Advanced Technology Vehicles Manufacturing Loan Program (ATVM)

Program & Application Overview

2014
The Advanced Technology Vehicles Manufacturing (ATVM) Program was established by Congress in 2007 to support the production of fuel-efficient, advanced technology vehicles and components in the United States. To date, the program has made over $8 billion in loans.

- $5.9 billion loan closed in 2009.
- Modernized 13 facilities in 6 states for the manufacture of fuel-efficient vehicles and components, including Ecoboost engine.

- $1.45 billion loan closed in 2010.
- Financed construction of the new Nissan Leaf battery facility, Leaf vehicle assembly line, and electric motor manufacturing facility in TN.

- Financed the opening and modernization of a shuttered CA auto plant to become Tesla’s assembly facility for all-electric models.
- Brought to market the award winning Model S EV.
ATVM Offers Attractive Financing for U.S. Auto Industry

$16.6 Billion in Remaining Loan Authority
(No Application Fee, U.S. Treasury Rates, Long-Term Financing)

✓ Low Interest Rates: Interest rates on loans are set at U.S. Treasury rates (~2-4%).

✓ Minimal Fees: The program does not charge application fees or an interest rate spread. At closing, applicant pays a closing fee of 0.1% of loan principal amount.

✓ Long Tenor: Loans are available up to 25 years but are set at the useful life of the asset as determined by DOE.

✓ Broad Applicability: Applies to light-duty vehicles and eligible projects can include vehicle and component manufacturing as well as engineering integration.
ATVM Can Support U.S. Auto Industry Resurgence

Achieving Stronger Fuel Economy Standards
- ATVM can support investments in broad set of fuel-efficient technology.
- Assists the compliance strategy for automakers & suppliers.

Meets Rising Consumer Demand for Fuel Efficient Vehicles
- Light-duty vehicle sales increased to over 15 million in 2013. Volume is projected to increase in future model years.
- Consumers are increasingly choosing fuel-efficient models.

Addresses Industry Capacity Constraints & Aids Insourcing
- Growing demand for fuel-efficient vehicles and components has strained industry capacity.
- ATVM can support the “localization” of engineering and manufacturing in the U.S.
An Advanced Technology Vehicle (ATV) is a light-duty vehicle that, among other things, achieves a 25% improvement in fuel economy over a 2005 model year baseline.

**2005 Baseline**
- Sedan
- SUV
- Light Duty Truck

**Applied Vehicle Technologies**
- Electric or Hybrid Powertrain (EV/HEV)
- Alternative Fuels (fuel cell, CNG, Diesel)
- Advanced Internal Combustion Engines
- Light weighting
- Aerodynamics

**25% Required Improvement in MPG**

**Examples: Future ATV Production (2014+)**
- Hybrid or Electric Vehicle
- Clean Diesel or CNG Vehicle
- Advanced ICE Vehicle
What Components Qualify Under ATVM?

A Qualifying Component for ATVM is defined as a component that is designed for advanced technology vehicles (ATVs) and installed for the purpose of meeting the performance requirements (25% improvement in MGP from 2005 baseline) of ATVs. These can include the following:

**Improved Aerodynamics**

**Light-Weighting Technologies**
- Advanced EV Controllers
- Electric Power Steering
- Power Electronics
- Battery Systems

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

**Advanced Powertrain Technologies**
- Increased number of gear ratios
- Hybrid / EV Powertrain Integration

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

**Fuel Efficient Tires**
What Projects are Eligible Under ATVM?

ATVM can provide direct loans to support three broad project categories:

1. **Advanced Technology Vehicle Manufacturing**
   - Building new facilities in USA
   - Reequipping, modernizing, or expanding existing facilities in USA

2. **Qualified Component Manufacturing**
   - Building new facilities in USA
   - Reequipping, modernizing, or expanding existing facilities in USA

3. **Engineering Integration**
   - Engineering integration performed in USA for ATVs or qualifying components.
1. Manufacturers of Advanced Technology Vehicles (ATVs) and their Components:
   • ATVs are light duty vehicles that have a fuel economy rating (mpg) of at least 125% of the 2005 average base year combined fuel economy for vehicles with substantially similar attributes
   - “Ultra Efficient Vehicles” that achieve at least 75 miles per gallon
   • Qualifying Components are designed for ATVs and installed for the purpose of meeting the performance requirements of ATVs.

<table>
<thead>
<tr>
<th>Vehicle Class</th>
<th>2005mpg</th>
<th>125%mpg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Sedan</td>
<td>26.2</td>
<td>32.7</td>
</tr>
<tr>
<td>Small Wagon</td>
<td>32.7</td>
<td>40.8</td>
</tr>
<tr>
<td>Mid-Size and Large Wagons</td>
<td>26.7</td>
<td>33.4</td>
</tr>
<tr>
<td>Small and Standard Pickup</td>
<td>19.7</td>
<td>24.6</td>
</tr>
<tr>
<td>Minivan</td>
<td>24.3</td>
<td>30.4</td>
</tr>
<tr>
<td>Passenger Van</td>
<td>19</td>
<td>23.8</td>
</tr>
<tr>
<td>Cargo Van</td>
<td>24.2</td>
<td>30.2</td>
</tr>
<tr>
<td>Sport Utility Vehicle</td>
<td>21.8</td>
<td>27.2</td>
</tr>
</tbody>
</table>

2. Projects must be located in the United States, though the program is open to both foreign and domestic manufacturers

3. Projects must be “financially viable without the receipt of additional Federal funding associated with the proposed project”
   • ATVM is a loan program, not a grant program. It provides “expansion capital,” not working capital
   • ATVM is capable of funding the ATV aspects of projects producing a mix of both ATVs and non-ATVs, as well as components that may also have a fuel efficiency application when installed in both ATVs and non-ATVs.
Hallmarks of a Strong Application

While all applications will be considered on their own merits, there are several key points which set apart a strong application. The following are just some of the hallmarks of a strong ATVM application:

• Detailed project narrative and plan with key activities and milestones
• Integrated, dynamic financial model, including cash flow, and a strong NPV for the project
• Three years of consolidated financial statements (audited, if available)
• Significant equity funding at the time of application
• Significant, unencumbered collateral, broken down by asset type
• For suppliers, sale agreement for existing (and/or planned) production strengthens the creditworthiness of the application
• Control over the proposed project site
• Experienced leadership and senior staff with experience directly related to the proposed project
• Strong operating history of the company, parent, and/or subsidiary
How to Apply to ATVM

Learn about ATVM Loan Program via a non-binding, no cost, pre-application consultation

• Speak to senior staff about a proposed project
• Discuss questions and concerns about the program
• Understand if this program is right for your company and the next steps to apply

   Phone: 202-586-8146
   Fax: 202-586-7809
   Email: atvmloan@hq.doe.gov

Read more about ATVM Loan Program via http://lpo.energy.gov/programs/atvm/

• On the Loan Programs Office web site, you will find links to a number of key resources
  ▪ Learn more about the ATVM Loan Program and our current projects
  ▪ Download PDF copies of governing legislation and the interim final rule, and view a webinar
    about the program, available through our online resource library
  ▪ Understand the program’s eligibility requirements and read our “Updated Guidance for
    Applicants”

Apply to the program at https://apply.loanprograms.energy.gov/doe/common/Pages/welcome.aspx