

Critical Materials

Loans & Loan Guarantees



Through its **Advanced Technology Vehicles Manufacturing (ATVM) Loan Program** and **Title 17 Innovative Energy Loan Guarantee Program**, LPO can finance qualifying critical materials projects with over **\$20 billion** of available loans and loan guarantees.



Contact LPO today to schedule a pre-application consultation: LPO@hq.doe.gov

The Value of Working With LPO

LPO provides borrowers access to capital, flexible financing, and expert project support to help reinvest, advance, and transform America's energy infrastructure.

Access to Capital

LPO can provide first-of-a-kind projects and other high-impact, energy-related ventures with access to debt capital that private lenders cannot or will not provide. LPO can also provide debt capital at U.S. Treasury rates for automakers' and their suppliers' investments in fuel-efficient vehicle and component manufacturing. LPO has approved more than \$30 billion of loans and loan guarantees for more than 30 projects under the Title 17 Innovative Energy Loan Guarantee Program and more than \$8 billion in low-cost loans to ATVM projects.

Flexible Financing

LPO can provide flexible, custom financing to meet the specific needs of individual borrowers. LPO works closely with industry to bridge gaps in the commercial debt market when innovative technologies may not be well understood by the private sector.

A Committed Project Partner

LPO can engage with projects early in development and remains involved for the entire lifetime of the loan. Projects are supported by an in-house team of experienced financial, technical, legal, risk mitigation, portfolio management, and environmental professionals.

Critical Materials Areas of Interest

Critical minerals, such as lithium, cobalt, and graphite, are used as materials within advanced batteries for electric vehicles (EVs). Rare earth elements, including neodymium, are processed and formed into magnets for motor drives used in EVs. Additional critical minerals or rare earth elements could be used in charging infrastructure that is essential for the operation of EVs.

Through the ATVM program, LPO has over \$17 billion in direct loans available to support manufacturing of qualifying components for eligible vehicles. These projects can be along the automotive value chain after a material has been mined, such as manufacturing of battery cell components, battery cells, battery modules, and battery packs for EVs, or manufacturing of EV charging infrastructure components.

Through the Title 17 Renewable Energy and Efficient Energy Projects solicitation, LPO has over \$3 billion in loan guarantees available to support efficient end-use energy technologies, such as mining, extraction, processing, recovery, or recycling of critical materials projects that satisfy the requirements of Title 17.

Prospective borrowers should engage with LPO for pre-application consultations to discuss specific projects and their potential eligibility.

Basic Project Eligibility Requirements

All projects must be located in the United States and have a reasonable prospect of repayment.

Title 17 Innovative Energy Loan Guarantee Program

A project must utilize innovative technology and avoid, reduce, utilize, or sequester greenhouse gas or air pollutant emissions.

ATVM Loan Program

A project must build new facilities; reequip, modernize, or expand existing facilities; and/or be for engineering integration performed in the United States related to the manufacturing of eligible vehicles or components.

Loan Application Process

- 1 Pre-Application Consultation**
 Engage with LPO for a no-fee, pre-application consultation for preliminary review of project technology areas and basic eligibility requirements.
- 2 Formal Application Process**
 Submit a no-fee application to LPO to determine basic eligibility, and then submit in-depth materials to determine project viability.
- 3 Due Diligence & Term Sheet Negotiation**
 Enter due diligence, negotiate term sheet, and receive a conditional commitment offer.
- 4 Loan Closing & Project Monitoring**
 Negotiate and execute loan documents. An origination fee will be charged to the applicant upon financial close of the loan guarantee. After loan closing, LPO monitors construction and operation throughout the life of the loan.



Advanced Technology Vehicles Manufacturing Loan Program

Project Spotlight

Nissan

In January 2010, the Department of Energy issued a \$1.45 billion loan facility to Nissan North America to construct one of the largest advanced battery manufacturing plants in the United States, construct an efficient and environmentally-friendly paint plant, and retool its Smyrna, Tennessee manufacturing facility for assembly of the all-electric LEAF vehicle. Nissan also used the loan to develop an electric power train manufacturing line for the LEAF vehicle within its engine manufacturing facility in Decherd, Tennessee. Nissan created more than 1,300 jobs at its ATVM-supported facilities.

Nissan built and upgraded facilities to manufacture its LEAF vehicle, which has a zero-emission, all-electric powertrain that improves fuel economy over conventional internal combustion engine vehicles. Nissan's new paint plant has improved energy efficiency by 30% compared to the paint plant it replaced. Its state-of-the-art manufacturing plant was designed with a production capacity of up to 4.4 GWh worth of battery packs and up to 150,000 LEAF vehicles annually.

Nissan repaid the loan in full in September 2017.

Contact Us & Learn More

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Learn more about LPO at: energy.gov/LPO/Critical-Materials