

Background

Current energy efficiency financing and funding programmes for the private sector in South Africa target major infrastructure and large-scale projects while typically support a mixed mandate, with combined renewable energy, resource efficiency and/or clean technology support. Within this, the pipeline for clean technology and renewable energy projects are more advanced than for energy efficiency. Furthermore, small and medium-sized enterprises (SMEs) in particular in South Africa fail to access financing to invest in energy efficiency measures.

Solution Overview

In order to address the challenges with finding alternative routes to financing energy efficiency for SMEs that secure the buy-in of financers, a paradigm shift is required to enlist the support and financing of the commercial banks through a bespoke facility that will:

- Establish a highly efficient and tailored application review and applicant credit vetting process
- Offer 15,000 unsecured short-term loans over a 5 year period, at rates in the range of prime+1.25% (best case) to ±prime+3.5% p.a. for a range of standardised technological interventions from vetted suppliers
- Dynamically manage the lending criteria and vetting process, managing for risk and defaults
- Manage and bridge cash flow constraints which might arise from unforeseen defaults (>6% of portfolio)

In developing this financing model for energy efficiency financing for SMEs in South Africa, it is clear that:

- **Private co-financing is crucial** and interventions will require equity contribution from the borrower
- Further public co-funding is needed to
 - complement GCF funding (as principal sponsor, alongside DBSA)
- support the facility when cash flow constraints arise, to avoid adjusting lending rates upwards

If defaults rise above the modelled 6%, the only viable option (to avoid adjusting rates upwards and constraining the market response), is

Focus: Climate Change Mitigation

Ecosystem Impact: Access to Finance

Lab Cycle: Climate Finance, South Africa 2019
Challenge Hosted by: Carbon Trust with Development

Bank of Southern Africa (DBSA)

to "plug the gap" with equity; where the return on this equity itself must not drive the facility's blended cost of capital up significantly. The proposed solution for an equity plug might be offered by an impact investor and/or DFI. In light of the coordination challenges presented by creating an equity plug, an effective multi-donor steering process is required to integrate effectively the equity plug provider in the financing model. The institutional arrangements should facilitate the equity gap provider to have substantial influence on the evolving operational and risk management processes and steer participation at programme level. Its design should also reflect the equity plug provider's risk and return expectations (including consideration for graduated and/or risk enhancement options).

Key Features

The equity plug facility should have the following attributes:

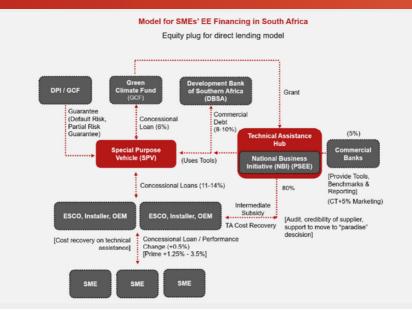
- The equity plug should be available when called upon in the event of cash flow challenges due to (managed) defaults, act as a bridging facility
- The equity plug must charge very low interest rates (and/or access rates)

The equity plug provider (as co-funder) should have the following attributes:

- Have a stake in promoting energy efficiency, low carbon implementation, SME resilience and/or economic development in South Africa, aligning to the facility's objectives
- Be willing to provide highly concessional equity
- Express refined impact reporting expectations, aligned to those established for the programme
- Participate alongside the GCF and DBSA in biannual performance reviews, take a minority position in programme steering and take a regular role with influence in quarterly facility operational reviews

Equity Plug for Energy Efficiency Financing





Target Market

The ambition is to finance ±15,000 EE interventions, focused on SMEs and with the following breakdown:

Typical profile					Number of
Organisatio- nal size	Maximum turnover (ZAR/annum)	Max number of employees	Max energy cost (ZAR/ annum)	Typical cost of energy for turnover (ZAR/ ZAR)	interventions anticipated to be supported
Small	Ave. R12m	50	< R 750 000 / year	12%	500
Medium	Ave. R32m	200	R 750 000 – R 45 million	12%	14,000
Large	>R64m	> 200	> R 45 million / year	2.5%	500

The facility is to be *sector-agnostic*. However, major energy savings opportunities lie in Manufacturing; Agriculture, Forestry & Fisheries and Mining. Therefore, additional efforts for project pipeline development will target these sectors¹. Loans are to be in the range of R50,000 – R2 million, averaging roughly R75,000 for SMEs and R450,000 for large enterprises.

Impact Potential

Securing the equity plug provider would provide the desired cofunding to complement the GCF and DBSA funding within the Private Sector Energy Efficiency Programme (PSEE), improving the overall profile and reach of the programme. Significantly, the co-funder would provide the critical bridge finance to support the continued operation of the facility without the detrimental rates escalation that would be required otherwise.

The potential impact of the direct route to market is the definitive demonstration potential of the facility – testing and demonstrating solutions that incumbent actors are unfamiliar with or averse to –, including proving:

1. Significance of SME EE market and project pipeline

[1] Excluding coal mining

- Adoption of SME-appropriate credit vetting processes and its application for EE financing
- 3. Potential for risk mitigation through robust technology and supplier positive lists
- 4. Ease of financing standard technologies
- Reliability of benchmarks and standardised tools in application and impact evaluation

Each of these measures will bring significant efficiency to lending procedures and serve to establish, until now, only theorised market potential of EE financing for SMEs. The collective ambition is that financers will better understand the opportunity and have developed tailored loan products that continue to serve the market by the close of the facility.

Furthermore, greater access to EE financing for SMEs in core sectors across South Africa will enable enterprises at the core of South Africa's economy to improve the environmental sustainability of their activities while greatly reducing their carbon footprints in support of South Africa's green economy transition.

Solution Developers



Carbon Trust



Development Bank of Southern Africa (DBSA)

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SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.

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