

Mainstreaming Credit Assessment and Appraisal to Accelerate the Access to Finance for Solar MSMEs in India



SEED

promoting entrepreneurship
for sustainable development

Objectives

The Government of India has the ambitious goals to increase its solar power capacity to 175 GW by 2022. Currently, the pursuit to meet the solar-related climate goals is mainly driven by large-scale solar installations. Rooftop solar power requires a high upfront investment of about INR 35-45 million per MW and implies long payback periods. The OPEX model, which requires payment for energy consumed on an ongoing basis, is mostly limited for large industries. At the same time, the CAPEX model, which requires paying 100% of the PV system cost upfront, is the most dominant model for SMEs. Even though most solar installations are profitable due to cost savings, SMEs struggle to embrace these projects due to limited access to finance.

Solution Overview

The proposed climate finance tool aims to address each of these financing challenges specific to SMEs:

- **Lack of credit record:** On the demand side, many SMEs units do not have any credit history or profile and in most cases, creditworthiness is generally inadequate. Also, the common use of cash transactions makes it difficult to track their financial details and assess their creditworthiness.
- **High transaction cost:** Typically the size of rooftop solar systems for SMEs are small, which makes it more expensive for financial institutions to assess and fund these projects. Further, perceived high risk of such SMEs in absence of credit records increases the interest rates. Financing SMEs is expensive and associated with higher risk.
- **Lack of collateral:** Currently, rooftop solar plants do not have an organized resale market, making it hard for financial institutions to consider the plants itself as a sufficient collateral. Most SMEs in India have limited freehold assets that they could use as collateral for securing financing for rooftop solar projects.

Focus:	Mitigation
Instrument Type:	Access to Finance Mechanism
Lab Cycle:	India 2020
Solution Developers:	TATA Cleantech Capital Limited

- **Long investment horizons:** Solar panels require high upfront investment representing significant long-pay back periods. Further, the falling price regime of PV modules makes it difficult for lenders to take a long term call on financially weaker SME units

Key Features

Key features of this finance solution are:

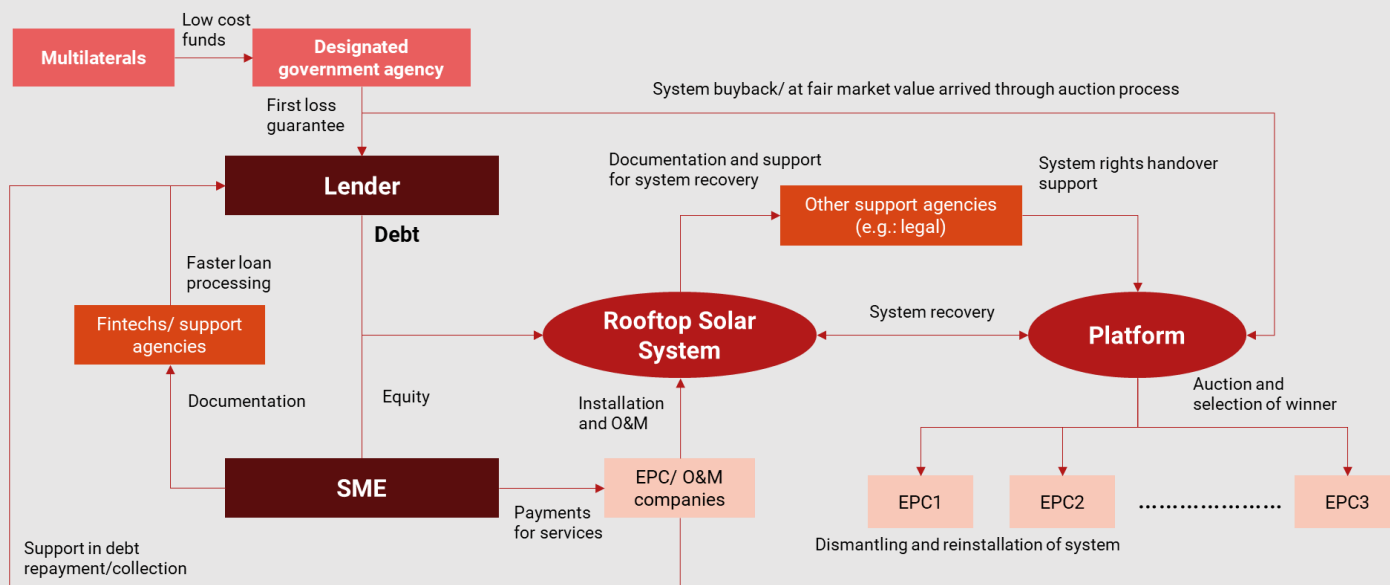
1. The **automation and standardization** of the credit assessment process using fintech solutions. This will involve a rule engine that will automate the credit appraisal process. Furthermore, as many SMEs lack conventional data for a credit decision, this rule engine is fed with alternative data, such as:
 - Firm Goods and Services Tax (GST) returns
 - Civil behaviour (any default of a listed company are listed)
 - Pending civil litigation
 - Political links
 - Satellite checks
 - Past electricity bills
2. The **clustering** of SMEs to reduce relative transaction costs. This clustering will be based on their geographic location. Third party local agents can service a few pre-defined clusters in completing the documentation part for financial institutions reducing the cost.



SEED

promoting entrepreneurship
for sustainable development

www.seed.uno



- To address the creditworthiness issue and cover the gap between the loan amount and current value of used solar systems, a **securitization mechanism** in the form of first loss default guarantee would be essential. The guarantee could be offered by a designated government agency. The fund for the guarantee could be setup from support of Multilaterals and developmental bodies. Furthermore, the release of funds from first loss default guarantee must not require a third-party to verify the authenticity of an SME's default, as this process can take between 6 months to 1 year, rendering the first loss default guarantee futile.
- To move towards making the solar plant an adequate collateral in itself, an organized **secondary redeployment market** is essential. This redeployment market would be founded by third party platforms with EPC companies listed as the customers. The fair buyback value for any used system could be determined through the auction process of such systems.

Target Market

- SMEs (enterprises with investment in plant and machinery of up to 50 crore rupees)
- Pilot in SME manufacturing sector, keeping in mind the ROI period is shorter
- Focus on states with higher electricity tariffs
- Areas where servicing of the solar installation is possible

Impact Potential

- The use of solar energy will reduce SMEs' diesel generator use and thereby their carbon footprint
- Lower electronic waste due to development of solar secondary market
- Boosting the use of solar energy in SMEs will provide further impetus to solar R&D overall in India
- SMEs will become more profitable due to cost savings
- SMEs will benefit from a more reliable power supply in most areas.

Solution Developers

TATA CLEANTECH CAPITAL LIMITED

Contact Persons:

Mudit Jain, Associate Vice President - Credit Research:
Mudit.Jain@tatacapital.com

Sourabh Shrivastava, Head – Business Development:
sourabh.shrivastava@tatacapital.com

SEED Practitioner Labs Climate Finance empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.