

CASE STUDY

Financial Instruments for Energy-Efficient Cities

Catalyzing Private Sector Investment in Energy Efficiency Projects

OVERVIEW

Financial product innovation is crucial to increase private sector participation in infrastructure. As the leader in Maximizing Finance for Development, the World Bank has developed the Infrastructure Project Financing with Deferred Drawdown Option (IPF-DDO) to help clients catalyze private sector investments. The first IPF-DDO was approved for Brazil's Financial Instruments for Brazil Energy Efficient Cities project (FINBRAZEEC) on June 28, 2018. The US\$200 million contingent line of credit for Caixa Economica Federal (Caixa) aims to promote and guarantee a new scheme for private domestic banks to invest in energy efficiency projects.

Background

In the past, infrastructure investment in Brazil was mainly financed through state banks, but ongoing fiscal adjustments have reduced public financing for infrastructure. For private financing to close this gap, new financial products must be developed that will incentivize private sector participation and reduce project and credit risks.

Among the sectors in need of private investment in Brazil, the energy efficiency sector requires considerable investments to meet its greenhouse gas emission reduction targets. Private financing for this sector is relatively small because local financial institutions do not have the required expertise to assess and properly price project risk.

Project Objectives

The FINBRAZEEC project aims to unlock private



Aerial view of Rio de Janeiro. Photo credit: Thinkstock.

financing for urban energy efficiency projects by (i) enhancing the technical quality of public street lighting and energy efficiency projects; (ii) improving project assessment at Caixa; and (iii) reducing project and credit risk to investors.

Project Design and Financial Solution

The World Bank Treasury and the Energy Global Practice partnered with Caixa, the second-largest state-owned bank in Brazil and a strategic partner of the federal government, to finance municipal infrastructure, housing, and water projects. The overall design of the FINBRAZEEC project called for the establishment of a syndicated loan facility—with funds provided by Caixa, the Green Climate Fund (GCF), and private Brazilian investors—to finance energy-efficient public street lighting and industrial energy efficiency projects. It also called for a guarantee facility to provide partial risk guarantees to local private investors.

Although Caixa had offered syndicated loans before, it had not offered a dedicated credit enhancement mechanism of this type. To design a suitable credit enhancement mechanism, the World Bank team in consultation with Caixa met with private investors to assess their requirements to participate in the syndicate. The feedback received clearly indicated that liquidity support from the World Bank would reduce credit risk and significantly increase investors' appetite.

Caixa will set up a guarantee facility backed by a contingent line of credit from the World Bank in the form of an IPF-DDO. The IPF-DDO allows Caixa to draw down resources if the guarantee facility needs additional funding to meet its obligations to the guaranteed syndicated lenders (for example, if subloan defaults are higher than expected). Disbursements of the IBRD contingent loan will be tied to the funding needs of the guarantee facility.

In addition, IBRD support will help Caixa develop a new business line in energy efficiency financing and address potential capital constraints, while significantly enhancing the attractiveness of the facility for private lenders. The IPF-DDO will act as callable capital for Caixa and ensure liquidity for Caixa's obligations under its guarantee products, which are offered to private investors over a 10-year investment period. The syndication includes domestic commercial lenders and will leverage approximately US\$400 million in private debt on a limited recourse finance basis.

Overall, the IPF-DDO as a contingent line of credit serves a dual purpose: it provides liquidity to capitalize the guarantee fund, and it serves as a catalyst for private sector participation in a new sector in Brazil.

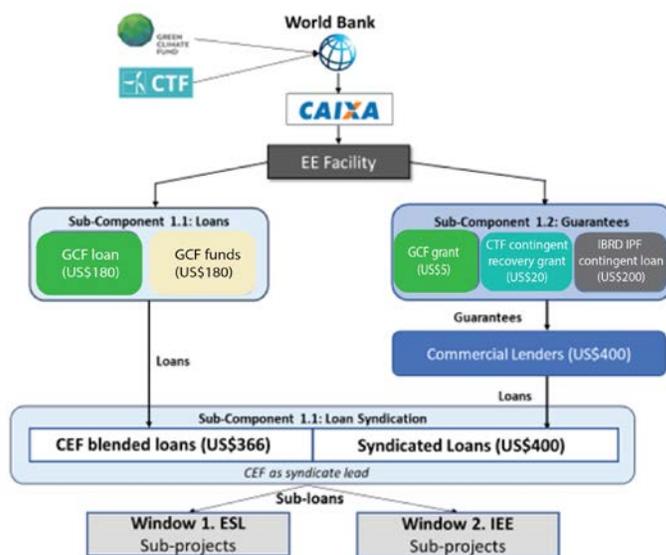
Outcome

In approving the US\$200 million IPF-DDO contingent line of credit, the World Bank demonstrated its ability to maximize finance for development in innovative ways by deploying solutions that reduce project and credit risk and that catalyze private sector investments. The contingent line of credit provided by the IPF-DDO encouraged private investors to participate, and the US\$200 million of contingent financing will likely leverage an estimated US\$400 million in investment (50 percent coverage).

This accomplishment was the result of a broad consultative process led by the World Bank Treasury, which included efforts to obtain approval of internal waivers so that contingent financing features (DDO)—previously reserved for development policy loans and natural disaster risk management—could be applied to investment projects (IPF). The IPF-DDO includes flexible financial features, including the ability to change the repayment schedule at the time of disbursement and to access the credit line over a period of 15 years. An additional risk management feature allows the borrower to convert disbursements to local currency to match the underlying liabilities denominated in Brazilian reais.

The World Bank Treasury's menu of financial products continues to expand in response to the needs of its clients, particularly upper-middle-income countries that are relying on traditional concessional financing less than in the past. The World Bank is a key partner that supports the private sector in undertaking investments in energy, infrastructure, and other high-priority areas.

Indicative FINBRAZEEC Energy Efficiency Facility Structure



Note: Amounts are in millions of U.S. dollars. EE = Energy Efficiency; CTF = Clean Technology Fund; GCF = Green Climate Fund; ESL = Efficient Street Lighting subproject; IEE = Industrial Energy Efficiency subproject.