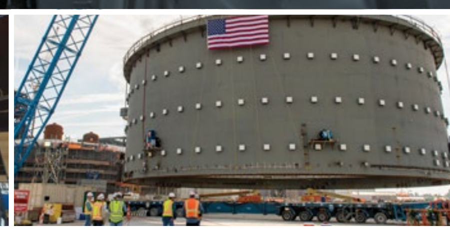
LPO
Loan Programs Office



Stability in a Year of Uncertainty

ANNUAL PORTFOLIO STATUS REPORT
FISCAL YEAR 2020

Despite major global challenges in fiscal year (FY) 2020,

LPO upheld its historical record of achievement in funding, monitoring, and supporting the success of innovative, large-scale energy and advanced vehicle technology manufacturing projects across the country.

Every active LPO borrower repaid principal in FY 2020, achieving $1.2 billion in principal retirement and $500 million in interest payments to the U.S. Treasury. Cumulative principal payments reached $11 billion, 38% of the $30 billion LPO has disbursed. The portfolio remains concentrated in creditworthy assets, with 58% of exposure held by investment-grade borrowers and maintains a low aggregate loss rate of 3% of funds disbursed.

LPO's commitment to efficiently and effectively manage its $30 billion portfolio puts it in a strong position to support the nation's immediate economic recovery, helping the U.S. build back better while contributing to its long-term transition to a clean energy future.

Portfolio Funding Status ($ Millions)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total Obligated	$24,109	$23,989	$23,451	$27,854	$29,322	$29,322	$28,522	$28,379	$32,081	$32,081
Disbursements	$8,696	$15,412	$18,688	$21,706	$24,342	$25,467	$25,742	$25,742	$27,707	$29,620
Repayments/ Discounts	$13	$284	$1,553	$3,486	$5,141	$6,399	$7,978	$9,017	$9,957	$11,168
Write-offs/ Loss on Sale	$0	$0	$54	$198	$198	$272	$806	$806	$806	$786
Exposure*	$8,697	$15,197	$17,317	$18,321	$19,297	$19,092	$17,288	$16,310	$17,420	$18,109

* Exposure includes outstanding interest

WHO WE ARE

The Department of Energy's Loan Programs Office (LPO) provides debt financing for large-scale, innovative energy infrastructure and advanced automotive manufacturing projects in the United States.

Leveraging decades of financial, technical, legal, and environmental experience, LPO has closed more than $35 billion in loans and loan guarantees that help bridge gaps in the commercial debt market. These financing gaps arise when commercial lenders are unwilling to issue any or adequate debt, when a project deploys technology that has yet to demonstrate a history of commercial operations, or entities like tribes have yet to demonstrate a history of commercially deploying energy projects.

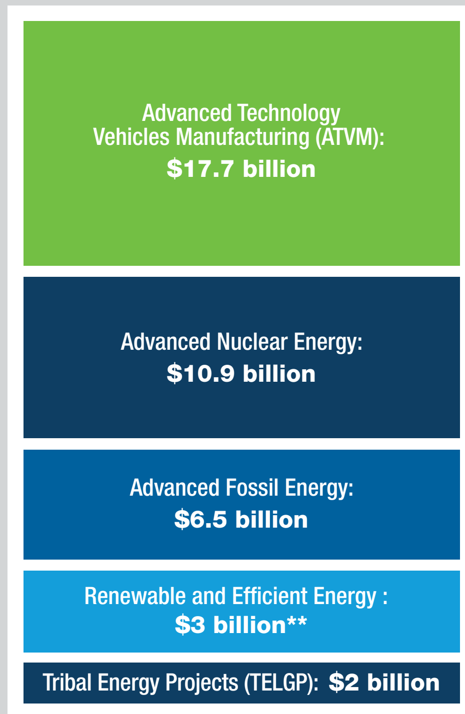
Once LPO closes a loan or loan guarantee, projects are monitored and evaluated throughout project development, construction, commissioning, and operation until the loan has been repaid in full, protecting taxpayer interests. With a proven track record that includes transforming existing energy infrastructure, reviving nuclear construction, accelerating growth of utility-scale solar and wind, and expanding domestic manufacturing of electric vehicles, LPO has helped catalyze new energy technology and create jobs.

Where We're Headed

LPO will continue leveraging more than $40 billion in available loan authority to finance innovation and emissions reductions:

- **$17.7 billion for manufacturing** fuel-efficient, light-duty or ultra-efficient vehicles and qualifying components under the Advanced Technology Vehicles Manufacturing program.
- **More than $20 billion for Title 17 Innovative Energy** Loan Guarantee Program to support advanced fossil, advanced nuclear, and renewable energy & efficient energy projects.
- **Up to $2 billion for tribally-owned** energy projects through the Tribal Energy Loan Guarantee Program.
- **At the end of FY 2020,** $2 billion in Title 17 loan authority had been conditionally committed to one project under the Advanced Fossil solicitation.

Available Loan & Loan Guarantee Authority:*



*As of the end of Fiscal Year 2020
**$160 million in Credit Subsidy Available

PROVIDING VALUE TO BORROWERS

LPO can provide access to debt capital for first-of-a-kind projects and other high-impact energy-related ventures in a way that private lenders often can't or won't.

With more than $40 billion to lend towards large-scale infrastructure projects and automotive manufacturing, LPO's success is in modeling for the private sector how innovative energy infrastructure projects can be financed so that they can later be taken over and replicated by commercial lenders.

LPO offers flexible, custom financing options that help to meet the specific needs of individual borrowers. The most common form of lending in the LPO portfolio is project finance, but some projects use a corporate lending structure. The portfolio also contains several different types of borrowers, including private entities, investor-owned utilities, and public power utilities.

LPO's involvement in projects provides the confidence other lenders and interested parties need to get involved. In learning how LPO structures these deals, financiers are empowered to model this financing for future projects without LPO support. While LPO typically has sufficient loan authority to provide all of the debt a project may need, it can also co-lend and provide "accordion capacity," filling in a range of financing gaps. It is this type of flexibility that can provide unique value to borrowers.

The starting point of a committed partnership is with LPO's Origination Division, which brings together an internal team of energy experts, experienced across the financial, technical, legal, risk, and environmental fields. They partner with project sponsors through pre-application consultations, the application process, due diligence, and underwriting. After loan closing, LPO's Portfolio Management Division maintains the partnership through construction, project operation and maintenance, and eventual final loan repayment. This approach is essential to achieving project milestones and overall project success, while protecting taxpayer interests.

By engaging early and often with applicants, the LPO team maximizes transparency and manages risk with a combination of proactive monitoring, discussions of emergent issues, and action to maximize project success, which can include approving distributions or equity ownership sales.

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> *LPO's success is in modeling for the private sector how innovative energy infrastructure projects can be financed.*

PORTFOLIO BY THE NUMBERS

Access to Debt Capital

- **$30 Billion** Disbursed to Borrowers
- **$11 Billion** in Principal Repayment

Community Impact

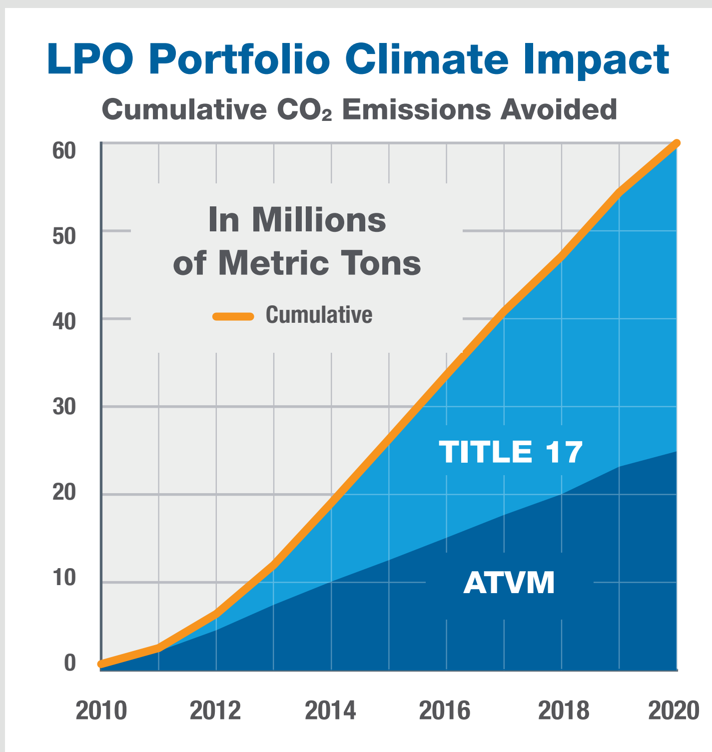
- **37,000** Permanent Jobs Created
- **49,000** Homes Powered

Portfolio Loan Statistics

Largest Loan	$5.9 Billion
Average Loan	$940 Million
Median Loan	$532 Million
Smallest Loan	$43 Million

Climate Impact

LPO's portfolio is playing a role in addressing climate change. Its Innovative Energy Loan Guarantee Program requires that projects avoid, reduce, or sequester greenhouse gas or air pollutant emissions, while eligible vehicles under the ATVM program must demonstrate improved fuel economy. The energy projects in LPO's portfolio have cumulatively avoided 35.2 million tonnes of CO_2 emissions while ATVM-supported projects have avoided a cumulative 25 million tonnes of CO_2 and displaced 2.8 billion gallons of gasoline.



FY 2020 IN REVIEW

LPO closed the fiscal year on September 30, 2020 with $18.1 billion in exposure and 26 active borrowers, supporting 19 innovative, commercial-scale clean energy and vehicle manufacturing projects.

FY 2020 marked LPO's 11th fiscal year of financing and managing loans. In that time, LPO has closed on over 30 projects covering a diverse array of sectors and technologies. The portfolio has seen steady consolidation since its early growth, with five loans repaid in full and five more exiting the portfolio via write-off or loan sale.

LPO's portfolio has seen a notable shift in trajectory over the past five years. Between FY 2016 and FY 2018, the portfolio's balance fell by 15%. Between FY 2019 and FY 2020, however, the portfolio saw a return to growth and funding, with exposure increasing by 11%.

Portfolio Project Data

Fiscal Year Ended	9/30/2019		9/30/2020	
	Title 17	ATVM	Title 17	ATVM
Total # of Active Projects	19	1	18	1
# Projects in Construction	1	0	1	0
# Projects in Operation	18	1	17	1
# Projects Unfunded	0	0	0	0
Generation Capacity (MW)	3,953	—	3,953	—
Electricity Generated (GWh, Cum.)	64,293	—	73,473	—
CO2 Avoided (Mtonnes, Cum.)	31.2	23.2	35.2	25.1
Production Capacity (Million vehicles/yr)	—	2.3	—	2.4
Vehicles Produced (Million, Cum.)	—	18.6	—	20.0

FY 2020 **IN REVIEW,** CONTINUED

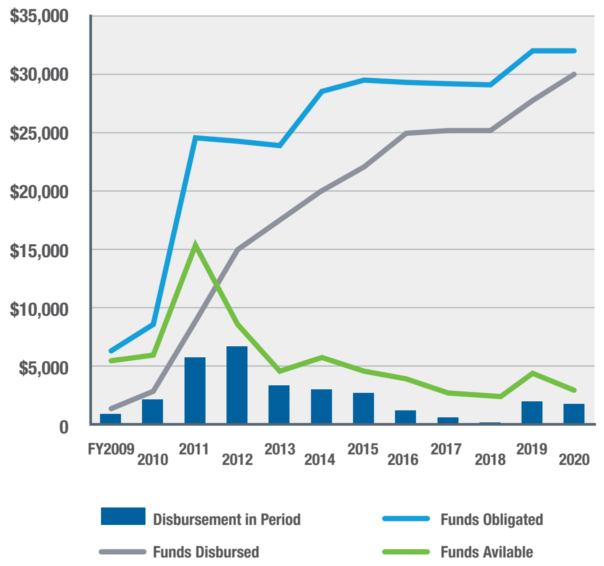
FY 2020 posed several extraordinary challenges across the energy sector. The ongoing COVID-19 pandemic disrupted project operations and construction activities across the country. West Coast wildfires inhibited project generation and raised operating costs.

Nevertheless, the portfolio saw major positive developments. The high-performing Genesis project repaid its loan in full 18 years ahead of schedule. LPO recovered $20 million from Fisker, which exited the portfolio seven years ago. LPO worked with one of its largest borrowers, Ford, to offer financial flexibility for the company during the pandemic. PG&E, the largest offtaker of electricity produced by LPO-financed projects, emerged from bankruptcy, providing renewed stability after over a year of sustained risk.

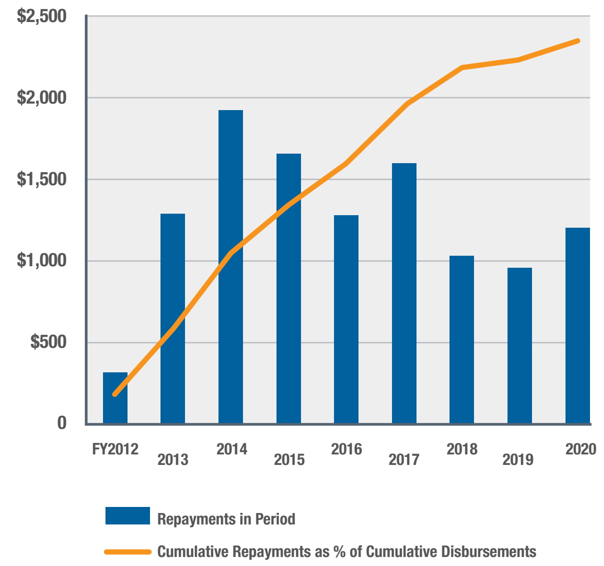
Despite the unprecedented uncertainty of FY 2020, LPO responded with marked stability in its portfolio management. LPO continued disbursements, with just under $2 billion to support the ongoing construction of the Vogtle nuclear generation project, the first new reactors to be built in the U.S in over 30 years.

In addition, repayments continued despite the disruption of the pandemic. LPO's borrowers repaid a combined $1.21 billion in principal in FY 2020. All active borrowers made at least one payment and principal repayments over the portfolio's lifetime now exceed a combined $11 billion, representing 38% of total funds disbursed. FY 2020 saw the largest repayment total of the past three fiscal years, bringing LPO's average annual repayments since FY 2013 to $1.36 billion.

LPO Disbursement History ($MM)



LPO Repayment History ($MM)



FY 2020 PORTFOLIO IMPACTS OF NOTE

Recovery On Distressed Assets

FISKER

Even after LPO records a loss and removes a borrower from its portfolio, it continues to monitor these assets. In some cases, there may be potential for additional recovery on inactive loans, whether due to terms of bankruptcy or other legal settlements, or through other ongoing contractual arrangements.

In April 2010, LPO closed on an ATVM loan to Fisker Automotive to support the manufacture of plug-in hybrid electric vehicles. All loan agreements include strong safeguards that allow LPO to protect taxpayers when a company can't meet its obligations. Accordingly, the Department stopped disbursements to Fisker in June 2011 after the company fell short of the rigorous milestones that LPO had established as conditions of the loan.

As a result, while the original loan commitment was for $529 million, only $192 million was actually disbursed and LPO has continued to pursue recoveries. Additional recoveries were achieved in March 2020, seven years after the note had been sold. Through a private party *qui tam* lawsuit, former investors pursued legal claims against Fisker which resulted in a settlement agreement between the U.S. and the successful plaintiffs, resulting in a payment of $20 million to DOE and bringing total recoveries to $68 million. This represents LPO's highest recovery rate for a project to date.

CRESCENT DUNES

LPO also experienced its first borrower to default on a payment since 2015 as the Crescent Dunes concentrating solar power project near Tonapah, Nevada defaulted and entered Chapter 11 bankruptcy in FY 2020. The project has been offline and without a PPA since 2019, rendering it unable to generate revenue or debt service. LPO has worked closely with the project on a plan to allow one of its owners to attempt to bring the project back into service while maximizing loan recovery. The agreement included a $200 million payment toward the outstanding loan balance, resulting in an expected recovery of $441 million of the $673 million disbursed.

As with all of its past loans, LPO will continue to monitor the outcomes of the bankruptcy case and other settlement efforts. Even after the conclusion of these proceedings and the write-off of the loan, LPO will continue to pursue every available avenue to maximize collections for the U.S. taxpayer.

PROJECT SPOTLIGHT

FORD

Partnering to Overcome the Unprecedented

The most notable event of FY 2020—the COVID-19 pandemic—was felt across the global economy and had direct implications for LPO's portfolio. As a partner throughout the life of a loan, LPO remained closely coordinated with borrowers in assessing the impacts of COVID-19 on projects and making relevant adjustments. One example is Ford, LPO's only remaining ATVM asset.

As an example of the flexibility it can offer to borrowers, LPO worked with Ford to modify its loan arrangement. In June 2020, Ford's Loan Arrangement and Reimbursement Agreement with the DOE was modified to reduce quarterly principal payments from $148 million to $37 million. The deferred portion of the principal payments will be due upon the original maturity date in June 2022. In the event Ford pays a dividend, any remaining principal payments will revert to the original payment schedule.

When the COVID-19 pandemic hit, LPO worked closely with Ford to modify its loan arrangement, allowing the borrower greater short-term flexibility while protecting the taxpayer interests.

PORTFOLIO SPOTLIGHT

STEADY REPAYMENT ACROSS PROJECTS

Genesis Repayment in Full Continues Portfolio Trend

FY 2020 continued a long-established trend of steady repayments from LPO borrowers across its portfolio. In particular, the year saw a major loan repayment by Genesis, a utility-scale concentrating solar power project in Riverside County, California.

This was the most significant prepayment of FY 2020, repaying the balance of its $852 million guaranteed loan in full and exiting the portfolio roughly 18 years ahead of schedule. In doing so, Genesis joins Abengoa Bioenergy, Kahuku, Nissan, and Tesla as the fifth LPO borrower to have repaid its loan obligations in full, ahead of schedule.

In addition, all active borrowers made at least one payment during FY 2020, yielding the largest repayment total of the past three fiscal years, and LPO borrowers collectively paid over $500 million in interest to the U.S. Treasury's Federal Financing Bank over the course of the year. The portfolio's lifetime cumulative interest payments now total over $3.27 billion.

LPO's borrowers continue to make steady repayments on their obligations, with a combined total of $1.21 billion in principal repaid in FY 2020.

SECTOR SPOTLIGHT

UTILITY-SCALE PV SOLAR

Continuing to Exceed Expectations

Although FY 2020 saw one of the most uncertain economic outlooks in years, utility-scale photovoltaic (PV) solar in the U.S. continued to grow, both in terms of power production and market share. This growth was reflected in LPO's portfolio, where PV solar generation represents over $3.0 billion in outstanding exposure and nearly 17% of the total portfolio balance. As of the end of FY 2020, the utility-scale PV solar sector comprised 7 of the portfolio's 26 active borrowers.

Collectively, LPO's PV solar projects continue to have strong operational performance at levels above base case projections while steadily repaying their loan obligations. LPO's PV solar assets generated a combined 3.5 million MWh (megawatt hours) in FY 2020, outperforming planned production levels by 7.8% for the year. 5 of 6 PV solar projects—Agua Caliente, AVSR, CVSR, Desert Sunlight, and Mesquite 1—exceeded closing model expectations for the year. LPO's PV solar borrowers also repaid a combined $650 million in FY 2020.

LPO played an early role in the growth of PV solar in the U.S. LPO financed the first 5 utility-scale PV solar projects larger than 100 megawatts (MW) in the country in 2011. These crucial deployments in turn helped demonstrate the technology's success to the market, catalyzing the private financing of dozens of additional utility-scale PV solar projects in the years since, not only bolstering the nation's installed utility-scale PV capacity, but also creating thousands of solar industry jobs.

> *FY 2020 saw the continued success of LPO's utility-scale photovoltaic (PV) solar portfolio projects—both in terms of power production and loan repayment.*

FY 2020
Key Accomplishments

- **Borrowers repaid** a combined $1.2 billion in principal.
- **Genesis repaid** the balance of its $852 million loan 18 years early.
- **Modified Ford loan**, providing flexibility to borrower during pandemic.
- **Recovered an additional** $20 million on Fisker.
- **PG&E exited bankruptcy** with all PPAs for LPO projects intact.

LPO Portfolio Performance Summary as of End of FY 2020

Loan & Loan Guarantees Issued	$35.69 billion
Conditional Commitments	$2.00 billion
Amount Disbursed	$29.62 billion
Principal Repaid	$11.17 billion
Interest Paid*	$3.27 billion
Losses as % of Total Disbursement	3.40 %

* Calculated without respect to Treasury's borrowing cost.

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