# DISCOMs and Solar Rooftop Capacity.

## What is the issue?

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- Despite the ambitious targets and incentives offered, the solar rooftop component remains below the potential.
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- It calls for concerted measures from the DISCOMs, to tap this beneficial segment.
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## How is the solar rooftop scenario?

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- **Capacity** - Capacity addition in rooftop solar stood at around 870 megawatt (MW) in 2017.
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- Notably, the target was set as 5,000 MW for the FY 2017-18.
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- As of 2017, the cumulative rooftop solar installed capacity was only 1.6 GW.
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- **Target** - At this pace, rooftop solar installations are unlikely to cross even 10 GW by 2022.
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- This is far short of the targeted 40 GW under India's National Solar Mission (100 GW of solar energy capacity by 2022).
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- **Incentives** - Ministry of New and Renewable Energy (MNRE) offers incentives in the form of capital subsidies.
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- There is also the net metering policy which allows consumers to sell excess power to distribution companies (DISCOMs).
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- However, DISCOMs have failed to catalyse rapid deployment of rooftop component.
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## Why are the DISCOMS hesitant?

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- **Business** - Rooftop deployment, especially in the commercial and industrial category could impact DISCOMs' businesses.
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- The reduction in demand for grid electricity may lead to revenue losses.
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- **Subsidies** - Cross subsidization is a strategy of setting higher prices for one set of consumers to subsidize to another set of consumers.
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- Rooftop segment cross-subsidises residential and agricultural consumers.
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- These revenue losses compound the financial burden on DISCOMs.
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## What is the recent scheme in this regard?

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- MNRE recently proposed the Sustainable Rooftop Implementation for Solar Transfiguration of India (SRISTI) scheme.
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- It incentivises the installation of roof top solar projects in India.
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- A central financial assistance will be provided only for installation of roof top solar plants in residential sectors.
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- It is an evolutionary step towards a DISCOM-driven model of rooftop solar adoption.
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- The proposed Rs.14,400-crore incentive fund would compensate DISCOMs for their revenue losses.
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## Why should DISCOMs take up rooftop component?

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- **Economic benefits** - Solar generation close to the point of consumption lowers transmission and distribution losses.
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- Further, targeted solar deployment in select geographies could minimise the problems of grid overloading.
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- It thereby lowers the requirements of investment for upgradation of distribution infrastructure.
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- **Jobs** - The deployment of rooftop solar is estimated to create 24.7 full-time equivalent jobs per MW.
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- This is significantly higher than the corresponding figure of 3.5 jobs per MW for utility-scale solar (generated and fed into the grid).
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- Thus, realising 40 GW target would provide employment to more than 2 lakh people.
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## What could the DISCOMs possibly do?

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- **Awareness** - With limited penetration, solar PV systems are still an unfamiliar technology for many.
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- Moreover, the cost benefit with solar tariffs dipping below Rs.5 per kWh for small-scale projects is also unknown.
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- DISCOMs could utilise their existing bill collection and payment networks to disseminate information.
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- This is essential to create awareness on various incentive schemes as well as to create demand for rooftop solar.
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- **RESCO model** - The Renewable Energy Service Company (RESCO) model of rooftop solar helps address high upfront cost of installations.
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- Under this, the developer bears the upfront capital investment for the installation.
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- The consumer hence only pays for the electricity consumed.
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- So far, the implementation of the RESCO model has largely been driven by developers.
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- This has favoured large-scale rooftop systems and commercial and industrial consumers with higher creditworthiness.
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- The DISCOMs could play the role of demand aggregators to facilitate the implementation of the RESCO model.
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- It could coordinate between developers, financiers, and consumers to take RESCO model across all consumer segments.
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- **Certainty** - DISCOMs should provide greater certainty over cash flows for developers or financiers.
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- E.g. the Bengaluru has a tripartite agreement between consumers, developers/financiers and the DISCOM to operationalize this.
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- **Expansion** - The DISCOMs could enable developers to expand their service areas beyond their regional geographies.
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- Given the widespread network of DISCOMs, they could provide certain additional services to developers.
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- These may include bill collection and operations and maintenance.
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- These services are prohibitively expensive for developers, in remote areas.
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- Such facilities also offer opportunities for building new revenue streams to DISCOMs.
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- All these in effect may make DISCOMs active participants in India’s rooftop solar revolution.
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### Source: BusinessLine

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