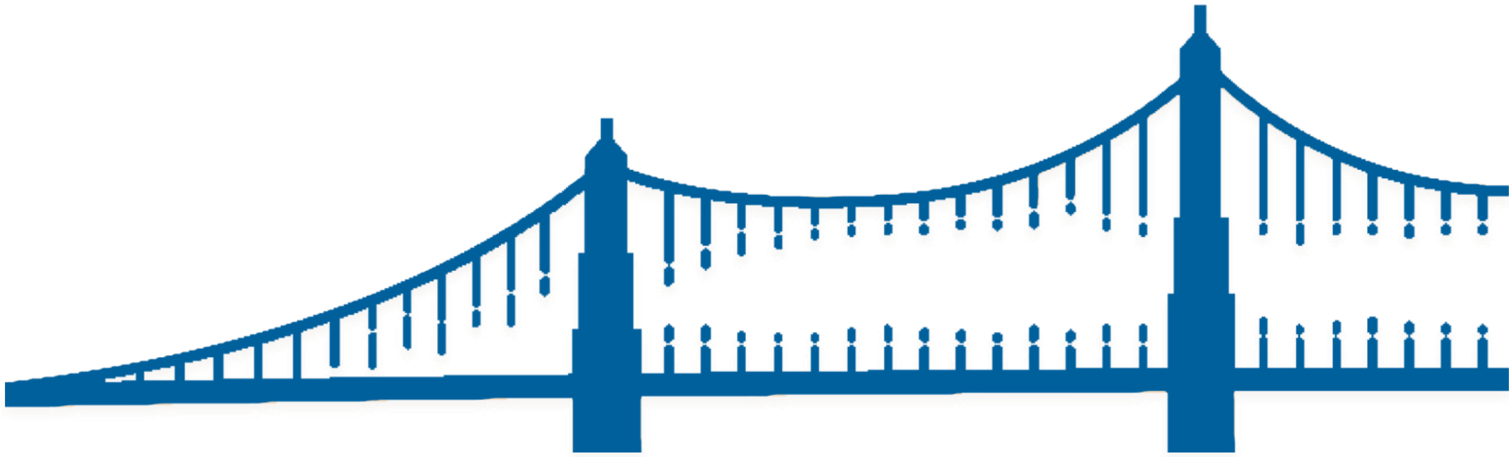
Loan Programs Office



Building a Bridge to Bankability for CCUS

How LPO can help move **innovative clean energy** technologies including **carbon capture, utilization, and storage** technologies with a goal of **full market acceptance** in the U.S.

2022 Carbon Management Project Review Meeting

Pittsburgh, PA

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August 15, 2022

Agenda

- **What LPO Does** | Building a Bridge to Bankability
- **What LPO Offers** | The Value of Working with LPO
- **LPO Financing** | Innovative Clean Energy: Fossil, CIFIA
- **Working with LPO** | The Loan Transaction Process
- **Questions**

What LPO Does

A Bridge to Bankability

"There are many areas that are mature from a technology standpoint but not mature from an access to capital standpoint — **that's a nexus where there's a clear mandate for LPO to participate.**

— LPO Director Jigar Shah

The **U.S. Department of Energy Loan Programs Office (LPO)** finances innovative clean energy, advanced transportation technologies, and tribal energy projects **serving as a bridge to bankability for breakthrough projects and technologies,** derisking them at early stages of commercialization so they can reach full market acceptance.

The Bridge to Bankability

Providing financing for technologies to go the last mile to reach full market acceptance

What LPO Offers

Value-Added Financing

The unique value of working with LPO for clean energy technology financing

LPO loans and loan guarantees are differentiated in the clean energy debt capital marketplace in **three primary ways:**

Access to Patient Capital
that private lenders cannot or will not provide.

Flexible Financing
customized for the specific needs of individual borrowers.

Committed DOE Partnership
offering specialized expertise to borrowers for the lifetime of the project.

LPO Financing

How We Build the Bridge

LPO provides **loans and loan guarantees** to projects that have demonstrated potential to **accelerate the decarbonization** of the U.S. economy, focusing on those that combine **clean energy technology** with **effective financial models**.

Innovative Clean Energy	**Loan Guarantees** Title 17 Program	• **Innovative Clean Energy | $3.0 Billion** • **Innovative Fossil Energy | $8.5 Billion** • **Innovative Nuclear Energy | $10.9 Billion**
Advanced Transportation	**Loans & Loan Guarantees** ATVM & Title 17 Programs	• **Manufacturing | $17.7 Billion** in ATVM loans • **Deployment |** Eligible for the same **$3.0 Billion** in Innovative Clean Energy loan guarantees as above
Tribal Energy	**Loans & Loan Guarantees** TELGP Program	• **Tribal Energy Projects | Up to $2.0 Billion**

Innovative Clean Energy

Title 17

Loan guarantees for the deployment of innovative energy projects at commercial scale

Eligibility

The Title 17 program can consider innovative clean 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.

Loan Guarantee Features

- LPO can offer 100% guarantee of U.S. Treasury’s Federal Finance Bank (FFB) loans or partial guarantees of commercial loans.
- Senior secured debt priced competitively with commercial rates.
- DOE can serve as sole lender or as a co-lender.
- Structures may include project finance, structured corporate, corporate or warehousing lines.

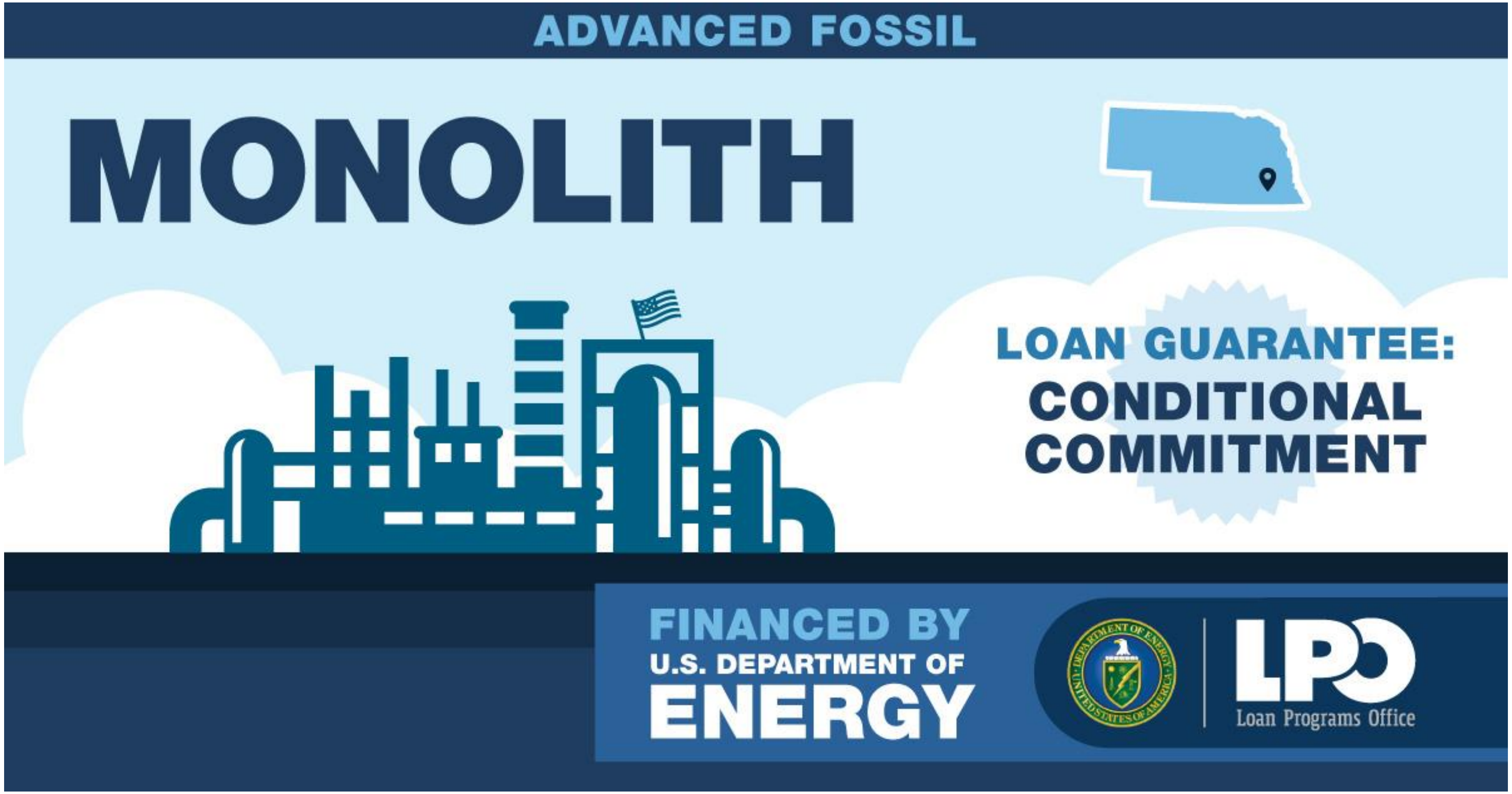
Innovative Clean Energy: Fossil

Examples of potential opportunities:

- Post-combustion technologies
- Pre-combustion technologies
- Oxy-combustion
- Hydrogen production
- Direct air capture (DAC)
- CO_2 storage (Class VI wells) and CO_2 hubs

Clean Hydrogen & Carbon Utilization Project

Conditional Commitment of up to $1.04 Billion



What is CIFIA?

Section 40304 of the Infrastructure Investment and Jobs Act of 2021

- Carbon Dioxide Infrastructure Finance and Innovation Act (CIFIA).
  - Authorized $2.1 billion in “credit subsidy” for “common carrier” CO_2 transportation “infrastructure”.
- “Common carrier” means a transportation infrastructure operator or owner that:
  - Publishes a publicly available tariff containing the just and reasonable rates, terms, and conditions of nondiscriminatory service; and
  - Holds itself out to provide transportation services to the public for a fee.
- “Infrastructure” includes pipeline, shipping, rail, or other forms of infrastructure and equipment to transport or handle CO_2 from anthropogenic sources or ambient air

Status of Implementation

Target Launch Upcoming Soon

- Being implemented by DOE’s Office of Fossil Energy and Carbon Management (FECM) and Loan Programs Office (LPO).
  - FECM – technical and industry expertise, grant administration infrastructure.
  - LPO – project finance expertise, loan service infrastructure.
- Stakeholder outreach underway.
- Coordinating with related Federal programs and initiatives.
- Developing guidance document and online resources for applicants.

The LPO Loan Transaction Process

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

1 2 3 4 5 6

Pre-Application Consultations

Meet with LPO for no-fee, pre-application consultations, including discussions on the application process and the proposed project.

More Variable Timing

Lengths of these stages vary greatly, depending on project complexity and readiness.

Less Variable Timing

Timing for these stages is largely fixed, with targeted timelines.

Formal Application Submission

Title 17: Submit Part I application to determine technical eligibility (innovation and greenhouse gas emissions calculation). There is no review of business plan or financial structure in Part I. If invited, submit more thorough Part II application to determine project viability and ability to move into due diligence.

ATVM: Submit single application to determine basic eligibility and project viability.

TELGP: Tribal borrower engages with a commercial lender. Lender applies for a loan guarantee on behalf of Borrower and project.

Due Diligence & Term Sheet Negotiation

Title 17 & ATVM: Enter confirmatory due diligence and negotiate term sheet.

TELGP: Borrower, Lender, and DOE engage in confirmatory due diligence and term sheet negotiation.

All Programs: Any third-party advisor costs are paid for by the applicant.

Credit Approval Process

Formal approval process of the term sheet, including interagency consultations.

Conditional Commitment

An offer by DOE of a term sheet to the borrower for a loan or loan guarantee subject to the satisfaction of certain conditions.

Loan Closing & Project Monitoring

Negotiate and execute loan documents using the approved term sheet. Loan closing and funding are subject to conditions precedent in the executed loan documents.

Applicant pays applicable costs and fees. After loan closing, LPO monitors 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: **202-287-5900** | **LPO@hq.doe.gov**

Learn more about LPO and all of its financing programs at: **Energy.gov/LPO**

Energy.gov/LPO

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