

DOE Loan Programs Office

U.S. Department of Energy



Presentation to the Biomass R&D Technical Advisory Committee
May 20, 2011

Loan Guarantee Program Objectives



- ▶ **Avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases through new or significantly improved technologies**
- ▶ **Employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued**
- ▶ **Can be deployed commercially**
 - **Beyond research and development, pilot and demonstration stages**
- ▶ **Provide a reasonable prospect for repayment**



Program Summary

LPO administers three clean energy loan programs



Title XVII: Section 1703

- ▶ Provides loans to innovative clean energy projects, which find it difficult to obtain conventional private financing due to their high technology risk and capital-intensive nature
- ▶ “Self Pay” - Borrowers pay Credit Subsidy Cost
- ▶ Policy Objective: To deploy a wide array of innovative clean energy technologies at scale

Title XVII: Section 1705

- ▶ Provides loans or loan guarantees to renewable energy, electric power transmission and leading edge biofuels projects that commence construction no later than September 30, 2011
 - Loan are from the Federal Finance bank
 - Loan Guarantees for up to 80% of a private loan (Financial Institution Partnership Program) for commercial technology
- ▶ Credit Subsidy Cost is paid by DOE
- ▶ Policy Objective: To deploy renewable energy projects and create jobs in a tight credit market

Advanced Technology Vehicle Manufacturing (ATVM) Program (Section 136)

- ▶ Provides direct loans to manufacturers of advanced technology vehicles and related automotive components
- ▶ Credit Subsidy Cost is paid by DOE

How the Program Works:

Every project goes through a rigorous and comprehensive review – similar to what a private sector lender would conduct – before taxpayer funds are put at risk



Intake – Part 1
Intake – Part 2

Due Diligence & Negotiation

Approve &
Announce

Closing
Process

Deal
Monitoring

Activity

- ▶ Eligibility reviews
- ▶ Completeness reviews
- ▶ Preliminary financial and technical evaluation
- ▶ Preliminary NEPA screening
- ▶ Full financial and technical evaluation and scoring
- ▶ Market due diligence
- ▶ Technical due diligence
- ▶ Legal/Regulatory due diligence
- ▶ NEPA compliance
- ▶ Credit analysis and develop Credit Package
- ▶ Credit subsidy calculation
- ▶ Negotiation of Term Sheet
- ▶ Credit Committee
- ▶ Credit Review Board
- ▶ Interagency reviews
- ▶ Final legal documents
- ▶ Finalize credit subsidy
- ▶ Financial close
- ▶ Performance tracking

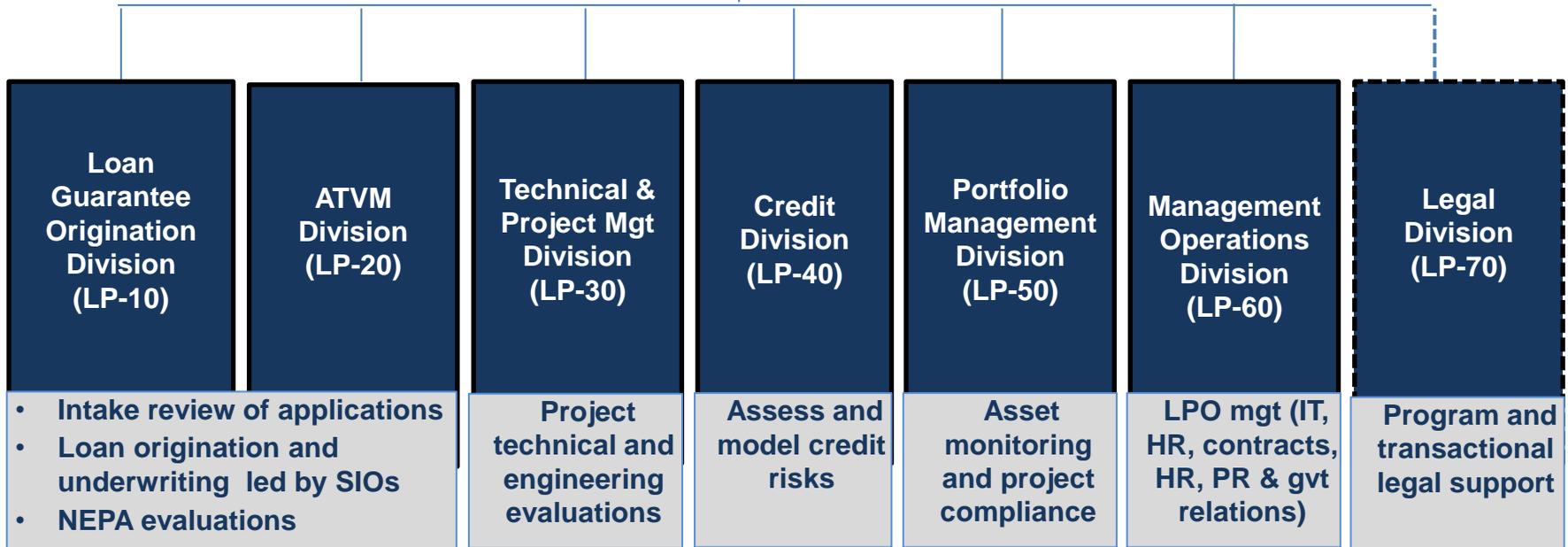
LPO Divisions



Loan Programs Office (LPO)

Executive Director (LP-1)
Chief Operating Officer (LP-2)

Management and integration of federal loan program for energy and automotive technology projects



Notes: Title XVII Programs are managed by the Loan Guarantee Origination Division.

The Legal Division reports to the DOE General Counsel with a dotted-line reporting relationship to LP-1.

First Biofuels Loan Announcement– Diamond Green Diesel



Project Description

- ▶ Design, construct and operate a renewable diesel facility with a nominal capacity of 137 million gallons per year using Desmet feedstock pre-treatment and UOP Ecofining hydrogenation/isomerization technologies. Revenues from sale of renewable diesel and co-products propane, naphtha and butane.
- ▶ To be located adjacent to Valero refinery in Norco, Louisiana, about 20 miles north of New Orleans.
- ▶ Job creation: 700 during construction, 63 to operate the plant.

Project Benefits

- ▶ Uses low cost feedstock (primarily, animal fats and used cooking oils) and the technology is able to process a wide variety of feedstocks.
- ▶ Produces high value product (renewable diesel has many desirable qualities over petroleum diesel and conventional biodiesel – low sulfur (lower than ULSD), excellent cloud point and pour point properties for winter blends, high cetane ratings).
- ▶ Sponsors are experienced, successful agribusiness and refining operators and the Project benefits from the use of existing investments in refining and supply chain infrastructure.
- ▶ Introduces innovative process technology to the United States.
- ▶ Reduces greenhouse gases by more than 80% over conventional petroleum-based diesel.

Impact of the Loan Programs

LPO has made a significant contribution to our national clean energy economy



- ▶ Over \$20 billion in loan and loan guarantees to 23 clean energy projects.
- ▶ **Created or saved almost 20,000 jobs, 5,000 of which are permanent, across 20 states.**
- ▶ Avoid approximately 20 million tons of carbon dioxide from the air every year.
 - Equivalent to about 3.5 million cars off the road
- ▶ LPO's eight power generation projects will produce over 23,000 gigawatt-hours of clean energy annually
 - Enough to power 2.5 million homes and
 - Equivalent power from about 10 coal plants.
- ▶ Over \$8 billion in ATVM projects that will save approximately 282 million gallons of petroleum annually – roughly the same as removing more than 400,000 cars from the road.



- ▶ Section 1705 authority (\$2.4 B) will expire September 30, 2011.
- ▶ 19 projects have been announced using about two-thirds of the authority
- ▶ LPO has more projects in the pipeline than the remaining authority
- ▶ May 10, 2011 letters to:
 - a group of applicant that are farthest along in the process that we will be working with them to take the final steps required to complete a loan guarantee
 - other applicants were told their projects would be put on hold
 - FY 2011 budget included \$170 million of funds for subsidy of 1703 projects

<http://blog.energy.gov/blog/2011/05/10/update-department%E2%80%99s-loan-programs>



For Additional Information

Loan Guarantee Program Office Website

<http://lpo.energy.gov/>

2005 Energy Policy Act

<http://lpo.energy.gov/wp-content/uploads/2010/09/EPAof2005.pdf>

Loan Guarantee Final Rule

<http://lpo.energy.gov/wp-content/uploads/2010/09/FR-1703-Dec4.pdf>

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