDERAL FUNDING INCLUDED IN THE PRESIDENT'S BUDGET REQUEST FOR THE COMING FISCAL YEAR:**

The President's request for the Office of Energy Efficiency and Renewable Energy is \$4,018,885,000.

AFCC's request is in addition to this.

AFCC is requesting that the TRL 7 and 8 and FEED grants be administered by the EERE through its existing grant program structure with funding for these grants appropriated from the interest payments received by the Treasury Department for the repayment of loan obligations awarded under the Title 17 Innovative Technologies Loan Guarantee Program.

There is a direct connection – and synergy – between the funding for these grants and the interest being earned by the Treasury Department from Title 17 loan guarantee obligations. This is because **completion of TRL 7 and 8 and the FEED steps are necessary to advance new, innovative technologies up through TRL 9 (first-time commercial construction and deployment) so they can benefit the Nation and American public.**

There is also precedent for using funds generated by Title 17 loan guarantee program that are paid to the Treasury Department to pay for Title 17 program-related expenditures:

**Every appropriations act, beginning in FY2008**, after the Title 17 program was enacted through the Energy Policy Act of 2005, has included the following language:

*Provided further*, That fees collected pursuant to section 1702(h) of the Energy Policy Act of 2005 shall be credited as offsetting collections to this account, so as to result in a final fiscal year 2008 appropriation from the general fund estimated at not more than \$0.

*-- Consolidated Appropriations Act, 2008, H.R. 2765 P.L. 110-161, page 161*



*Provided further*, That up to \$32,000,000 of fees collected in fiscal year 2022 pursuant to section 1702(h) of the Energy Policy Act of 2005 shall be credited as offsetting collections under this heading and used for necessary administrative expenses in this appropriation and shall remain available until September 30, 2023:

*-- Consolidated Appropriations Act, 2022, H.R. 2471. P.L. 117-103, page 178*

Hence, using the funds collected by the Treasury Department from payments derived from the Title 17 loan guarantee program in one fiscal year and appropriating those funds the following fiscal year to offset Title 17 program expenditures has been done every fiscal year since 2008.

**AFCC requests that these annual appropriations be expanded to include all funds collected by the Treasury Department from interest payments on Title 17 loan guarantee obligations**, with these funds appropriated to EERE to provide grants to accelerate the development and deployment of innovative, disruptive clean technologies.

## **AMOUNT OF FEDERAL FUNDING APPROPRIATED FOR THE PROGRAM DURING PREVIOUS FISCAL YEARS:**

Office of Energy Efficiency and Renewable Energy

**FY 2019:** \$2,379,000,000

**FY 2020:** \$2,848,000,000

**FY 2021:** \$2,864,000,293

**FY 2022:** \$3,200,000,000

Title 17 Innovative Technology Loan Guarantee Program:

*Administrative Expenses:*

**FY 2019:** \$33,000,000

**FY 2020:** \$33,000,000

**FY 2021:** \$32,000,000

**FY 2022:** \$32,000,000

*Loan Authority:*

**FY2019 – FY2022:** No change

Advanced Technology Vehicle Manufacturing Loan Program:

*Administrative Expenses:*

**FY 2019:** \$5,000,000

**FY 2020:** \$5,000,000

**FY 2021:** \$5,000,000

**FY 2022:** \$5,000,000

*Loan Authority:*

**FY2019 – FY2022:** No change



## **JUSTIFICATION / RATIONALE FOR ITS FUNDING REQUEST:**

**No technology, no matter how promising**, ever will be able to benefit the American public, create jobs, stimulate economic development, or improve or mitigate damage to the environment if that technology cannot move through all nine of the Technology Readiness Levels (TRLs), from concept to commercial deployment.

Financing innovative, disruptive technologies is not something private sector lenders readily embrace nor do very often.

**This is because projects that are using something that is brand new, unproven, and never done before have a high degree of risk, which traditional lenders and sources of equity are – with very few exceptions – unwilling to assume.**

Federal financing is available for the first 6 TRLs and the final TRL 9 level, the first commercial deployment of new, first-of-their-kind technologies.

Very little federal financing, however, is available for TRLs 7 and 8 – the scale up, piloting, and demonstration of clean energy technologies. **These steps, along with TRL 9, are critical bridges from promise to commercial reality.** Without one of these bridges, a promising new technology may never be able to advance.

Moreover, funding is necessary to carry out the pre-construction front-end engineering and design (FEED) steps that are necessary to build a facility.

### **This is some of the hardest money to raise:**

- Banks do not provide loans for activities that do not generate revenues to pay off the loans
- Investors often are wary of projects that have new, unproven, first-of-their-kind, never-commercialized-before technologies without a successful, previously established money-generating return on investment
- Thus, when they do invest, they take large bites of equity to mitigate their risk .

**The funds being requested for TRL 7 and 8, and FEED grants are a critical investment in the Nation's future.** As has occurred with the Loan Program Office investments in Tesla, Ford's EcoBoost engine, and the first utility scale wind and solar facilities in the U.S., this investment **will be multiplied many times over** by private sector financing once the technologies are successfully launched and in commercial operation, so they are proven and, therefore, financeable.

As each new technology, process, and material is commercialized and deployed:

- jobs are created
- the economies of local communities are boosted
- community tax receipts are generated
- the public benefits, and



- the U.S. becomes a global leader and innovator in the development and deployment of these technologies, processes, and materials

**Without the ability of a potentially game-changing technology to move forward, it easily – and too often – will die, robbing the Nation and the planet of its potential.**

Technology developers currently must rely in large part on early-stage private angel and venture capital investors to move through TRLs 7 and 8 and FEED. This takes time – sometimes years of time – to identify, approach, and court potential investors. Sometimes only one in 100 will show interest. Once interested, they often will carry out extensive due diligence to assess the risks of investing in an unproven technology.

**This time and delay make it extremely hard to deploy a game-changing technology to address problems that may be getting worse by the day.**

Also, due to the degree of risk, early-stage investors want to be compensated with generous amounts of equity, **which subsequently can stifle a technology developer’s ability to raise the capital at a later stage** to complete the engineering, design, and pre-construction steps that are necessary to bring a technology to commercial fruition.

**This is a *Valley of Death* which many promising technologies do not survive ... technologies which may have held – or may hold – solutions to many of our Nation’s and the worlds’ problems.**

### **FUNDING REQUEST:**

AFCC requests that the following language be incorporated into the paragraph providing appropriations for Energy Efficiency and Renewable Energy under Title III, Department of Energy, Energy Programs (page 174, Consolidations Appropriations Act, 2022, H.R. 2471, P.L. 117-303) prior to the last *Provided Further*:

*Provided Further*, That \$340,000,000 shall be added to the amount appropriated in this paragraph, which shall be annually renewing and shall come from the interest payments received during the previous fiscal year by the Treasury Department in accordance with section 502(7) of the Congressional Budget Act of 1974 for the repayment of loan obligations pursuant to section 1702 of the Energy Policy Act of 2005: