FUNDING OPPORTUNITIES
U.S. DEPARTMENT OF ENERGY
LOAN PROGRAMS OFFICE

Nidhi Thakar, Senior Advisor
NASEO Annual Meeting
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INVESTING in AMERICAN ENERGY
LPO Programs

$40 Billion in Remaining Loan Authority

LPO investments accelerate the deployment of innovative clean energy projects and advanced vehicle manufacturing facilities in the United States.

Title XVII
- Innovative Clean Energy Projects
  - Loan guarantees
  - Applications accepted via scheduled solicitations

ATVM
- Advanced Technology Vehicles Manufacturing
  - Direct loans
  - Applications accepted on a rolling basis
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
WHAT LPO CAN SUPPORT

ATVM

Original Equipment Manufacturing

- Electric Vehicles
- Batteries

Supply Chain Manufacturing

- Cost Efficiencies in the Supply Chain by Providing Low-Interest Debt for:
  - Light-weighting
  - Power & Transmission
  - Electric Vehicle Components
  - Hybrid/EV Powertrain Integration
  - Advanced EV Controllers

Efficiency Improvements

- Efficiency Improvements

NEW SUPPLEMENT

- EV Charging Facilities
- Associated Hardware & Software

QUALIFYING PROJECTS ARE NOT LIMITED TO THESE TECHNOLOGIES
# Financable Technologies Under Title XVII

**ATVM**

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**NEW SUPPLEMENT**

- EV Charging Facilities
- Associated Hardware & Software

Qualifying projects are not limited to these technologies.
BRIDGING THE GAP

Available Investment Funds

Clean Energy Technology Maturity

Research & Development
Pilot Demonstration
Initial Commercial Deployment
Full Deployment & Commercial Maturity

DOE Grants, National Labs, Private Equity
Private Equity
Private Debt Financing & Equity

Commercial Deployment Funding Gap
LPO Debt Financing
LAUNCHING NEW MARKETS
UTILITY-SCALE PHOTOVOLTAICS U.S. PROJECTS >100MW

2010
0 PROJECTS
5 LPO PROJECTS
$4.6 BILLION IN LOANS
1,502 MW

2012
28 PRIVATELY FINANCED PROJECTS
6,870 MW CUMULATIVE

2016
357% MW INCREASE

1705 Program Ends

*MW Totals include projects operating or under construction
REEE SOLICITATION
ELECTRIC VEHICLE (EV)
CHARGING SUPPLEMENT

EV charging infrastructure may be eligible as a Distributed Energy Project under the REEE Solicitation.

Projects may include EV charging facilities, including associated hardware and software.

Projects must satisfy all Title XVII program eligibility requirements.

For more information, visit: www.energy.gov/lpo/ev
ELIGIBILITY REQUIREMENTS

TITLE XVII CLEAN ENERGY PROJECTS

- INNOVATIVE TECHNOLOGY
  Eligible projects must utilize new or significantly improved technology or systems

- GREENHOUSE GAS BENEFITS
  Eligible projects must reduce, avoid, or sequester greenhouse gases

- LOCATED IN THE U.S.
  Eligible projects must be located in the United States but may be foreign-owned

- REASONABLE PROSPECT OF REPAYMENT
  Eligible projects must be able to repay loan principal and interest. LPO conducts due diligence and underwrites each loan similar to a commercial lender
FINANCABLE TECHNOLOGIES UNDER ATVM

Original Equipment Manufacturing
- Electric Vehicles
- Batteries

Supply Chain Manufacturing
- Cost Efficiencies in the Supply Chain by Providing Low-Interest Debt for:
  - Light-weighting
  - Power & Transmission
  - Electric Vehicle Components
  - Hybrid/EV Powertrain Integration
  - Advanced EV Controllers

Efficiency Improvements
- Efficiency Improvements

NEW SUPPLEMENT
- EV Charging Facilities
- Associated Hardware & Software

QUALIFYING PROJECTS ARE NOT LIMITED TO THESE TECHNOLOGIES
WHERE WE ARE GOING: DEPLOYING REMAINING LOAN AUTHORITY

More than $16 billion in remaining authority

Low Interest Rates
Interest rates on loans are set at U.S. Treasury rates.

Minimal Fees
The program does not charge application or underwriting fees. At closing, applicant pays a closing fee of 0.1% of loan principal amount.

Long Tenor
Loans are set at the useful life of the asset, as determined by DOE, and can extend up to 25 years.

Broad Applicability
Eligible projects can include vehicle and component manufacturing, as well as engineering integration.
WHERE WE HAVE BEEN:
$8 BILLION INVESTED IN AMERICAN AUTO MANUFACTURING

TESLA
• $465 million loan issued in 2010
• Financed the engineering and design of the all-electric Model S battery manufacturing, and the renovation and modernization of a shuttered auto plant in California.

FORD
• $5.9 billion loan issued in 2009
• Modernized 13 facilities in 6 states to manufacture fuel-efficient vehicles and components, including the EcoBoost™ engine.

NISSAN
• $1.45 billion loan issued in 2010
• Financed the construction of Nissan’s new all-electric Leaf vehicle assembly line, a battery facility, and electric motor manufacturing facility in Tennessee.
ATVM can provide loans for eligible vehicle and component manufacturing projects in the U.S. that can include:

- Building new facilities in the U.S.
- Reequipping, modernizing, or expanding existing facilities in the U.S.
- Engineering integration
ADVANCED TECHNOLOGY VEHICLES
ELIGIBLE LIGHT-DUTY VEHICLES

MY2005

LIGHT-DUTY 25%
MORE FUEL EFFICIENT

COMPAARED TO MODEL YEAR 2005 BASELINE

MY2015+

 Cars

 Cars

 Cars

 Cars
ADVANCED TECHNOLOGY VEHICLES

ELIGIBLE ULTRA-EFFICIENT VEHICLES

ULTRA-EFFICIENT

75 MPG

MINIMUM EQUIVALENT

AND CARRY AT LEAST 2 PASSENGERS
ELIGIBLE COMPONENTS INSTALLED IN ADVANCED TECHNOLOGY VEHICLES TO INCREASE FUEL ECONOMY PERFORMANCE

Advanced Engine Technologies
- Variable Valvetrain Control
- Direct Injection
- Turbocharging
- Start/Stop

Advanced Powertrain Technologies
- Increased Number of Gear Ratios
- Hybrid / EV Powertrain Integration

Light-Weighting Technologies
- Advanced High Strength Steels
- Aluminum, Magnesium, or Other Alloys
- Plastics, Carbon Fiber, & Composite Materials

Electronics
- Advanced EV Controllers
- Electric Power Steering
- Power Electronics
- Battery Systems

Fuel Efficient Tires

Improved Aerodynamics

Qualifying projects may include—but are not limited to—these technologies
Apply at energy.gov/lpo/apply

U.S. DEPARTMENT OF ENERGY
LOAN PROGRAMS OFFICE

Advanced Fossil Energy:
LPO.FossilSolicitation.Questions@hq.doe.gov

Renewable Energy & Efficient Energy:
LPO.REEEE.Solicitation.Questions@hq.doe.gov

Advanced Nuclear Energy:
LPO.NuclearSolicitation.Questions@hq.doe.gov

Advanced Technology Vehicle Manufacturing:
atvmloan@hq.doe.gov

For more information, and to apply online, please visit:
energy.gov/lpo

PHONE 202-586-8336 | FAX 202-586-7366 | EMAIL igprogram@hq.doe.gov