Renewable Energy Monitor April - June 2019





- CERC extends validity of 1.2 lakh renewable energy certificates as prices rise
- Increasing share of renewables in energy sector poses regulatory challenge: Moody's
- India revises solar manufacturing tender specs to attract investors
- Centre forms panel to resolve differences between solar and wind power players





- Four-fold rise in total solar capacity but rooftop meets just 10% of target
- Gujarat solar projects get bids of 600 MW despite low ceiling tariffs
- Delhi Metro trains to now run on solar power too; DMRC gets 27 MW power from Rewa project
- 2,400 cr due from Telangana clouds prospects of solarpower companies
- India is cheapest solar energy producer; beats China, UK, US among others
- SECI tweaks conditions for manufacturing-linked solar scheme

Wind



- Lower capacity utilisation hits wind turbine manufacturers
- Suzlon retains top wind equipment manufacturer rank
- Over 1K-MW wind projects running behind schedule
- Facing a glut of tools, wind energy sector wants govt to push exports



- Tata Power to focus on clean energy, won't build new coal-fired plants: Report
- Poor participation leads to bid delays for Gujarat's green projects
- GAIL India top bidder for IL&FS Wind Energy
- Mahindra Susten and Mitsui to co-invest in distributed solar power projects in India

Policy/ Regulations **CERC extends validity of 1.2 lakh renewable energy certificates as prices rise.** The Central Electricity Regulatory Commission has extended the validity of 1.2 lakh REC which were scheduled to expire by October 31. These RECs will now be valid till December 31. This development comes at a time when the prices of RECs are increasing with rising demand as states are gradually becoming more stringent about following RPO.

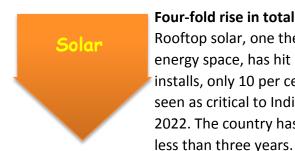
Till September 2018, solar RECs were being traded at their minimum floor price of Rs 1,000/REC. However, the prices started rising since then, trading at Rs 2,000/REC in March and April this year. RECs are an alternative market-based instrument to promote renewables and facilitate RPO compliance. RPO mandates that all electricity distribution licensees should purchase or produce a minimum specified quantity of their requirement from renewable energy sources.

Increasing share of renewables in energy sector poses regulatory challenge: Moody's. The increasing share of renewables in the total energy mix of the country may lead to an increase in regulatory risk for coal-based projects in the long term, global ratings agency Moody's Investors Service said. The higher share of renewable energy in the total energy mix presents a key regulatory challenge in terms of integrating new renewable capacity, while protecting investments already made in coal-based capacity, it said.

India revises solar manufacturing tender specs to attract investors. More than a year and 10 extensions later, the Union government has revised the tender specifications for the first solar manufacturing-linked power plant project in the country. Hoping to attract more investor interest, the tariff cap has been set at Rs 2.75/unit. Solar Energy Corporation India (SECI) on 25 June 2019 issued a request for a selection notice for selecting solar power developers. This will be for setting up 6 GW (per annum) of solar power plants linked to 2 GW of solar manufacturing plant.

Centre forms panel to resolve differences between solar and wind power players. As India moves towards greater adoption of renewable power in the energy mix, a dispute resolution committee has been formed to consider unforeseen disputes between public and private players. Minister of State for Power and New & Renewable Energy (Independent Charge) Mr R K Singh approved the formation of a three-member dispute resolution committee to consider the disputes between private solar and wind power developers and public sector Solar Energy Corporation of India and NTPC Ltd beyond contractual agreement. The members of the committee under this mechanism will be former Heavy Industry Secretary Mr M F Farooqui, former Coal Secretary Mr Anil Swarup and former Sports Secretary Mr A K Dubey.

The Financial Express, 2 May 2019 | The Hindu Business Line, 3 June 2019 | Business Standard, 26 June 2019 | Business Standard, 27 June 2019



Four-fold rise in total solar capacity but rooftop meets just 10% of target. Rooftop solar, one the fastest growing sub-sectors in the country's renewable energy space, has hit a speed bump. Of the targeted 40 GW of solar rooftop installs, only 10 per cent has been achieved. Solar rooftop installations are seen as critical to India achieving its 175 GW of renewable energy capacity by 2022. The country has built 28 GW solar capacity, marking a four-fold leap in

The share of rooftop solar to-date is just 14 per cent of the cumulative solar installation in India, reaching 3,855 MW by December 2018. This is well below the run-rate anticipated by the Government of India's audacious 2015 renewable energy plan.

Gujarat solar projects get bids of 600 MW despite low ceiling tariffs. Gujarat's fresh attempt to auction 700 MW of solar projects at Raghanesda Solar Park has attracted techno-commercial bids of 600 MW despite having an aggressive ceiling price of Rs 2.70 per unit. The state's renewable energy agency Gujarat Urja Vikas Nigam had cancelled the first auction for the same projects held in January, because it found the lowest discovered tariff of Rs 2.84 per unit to be too high. The January auction had attracted bids of 1,250 MW, while the new auction has been undersubscribed by 100 MW.

Delhi Metro trains to now run on solar power too; DMRC gets 27 MW power from Rewa project. This will also be the first time when the DMRC (Delhi Metro Rail Corporation) will be receiving power from an "offsite source". According to DMRC, till now, solar power generated by roof-top solar plants installed in DMRC premises were utilised for auxiliary requirements such as lighting and air conditioning of stations, depots.

2,400-cr due from Telangana clouds prospects of solar-power companies. The total outstanding dues of solar-power companies supplying power to Telangana have shot up to Rs 2,400 crore, plunging them in a financial crisis. The State, which has a solar installed capacity of about 3,600 MW and is on the verge of offering another 1,100 MW for development, has not been making payments since July 2018. According to representatives of solar-power producers in the State, the last payment pertaining to the supply made in June 2018 was made in the first week of April 2019, after a delay of nine months. The previous bill (for power supplied in May 2018) was paid in December 2018.

India is cheapest solar energy producer; beats China, UK, US among others. India is now the forerunner in producing solar power at lowest cost globally and is far ahead of other nations in low average production costs, a report said. Beating countries like China, which usually is the cheapest manufacturer of everything, India has also left behind the US, UK, Canada and France among others. While the global average of installing utility-scale solar PV projects was \$1210 for a KW, the same was found to be as low as \$793/KW in India in 2018, the report by the International Renewable Energy Agency (IRENA) said. India's neighbour China also saw very competitive installation costs of \$879/ KW compared to the highest rate of \$2,427 per KW in Canada. Among European countries, Italy saw very competitive installation costs for 2018 at \$870/ KW.

SECI tweaks conditions for manufacturing-linked solar scheme. The Solar Energy Corporation of India (SECI) has tweaked its bidding requirements. The new tender seeks to set up 6 GW of solar

plants, against 2 GW of manufacturing units. However, similar to the preceding version, participating bidders cannot quote a tariff of more than Rs 2.75/unit. The scheme was initially launched in 2018 to boost the domestic solar manufacturing industry, which was growing tepidly in spite of huge surge in solar generation capacity. About 88% of domestic module requirements were met through imports in FY18.

The Economic Times, 18 April 2019 | The Economic Times, 2 May 2019 | Business Standard 8 May 2019 | The Hindu Business Line, 4 June 2019 | The Financial Express, 26 June 2019 | The Financial Express, 27 June 2019



Lower capacity utilisation hits wind turbine manufacturers. The less-thananticipated demand for wind turbines in the country has resulted in capacity under-utilisation and has badly hitwind energy equipment manufacturers in the country. According to data compiled by the Indian Wind Turbine Manufacturers Association, the country has the ability to produce equipment for adding 10,000 MW of wind power generation capacity every year. Comparably, 1,700 MW of wind power generation capacity was added in 2017-2018 and just 1,520 MW of capacity was added in 2018-2019.

Suzion retains top wind equipment manufacturer rank. Among wind equipment manufacturers, Suzlon installed the most in 2018-19 with 581 MW, followed by the Denmark headquartered Vestas with 492 MW, while Siemens Gamesa put up 261 MW, according to multiple sources close to the development. India installed a modest 1544 MW of wind energy capacity in 2018-19, which was even lower than the 1739 MW commissioned the previous year, and way below the 5400 MW installed in 2016-17. In 2017-18 too, Suzlon was the leading OEM in India, installing 626 MW, with Siemens Gamesa in second place with 552 MW, and Vestas with 181 MW in third. Other OEMs, however, added very little in 2018-19, due to overall paucity of orders. Inox Wind added a mere 36 MW through the year and Regen Powertech just 25 MW. GE India added 132MW, while Germany's Nordex Acciona added a paltry 18MW.

Over 1k-MW wind projects running behind schedule. Many of the projects won by developers in the two wind auctions conducted by Solar Corporation of India in 2017 have not been completed yet, according to sources close to the development. The commissioning deadline for the first tranche of projects of 1050 MW was October 2018 and for the second of 1000 MW was May this year. But only 690 MW of the first lot and a mere 200 MW of the second are complete. The winners from the first auction who have managed to set up the entire amount obtained are ReNew Power and Sembcorp, while Mytrah Energy is close to commissioning. Inox Wind and Adani Green Energy had won 250 MW and 50 MW, respectively, but neither has set up a single megawatt so far. Some of the developers unable to meet their deadlines were given a month's extension, but they still couldn't finish their projects.

Facing a glut of tools, wind energy sector wants govt to push exports. The wind energy sector, which has an installed capacity of about 36 GW as of March, 2019, is passing through an odd phase of equipment glut. The sector has the equipment capacity of about 10,000 MW, but only 1,500MW has been installed as of 2017-2018. The rest is partly exported or not fully utilised. The renewable energy sector contributed over 70 per cent to power capacity addition last year, but the wind sector's contribution was low. The new government needs to bring in some policy tweaks to accelerate growth.

The Hindu Business Line, 11 April 2019 | The Economic Times, 29 April 2019 | The Economic Times, 6 May 2019 | The Hindu Business Line, 27 May 2019



Tata Power to focus on clean energy, won't build new coal-fired plants: **Report.** Private power producer Tata Power will lead the nation's renewable energy transition with gradual withdrawal from building new coal fired power plants, a report said. The country's largest private integrated power company has recently made it clear that it will cease to build new coal-fired power capacity, according to 'Tata Power: Renewables to Power Growth' <u>report</u> released by <u>Institute for Energy Economics and Financial Analysis</u> (IEEFA). The report highlights the company's long-term strategy that will see renewable energy dominate its power capacity build-out going forward.

Poor participation leads to bid delays for Gujarat's green projects. Gujarat's wind and solar energy projects have attracted poor participation of late, leading to a continuous bid postponements. The submission of techno-commercial bids for the state's 1,000 MW solar tender took place for the third time and drew offers for only 50 MW. Industry officials attributed the tepid response to the tariff, which was capped at Rs 2.75 per unit, which they consider unviable. The next submission date has been scheduled for May 4. Gujarat Urja Vikas Nigam Ltd. confirmed the development.

GAIL India top bidder for IL&FS Wind Energy. GAIL India has emerged as the highest bidder for IL&FS Wind Energy offering Rs 4,800 crore. If the sale were to go through, it would be the first resolution by the Uday Kotak-led board at the struggling infrastructure financier. GAIL heads the bidding list for 7 operating wind power plants (special purpose vehicles or SPVs), with total generation capacity of 874 MW. ORIX has the first right of refusal on the deal. The offer assumes no haircut to the outstanding debt of the SPVs, at about Rs 3,700 crore, IL&FS said in a statement. The transaction is likely to close in three weeks. Sale proceeds will be held in a trust for distribution to the relevant stakeholders, sticking to the resolution framework filed with an appellate court that deals with bankruptcies, the company said.

Mahindra Susten and Mitsui to co-invest in distributed solar power projects in India. Mahindra Susten, a leading player in the Indian solar energy sector, has entered into a partnership with Mitsui & Co., of Japan to jointly develop and operate distributed solar power generation projects in India. Mahindra Susten will continue to hold 51% stake in Marvel Solren (Marvel), with Mitsui holding the balance equity. Marvel currently operates four distributed solar projects in India with a combined capacity of 16MW that help private clients reduce their carbon footprint by providing renewable energy through long-term power purchase agreements of 10-25 years.

Business Standard, 23 April 2019 | The Economic Times, 24 April 2019 | The Economic Times, 23 April 2019

