



## **Virtual CCUS Road Show**

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### DOE Loan Guarantees: What CCUS Developers Need to Know

Khalid Abedin

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# Agenda

## Intro to LPO

- Value of LPO Financing • LPO Portfolio • LPO Programs

## Advanced Fossil Energy Loan Guarantees

- CCUS Technology Considerations
- CCUS Project Business Considerations

# 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.

# 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**

CO<sub>2</sub> 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

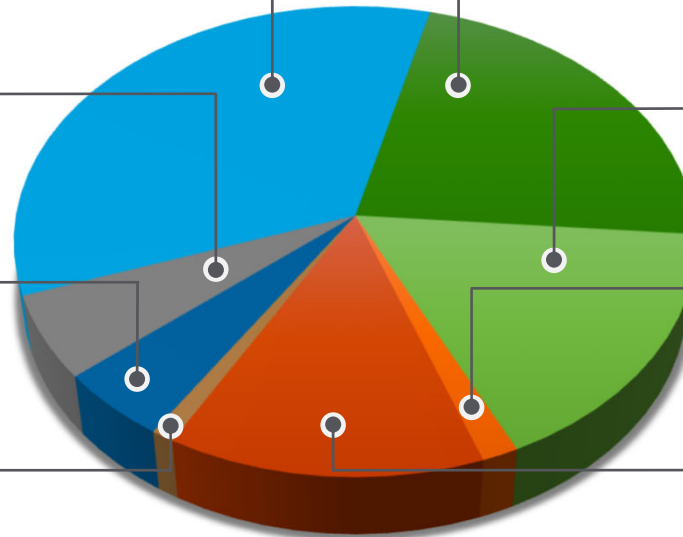
**\$546 Million**

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



Advanced Fossil Energy  
\$8.5 Billion Available



Advanced Nuclear Energy  
\$10.9 Billion Available



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



## ATVM Direct Loans



Advanced Technology  
Vehicle Manufacturing  
\$17.7 Billion Available



## TELGP Partial Loan Guarantees



Tribal Energy Projects  
Up to \$2 Billion Available





# 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**

# CCUS Technology Considerations

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- ⚡ CCUS projects fit the technical eligibility criteria for new or significantly improved technology and reduction of anthropogenic emissions of greenhouse gases
  - ⚡ Solicitation specifically calls for projects that integrate fossil fuel usage in traditional processes with new or improved technology that capture and remove CO<sub>2</sub> for permanent storage in underground formations or through beneficial reuse
- ⚡ LPO can also support infrastructure, products, and services necessary to catalyze CCUS technologies that are at the cusp of initial commercial deployment
  - ⚡ For example, new or expanded pipeline infrastructure to transport captured carbon to either be utilized or stored
- ⚡ Recently expanded the eligibility requirement to allow Advanced Fossil Energy Projects that avoid, reduce, or sequester greenhouse gas emissions OR air pollutants.

# CCUS Project Business Considerations

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- ⚡ Operate similar to commercial lenders
- ⚡ Willing to take on technology risk
- ⚡ Look for strong cash flows to support O&M and debt service
- ⚡ Collaborate with borrowers to reach bankable structures
- ⚡ Reliable anchor lender actively engaged throughout project life





# 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**

## Khalid Abedin

Supervisory Investment Officer  
Khalid.Abedin@hq.doe.gov  
202-287-6898

# Appendix

# Offering Flexible Financing Solutions

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

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- ✓ **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.

# Title 17 Loan Transaction Process

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

