INNOVATION CONTINUES

ADVANCED TECHNOLOGY VEHICLES MANUFACTURING: $16 B
ADVANCED FOSSIL ENERGY: $8.5 B
RENEWABLE ENERGY & EFFICIENT ENERGY: $4.5 B
ADVANCED NUCLEAR ENERGY: $12.5 B

MORE THAN $40 BILLION IN REMAINING AUTHORITY

AS OF OCTOBER 2015
RENEWABLE ENERGY & EFFICIENCY

TECHNOLOGY AREAS OF INTEREST

Advanced Grid Integration & Storage
- Renewable energy generation, including distributed generation, incorporating storage
- Smart grid systems incorporating demand response

Drop-in Biofuels
- New bio-refineries or bio-crude refining processes
- Modifications to existing ethanol facilities to produce drop-in molecules

Waste-to-Energy
- Methane from landfills or ranches via biodigesters
- Utilizing municipal solid waste, crop waste, or forestry waste

Enhancement of Existing Facilities
- Powering non-powered dams or upgrading existing hydro facilities
- Retrofitting existing renewable facilities with innovative technology (e.g. wind turbine retrofits)

Efficiency Improvements
- Improve or reduce energy usage in residential, institutional, and commercial facilities, buildings, and/or processes
- Recover, store, or dispatch waste energy or underutilized renewable energy sources

QUALIFYING PROJECTS ARE NOT LIMITED TO THESE TECHNOLOGIES.
## Eligibility Requirements

### Title XVII Clean Energy Projects

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Technology</td>
<td>Eligible projects must utilize new or significantly improved technology or systems</td>
</tr>
<tr>
<td>Greenhouse Gas Benefits</td>
<td>Eligible projects must reduce, avoid, or sequester greenhouse gases</td>
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<tr>
<td>Located in the U.S.</td>
<td>Eligible projects must be located in the United States but may be foreign-owned</td>
</tr>
<tr>
<td>Reasonable Prospect of Repayment</td>
<td>Eligible projects must be able to repay loan principal and interest. LPO conducts due diligence and underwrites each loan similar to a commercial lender</td>
</tr>
</tbody>
</table>
OUTPUTS LPO CAN SUPPORT

• Bioenergy
• Biofuels
• Biochemicals
• Bio-products

Qualifying projects are not limited to these technologies. Projects must utilize an innovative technology to be eligible under Title XII.
**FINANCIAL TERMS**

**TITLE XVII CLEAN ENERGY PROJECTS**

**LOAN GUARANTEE:** A loan guarantee can support debt from a commercial lender or the U.S. Treasury.

**LOAN TENOR:** Long-term financing is available based on the useful life of the asset - up to 30 years.

**INTEREST RATES:** Interest rates set based on equivalent U.S. Treasury rate plus a credit-based spread (-0.5-1.5%).

**EQUITY:** LPO can only guarantee up to 80% of the total project cost. Most projects have at least 35% equity.

**CO-LENDING:** Co-lending with commercial lenders is encouraged but not required.
ITEMS TO CONSIDER FOR APPLICANTS

- Security, duration & pricing of feedstock arrangement.
- Equity contribution from sponsor must be at least 20% of total project cost. Typically has ranged between 20-40%.
- Duration & pricing for offtake product arrangements.
APPLICATION PROCESS

01 APPLICATION-PART I
  • Determine basic eligibility
  • $50,000 fee (Fee does not apply to ATVM)

02 APPLICATION-PART II
  • Confirmatory due diligence
  • Balance of application fee ($100,000/$350,000)
    (Fee does not apply to ATVM)

03 CONDITIONAL COMMITMENT
  • Negotiate term sheet

04 LOAN GUARANTEE
  • Negotiate final agreements
  • Remaining fees

Apply at energy.gov/lpo/apply

REMAINING RENEWABLE SOLICITATION DEADLINES

PART I
  11/18/2015
  12/30/2015
  1/13/2016
  3/16/2016
  5/18/2016
  7/13/2016

PART II
  12/16/2015
  2/17/2016
  4/13/2016
  6/15/2016
  8/17/2016
  10/19/2016

NOTE: ADDITIONAL ROUNDS MAY BE ANNOUNCED IN A SUPPLEMENT TO THE RENEWABLE ENERGY AND EFFICIENT ENERGY PROJECTS SOLICITATION.