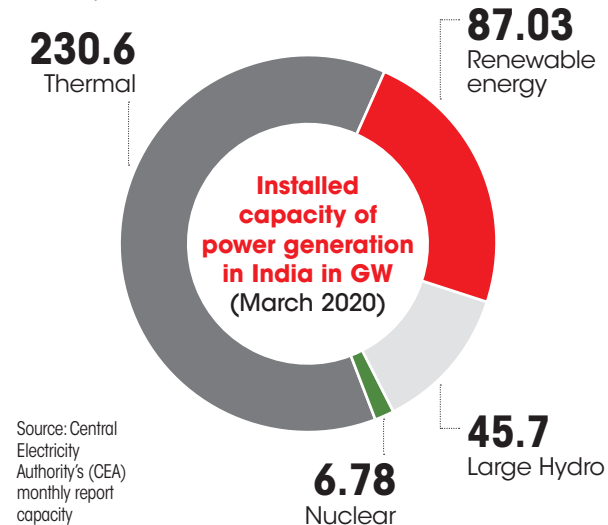


# HOW RENEWABLE ENERGY SHAPES UP

## Solar Energy

India set itself a target of 175 gigawatt (GW) installed renewable energy (RE) capacity by 2022. This target currently stands at 87 GW till March 2020.

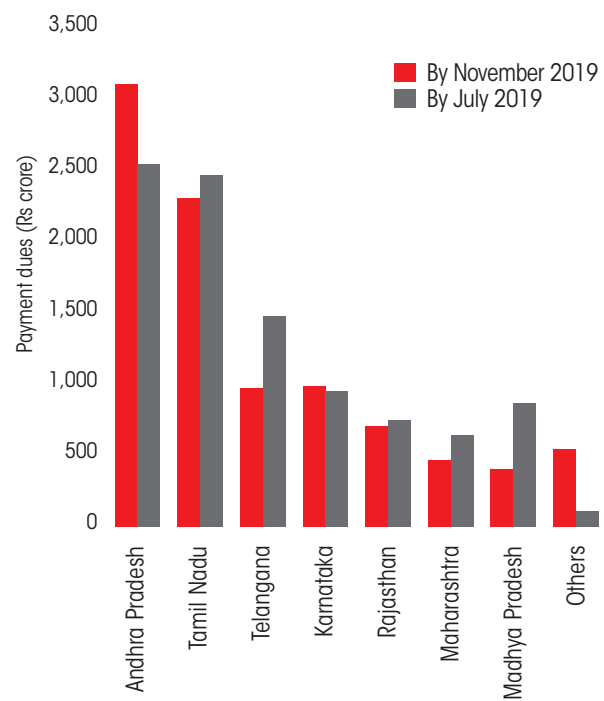


Source: Central Electricity Authority's (CEA) monthly report capacity

Payments for power to RE generators are frequently delayed. **Roughly ₹10,000 crore was owed to them in July 2019.**

**RE-rich states delay payments,** with Andhra Pradesh accounting for one-third of the total amount.

## State-wise payment owed to RE generators

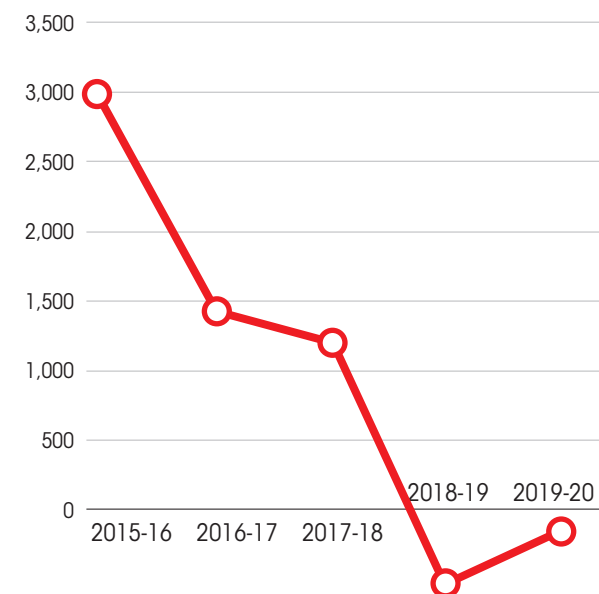


Source: CEA, Report on payment dues of RE generators

## Large-scale solar

India expected to add only 5 GW to the 60 GW utility-scale solar power target by 2022 due to the COVID-19 pandemic. This includes rooftop solar capacity.

### Rate of change in capacity addition:

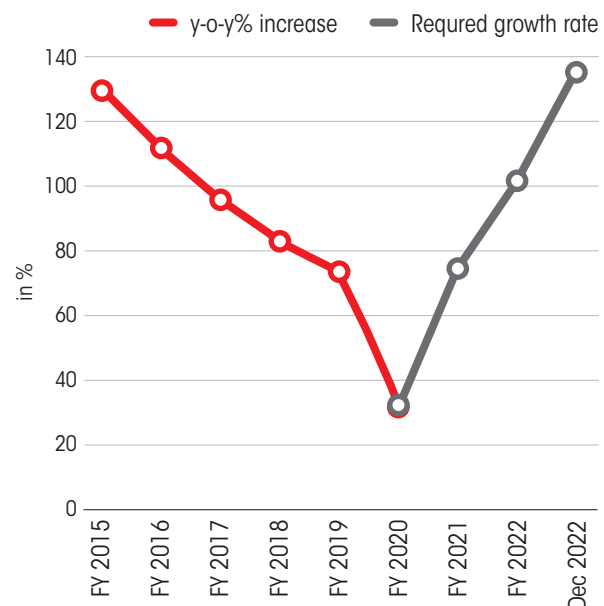


Source: CSE analysis based on MNRE and CEA data

## Rooftop solar

Installing solar on rooftops does not need new land and provides direct electricity to the consumer.

Year-on-year growth, however, indicates a decreasing trend and needs a V-shaped recovery



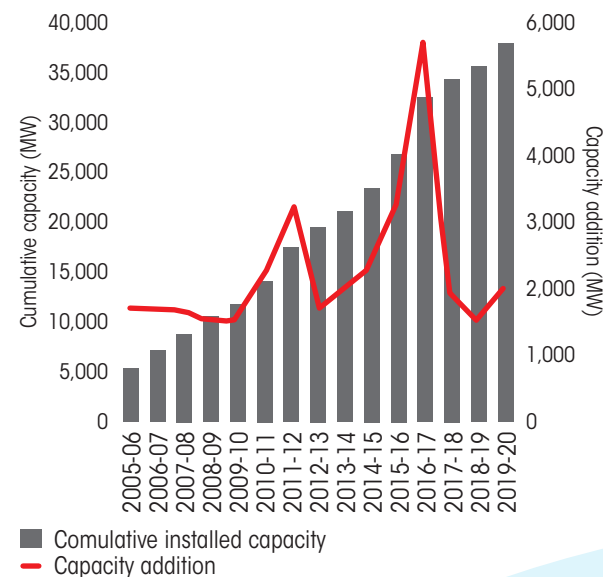
Source: CSE analysis

## Wind energy

India is fourth in the world in wind power, with 37.7 GW as of March 2020. But can it meet its 60 GW target?

CRISIL reports that wind installations may reach only 45 GW by March 2022.

### Capacity addition and total installation of wind energy in India:

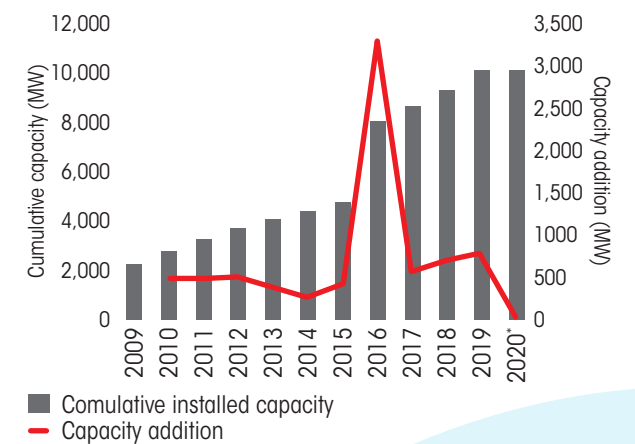


Source: MNRE reports

## Biomass energy

India has already met its biomass energy target. The sector, however, is hamstrung by low availability of raw material and rising costs and seems to be running out of steam.

### Capacity addition over the years:



\*Till March 2020, Source: MNRE, CEA

