



Loan Programs Office

Title 17

Innovative Energy

Loan Guarantee Program

Financing American Energy Innovation

June 2021

Agenda

Intro to LPO

- Value of LPO Financing • LPO Portfolio • LPO Programs

Title 17 Overview

- Innovative Technology Solicitations:
 - Renewable Energy & Efficient Energy
 - Advanced Nuclear Energy
 - Advanced Fossil Energy
 - Flexible Financing
- Loan Transaction Process

Financing American Energy Infrastructure

The Department of Energy's Loan Programs Office (LPO)

was established for borrowers seeking access to debt financing for energy infrastructure projects.

With over \$40 billion in available debt capital,

LPO programs finance high-impact projects and first-time commercializations, partnering with borrowers to customize deal structures.



Access to Debt Capital

that private lenders cannot or will not provide.



Flexible Financing

customized for the specific needs of individual borrowers.



A Committed Partner

offering expertise to borrowers for the lifetime of the project.

Over \$35 Billion in Energy Deals Financed

More than 30 projects of broadly distributed technologies across the United States.

Renewables Innovation

Financed large-scale, innovative wind, geothermal, and transmission projects across the West.

Utility-Scale Solar

Financed 11 utility-scale solar projects across the Southwest, catalyzing the industry in the U.S.



Advanced Auto Manufacturing

Financed the upgrade of advanced auto manufacturing facilities across the Midwest, creating tens of thousands of jobs.

Advanced Nuclear Energy

Financed the construction of the first new nuclear reactor in the U.S. in 30 years.

A Diverse Portfolio of Innovative Technologies

LPO financed-projects have catalyzed new energy technologies and supported thousands of jobs.

Advanced Nuclear Energy

\$12 Billion

First AP1000 reactor in the U.S. (Vogtle)

Advanced Fossil Energy

\$2 Billion

CO₂ capture and sequestration conditional commitment. (Lake Charles Methanol)

Wind Energy

\$1.7 Billion

Four onshore farms, including one of the world's largest. (Shepherds Flat)

Transmission

\$343 Million

Advanced transmission lines for improved grid reliability. (One Nevada Line)

Advanced Vehicles Manufacturing

\$7.8 Billion

Accelerated domestic electric vehicles manufacturing. (Nissan, Tesla)

Concentrating Solar Power

\$5.8 Billion

Five CSP plants utilizing diverse technologies.

Geothermal Energy

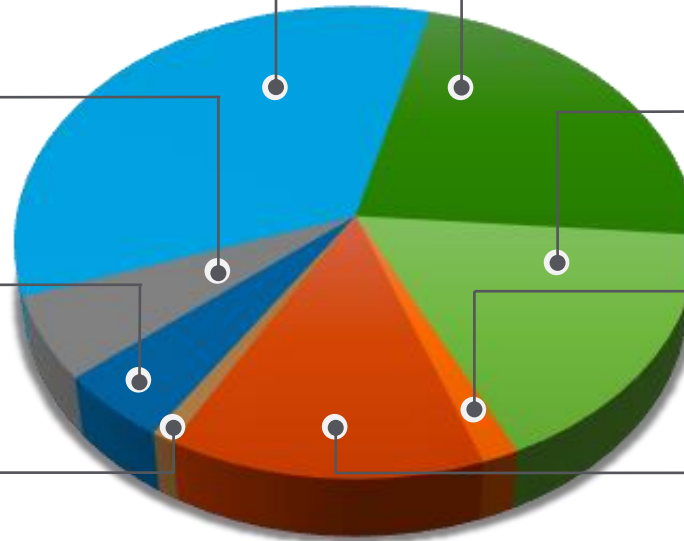
\$546 Million

State-of-the-art thermal extraction, revitalizing the sector.

Photovoltaic Solar

\$4.7 Billion

First five utility-scale PV solar projects larger than 100 MW in the U.S.



\$40 Billion in Available Debt Capital

LPO offers project financing across energy sectors through three distinct loan programs.

TITLE 17 Innovative Energy Loan Guarantees



Renewable Energy & Efficient Energy
Up to \$4.5 Billion Available



Advanced Nuclear Energy
\$10.9 Billion Available



Advanced Fossil Energy
\$8.5 Billion Available



ATVM Direct Loans



**Advanced Technology
Vehicles Manufacturing**
\$17.7 Billion Available



TELGP Partial Loan Guarantees



Tribal Energy Projects
Up to \$2 Billion Available





Renewable Energy & Efficient Energy



Up to \$4.5 Billion in Loan Guarantees Available

LPO helps bring renewable & efficient energy projects to commercial scale through its Title 17 Innovative Energy Loan Guarantee Program.

Financing

LPO provides access to debt capital for energy projects using innovative technology when commercial lenders cannot or will not provide financing.

Eligibility

LPO can consider renewable & efficient energy projects that:

1. Use innovative technology.
2. Reduce, avoid, or sequester greenhouse gas emissions.
3. Are located in the U.S.
4. Provide reasonable prospect of repayment.

Technologies

Technology areas of interest include, but are not limited to:

- Advanced Grid Integration & Storage
- Alternative Fuel Vehicle Infrastructure
- Distributed Energy Projects
- Efficiency Improvements
- Enhancement of Existing Facilities
- Offshore Wind & Related Infrastructure
- Waste-To-Energy



Advanced Nuclear Energy



\$10.9 Billion in Loan Guarantees Available

(Including **\$2 Billion** specifically for front-end projects)

LPO helps bring advanced nuclear energy projects to commercial scale through its Title 17 Innovative Energy Loan Guarantee Program.

Financing

LPO provides access to debt capital for energy projects using innovative technology when commercial lenders cannot or will not provide financing.

Eligibility

LPO can consider advanced nuclear energy projects that:

1. Use innovative technology.
2. Reduce, avoid, or sequester greenhouse gas emissions.
3. Are located in the U.S.
4. Provide reasonable prospect of repayment.

Technologies

Technology areas of interest include, but are not limited to:

- **Advanced Nuclear Reactors**
- **Front-End Nuclear**
- **Small Modular Reactors (SMRs)**
- **Upgrades & Upgrades at Existing Facilities**



Advanced Fossil Energy

\$8.5 Billion in Loan Guarantees Available
(Including **\$2 Billion** conditionally committed to Lake Charles Methanol)



LPO helps bring advanced fossil energy projects to commercial scale through its Title 17 Innovative Energy Loan Guarantee Program.

Financing

LPO provides access to debt capital for energy projects using innovative technology when commercial lenders cannot or will not provide financing.

Eligibility

LPO can consider advanced fossil energy projects that:

1. Use innovative technology.
2. Reduce, avoid, or sequester greenhouse gas emissions or air pollutants.
3. Are located in the U.S.
4. Provide reasonable prospect of repayment.

Technologies

Technology areas of interest include, but are not limited to:

- **Advanced Resource Development**
- **Carbon Capture**
- **Efficiency Improvements**
- **Low-Carbon Power Systems**

EV or Alternative Fueling Infrastructure

Projects could be eligible through two LPO loan programs:

ATVM

Direct Loans
Eligibility:

Manufacturing
of Infrastructure



Title 17

Loan Guarantees
Eligibility:

Deployment
of Infrastructure

For both programs, eligibility includes associated hardware and software for EV and alternative vehicle fuels such as hydrogen, liquefied natural gas (LNG), compressed natural gas (CNG), and biofuels.

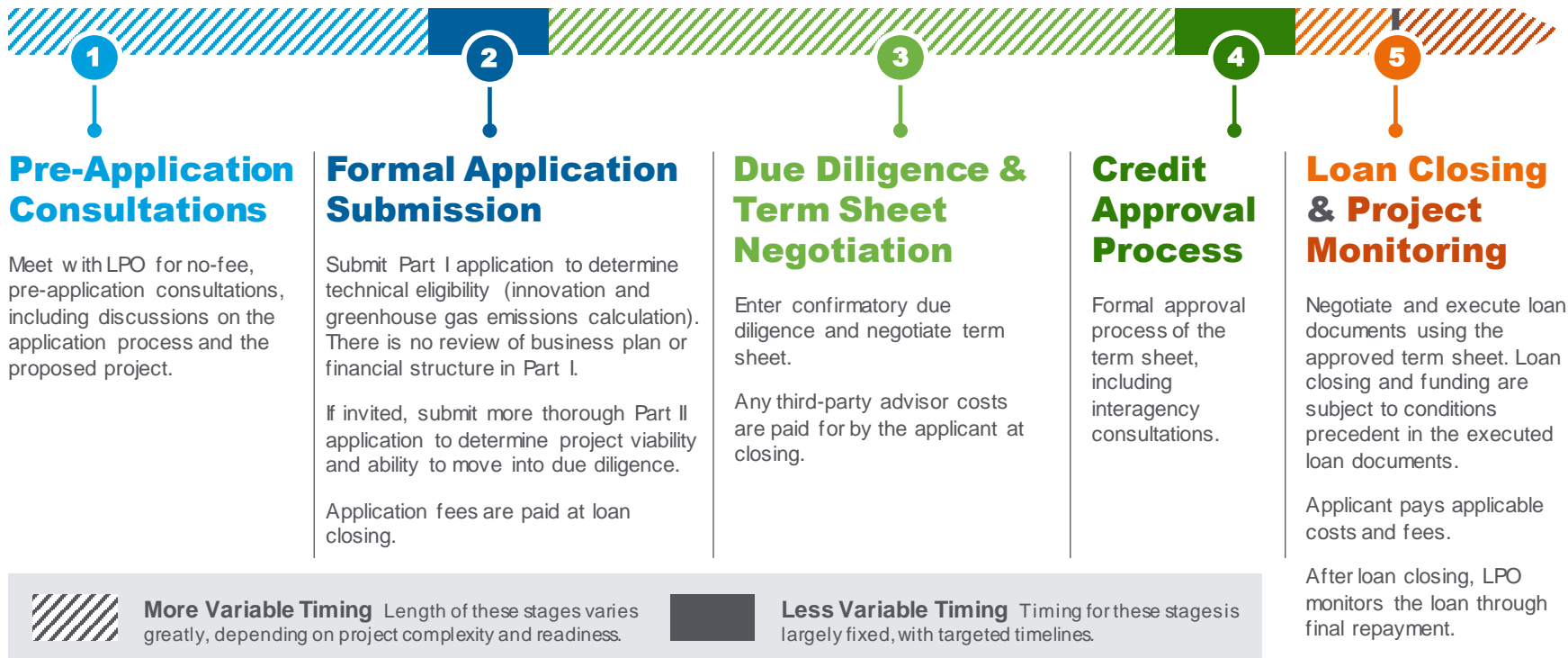
Offering Flexible Financing Solutions

LPO can provide affordable, custom financing to meet the specific needs of individual borrowers.

- ✓ **Loan Type** | Direct loan from U.S. Treasury's Federal Financing Bank (FFB) backed by 100% DOE guarantee or DOE partial guarantee of commercial loans.
- ✓ **Affordable Debt** | Senior secured, fixed or floating rate debt.
- ✓ **Competitive Pricing** | Equal to U.S. Treasury-equivalent yield curve plus a credit risk premium, typically ranging from 37.5 to 200 basis points.
- ✓ **Long Tenor** | Tenor of up to 30 years or 90% of projected useful life of assets financed.
- ✓ **Flexible Deal Structures** | Structures may include project finance, structured corporate, corporate or warehousing lines.
- ✓ **DOE Role** | Can serve as sole lender or as a co-lender.
- ✓ **Debt Amount Determination** | Debt amount based on credit profile, business plan, market risk, technology, cash flows, project risk allocation and other relevant factors, up to 80% of total project costs.
- ✓ **Viability Standard** | Emphasis placed on certainty of cash flow to the project during initial financial viability review and during subsequent due diligence.

LPO Moves Ideas to Applications to Projects

LPO engages early with applicants and remains a partner throughout the lifetime of the loan.





Let's Talk About Your Project

Contact LPO to see what financing options may be available for your project:



Call or write to schedule a no-fee, pre-application consultation: **202-586-8336** | **lpo@hq.doe.gov**



Learn more about LPO and all of its lending programs at: **energy.gov/LPO**