

Financing Solar Rooftop in India

Experiences and possible future finance products

Potential Solar Rooftop

- Total realistic technical potential for rooftop solar PV in urban settlements is around 352 GWp
- Total area in India under urban settlement is 77,370 km².
- In order to install 1 Kwp solar PV system 10 m² area is required.

Installed Capacity in India

- Over 350 MW of rooftop solar projects have been commissioned as on May 2015.
- Maharashtra is the largest state in cumulative capacity terms of over 40 MW.
- DG capacity of more than 70 GW shows huge demand for captive power and vast potential for rooftop solar.

Solar Rooftop Targets

- A target of achieving 40 GW by 2022 has been set by Govt. of India.

State	Target (2022)
Maharashtra	4.70 GW
Uttar Pradesh	4.30 GW
Tamil Nadu	3.50 GW
Gujarat	3.20 GW
Rajasthan, Karnataka	2.30 GW each
Madhya Pradesh	2.20 GW
West Bengal	2.10 GW
Punjab, Andhra Pradesh, Telangana	2.00 GW each

Solar Rooftop

Issues/ Challenges	Mitigation Measures
Roof Lease Rights	Non termination clause till loan repayment period
Roof structure, strength, load bearing capacity, wind resisting capacity, aesthetic issues, fire safety etc.	Study on load bearing capacity of roof and Fire and Safety Certifications from Competent Authority.
Net-metering Policies	Needs more clarity from respective utilities
Plant Layout-expansion of building/ addition of floor/ shadow effect due to new structure etc.	Study on shadow effect on the roof and possibility of any shadow effect due to expansion of building, construction of flyovers etc.

Salient Features of IREDA's loan scheme for solar rooftop projects

- Applications through Rooftop Solar Aggregators
- Single or different locations
- Minimum total size of the project ≥ 1000 kWp, each system capacity ≥ 20 kWp
- Aggregators to provide credit rating from IREDA empanelled credit rating agencies
- Aggregators responsible for execution & operational performance commitments.

Eligibility conditions:

Applications to be submitted under following categories:-

Aggregator Category:

- Can submit application as borrower for either single project or multiple sub-projects as per eligibility guidelines.
- Minimum total project capacity ≥ 1000 kWp.
- Minimum sub-project capacity under this mode ≥ 20 kWp.

Direct Category

- Applicants can submit applications for a project ≥ 1000 kWp on a single roof /contiguous roofs
- Applications to be rated by IREDA empanelled Credit Rating Agencies.

Eligible Business Models

I. Project Ownership Models

- a. Rooftops owned by single party
- b. Rooftops owned by multiple parties

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II. Revenue Models

- a. Captive power generation by roof owner
- b. Sale to grid under Net Metering/PPA
- c. Sale to Grid under Gross Metering PPA
- d. Distribution licensee/ Govt. / Semi Government bodies/institutions
- e. Any other viable model

Other Terms & Conditions

Interest Rate : 9.90% to 10.75% p.a. based on the Credit Rating.

Loan Repayment Period : upto 9 years

Moratorium : 6 to 12 months from the date of COD

Quantum of Loan : 70% of the total project cost with minimum promoter's contribution of 30% of the project cost.

Other general eligibility conditions for loans shall be as per IREDA's Financing Guidelines.

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Thank You

Indian Renewable Energy Development Agency Limited

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