



SUBCOMMITTEE ON ENERGY

HEARING CHARTER

“Risky Business Part 2: The DOE Loan Guarantee Program”

Wednesday, April 30, 2025

10:00 a.m.

2318 Rayburn House Office Building

PURPOSE

This hearing will examine the Department of Energy’s (DOE) Loan Guarantee Program and its return on investment for the taxpayer. The hearing will evaluate the Loan Program’s role as a lender of capital in traditionally private markets. It will also explore the Loan Program Office’s (LPO) recent expansion under the Biden Administration and review its current portfolio and associated risks. Moreover, this will serve as an opportunity for Members to reconsider changes in the Infrastructure Investment and Jobs Act and Inflation Reduction Act and options to reform the program moving forward.

WITNESSES

- **Dr. Ryan Yonk**, Senior Research Fellow and Director of Education, American Institute for Economic Research
- **Mr. Jon Haygood**, Assistant Treasurer, Southern Company
- **The Honorable Sam Walsh**, Former General Counsel, U.S. Department of Energy

OVERARCHING QUESTIONS

- Historically, what is LPO’s rate of return for the taxpayer? Has LPO successfully advanced the deployment of new innovative technologies to justify its benefits?
- What is LPO’s current exposure to its balance sheet given the rise of its loan authority? How has this expansion of authority transformed the office and its risk management practices?
- Traditionally, how has LPO interacted with industry? What is LPO’s process from initial application to final award?
- What options exist for the current Administration to reform LPO and reduce taxpayer liability? What role should Congress have in enacting these reforms?

BACKGROUND

Established in the Energy Policy Act of 2005, Title XVII, the DOE's LPO manages its authority of (Sections 1703, 1705, 1706), the Incentives for Innovative Technologies, the Advanced Technology Vehicles Manufacturing (ATVM) Loan Program, the Tribal Energy Loan Guarantee Program (TELGP), and the CO2 Transportation Infrastructure (CIFIA) subprograms. This authority was expanded significantly through the Energy Act of 2020, the Infrastructure Investment and Jobs Act (IIJA), and the Inflation Reduction Act (IRA).

Since LPO issued its first loan in 2009, the office has issued approximately \$137 billion in total financing over 90 project locations.^{1,2} Over the last four years, LPO has announced 53 deals totaling roughly \$108 billion in committed project investment. This is further broken down by \$47 billion for 28 active conditional commitments and approximately \$61 billion for 25 closed loans and loan guarantees.³

Today, LPO maintains a large portfolio of loans for renewable energy and advanced technology vehicle manufacturing projects, with only a single active advanced fossil project in its portfolio that monitors methane emissions from oil and natural gas production.⁴

LEGISLATION

Recent legislation has expanded LPO's scope of eligible projects and authority. The IIJA expanded Section 1703 eligible projects to include domestic critical mineral projects in producing, processing, manufacturing, recycling, and fabricating mineral alternatives.⁵ In tandem, the IIJA expanded the scope of Section 136's (ATVM) eligible projects to include medium and heavy-duty vehicles, trains, aircraft, maritime vessels, and hyperloop technology.⁶ This law also established the Carbon Dioxide Transportation Infrastructure Finance and Innovation Act (CIFIA), which aims to finance projects that move CO2 from carbon capture, utilization, and storage (CCUS) sites to storage or conversion facilities.⁷

At the same time, the IRA vastly expanded and increased LPO's loan authority. The law established the Energy Infrastructure Reinvestment (EIR) Program under Section 1706, which upgrades existing energy infrastructure, replaces retired energy infrastructure, and builds new clean energy projects that utilize legacy sites. Likewise, the IRA increased LPO's authority tenfold from \$40 billion to \$412 billion.^{8,9} As a result, the program saw massive increases in its loan portfolio:

¹ "History." *U.S. Department of Energy*, 29 Mar. 2025, www.energy.gov/lpo/history.

² "Portfolio Projects." *U.S. Department of Energy*, 23 June 2015, www.energy.gov/lpo/portfolio-projects.

³ "LPO Year in Review 2024." *U.S. Department of Energy*, 17 Jan. 2025, www.energy.gov/lpo/articles/lpo-year-review-2024.

⁴ "Longpath." *U.S. Department of Energy*, Oct. 2024, www.energy.gov/lpo/longpath.

⁵ "Text - H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act." *Congress.gov*, Library of Congress, 15 November 2021, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>.

⁶ "Text - H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act." *Congress.gov*, Library of Congress, 15 November 2021, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>.

⁷ "Carbon Dioxide Transportation Infrastructure." *U.S. Department of Energy*, 6 Oct. 2022, www.energy.gov/lpo/carbon-dioxide-transportation-infrastructure.

⁸ Plumer, Brad, and Lisa Friedman. "A Swaggering Clean-Energy Pioneer, With \$400 Billion to Hand Out." *The New York Times*, 11 May 2023, www.nytimes.com/2023/05/11/climate/jigar-shah-climate-biden.html.

⁹ McDonald, Taite R., et al. "DOE Loan Programs Office: 2023 Updates, Overview and Key Insights." *Holland & Knight*, 1 Feb. 2023, www.hkllaw.com/en/insights/publications/2023/02/doe-loan-programs-office-2023-updates-

EIR saw an increase to \$250 billion, CIFIA increased to \$25 billion, Title XVII increased to \$62 billion, Section 136 increased to \$55 billion, and the Tribal Energy Loan Guarantee Program increased to \$20 billion.¹⁰

Subprograms

Section 1703

Established in the Energy Policy Act of 2005, Title XVII, the Incentives for Innovative Technology, known as the 1703 subprogram, provides loan guarantees to clean energy technologies. These technologies must “avoid, reduce, utilize or sequester air pollutants or anthropogenic emissions of greenhouse gases” and “employ new or significantly improved technologies.”¹¹ Under 1703, the Department may provide loans to eligible projects on renewable energy, fossil energy, hydrogen, advanced nuclear, and energy efficiency. In administering these loans, DOE may provide a loan of up to 80% of the project cost over a 30-year term.¹²

Under the Obama Administration, Section 1703 loans were limited to just a single project. The loans went to various contractors involved with Georgia Power’s Vogtle Electric Generating Plant expansion project. A total of \$8.3 billion was loaned to the project for the construction and operation of the two additional reactors at the site (Vogtle Unit 3 and Vogtle Unit 4).¹³ During the first Trump Administration, DOE scaled back its loan program authority and finalized only one loan. They issued \$3.7 billion in guarantees to Georgia Power, a subsidiary of Southern Company, Oglethorpe Power Corp., and three subsidiaries of Municipal Electric Authority of Georgia to construct two Westinghouse AP1000 reactors.^{14,15} Vogtle 3 and 4 were the first GEN III+ reactor deployed in the U.S., which showcase a new set of safety features. During the Biden Administration, the IJA increased the scope of eligible loans to include domestic critical mineral projects, including production, processing, manufacturing, recycling, and fabrication of mineral alternatives. The IRA increased the LPO’s loan authority from \$40 billion to \$412 billion. Projects that secured loans include \$1.7 billion to Plug Power, a hydrogen fuel cell company whose loan was closed during the last days of the Biden Administration, \$1.5 billion to Hanwha Q Cells Georgia, a company in the solar power supply chain, and \$1.3 billion to Evgo Swift Borrower for

overview-and-key-insights.

¹⁰ McDonald, Taite R., et al. “DOE Loan Programs Office: 2023 Updates, Overview and Key Insights.” *Holland & Knight*, 1 Feb. 2023, www.hklaw.com/en/insights/publications/2023/02/doe-loan-programs-office-2023-updates-overview-and-key-insights.

¹¹ “42 U.S. Code § 16513 - Eligible Projects.” *Cornell Law School*, 28 Feb. 2015, www.law.cornell.edu/uscode/text/42/16513.

¹² “42 U.S. Code § 16512 - Terms and Conditions.” *Cornell Law School*, 28 Feb. 2015, www.law.cornell.edu/uscode/text/42/16512.

¹³ “Obama Administration Announces Loan Guarantees to Construct New Nuclear Power Reactors in Georgia.” *The White House*, 23 May 2013, web.archive.org/web/20170121023107/https://obamawhitehouse.archives.gov/the-press-office/obama-administration-announces-loan-guarantees-construct-new-nuclear-power-reactors.

¹⁴ Gardner, Timothy. “U.S Finalizes \$3.7 Billion Loan for Vogtle Nuclear Power Plant | Reuters.” *Reuters*, 22 Mar. 2019, www.reuters.com/article/business/us-finalizes-37-billion-loan-for-vogtle-nuclear-power-plant-idUSKCN1R31X8/.

¹⁵ “Vogtle.” *U.S. Department of Energy*, 23 Mar. 2019, www.energy.gov/lpo/vogtle.

the deployment of 7,500 electric vehicle (EV) chargers, among many others.^{16,17,18}

Section 1705

Established in the American Recovery and Reinvestment Act of 2009, the Section 1705 loan guarantee subprogram was a temporary loan program for U.S.-based projects that started construction no later than September 30, 2011, and involved certain renewable energy systems, electrical power transmission systems, and leading-edge biofuels.¹⁹ Since the Section 1705 Loan Program expired on September 30, 2011, the LPO continues to monitor projects that have already received loans under this subprogram but no longer issues new loans. When the subprogram issued loans, 31 loan guarantees covering 28 projects were issued for approximately \$15.7 billion.²⁰ Section 1705 loans have not had a great success rate due to both bankruptcies and overlooked barriers.²¹ Five awardees filed for bankruptcy by 2012, resulting in tens of millions of dollars lost in taxpayer funding.²² In recent years, projects like the Ivanpah Solar Project, which received \$1.6 billion, are in active discussions with DOE to shut down over a decade early, resulting in a loss of taxpayer dollars.²³ Two borrowers withdrew from the program in 2012 before they started drawing from their loans.²⁴ In September and October 2013, DOE unobligated two loan guarantees because the borrowers were unlikely to meet the loan conditions required. Three borrowers defaulted, one entering restructuring but remained an active loan, while two others entered liquidation proceedings.²⁵

Section 1706

Established in the IRA, the Energy Infrastructure Reinvestment Financing (EIR) Program aims to upgrade existing energy infrastructure, reduce emissions, and replace existing energy infrastructure with clean energy projects. Specifically, it permits LPO to issue loans to projects that “retool,

¹⁶ “DOE Announces \$1.66 Billion Loan Guarantee to Plug Power to Produce and Liquify Clean Hydrogen Fuel.” *U.S. Department of Energy*, 16 Jan. 2025, www.energy.gov/lpo/articles/doe-announces-166-billion-loan-guarantee-plug-power-produce-and-liquify-clean-hydrogen.

¹⁷ “LPO Announces \$1.45 Billion Loan Guarantee to Qcells to Finance a Solar Manufacturing Facility in Georgia.” *U.S. Department of Energy*, 19 Dec. 2024, www.energy.gov/lpo/articles/lpo-announces-145-billion-loan-guarantee-qcells-finance-solar-manufacturing-facility.

¹⁸ “DOE Announces \$1.25 Billion Loan to EVgo to Expand Nationwide Public Fast Charging.” *U.S. Department of Energy*, 12 Dec. 2024, www.energy.gov/lpo/articles/doe-announces-125-billion-loan-evgo-expand-nationwide-public-fast-charging.

¹⁹ “Section 1705 Loan Program.” *U.S. Department of Energy*, 19 Apr. 2014, www.energy.gov/lpo/section-1705-loan-program.

²⁰ “Department of Energy Loan Programs: Title XVII Innovative Technology Loan Guarantees.” *Congress.gov*, Library of Congress, 22 April 2025, <https://www.congress.gov/crs-product/IN11432>.

²¹ “The Department of Energy’s Disastrous Management of Loan Guarantee Programs.” *U.S. House of Representatives Committee on Oversight and Government Reform*, 20 Mar. 2012, oversight.house.gov/wp-content/uploads/2012/03/FINAL-DOE-Loan-Guarantees-Report.pdf.

²² Restuccia, Andrew. “DOE: Another Loan Recipient Closing.” *Politico*, 28 June 2012, www.politico.com/story/2012/06/another-solyndra-doe-loan-guarantee-recipient-abound-solar-closing-its-doors-077966.

²³ Gerke, Paul. “Once an Engineering Marvel, Two-Thirds of This Concentrated Solar Power Plant Will Shut down after a California Utility Pulled Two of Its Ppas.” *Factor ThisTM*, 23 Jan. 2025, www.renewableenergyworld.com/solar/once-an-engineering-marvel-two-thirds-of-this-concentrated-solar-power-plant-will-shut-down-after-a-california-utility-pulled-two-of-its-ppas/.

²⁴ “Testimony Before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives.” *U.S. Government Accountability Office*, 30 May 2014, www.gao.gov/assets/gao-14-645t.pdf.

²⁵ *Id*

repower, repurpose, or replace energy infrastructure that has ceased operations” or “enables operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emission of greenhouse gases.”²⁶ Eligible projects include replacing retired power plants with renewable energy, virtual power plants, transmission interconnections, nuclear energy, and fossil or biomass generation with CCUS.²⁷ In addition, EIR may support remediation of environmental damage associated with legacy infrastructure. With \$5 billion appropriated by the IRA, EIR has an estimated \$250 billion in total loan program authority.²⁸

While this program was relatively new at the end of the Biden Administration, several large, multi-billion-dollar loans were issued under its authority. These include \$7.2 billion to DTE Electric, \$5.2 billion to Consumers Energy, a subsidiary of CMS Energy, and the largest loan guarantee ever issued by LPO, \$15 billion to Pacific Gas & Electric for their Project Polaris.^{29,30,31,32} These loans were conditionally announced or closed in the final days of the Biden Administration.

Section 136

Authorized in the Energy Independence and Security Act of 2007, the ATVM program was established to support the domestic production of fuel-efficient and advanced technology vehicles. It permits LPO to offer loans to factories that produce advanced vehicles, including ultra-efficient or light-duty vehicles, medium-duty vehicles, or heavy-duty vehicles with certain efficiency standards, trains, maritime vessels, aircraft, and hyperloop technology. Initially, the law granted LPO \$25 billion in loan authority.

During the Obama Administration, LPO used its authority to award \$8.4 billion in loans to Fisker, Ford, Nissan, Tesla, and the Vehicle Production Group. The Vehicle Production Group and Fisker could not meet their loan payments and later filed for bankruptcy, costing the taxpayer \$181 million.³³ Ford, Nissan, and Tesla repaid their loans in full.³⁴ ATVM did not issue any loans during the Trump Administration, but in September 2020, Executive Order 13953 expanded the ATVM

²⁶ "Text - H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022." *Congress.gov*, Library of Congress, 16 August 2022, <https://www.congress.gov/bill/117th-congress/house-bill/5376/text/enr>.

²⁷ "Energy Infrastructure Reinvestment." *U.S. Department of Energy*, 19 May 2023, www.energy.gov/lpo/energy-infrastructure-reinvestment.

²⁸ "Energy Infrastructure Reinvestment Financing." *U.S. Department of Energy*, 28 Nov. 2023, www.energy.gov/lpo/energy-infrastructure-reinvestment-financing.

²⁹ "LPO Announces Conditional Commitments to DTE Gas and DTE Electric to Fund Infrastructure Improvements While Maintaining Affordability for Customers." *U.S. Department of Energy*, 16 Jan. 2025, www.energy.gov/lpo/articles/lpo-announces-conditional-commitments-dte-gas-and-dte-electric-fund-infrastructure.

³⁰ "LPO Announces Conditional Commitment to Consumers Energy to Help Lower Customer Costs for Investments in Reliable Energy Infrastructure in Michigan." *U.S. Department of Energy*, 16 Jan. 2025, www.energy.gov/lpo/articles/lpo-announces-conditional-commitment-consumers-energy-help-lower-customer-costs.

³¹ "DOE Announces \$15 Billion Loan Guarantee to Pacific Gas & Electric Company to Expand Hydropower Generation, Battery Energy Storage, and Transmission." *U.S. Department of Energy*, 17 Jan. 2025, www.energy.gov/lpo/articles/doe-announces-15-billion-loan-guarantee-pacific-gas-electric-company-expand-hydropower.

³² Proctor, Darrell. "DOE Announces \$15 Billion Loan Guarantee for PG&E." *POWER Magazine*, 17 Dec. 2024, www.powermag.com/doe-announces-15-billion-loan-guarantee-for-pge/.

³³ "The Advanced Technology Vehicles Manufacturing (ATVM) Loan Program: Status and Issues." *Congress.gov*, Library of Congress, 22 April 2025, <https://www.congress.gov/crs-product/R42064>.

³⁴ "Advanced Vehicles & Components Projects." *U.S. Department of Energy*, 15 Nov. 2022, www.energy.gov/lpo/advanced-vehicles-components-projects.

Program to promote the onshoring of the critical minerals supply chain.³⁵ During the Biden Administration, the issuance of loans dramatically increased with the issuance of 11 loans valued at roughly \$32 billion and five conditional loans valued at \$5 billion. Loans to Rivian for \$6.6 billion, StarPlus Energy for \$7.5 billion, and BlueOval SK for \$9.6 billion were all closed at the end of the Administration.^{36,37,38} These loans were significantly larger than many traditionally given by previous Administrations.

³⁵ “Addressing the Threat to the Domestic Supply Chain From Reliance on Critical Minerals From Foreign Adversaries and Supporting the Domestic Mining and Processing Industries.” *Federal Register*, 5 Oct. 2020, www.federalregister.gov/documents/2020/10/05/2020-22064/addressing-the-threat-to-the-domestic-supply-chain-from-reliance-on-critical-minerals-from-foreign.

³⁶ “DOE Announces \$6.57 Billion Loan to Rivian to Support the Construction of EV Manufacturing Facility in Georgia.” *U.S. Department of Energy*, 16 Jan. 2025, www.energy.gov/lpo/articles/doe-announces-657-billion-loan-rivian-support-construction-ev-manufacturing-facility.

³⁷ “LPO Announces \$7.54 Billion Loan to StarPlus Energy to Construct Lithium-Ion Battery Factories in Indiana.” *U.S. Department of Energy*, 17 Dec. 2024, www.energy.gov/lpo/articles/lpo-announces-754-billion-loan-starplus-energy-construct-lithium-ion-battery-factories.

³⁸ “DOE Announces \$9.63 Billion Loan to BlueOval SK to Further Expand US Manufacturing of Electric Vehicle Batteries.” *U.S. Department of Energy*, 16 Dec. 2024, www.energy.gov/lpo/articles/doe-announces-963-billion-loan-blueoval-sk-further-expand-us-manufacturing-electric.