



U.S. DEPARTMENT OF ENERGY

# LOAN PROGRAMS OFFICE

An aerial photograph of a solar tower power plant in a desert landscape. The plant consists of a central receiver tower surrounded by a large field of heliostats (mirrors) that reflect sunlight onto the tower. The desert floor is sandy and brown, with some small structures and a road visible near the plant. In the background, there are blue mountains under a clear sky.

# INVESTING *in* AMERICAN ENERGY

## THE DEPARTMENT OF ENERGY'S LOAN PROGRAMS OFFICE (LPO) INVESTS IN THE POWER OF AMERICAN INNOVATION

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

Our team of financial, technical, environmental, and legal professionals is dedicated to advancing an all-of-the-above energy strategy that avoids, reduces, or sequesters greenhouse gases.

[energy.gov/lpo](https://energy.gov/lpo)

# A PROVEN PORTFOLIO OF CLEAN ENERGY INVESTMENTS

LPO currently supports a large, diverse portfolio of more than \$30 billion in loans, loan guarantees, and commitments, covering more than 30 projects across the United States.

## LPO PORTFOLIO PERFORMANCE SUMMARY

Loans and Loan Guarantees Issued	<b>\$31.98</b> Billion
Conditional Commitments	<b>\$2.41</b> Billion
Amount Disbursed	<b>\$24.34</b> Billion
Principal Repaid	<b>\$5.14</b> Billion
Interest Earned*	<b>\$1.22</b> Billion
Actual and Estimated Loan Losses	<b>\$0.78</b> Billion
Losses as % of Total Commitments	<b>2.27%</b>

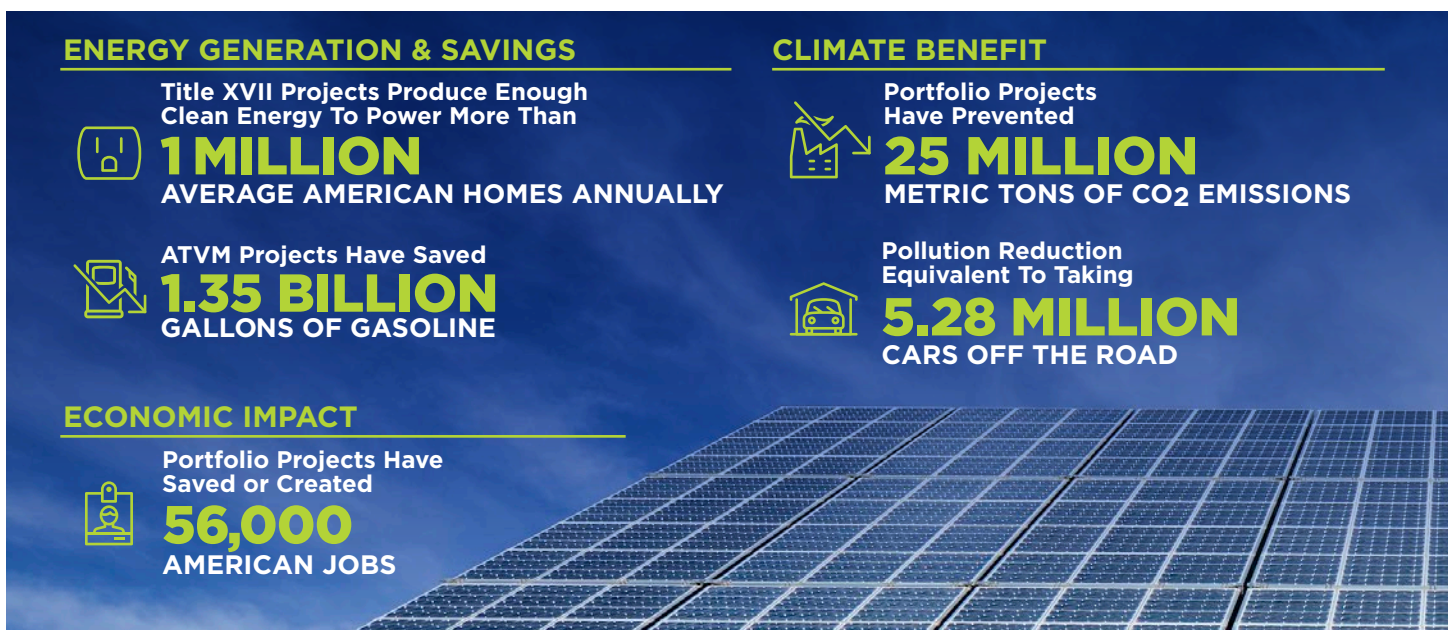
\* CALCULATED WITHOUT RESPECT TO U.S. TREASURY'S BORROWING COST.  
AS OF OCTOBER 2015

*"The use of loan guarantees allows for greater access to the capital markets resulting in lower-cost financing, thereby reducing the cost of electricity to consumers."*

**MARVIN FERTEL**  
PRESIDENT & CEO  
**NUCLEAR ENERGY INSTITUTE**  
POWER ENGINEERING, MARCH 2014

## PORTFOLIO IMPACT

LPO projects have generated more than \$50 billion in total project investment, supported tens of thousands of jobs, cut pollution, and enhanced American competitiveness in the global economy.



AS OF SEPTEMBER 2015

**INVESTING *in* AMERICAN ENERGY**

# LPO's PORTFOLIO HAS SPURRED INNOVATION

Portfolio highlights include:

- Ivanpah** World's largest concentrating solar power plant
- Solana** World's largest operating solar thermal energy storage plant
- Vogtle** First new U.S. nuclear reactors to begin construction in 30 years
- Tesla** First all-electric auto manufacturer
- Nissan North America** Largest lithium-ion battery plant in the U.S.
- Shepherds Flat** One of the world's largest onshore wind farms
- Abengoa Bioenergy** One of the first cellulosic biofuel facilities in the U.S.

*"The federal loan was very helpful... what the government loan really did was accelerate our progress."*

**ELON MUSK**

CEO & CO-FOUNDER

**TESLA MOTORS**

60 MINUTES, MARCH 30, 2014



## Launching Utility-Scale Solar in the United States

In 2009, the largest U.S. photovoltaic (PV) solar facility was only 14 megawatts. LPO provided \$4.6 billion in loan guarantees to support the first five U.S. PV projects larger than 100 megawatts. These projects are now generating electricity and proving that solar can be deployed at utility-scale.

As a result, PV solar projects are now regularly financed by financial institutions—giving rise to a new utility-scale PV solar industry in the United States. Since LPO stopped financing utility-scale PV projects, more than 17 have been privately financed in the United States.

See more at:  
[www.energy.gov/lpo/pv](http://www.energy.gov/lpo/pv)

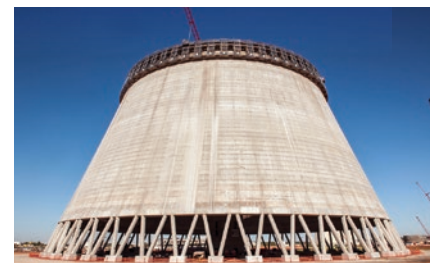


## Accelerating the Resurgence of U.S. Auto Manufacturing

LPO investments have helped restore and modernize automotive manufacturing in the United States, created demand along the component supply chain, and provided more fuel-efficient, American-made cars and trucks for consumers.

Direct loans from the Advanced Technology Vehicles Manufacturing (ATVM) program have helped Ford Motor Company, Nissan North America, and Tesla Motors to produce more than 4 million advanced technology vehicles and approximately 35,000 direct jobs at manufacturing facilities across eight states.

See more at:  
[www.energy.gov/lpo/adv-vehicles](http://www.energy.gov/lpo/adv-vehicles)



## Supporting America's First New Nuclear Power Plant in 30 Years

Loan guarantees from LPO are now supporting construction of two new 1,100 megawatt nuclear reactors at the Alvin W. Vogtle Electric Generating Plant in Georgia that will generate enough carbon-free electricity to power more than 1.5 million homes.

This project is using the next generation of nuclear reactors that incorporate a number of new safety features, including passive safety systems that are able to respond in an emergency without any human intervention or electrical power.

See more at:  
[www.energy.gov/lpo/adv-nuclear](http://www.energy.gov/lpo/adv-nuclear)

# LOAN PROGRAMS & REMAINING AUTHORITY

LPO has more than \$40 billion in remaining loan and loan guarantee authority to finance innovative energy projects and advanced vehicles manufacturing.

New applications are currently being accepted under two programs:

## Title XVII Innovative Clean Energy Projects

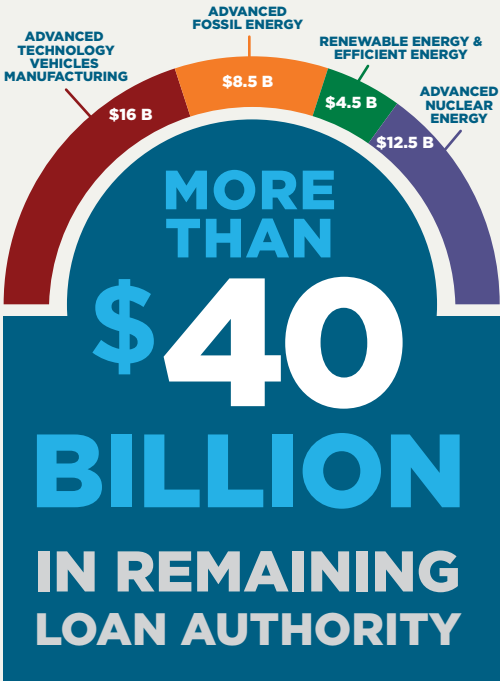
The Title XVII loan program **provides loan guarantees** to accelerate the deployment of innovative energy technology. The program applies to a wide range of energy technologies, including **advanced fossil energy**, **advanced nuclear energy**, and **renewable energy & efficient energy**. Eligible projects must utilize a new or significantly improved technology, avoid, reduce, or sequester greenhouse gases, be located in the United States, and have a reasonable prospect of repayment.

See more at: [www.energy.gov/lpo/title-xvii](http://www.energy.gov/lpo/title-xvii)

## Advanced Technology Vehicles Manufacturing (ATVM)

The ATVM program **provides direct loans** to automotive or component manufacturers for **reequipping, expanding, or establishing manufacturing facilities in the United States** that produce fuel-efficient light-duty passenger vehicles and components.

See more at: [www.energy.gov/lpo/atvm](http://www.energy.gov/lpo/atvm)



*"We had been interested in the technology...but it was such an expensive project and it was the first of its kind. We didn't think the private sector would provide the debt financing. ..."*

*The Department of Energy's loan guarantee program was a key part of the equation."*

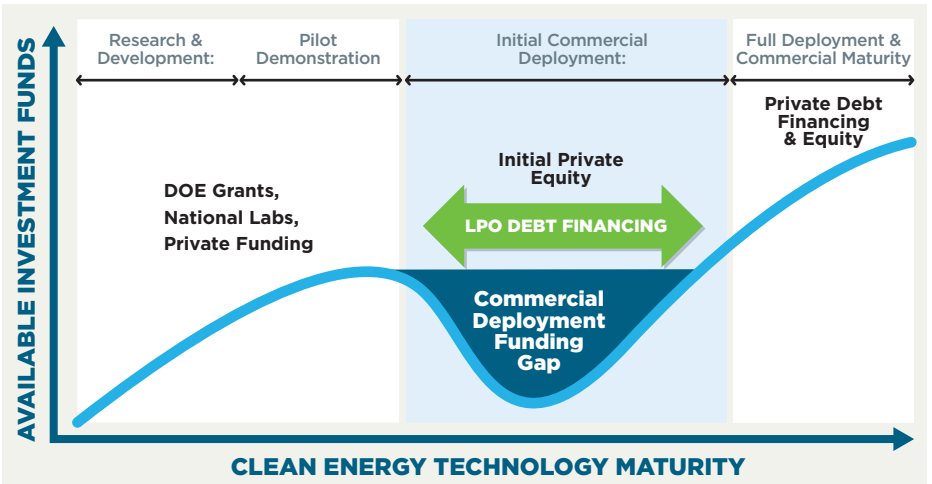
**DAVID CRANE**

FORMER PRESIDENT & CEO  
**NRG ENERGY**

VEGAS MAGAZINE, SEPTEMBER 2013

## BRIDGING THE GAP BETWEEN INNOVATION AND PRIVATE CAPITAL MARKETS

LPO financing accelerates the domestic deployment of innovative clean energy technologies and advanced vehicles manufacturing for the benefit of all Americans.



U.S. DEPARTMENT OF ENERGY

## LOAN PROGRAMS OFFICE

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and to apply online,  
please visit:

[energy.gov/lpo](http://energy.gov/lpo)