AFCC'S FY2023 Appropriation Requests

AFCC Contacts:

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

Appropriations Subcommittee:

Energy and Water Development (E&W)

E&W Priority:

#1 & 2 of 2

Federal Agency:

Department of Energy

Agency Account:

Energy Programs

Program Titles:

Title 17 Innovative Technology Loan Guarantee Program Office - #1 - Administrative Expenses
Title 17 Innovative Technology Loan Guarantee Program Office - #2 – Loan Authority

Advanced Technology Vehicle Manufacturing Loan Program - #1 - Administrative Expenses
Advanced Technology Vehicle Manufacturing Loan Program - #2 – Loan Authority

Program Description:

See Background Information / Other Comments below

Amount Requested by AFCC:

Title 17 Innovative Technology Loan Guarantee Program:
- #1 - Administrative Expenses: $32,000,000
- #2 – Loan Authority: NO CHANGE. Maintain full loan authority

Advanced Technology Vehicle Manufacturing Loan Program:
- #1 - Administrative Expenses: $5,000,000
- #2 – Loan Authority: NO CHANGE. Maintain full loan authority

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:

Title 17 Innovative Technology Loan Guarantee Program:

#1 - Administrative Expenses:

FY 2019: $33,000,000
FY 2020: $33,000,000
FY 2021: $32,000,000
FY 2022: $32,000,000

#2 – Loan Authority:

FY2019 – FY2022: No change

Advanced Technology Vehicle Manufacturing Loan Program:

#1 - Administrative Expenses:

FY 2019: $5,000,000
FY 2020: $5,000,000
FY 2021: $35,000,000
FY 2022: $5,000,000

#2 – Loan Authority:

FY2019 – FY2022: No change

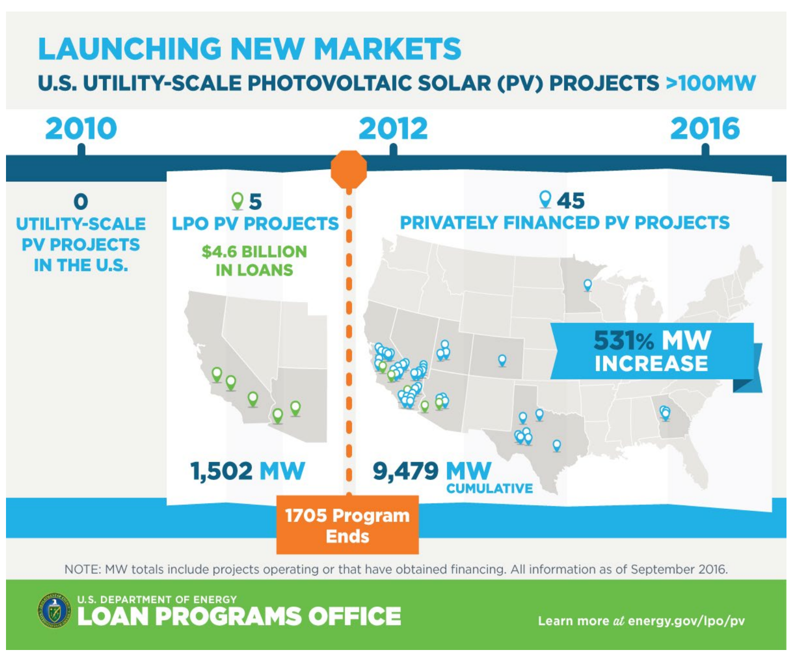
Justification / Rationale for Its Funding Request:

See Background Information / Other Comments below

Background Information / Other Comments:

The Title 17 Program creates jobs and stimulates private sector investment.

- The Title 17 program has shown through the projects it has supported that each federal dollar invested in a loan guarantee stimulates more than $10 in private capital investment and leads to scores of additional follow-on projects supported entirely by private sector financing. Every project in the Title 17 pipeline that is built will generate tax revenues for local communities, states and



the federal government, as well as state and federal income taxes from the salaries paid to workers.

That's not all: **DOE's Title 17 Loan Guarantee Program and its sister, the Advanced Technology Vehicle Manufacturing (ATVM) direct loan program, have generated an average of $250 million per year in interest payments, returning almost $2.6 billion in collections to the U.S. Treasury since their first loan closing in 2009.**

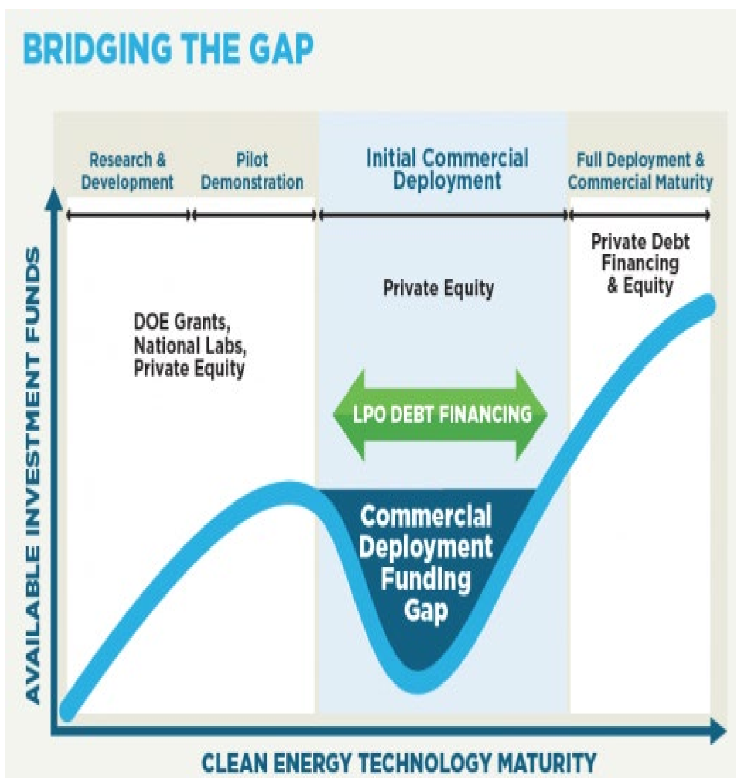
- Title 17 losses represent only 3.2% of its portfolio, a loss rate any commercial bank would happily claim.

LPO Portfolio Performance Summary as of December 31, 2021

Loan and Loan Guarantees Issued	$35.69 billion
Conditional Commitments	$2.00 billion
Amount Disbursed	$31.46 billion
Principal Repaid	$12.40 billion
Interest Paid*	$3.94 billion
Actual and Estimated Losses	$1.02 billion
Actual and Estimated Losses as % of Total Disbursement	3.2%

* Calculated without respect to Treasury's borrowing cost.

- The bulk of the administrative costs necessary to operate the Title 17 program –$32 million per year – have been paid by the companies that submit applications.
- WHILE ACTUAL & PROJECTED REVENUES HAVE NO IMPACT OR RELEVANCE IN THE U.S. CONGRESS WHEN IT COMES TO SCORING SPENDING BILLS, THE REVENUES GENERATED FOR THE U.S. TREASURY BY THE TITLE 17 & ATVM PROGRAMS OCCUR NEVERTHELESS.
- In fact, interest payments to the U.S. Treasury from Title 17 and ATVM loan obligations generate **6.75 times more in revenue**



than the total administrative costs required to operate the programs, and **12 times more in revenue when the fees paid by companies that submit applications are taken into account** ($250M/$20M =12.5).

- The $250 million in annual interest payments that currently are being paid to the Treasury will continue for as long as the current Title 17 and ATVM loans are outstanding. However, **the longer these two programs are extended, the more projects will be approved, and the more revenues to the Treasury will increase.**
- Financing innovative, disruptive technologies is not something the private sector can do or do better. The Title 17 program was established because the private sector will not finance projects that have a high risk of failure due to the use of something that is brand new, unproven, and never done before at commercial scale.
- Every project advanced through research and development (R&D) by DOE will be meaningless unless they can be commercialized and deployed so that the nation can benefit from these technologies.

Without a path to commercialization, no innovation advanced through R&D will be able to become reality.

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
Rina Singh, PhD., Executive Vice President, Tel. 202-922-0144, email: 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 Level (TRL) 7 and 8 grants** to support and expedite the scale up, piloting, and commercial-scale demonstration of clean energy technologies.

This request is the result of a meeting by AFCC and its Governing Board of Directors with EERE and Loan Program Office directors and executive staff on April 19, 2022, during which AFCC initiated a discussion on the obstacles that stand in the way of advancing promising technologies.

AFCC learned that the EERE has very limited funds to support TRL 7 and 8 grant requests and, as a result, has awarded – and only can award – very few such grants.

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.

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

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.

Federal financing is available for the first six TRLs and the final TRL level, the first commercial deployment of a new, first-of-its-kind technology, TRL 9.

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.**

The funds being requested for TRL 7 and 8 grants are a critical investment in the Nation's future which, as has occurred with the Loan Program Office's investments in Tesla, Ford's EcoBoost engine, and the fist utility scale wind and solar facilities in the U.S., **will be**

multiplied many times over by private sector financing once the technologies are successfully launched and in commercial operation.

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 TRL 7 and 8.

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 of the amount appropriated in this paragraph, $340,000,000 shall be used for grants for the scale up, piloting, and demonstration of innovative clean energy technologies: