# Private Investment Leveraging Provisions in the Inflation Reduction Act of 2022

Innovating and deploying clean energy technologies at the scale needed to achieve US net-zero goals will require unlocking billions of dollars of private capital, in addition to public investment. These technologies may represent a multi-trillion-dollar market opportunity, yet they often struggle to receive financing due to uncertain risk profiles and underdeveloped capital markets. By providing loans and credit-enhancement tools, public financing mechanisms can bridge this investment gap and potentially catalyze the creation of a formal, scalable clean energy financing market to accelerate climate action.

In addition to funding climate mitigation directly, the Inflation Reduction Act (IRA) will catalyze hundreds of billions of dollars in clean energy investment from the private sector. **The newly created Greenhouse Gas Reduction Fund and Energy Infrastructure Reinvestment Financing Program along with additional support for the existing Department of Energy Loan Programs could translate $38.7 billion of direct federal spending into $385 billion of private sector investment.**[1]

## Department of Energy Loan Programs

The US Department of Energy's Loan Programs Office (LPO) provides financing tools to help proven, high-potential energy technologies reach the market, thereby boosting the credibility of those critical new technologies in the eyes of private investors. LPO has historically enjoyed a high rate of return on its investments, and estimates suggest that its currently remaining loan authority of $39 billion could leverage up to $100 billion in investments in innovative energy technologies (EFI 2018). The IRA will boost LPO's financial impact even further by expanding its Title XVII Innovative Technology Loan Guarantee Program, Advanced Technology Vehicles Manufacturing Program, and Tribal Energy Loan Guarantee Program and creating a new Energy Infrastructure Reinvestment Financing Program. **In all, $11.7 billion of appropriations to support these loans could support $312.6 billion of new energy investments.** The IRA leverages these private dollars through the following investments:

- **Title XVII Innovative Technology Loan Guarantee Program** – Increases the existing loan guarantee authority to deliver over **$39.3 billion** in investment in emerging technologies that mitigate GHG emissions *($40 billion in loan authority minus CBO's fair value estimate for the cost of federal energy credit programs; $3.6 billion in appropriations*).
- **Advanced Technology Vehicles Manufacturing Program** – Expands the program to deliver an additional investment of nearly **$9.8 billion** for manufacturing low- and zero-emissions vehicles in the US *(The IRA provides $3 billion in appropriations, which would result in an estimated $10 billion in loan authority for ATVM, based on similar loan authority awards in 2009 Appropriations, minus CBO's fair value estimate for the cost of federal energy credit programs)*.
- **Tribal Energy Loan Guarantee Program** – Provides additional loan authority to catalyze nearly **$17.7 billion** to finance energy development projects on tribal lands *($18 billion in additional loan authority minus CBO's fair value estimate for the cost of federal energy credit programs; $75 million in appropriations).*
- **Energy Infrastructure Reinvestment Program** – Establishes a new loan program which would catalyze **$245.8 billion** in investment in projects that (1) retool, repower, repurpose, or replace retired energy infrastructure; or (2) enable operating energy infrastructure to limit air pollution and GHG emissions *($250 billion in loan authority minus CBO's fair value estimate for the cost of federal energy credit programs; $5 billion in appropriations)*.

[1] The IRA also includes additional loan programs through the US Department of Energy, US Department of Agriculture, and the US Department of Housing and Urban Development that were not included for the purposes of this initial analysis due to data limitations.

**Greenhouse Gas Reduction Fund**

The IRA will also establish a $27 billion Greenhouse Gas Reduction Fund (GGRF) within EPA to finance the wide-scale deployment of mature clean energy technologies. This program is critical to filling the gap between the amount of investment needed and the actual investment in low-cost, ready-to-deploy technologies like solar, wind, and batteries. It will also direct over half of its funds to low-income and disadvantaged communities which stand to benefit the most from a rapid clean energy transition. GGRF would primarily fund state and local green banks, or institutions which leverage some amount of public money to attract private investment in climate and clean energy technologies. Some funds would also go towards setting up new green banks in jurisdictions which do not yet have one. The US is currently home to over 20 subnational green banks which have leveraged an average of $2.68 in private investment for every public dollar spent. **By capitalizing new and existing green banks, the GGRF established in IRA could lead to over $72.4 billion in additional private sector investment.**

| Program | IRA Section | Federal Appropriations | New Loan Authority | **Estimated Private Dollars Leveraged** |
|---|---|---|---|---|
| Title XVII Innovative Technology Loan Guarantee Program | 50141 | $3.6 billion | $40 billion | **$39.3 billion**[a] |
| Advanced Technology Vehicles Manufacturing Program | 50142 | $10 billion | *IRA removes the previous cap ($25 billion) on loan authority* | **$9.8 billion**[ab] |
| Tribal Energy Loan Guarantee Program | 50145 | $75 million | $18 billion | **$17.7 billion**[a] |
| Energy Infrastructure Reinvestment Financing Program | 50144 | $5 billion | $250 billion | **$245.8 billion**[a] |
| Greenhouse Gas Reduction Fund | 60103 | $27 billion | N/A | **$72.4 billion**[c] |
| **TOTAL** | | **$38.7 billion** | | **$385 billion** |

[a] *Estimate assumes full utilization of the available loan authority with project costs equal to the amount of direct loans or loan guarantees received. To estimate the amount of private investment, the loan authority value is reduced by the CBO's fair value estimate, which takes into consideration the expected return on investment from interest payments and the expected losses due to market risk. In 2022, CBO projects that the market value of energy-related obligations will be 1.7% less than the value of the loan authority.*

[b] *Estimate of potential loan value that could be utilized by the Advanced Technology Vehicles Manufacturing program with the removal of the existing loan cap is based on the subsidy cost to loan authority previously awarded to the program in the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act of 2009, P.L. 110-329, (Section 129).*

[c] *To estimate the amount of private investment, the federal funding is multiplied by the ratio of private investment to public dollars ($2.68 to $1) leveraged by 20 subnational green banks included in the American Green Bank Consortium and Coalition for Green Capital Report: Green Banks in the United States, 2021 U.S. Green Bank Annual Industry Report with Data from Calendar Year 2020.*