

DISCOMs and Solar Rooftop Capacity.

What is the issue?

 $n\n$

\n

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

\n

 $n\$

How is the solar rooftop scenario?

 $n\n$

۱n

• Capacity - Capacity addition in rooftop solar stood at around 870 megawatt (MW) in 2017.

۱n

- As of 2017, the cumulative rooftop solar installed capacity was only 1.6 GW.
- **Target** At this pace, <u>rooftop solar installations</u> are unlikely to cross even 10 GW by 2022.

۱n

- This is far short of the targeted $\underline{40~\text{GW}}$ under India's National Solar Mission (100 GW of solar energy capacity by 2022).
- Incentives Ministry of New and Renewable Energy (MNRE) offers incentives in the form of capital subsidies.
- There is also the net metering policy which allows consumers to sell excess power to distribution companies (DISCOMs).
- However, DISCOMs have failed to catalyse rapid deployment of rooftop component.

Why are the DISCOMS hesitant?

 $n\n$

\n

- **Business** Rooftop deployment, especially in the commercial and industrial category could impact DISCOMs' businesses.
- \bullet The reduction in demand for grid electricity may lead to revenue losses. $\mbox{\ensuremath{^{\mbox{\sc h}}}}$
- **Subsidies** Cross subsidization is a strategy of setting higher prices for one set of consumers to subsidize to another set of consumers.
- Rooftop segment cross-subsidises residential and agricultural consumers.
- \bullet These revenue losses compound the financial burden on DISCOMs.

 $n\n$

What is the recent scheme in this regard?

 $n\n$

\n

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

\n

 $n\n$

Why should DISCOMs take up rooftop component?

 $n\n$

• **Economic benefits** - Solar generation close to the point of consumption lowers transmission and distribution losses.

\n

\n

- \bullet Further, targeted solar deployment in select geographies could minimise the problems of grid overloading. \n
- It thereby lowers the requirements of investment for upgradation of distribution infrastructure.
- **Jobs** The deployment of rooftop solar is estimated to create 24.7 full-time equivalent jobs per MW.
- This is significantly higher than the corresponding figure of 3.5 jobs per MW for utility-scale solar (generated and fed into the grid).
- \bullet Thus, realising 40 GW target would provide employment to more than 2 lakh people. $\ensuremath{\backslash n}$

 $n\n$

What could the DISCOMs possibly do?

 $n\$

۱n

- $\begin{array}{l} \bullet \ \textbf{Awareness} \ \cdot \ \textbf{With limited penetration, solar PV systems are still an} \\ \ \textbf{unfamiliar technology for many.} \\ \textbf{n} \end{array}$
- \bullet Moreover, the cost benefit with solar tariffs dipping below Rs.5 per kWh for small-scale projects is also unknown. \n
- DISCOMs could utilise their existing bill collection and payment networks to disseminate information.
- This is essential to create awareness on various incentive schemes as well as to create demand for rooftop solar.
- **RESCO model** The Renewable Energy Service Company (RESCO) model of rooftop solar helps address high upfront cost of installations.
- Under this, the developer bears the upfront capital investment for the installation.
- \bullet The consumer hence only pays for the electricity consumed. $\ensuremath{\backslash n}$

• So far, the implementation of the RESCO model has largely been driven by developers.

\n

 \bullet This has favoured large-scale rooftop systems and commercial and industrial consumers with higher creditworthiness. $\mbox{\sc h}$

• The DISCOMs could play the role of demand aggregators to facilitate the implementation of the RESCO model.

• It could coordinate between developers, financiers, and consumers to take RESCO model across all consumer segments.

• **Certainty** - DISCOMs should provide greater certainty over cash flows for developers or financiers.

\n

\n

- \bullet E.g. the Bengaluru has a tripartite agreement between consumers, developers/financiers and the DISCOM to operationalize this. $\mbox{\sc h}$
- **Expansion** The DISCOMs could enable developers to expand their service areas beyond their regional geographies.
- Given the widespread network of DISCOMs, they could provide certain additional services to developers.
- \bullet These may include bill collection and operations and maintenance.
- \bullet These services are prohibitively expensive for developers, in remote areas. $\mbox{\ensuremath{\upshape \ensuremath{\upshape \ensuremath{\up$
- Such facilities also offer opportunities for building new revenue streams to DISCOMs.

\n

 All these in effect may make DISCOMs active participants in India's rooftop solar revolution.

\n

 $n\n$

 $n\n$

Source: BusinessLine

