

Quarterly Market Observatory



# Solar PV Market In India Outlook Update – Q1

February 2020

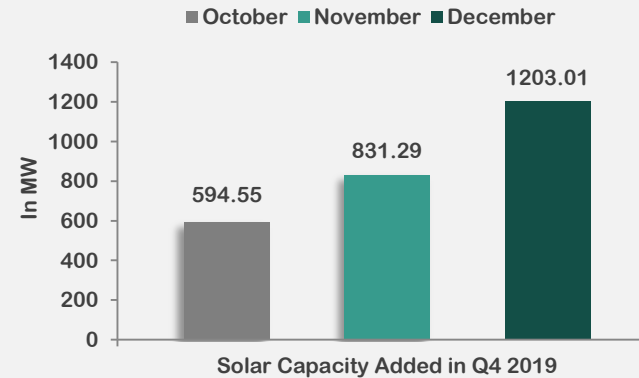


# The Eighty – 20 of Industry: What Matters?

## Leading Edge

**Coronavirus outbreak is set to impact 3 giga watt (GW) of Indian solar projects worth INR 16,000 crore - leading to slump in solar capacity addition in Q1 2020**

In order to achieve 100 GW solar installed capacity target by 2022, year 2020 was expected to bring much renewed push to the solar sector but with the corona virus outbreak in China the future of the solar sector seems to be in doldrums. The Indian solar components market is dominated by the Chinese companies supplying around 80% of solar cells and modules which are being used India due to their competitive pricing. After the disease outbreak in China the component production has taken a hit and due to prevention measures the imports from China have come to a standstill. Due to slowdown in solar component import from China around 3 GW of solar projects worth INR 16,000 crore are facing risk of missing project completion deadline. This situation has also come as a ray of hope for the OEMs of solar components in India who need to grab this opportunity by increasing their production capacities to match the domestic requirement and also try to export solar components making India a leading manufacturing hub of solar components in future.



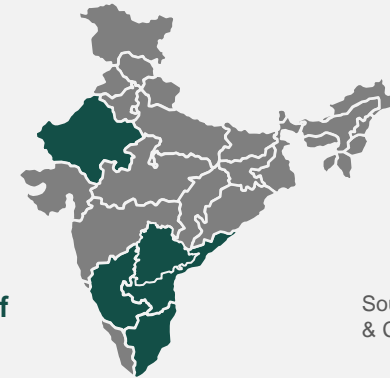
## 1.6 GW

Solar capacity installed in Rajasthan during FY 2019-20 (till Dec 2019) is the highest in the country

Source: eninrac consulting, CEA & Channel checks

## 54%

Of the total solar installed capacity in India comes from the southern region, Karnataka leading the pack with over 7 GW of installed capacity.



## TOP 5

States having the highest solar installed capacity in the country

Source: eninrac consulting, CEA & Channel checks



In Q4 2019 solar capacity additions have doubled in December from October but will the solar industry be able to sustain this growth rate after the corona virus outbreak in China and due to policy & regulatory uncertainty crisis.

## Numbers to Focus Upon – Q4 2019



### Around 3.7 GW solar capacity tenders issued in Q4 2019

14 new tenders for solar were issued in Q4 2019 by various state and central authorities having a cumulative capacity close to 3.7 GW to be installed across India.



### Close to 2 GW solar capacity allocated in auctions Q4 2019

Out of 3.11 GW solar capacity auctioned by RREL, EESI, SECI, NTPC & MSEDCL close to 2 GW solar capacity has been allocated to various solar players for installation.

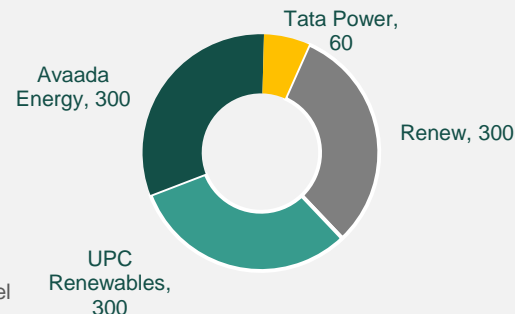
Source: eninrac consulting, SECI & Channel checks

## Technological Advancements



### Renewable Energy Management Centres (REMCs) – For Better Grid Management

The integration of renewable power plants to the grid poses high risk to the grid stability due to intermittent and variable nature of RE generation. But with the introduction of REMCs this problem can be tackled as REMCs are equipped with artificial intelligence-based RE forecasting and scheduling tools and provide greater visualisation and enhanced situational awareness to the grid operators.



**Winners of the SECI 1.2 GW solar capacity ISTS-VI Auction with allocated capacity in MW. Tata Power had quoted tariff at INR 2.72/Unit while other three had quoted INR 2.71/Unit**

## Deployment Trends - Projects

### 01 SECI auctions 1200 MW solar projects

SECI auctioned 1200 MW solar projects to SB Energy (600 MW), AMP Energy (100 MW) and EDF (300 MW) at tariff of INR 2.50/unit while Renew Power (200 MW) at INR 2.51/Unit

### 02 Rajasthan a key state

As per the Rajasthan state energy minister, there are plans to set up 30,000 MW of solar power plants in next five years for which the already the talks with leading private and state run companies are under way to develop energy parks.

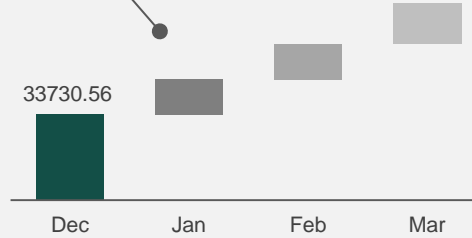
### 03 EESL plans to set up 1.5 GW solar capacity by 2021

Energy Efficient Services Ltd. (EESL) has planned to set up 1500 MW of decentralised solar power plants by the end of 2020-21.



Capacity likely to be added in Q1 2020

Capacity in MW



Source: eninrac consulting, CEA & Channel checks

## This Quarter – Q1 CY 2020



In Q1 CY 2020 the overall capacity additions will be low due to the impact of corona virus outbreak leading to import of solar components being hampered and also because of the recent policy and regulatory crisis.



### Key Investments – Q1 2020

- Gujrat has received INR 118.27 crore the highest Central financial Assistance (CFA) among all states for renewable energy generation.
- Global investors including Brookfield, Omers, Mubadala and Abu Dhabi Investment Authority (ADIA) are in early stage discussions with Tata Power to invest around USD 500 - 600 million (INR 3,500 crore - INR 4,200 crore) in its renewable energy platform.
- NTPC plans to invest an estimated sum of INR 4,000 crore in Rajasthan to develop solar PV projects in the state



### Key Trends – Solar PV Market in India Q1 2020

- In a recently concluded bid the combination of renewable energy and energy storage systems tariff is giving a stiff competition to the thermal segment. This new revelation will help push the growth of renewable capacity in the country.
- There has been seen steep decline in the solar tender and auction announcements in Q1 2020. In Feb 2020 tenders were issued for only 1.7 GW as compared to 4 GW in Jan 2020 which saw a decline of 58% meanwhile, auction activity also saw a downfall of almost 76% from Jan 2020 as only 1.4 GW was only auctioned in Feb as compared to 5.9 GW in January.



### Key Signpost – Policy and Regulatory crisis a bottleneck for growth of solar PV market in India

The policy and regulatory changes by certain states has been acting as a roadblock to the growth of solar industry and is also causing confusion in the minds of investors as well solar industry market players. For instance in Maharashtra MSEDCL is planning to levy grid support charges of the tune of INR 8.66/Unit for solar rooftop with capacity over 10 kW, which has raised doubts in the mind of market players in other states as well. Another incident has happened in Andhra Pradesh where renegotiation of renewable PPA's was proposed by the government. These steps will only cause chaos and will act as a barrier to the growth of solar capacity in the country and lead to underachieving of set targets.



## Contents & Coverage – Q1 2020

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### 01 This Quarter

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The section shall reflect upon the major trigger points for solar PV sector in India including investments, project developments, policy & regulatory interface, M&A etc.

### 04 Numbers to Learn

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All solar capacity additions with a split on region wise, state wise & ownership wise break up shall be included. Moreover, upcoming projects shall be tracked as well

### 07 Deployment Trends

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The pace of deployment of projects at central, state and private company levels covering issues like investments & project management shall form part of this section

### 02 Key Features

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Key features shall cover the major strengths and development map that the solar industry has shown over the quarter

### 05 The Eighty - 20 of Industry – What Matters?

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In this section the major factors which are acting as the growth catalysts / barriers in the Indian solar PV segment are highlighted inclusive of policies, regulations etc.

### 08 Technology & Price Trends

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Capture of all the latest technology implementation, tie-ups with entire price benchmarks w.r.t state of art shall be the focus of this segment

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### 03 Leading Edge

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The current affairs leading business impacts on solar PV sector with insightful data analytics & our exclusive “Knowledge Grid” feeds covered in the section. Our analyst’s viewpoints with sharp edged objectives shall be central to the section

### 06 Key Signposts

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The business factors which shall govern the course of coming quarters of business and the industry response to the changes shall be the focus area of this segment

### 09 Industry Activities & Corporate Strategies

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All the industry order track & merger’s and acquisition activities shall be tracked. Fresh investments in transmission sector as per player’s shall also be tracked in this section



## Must Buy For

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- Central Power Generation Companies
- State Power Generation Companies
- Power Distribution Companies
- Independent Power Producers
- State Electricity Boards
- Project Developers
- EPC Contractors
- Original Equipment Manufacturers
- Renewable Power Developers
- Renewable Developing Agencies
- Government Agencies
- Research firms/ Institutes
- Project Consultants
- Industry Associations / Technical Consulting Group



## For Queries

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**Research** : Write to: [connect@eninrac.com](mailto:connect@eninrac.com)  
and alternatively you may reach our  
consultant at [abhay.pathania@eninrac.com](mailto:abhay.pathania@eninrac.com)

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**Please call at +91 120 – 4147 000 for any  
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## Companies Mentioned

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- ACME
- Renew
- Amplus Solar
- Azure Power
- Tata Power
- UPC Renewables
- Avaada Energy
- EESL
- NTPC
- SECI
- SB Energy
- AMP Energy
- Hero Future
- Greenko
- Adani
- Sprng Energy



The life of a man consists not in seeing visions and in dreaming dreams, but in active charity and in willing service

**- Henry Wadsworth Longfellow**

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Address : 5th floor, Caddie Commercial Tower, Aerocity (DIAL), New Delhi - 110037

**Contact – NCR Office**

Address : 7<sup>th</sup> Floor, I-Thum Towers, Noida, NCR Region, Uttar Pradesh, India

**Contact – Mumbai Office**

Address : 4<sup>th</sup> Floor Duru House, Juhu, Opposite JW Marriott, Mumbai, Maharashtra



[connect@eninrac.com](mailto:connect@eninrac.com)



+91 120 4147 000



[www.eninrac.com](http://www.eninrac.com)