Financing Your Energy Future

Financing energy sovereignty and strengthening Native Nations one investment at a time.

DOE: Office of Indian Energy – 2022
Tribal Energy Webinar Series:
Funding Your Energy Future

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Agenda

- **LPO** | DOE Public Policy Bank
- **Positioning your Tribe** | Tribal Energy Project Financing
- **Future** | IRA, Terms, Short – Medium & Long
The Loan Program Office
LPO Acts as a Bridge to ...

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

**DEPLOYMENT MILESTONES**

1. First Commercial Deployments
2. Follow-On Commercial Deployments
3. Commercial Scale-Up
4. Commercial Debt Market Education

**CHALLENGES ALONG THE LAST MILE TO COMMERCIALIZATION**

- Applied Engineering
- Construction Risks
- Establishing Demand
- Achieving Securitization
LPO Financing

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.

Tribal Energy
- Tribal Energy Projects | Up to $20.0 Billion
  - TELGP Program

Advanced Transportation
- Manufacturing | $17.7 Billion in ATVM loans
- Deployment | Eligible for the same $2.5 Billion in Innovative Clean Energy loan guarantees as above
  - ATVM & Title 17 Programs

Innovative Clean Energy
- Innovative Clean Energy | $2.5 Billion
- Innovative Fossil Energy | $8.5 Billion
- Innovative Nuclear Energy | $10.9 Billion
  - Title 17 Program
Working with LPO: The Process

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

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

2. Formal Application Submission
   - Direct Loan: Tribal borrower submits application directly to LPO.
   - Loan Guarantee: Tribal borrower engages with a commercial lender. Lender applies for a loan guarantee on behalf of Borrower and project.

3. Due Diligence & Term Sheet Negotiation
   - Borrower, Lender, and DOE engage in confirmatory due diligence and term sheet negotiation.

4. Credit Approval Process
   - Formal approval process of the term sheet, including interagency consultations.

5. 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.

6. 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.
Positioning your Tribe to participate in the energy transition to the benefit of your community and future generations
Tribal Energy Financing

• A Federal Credit Program to finance a Tribe’s energy investment
• Established in Energy Policy Act (25 USC 3502)
• Amended in the Inflation Reduction Act
• $20 B appropriated to lend or guarantee
• $ 80+ M to pay associated costs including credit subsidy
Tribal Energy Financing

Loans are financed through the Tribal Program under Section 2602(c) of Energy Policy Act

Program Overview

We consider Tribal energy projects that:

1. **Are owned by a Tribe** or entity that Tribe owns substantial interest.

2. **Are located in the U.S.** (Tribal or non-Tribal land, single site or distributed).

3. **Are financially viable**, including Tribal equity investment in the project.

4. Are seeking direct loans or partial guarantees of commercial loans.

5. Involve energy resources, products, and services that utilize commercial technology (innovative technology is permitted but not required).

*Note: Unlike other LPO Programs, there is NO innovation or greenhouse gases (GHG) requirement.*
The Opportunity Providing Credit Capital

"That every sovereign Indian Tribe will have sufficient energy to support its social and economic well-being."
— National Indian Energy Vision, 1999 (A. David Lester)

The U.S. Department of Energy Loan Programs Office (LPO) can provide access to credit capital for tribal ownership of energy projects to support energy access, economic development, and self-determination.

Unlike other federal Indian energy programs, LPO Tribal Energy project financing:
• Offers loans, which can be catalytic for a Tribe’s economic development by creating a multiplier effect
• Is exclusively for Tribal borrowers
• Is anchored in the credit market
Rebuilding Nation with Energy Plan

An investment in sovereignty

1. Tribal infrastructure investment *bought down with grant*
2. Land & natural resource investment
3. Strategic energy partner investment
4. Sovereign private equity investment
5. Tribal utility authority investment
Special skills are needed on Tribe’s Team

**Technical Assistance**
- Owner’s Representative
  - Engineer/
  - Special Legal Counsel
    - Support Federal Indian Lawyer
- Financial Advisor
- CPA
- Energy Consultant

**Equity/Grant/Cost Share**

**Loan or Guarantee**
Tribal Energy Financing Roadmap

Investment Case Analysis
- Social Services – energy costs
- Budget Forecast
- Capital Improvement Plan

- Investment Plan/Policy
- Enterprise Investment
- Economic Development Investment

Equity
Debt
Revenue
Management
gains
## Commercial Technologies

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<th><strong>STANDARD</strong></th>
<th><strong>CUSTOM (BESPOKE)</strong></th>
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<tbody>
<tr>
<td><strong>Use – Individual Members, Residents &amp; Tenants</strong></td>
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<tr>
<td><strong>Use – Tribal Government</strong></td>
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<td><strong>Use – Commercial -</strong></td>
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**ALL Energy Resources & Infrastructure**

- Behind The Meter - Facility
- Wholesale – Commercial, Utility
- Wholesale – Wind
- Carbon Based

**Reasonable Prospect of Repayment**
• Solar PV
• Land based Wind
• Transmission
• Cogeneration
• Pipelines

Medium Term:
• Microgrids
• Integrated Systems
• Energy as a Services
• Storage*
• Offshore Wind

Long Term:
• Hydrogen (Fuel Cells)
• ?
• ?
• ?
• ?
Inflation Reduction Act
50% REBATE REDUCES LOAN AMOUNT BY 50%

- EQUITY 5%
- BASE REBATE 30%
- ENERGY COMMUNITY 10%
- DEBT 45%
- NATIVE LAND 10%
Engage early to identify hurdles, eligibility, and viability
CAPITALIZATION & REPAYMENT

CONSTRUCTION

- Disbursements

OPERATION

- Repayments

DECOMMISSION

- Pay Down Loan with 50% Rebate
- Pay Down Loan with cash from Monetization
Medium Term
The Next Generation of LPO Financing

LPO is working with stakeholders across innovative clean energy and advanced transportation sectors

### Major Technology Sectors

<table>
<thead>
<tr>
<th>Technology Area</th>
<th>Technology Areas of Interest</th>
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<tbody>
<tr>
<td>Advanced Vehicles &amp; Components</td>
<td>• Vehciles • Components • Lightweighting • Manufacturing</td>
</tr>
<tr>
<td>Biofuels</td>
<td>• Advanced Biofuels • Biodiesel • Cellulosic Biofuels • Renewable Diesel • Sustainable Aviation Fuel (SAF)</td>
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<tr>
<td>Critical Materials</td>
<td>• Extraction • Manufacturing • Mining • Processing • Recovery • Recycling</td>
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<tr>
<td>EV Charging</td>
<td>• Electric Vehicle (EV) Charging Infrastructure • Manufacturing &amp; Deployment</td>
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<tr>
<td>Hydrogen</td>
<td>• Generation • Infrastructure • Transportation</td>
</tr>
<tr>
<td>Onshore &amp; Offshore Wind</td>
<td>• Offshore Wind • Onshore Wind Infrastructure</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>• Electrification • Geothermal • Hydrokinetics • Hydropower • Solar • Waste Conversion</td>
</tr>
<tr>
<td>Storage</td>
<td>• Electric Vehicle (EV) Battery Manufacturing • EV Bidirectional Storage</td>
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<tr>
<td></td>
<td>• Newer Battery Chemistries &amp; Flow Batteries • Compressed Air Energy Storage</td>
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<tr>
<td>Transmission</td>
<td>• Pumped Storage Hydropower • Thermal Energy Storage</td>
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<tr>
<td>Virtual Power Plants</td>
<td>• Grid Efficiency • Grid Reliability • High Voltage Direct Current (HVDC) Systems</td>
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<tr>
<td></td>
<td>• Offshore Wind Transmission • Systems Sited Along Rail &amp; Highway Routes</td>
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<tr>
<td>Advanced Fossil</td>
<td>• Grid Connected Distributed Energy Resources (DERs)</td>
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<tr>
<td>CCUS</td>
<td>• Carbon Feedstock Waste Conversion • Fossil Infrastructure Repurposed Hybrid</td>
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<td></td>
<td>• Hydrogen Generated From Fossil Sources • Industrial Decarbonization • Synfuel</td>
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<tr>
<td>Advanced Nuclear</td>
<td>• Carbon Capture, Utilization &amp; Storage (CCUS) • Carbon Dioxide Removal (CDR)</td>
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<tr>
<td>Tribal Energy</td>
<td>• Small Modular Reactors • Micro Reactors • Nuclear Supply Chain • Nuclear Front End</td>
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<td>• Energy Storage • Fossil Energy • Renewable Energy • Transmission Infrastructure</td>
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<td>• Transportation of Fuels</td>
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Catalyzing $100B-scale across clean energy

**Overview**

- Achieving administration climate targets requires trillions of dollars in capital formation in clean energy
- LPO is focused on catalyzing $100B scale in each of our focus sectors to create irreversible momentum for the clean energy transition

**LPO’s focus sectors**

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<thead>
<tr>
<th>Carbon management</th>
<th>Generation</th>
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<tr>
<td>Direct Air Capture / CO2 Removal</td>
<td>Advanced geothermal</td>
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<tr>
<td>Carbon transport and storage</td>
<td>Advanced nuclear</td>
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<td>Hydropower</td>
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<td>Offshore wind supply chain</td>
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<td>Utility-scale PV and onshore wind supply chain</td>
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<th>Grid optimization</th>
<th>Industry</th>
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<td>Grid-scale storage</td>
<td>Green cement</td>
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<td>Transmission infrastructure &amp; optimization</td>
<td>Green steel</td>
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<td></td>
<td>Waste-to-Value</td>
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<td>Clean hydrogen</td>
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<tr>
<th>Materials</th>
<th>Transportation</th>
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<td>Battery, E-Waste, and plastics recycling</td>
<td>EVs (mfg, supply chains)</td>
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<td>EV charging</td>
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<td>Critical minerals and rare earths</td>
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<td>Next-gen aviation</td>
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<td>Transportation fuels</td>
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Tipping point: $100B in capital formation

$100B as a ‘rule of thumb’ for commercial lift off

At $100B…

• Cost declines achieved through cumulative doublings of manufacturing capacity
• Project developers achieve repeatable processes
• Supply chain established – raw inputs, components
• Trained workforce developed
• Dedicated core of capital markets professionals with experience funding

Example: Wind and Solar achieved exponential scale-up after achieving ~$100B in global capital formation

Cumulative global installed capacity for wind and solar, 2004-2020

- Solar
- Wind

2006: Wind hits $100B
2009: Solar hits $100B

Sources: BNEF
Long Term
Hope you see a role or opportunity for your Tribe to Invest in Energy

Please contact us to discuss your vision, objectives, path and payback or return expectations
Let’s Talk About Your Tribal Energy 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/TELGP

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