

Is India on track to meet RE target of 175 GW by 2022

Large Scale Solar

1. Out of the 175 GW, as much as 60 GW is to come from utility scale solar power and another 40 from rooftop installations.

Currently, some 31 GW of large-scale solar is installed; 19.36 GW is under implementation while 35.27 GW has been put out for bids, according to government's submission to the Lok Sabha, standing committee on energy (see Table 1). Therefore, 85.73 GW is already at various stages of development and balance 15 GW would be tendered out in 2019-20, so that implementation is done before 2022. Government is confident of meeting the 100 GW target by 2022.

2. However, this may not work, as what MNRE fails to point out is that in the last 2 years tenders for new projects have been unsuccessful and the achievements are slipping.
(see Graph 1)

Table 1: Status of solar projects as on 30th September, 2019

Target (GW)	100
Installed capacity (GW)	31.1
Under implementation (GW)	19.36
Tendered (GW)	35.27

Source: Standing Committee on Energy (2019-20), MNRE, Demand for Grants

only 5.0 GW has been added. MNRE has reduced its target by 23 per cent over the previous year and is now hoping to add 8.5 GW – but this may be too optimistic. (see Graph 2)

5. In the light of this sluggish growth, it is uncertain if the country will meet the 60 GW target by 2022. (see Graph 3)

3. This is different from the past five years: Between April 2014 to March 2019, this sector had remarkable growth –from 2.6 GW installed capacity to 28 MW.

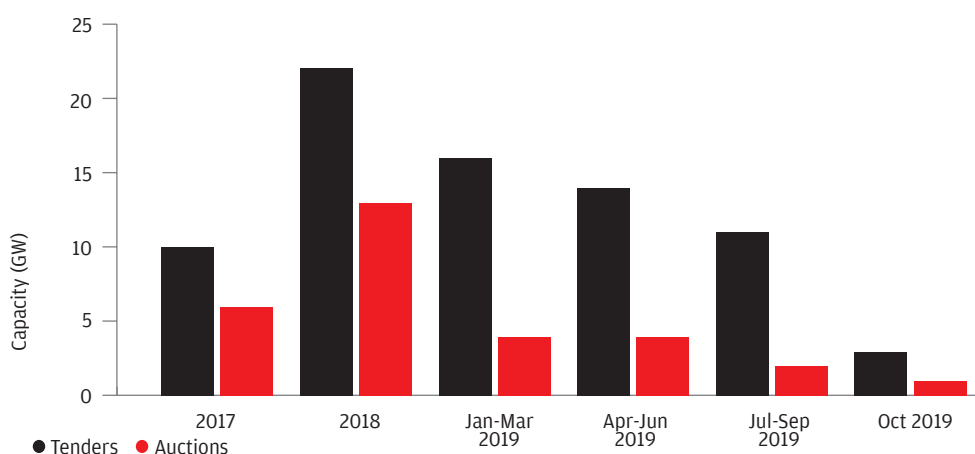
4. However, in the last fiscal (2018-19), annual capacity addition was 6.5 GW, as against the previous year when 9.4 GW was installed. In this year, till December 2019 growth has been extremely laggardly and

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6. The reasons for slow growth are structural and also policy induced and are as follows:

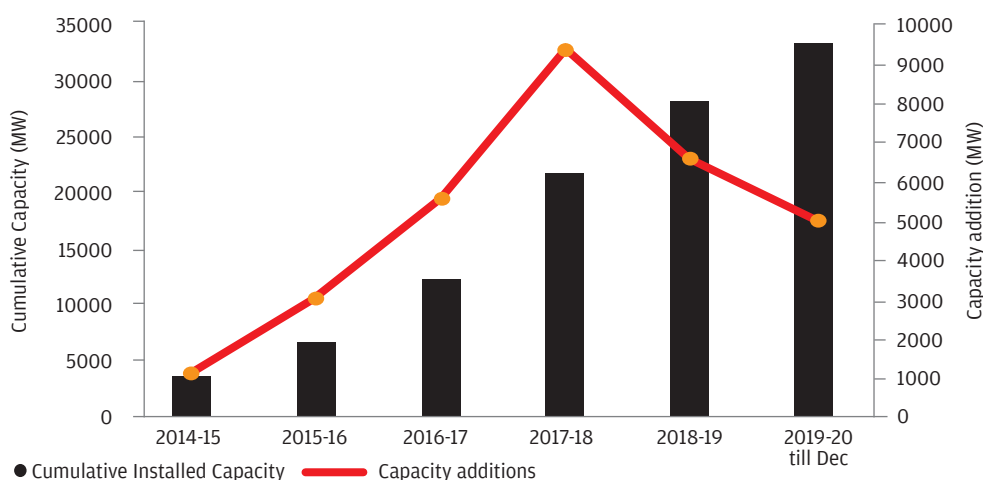
- i. High cost of power adding to financial problems of distribution companies
 - a. Investment risk has increased as distribution companies are unable to pay the dues to solar power generators. According to CEA, the dues towards 342 RE projects amounts to close to ₹9,400 crore by end of November 2019, affecting 14.56 GW RE capacity. The states with the bulk of RE projects, AP, TN, Telangana and Karnataka account for 78 of the dues (these 4 also account for 54 per cent of installed capacity of large-scale solar).
 - b. It is also said that solar energy is being curtailed 'illegally' – this energy is in the must run category and therefore has high priority is scheduling of

Graph 1: Solar power capacity auctioned and tendered



Source: Mercom, a clean energy communications and consulting firm

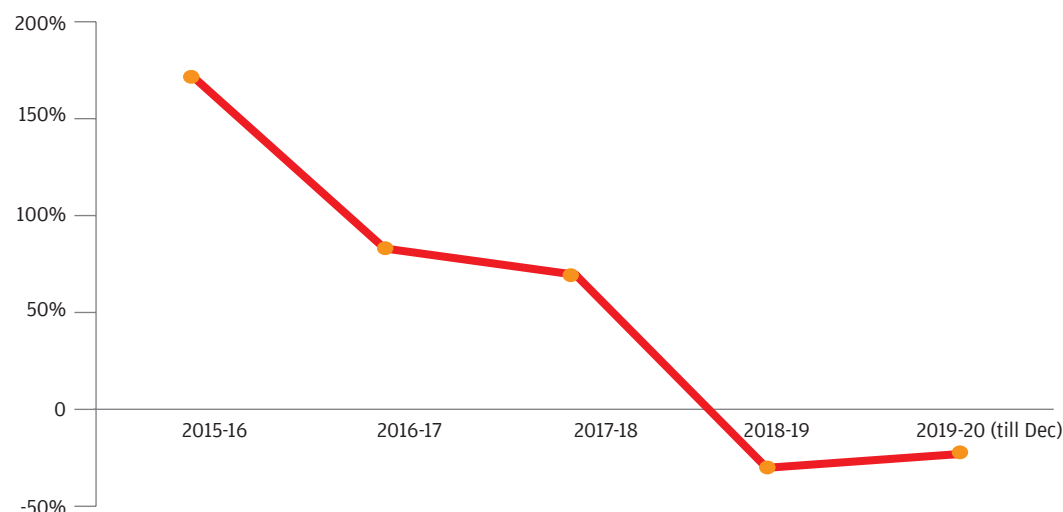
Graph 2: Capacity addition and Cumulative installations



Source: MNRE, CEA



Graph 3: Rate of capacity addition wrt to previous year



CSE analysis based on MNRE/CEA data

power, but because of the higher costs or grid unavailability, the generation companies are asked to stop feeding power.

c. The AP government effort to re-negotiate the terms of the solar Power Purchase Agreements (PPA), on the ground that these have a high cost, have also spooked investors. Many other states are now demanding re-negotiated rates; UP in 2017 has reduced tariff.

2. Tenders are failing because they do not capture costs of power:

Governments have been imposing ceilings on tariffs – from ₹2.5 to ₹2.6 per unit. This is partly because of the unit price discovery for Bhadla Solar Park auction in May 2017 of ₹2.44 per unit. But this price is often not viable and so, 8 GW of tenders were cancelled in 2018-19 – more than the capacity added in that year. In 2018-19, most SECI auctions drew a tariff of ₹2.55 to 2.71 per unit; in UP tariffs were ₹3.02 to 3.38 per unit.

3. Introduction of safeguard duty has increased cost- in July 2018, government imposed an import duty of 25 per cent for the year; 20 per cent for next 6 months and 15 per cent for the subsequent six months. This was done to promote domestic manufacture of modules, but as production capacity is limited – India currently has 9 GW of module and 2 GW of cell manufacturing capacity, this not enough for achieving the targets and capacity is under-

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utilized – and price is higher than the imported variants it has led to increased cost.

4. Then there is increased cost because of GST – there was initial confusion on the applicable tax rate; solar panels were under 5 per cent but other equipment was in a higher slab. Then in December 2018, government adopted deemed valuation provision, under which 70 per cent of the contract value for goods would be taxed at 5 per cent and the remaining 30 per cent for services at 18 per cent. The effective rate is now roughly 9 per cent, which has increased costs of the projects.

Therefore, what now needs to be done? This is what we need to discuss so that policies can be re-worked for the future

