



monthly update

June 2021

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The background of the advertisement is a vast desert landscape with rolling sand dunes under a clear blue sky. A large, rectangular frame with a white border is superimposed over the center of the image. Inside this frame, the top half shows a clear blue sky with a few wispy clouds, and the bottom half shows a close-up of a solar panel array. The solar panels are dark and have a grid pattern. The text "Shaping the future. Once again." is centered in the top half of the frame, and "Hi-MO 5" is centered in the bottom half of the frame.

**Shaping the future.
Once again.**

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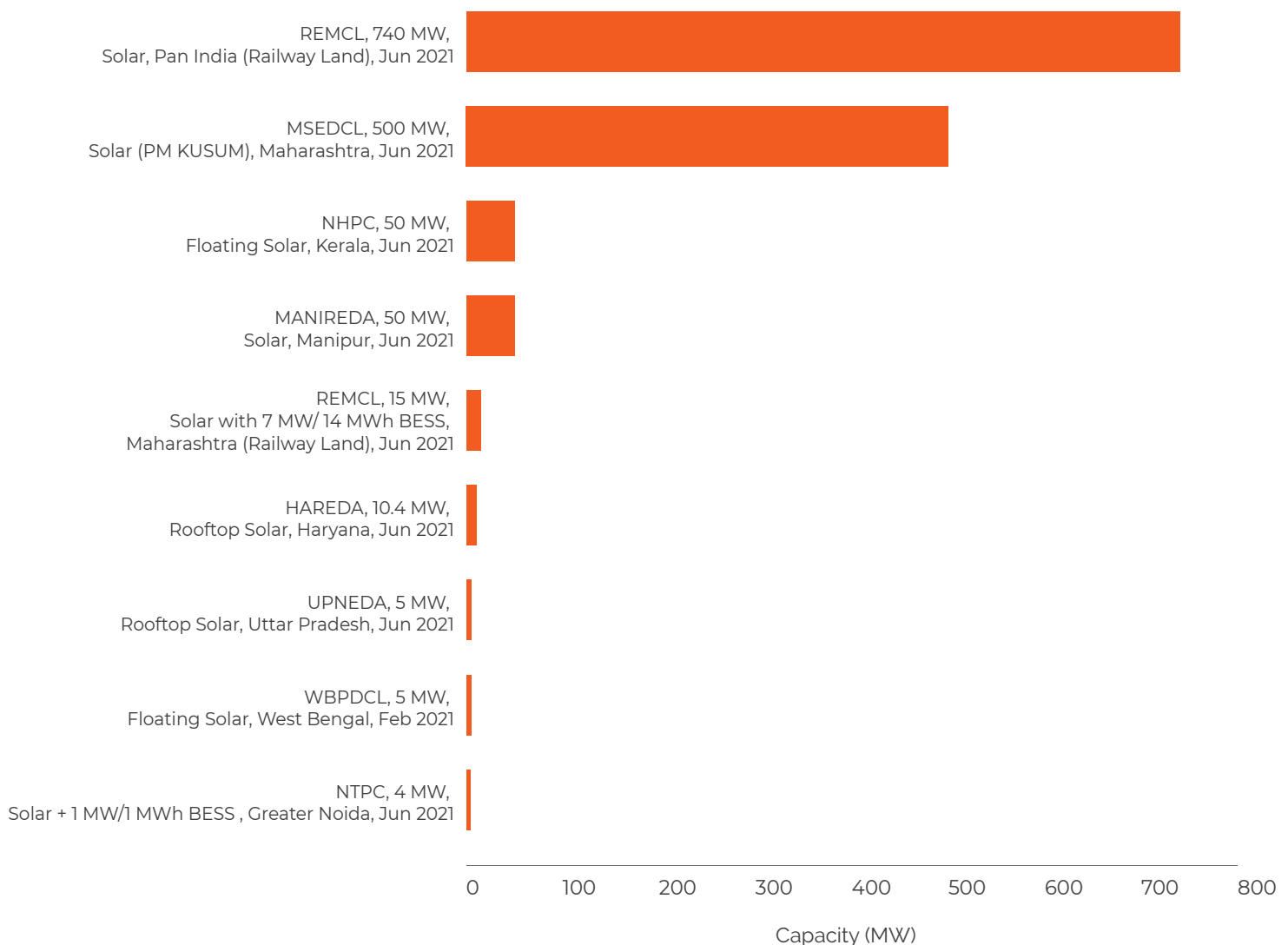
1. Tenders

New RFS Issued

About 1379.4 MW of renewable tenders were issued in June 2021. 500 MW of solar tender was issued under PM KUSUM scheme (component A) by MSEDCL.

REMCL has issued two tenders out of which one was 740 MW solar tender to be implemented on the vacant lands of Indian Railways while the other one was a 15 MW solar tender with 7 MW/14 MWh BESS on railway land in Nagpur.

Fig 1.1: Details of new tenders issued in June 2021



Source: JMK Research

Table 1.1: New RFS issued

Tender Name	Tech	Tender Scope	Capacity (MW)	Other Details	Min CUF	Commissioning timeline from PPA signing	Bid Submission Date
REMCL, 740 MW, Solar, Pan India (Railway Land), Jun 2021	Utility Scale Solar	Project Development	740	<ul style="list-style-type: none"> EMD – INR 0.4 million/MW PBG – INR 0.8 million/MW 	17%	18 months	26th-Aug-2021
MSEDCL, 500 MW, Solar (PM KUSUM), Maharashtra, Jun 2021	Small Scale Solar	Project Development	500	<ul style="list-style-type: none"> EMD – INR 0.1 million/MW PBG – INR 0.5 million/MW CeilingTariff - INR 3.05/kWh 	15%	12 months	28th-Jun-2021
MANIREDA, 50 MW , Solar, Manipur, Jun 2021	Utility Scale Solar	Project Development	50	<ul style="list-style-type: none"> PBG – INR 0.8 million/MW Ceiling tariff – INR 3.00/kWh 	17%	18 months	9th-Jul-2021
NHPC, 50 MW, Floating Solar, Kerala, Jun 2021	Floating Solar	EPC	50	<ul style="list-style-type: none"> PBG - 5% of the contract value 		12 months	5th-Aug-2021
REMCL, 15 MW, Solar with 7 MW/ 14 MWh BESS, Maharashtra (Railway Land), Jun 2021	Solar + BESS	Project Development	15	<ul style="list-style-type: none"> PBG – INR 0.4 million/MW 	17%	12 months	9th-Aug-2021
HAREDA, 10.4 MW, Rooftop Solar, Haryana, Jun 2021	Rooftop Solar		10.4	<ul style="list-style-type: none"> EMD – INR 0.2 million/MW PBG – 3% of the contract value 		3 months	5th-Jul-2021
WBPDC, 5 MW, Floating Solar, West Bengal, Feb 2021	Floating Solar	Project Development	5	<ul style="list-style-type: none"> EMD – INR 7 million 		9 months	27th-Jul-2021
UPNEDA, 5 MW, Rooftop Solar, Uttar Pradesh, Jun 2021	Rooftop Solar		5	<ul style="list-style-type: none"> PBG – 3% of the contract value 		4 months	25th-Jun-2021
NTPC, 4 MW, Solar + 1 MW/1 MWh BESS , Greater Noida, Jun 2021	Solar + BESS	EPC	4	<ul style="list-style-type: none"> PBG - 10% of the contract value 		12 months	21st-Jul-2021

PBG: Performance Bank guarantee EMD: Earnest Money Deposit

Source: Industry news articles, JMK Research

NTPC has floated an Expression of Interest (EOI) for 1 GWh grid-scale battery energy storage

An Expression of Interest (EOI) has been issued by NTPC from Indian and global firms to set up 1 GWh of grid scale battery energy storage system at its power plants located in India. It can be installed at a single or multiple locations. The last date for EOI submission is 10th Aug 2021.

Date Extension

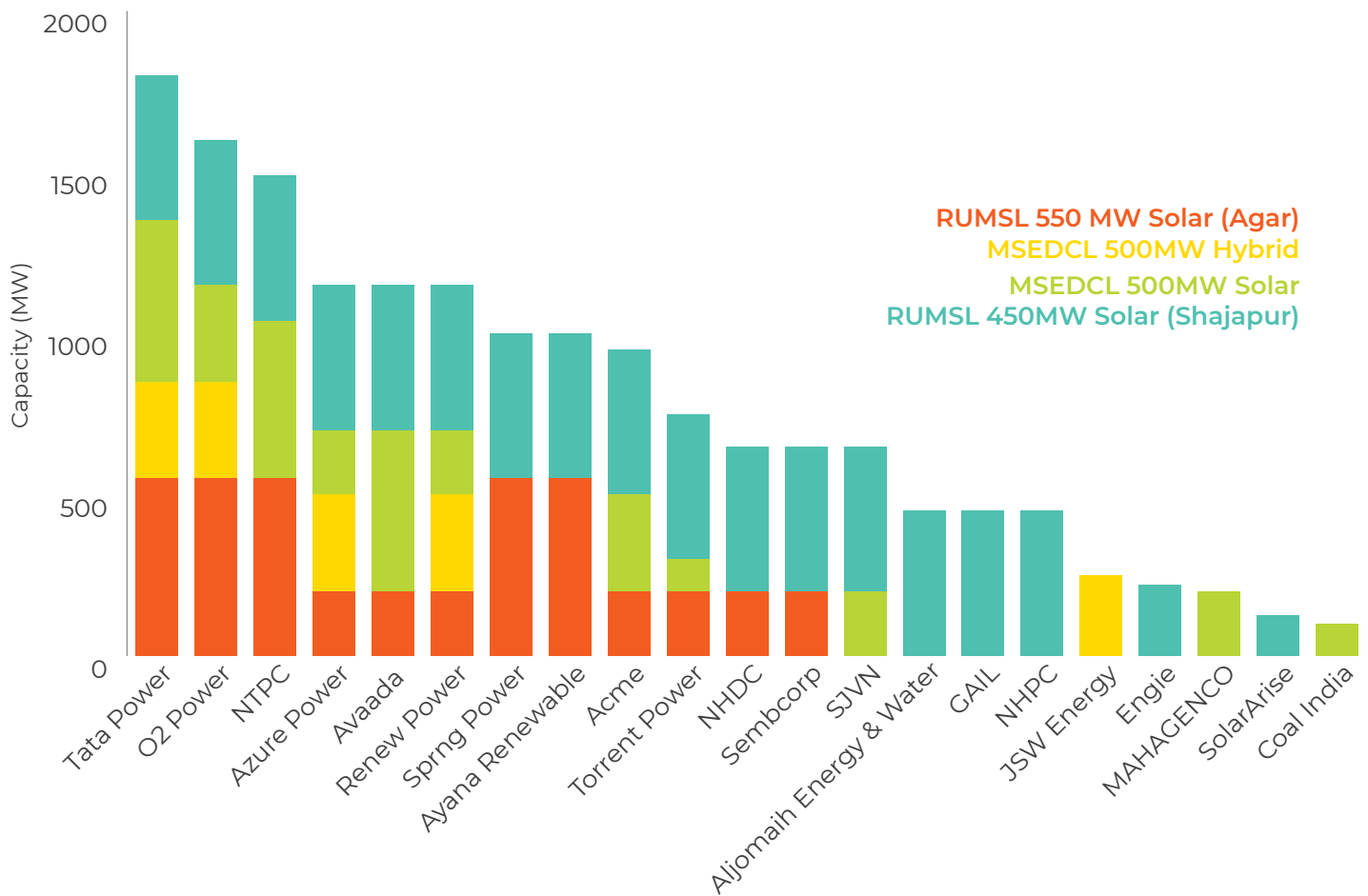
Table 1.2: Date Extension

Tender Name	Technology	Tender Scope	Capacity (MW)	Other Details	Minimum CUF	Commissioning timeline	Bid Submission Date
SECI, Pan India, 2500 MW, Thermal + RE, Mar 2020	Utility Scale Solar	Project Development	2500	<ul style="list-style-type: none"> EMD – INR 0.5 million/MW PBG – INR 0.1 million/MW 		30 months	12th-Jul-2021
SECI, 1200 MW, Wind (Tranche XI), Madhya Pradesh, May 2021	Wind	Project Development	1200	<ul style="list-style-type: none"> PBG – INR 1.2 million/MW 	22%	18 months	6th-Jul-2021
SECI, 1785 MW Solar, Rajasthan, Mar 2021	Utility Scale Solar	Project Development	1785	<ul style="list-style-type: none"> PBG – INR 0.8 million 	17%	18 months	1st-Jul-2021
SECI, 1200 MW, Wind- Solar Hybrid Tranche IV, Pan India, Apr 2021	Hybrid	Project Development	1200	<ul style="list-style-type: none"> PBG – INR 1 million/MW 	30%	18 months	16th-Jul-2021
SECI, 50 MW, Solar PV and Agro PV, Tamil Nadu, Jan 2021	Solar and Agro PV	EPC	50	<ul style="list-style-type: none"> PBG – 3% of the contract value 	24.10%	12 months	22nd-Jul-2021
SECI, 15 MW, Floating Solar, Bilaspur, Himachal Pradesh, Jul 2020	Floating Solar	Project Development	15	<ul style="list-style-type: none"> EMD – INR 13.5 million PBG – INR 27 million 	21%	18 months	15th-Jul-2021

Source: Industry news articles, JMK Research

Bid Submission

Fig 1.2: Bid Submission



Note:

For RUMSL, 550 MW, Solar, Agar Madhya Pradesh tender the bid capacity is not disclosed for SJVN, Litsolaire (Engie) and Aljomaih Energy & Water and

for RUMSL, 450 MW, Solar, Shajapur Madhya Pradesh tender bid capacity is not available for Adani Green Energy.

Table 1.3: Bid Submission

Tender Name	Capacity tendered (MW)	Capacity allotted (MW)	Minimum CUF	Commissioning timeline from PPA Signing	Bidder Details
RUMSL, 550 MW, Solar, Agar Madhya Pradesh, Jan 2020	550	4150+		24 months	<ul style="list-style-type: none"> NHDC - 200 MW Azure Power - 200 MW Avaada - 200 MW Sembcorp - 200 MW Acme Solar - 200 MW Renew Power - 200 MW Torrent Power - 200 MW SJVN Litsolaire Energy (Engie) Aljomaih Energy NTPC - 550 MW Tata Power - 550 MW Sprng Energy - 550 MW Ayana Renewable - 550 MW O2 Power - 550 MW
MSEDCL, 500 MW, Wind-Solar Hybrid, Pan India, May 2021	500	1450	30%	18 months	<ul style="list-style-type: none"> Azure Power – 300 MW O2 Power – 300 MW Tata Power – 300 MW JSW Energy – 250 MW Renew Power – 300 MW
MSEDCL, 500 MW, Solar, Pan India, May 2021	500	3910+	19%	15 months	<ul style="list-style-type: none"> MAHAGENCO- 200 MW Renew Power- 200 MW Coal India- 100 MW Torrent Power- 100 MW SJVN- 200 MW NTPC- 490 MW Tata Power -500 MW Avaada Energy- 500 MW ACME Solar- 300 MW Azure Power – 300 MW O2 Power- 300 MW Adani Green

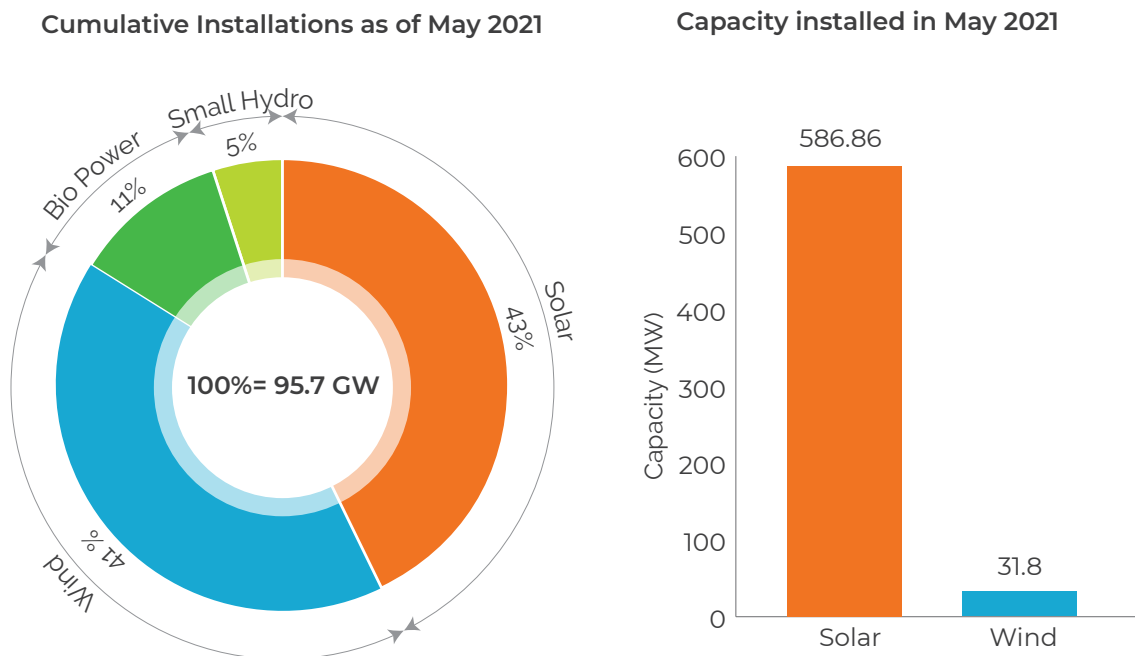
Tender Name	Capacity tendered (MW)	Capacity allotted (MW)	Minimum CUF	Commissioning timeline from PPA Signing	Bidder Details
RUMSL, 450 MW, Solar, Shajapur Madhya Pradesh, Jan 2020	450	7545		24 months	<ul style="list-style-type: none"> • SolarArise/ Talettutayi – 125 MW • Torrent – 450 MW • NTPC – 450 MW • Tata – 450 MW • Avaada – 450 MW • Renew – 450 MW • Sprng – 450 MW • SJVN – 450 MW • Sembcorp – 450 MW • O2 – 450 MW • Ayana – 450 MW • GAIL – 450 MW • NHPC – 450 MW • Aljomaih Energy– 450 MW • Engie – 220 MW • NHDC – 450 MW • Azure – 450 MW • Acme 450 MW

Source: Industry news articles, JMK Research

2. Installed Capacity

In May 2021, a combined total of 618.66 MW of solar and wind energy capacity was added, taking the cumulative RE capacity to 95.66 GW. According to MNRE, as of May 31, 2021, projects of 50.89 GW are at various stages of implementation while another 29.52 GW of projects are under various stages of bidding.

Fig 2.1: RE installations in May 2021



Source: MNRE, CEA, JMK Research

Recently Commissioned Projects

Table 2.1: List of recently commissioned projects

Developer	Technology	AC Capacity (MW)	State	Date of Commissioning
Adani Green Energy	Wind	150	Gujarat	Jun 2021
Singareni Collieries Company Ltd	Solar	10	Telangana	Jun 2021
Tata Power	Solar Carport	6.2	Maharashtra	Jun 2021
WBPDC	Floating Solar	5.4	West Bengal	Jun 2021
SunAlpha Energy	Solar (PM KUSUM scheme)	2	Rajasthan	Jun 2021

Source: Industry news articles, JMK Research

Solar developers approach Centre as Uttar Pradesh cancels 500 MW auction

UPNEDA has sent the letter of cancellation of bids to three winners of the reverse auction held in February 2020 by UPNEDA for solar project of 500 MW capacity. The three firms are Vijay Printing Press, NV Vogt Singapore and Al Jomaih and India's Jakson Power, these are planning to move the appellate tribunal for Electricity (APTEL) against the move. They may also request to Prime Minister for his intervention. UP government expects for the fresh auction with lower bids to happen. Al Jomaih has won 100 MW capacity, NV Vgot- 50 MW and Vijay Printing- 25 MW capacity in the auction. The tariff of Rs 3.17 per unit was quoted in the auction of February 2020.

Small solar projects: Gujarat signs PPAs for 2,500MW

The four discoms that are associated with Gujarat Urja Vikas Nigam Limited (GUVNL) have signed power purchase agreements (PPAs) for 3,979 small scale solar projects. These projects will be set up under the state's scheme for small scale distributed solar projects, the cumulative power generation capacity of these projects is about 2,500MW and they will bring in an investment of more than Rs 10,000 crore in green energy and allied sectors. The expected commissioning of these projects will be within the next 18 months. After signing the PPA for such a large capacity through small scale distributed solar projects Gujarat has become the only state in the country to do so.

Tata Power secures 210 MW solar EPC work in the Indian State of Gujarat

Tata Power Solar has received a Letter of Award (LoA) to develop 210 MWp of solar project for NTPC. The project's total value is approximately ₹686 crore. The project will be situated in Gujarat and the expected commissioning timeline is scheduled in November 2022. In addition to this, Tata Power Solar has around 2.8 GW projects with an approximate value of ₹13,000 crore which are in pipeline.

Suzlon has won 252 MW of Wind Power Project From CLP India

Suzlon Group has announced that it has won 252 MW new order from CLP India. The project is located in Sidhpur, Gujarat and is expected to be commissioned in 2022. The portion of the bid won by CLP India was under Wind Tranche VIII Bid issued by SECI in August 2019. The scope for the project will be supply, foundation, erection and commissioning. Suzlon will also provide operation and maintenance services after commissioning of the wind project.

GGGI supporting 250 MW solar plant along Mumbai-Nagpur highway

Global Green Growth Institute (GGGI) is supporting the development of a 250 MW solar PV plant for Maharashtra State Road Development Corporation (MSRDC) in Mumbai-Nagpur Highway. The solar energy generated from the project will fulfil all the future e-mobility requirement of the highway. This is the first renewable energy project that is in line with a large road infrastructure project in India.

Maharashtra Government begins work on 17,000 MW solar project

Maharashtra Energy Minister Mr Nitin Raut has announced that the state government has decided to implement 25,000 MW solar power projects in the state by 2025. Out of the total capacity, work has been started for the 17,000 MW solar projects and the projects were scheduled to get completed by December 2021. But now because of Covid 19 pandemic it will get extended. The state has decided not to take thermal power projects and therefore it has given immense boost to solar energy in Maharashtra.

GE Renewable Energy to set up 148.5 MW wind capacity for Continuum Green Energy

GE Renewable Energy has been chosen by Continuum Green Energy India Pvt Ltd in order to set up 148.5 MW wind energy capacity in Bhuj wind farm in Gujarat. This project was won by Continuum Green

Energy during the tranche-VI auction of wind projects by held SECI and will be producing sufficient green power which will further help to energised 125,000 households in India.

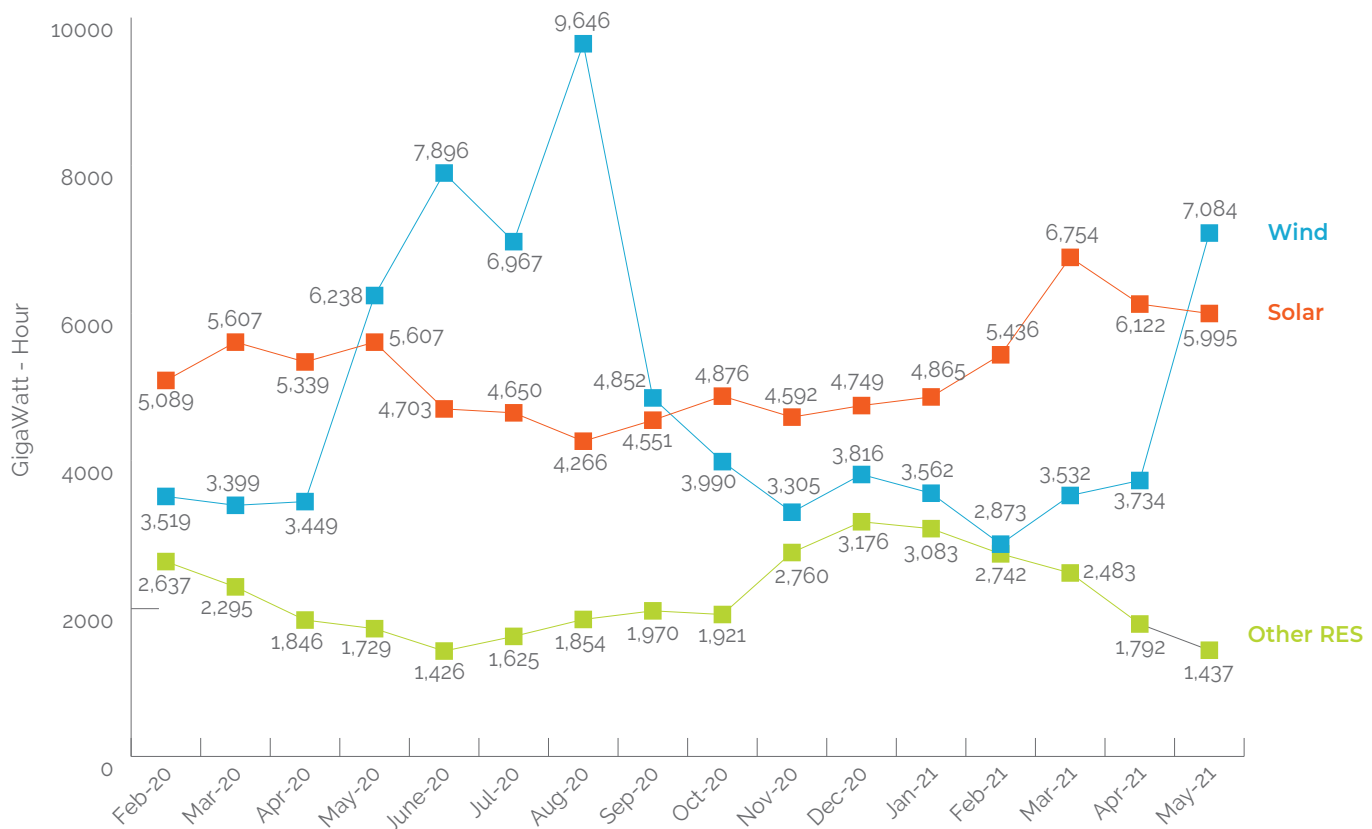
Madhya Pradesh will have a 950 MW solar plant operational in two years

Madhya Pradesh government is moving forward to set up 950 MW of operational solar capacities in the next two years. The land allotment procedure has already been completed and the project will start soon. The tender will be issued in November this year and the selection process for the developers will be finished by January 2022. The entire solar project is expected to get completed by March 2023.

3. Monthly RE Generation

The share of RE in the energy generation mix of India was 14,515.61 GWh during May 2021. Considering the generation from RES (Renewable Energy Sources) for the last month, wind constitutes the majority share of 49%, followed by solar at 41% and other RES (including Biomass) at 10%. Compared to April 2021, the RE generation has significantly increased by ~24.6% in May 2021.

Table 3.1: Source-wise Renewable Energy Generation (GWh) - India



Source: CEA, JMK Research

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4. Investments and Partnerships

Table 4.1: Investment and deals in June, 2021

Company Name	Deal Type	Sector	Asset Acquired	Investor	Deal Value	Stake Acquired	Other Details
Acme	Acquisition	Solar		Scatec Solar	\$400 million	50% stake in 900 MW Solar project of Acme	The project will be built with 75% of debt financing from state owned lender
Fortum	Acquisition	Solar	500 MW	Actis	\$ 333 million		The capital gain will be recorded in three tranches; during the second half of 2021 and the first half of 2022.
Acme	Equity	Solar	250 MW	IFU and S3i	Out of the total project value of US\$ 200 million, about a quarter will be financed through equity contributions by the three co- investors.	IFU – 39% S3i – 10%	
Vector Green	Green Bond	Solar			\$1031 million		The term of the bonds will be three years. Axis Bank and ICICI Bank are the guarantors of the operation. This will be the first AAA rated green bond.
Fourth Partner Energy	Equity	Rooftop Solar		Norfund - \$ 100 million The Rise Fund - \$ 25 million	\$ 125 million		

Source: Industry news articles, JMK Research

CCI gives nod to ReNew Power Merger with RMG II

It has been announced that the Competition Commission of India (CCI) has approved exchange of equity shareholding by existing shareholders of ReNew Power with shares of ReNew Global along with a reverse triangular merger of subsidiary of ReNew Global with RMG II. This deal has led the first big investment in overseas listing of an Indian company via the Special Purpose Acquisition Company (SPAC) course.

ACME, Brookfield Renewable to jointly develop 450 MWp solar project in Rajasthan

ACME and Brookfield Renewable has signed an agreement to jointly develop a 450 MW solar project in Rajasthan. The deal value has not been disclosed in the public domain. The solar project includes a 25 year of PPA with Maharashtra State Electricity Distribution Company Limited (MSEDCL).

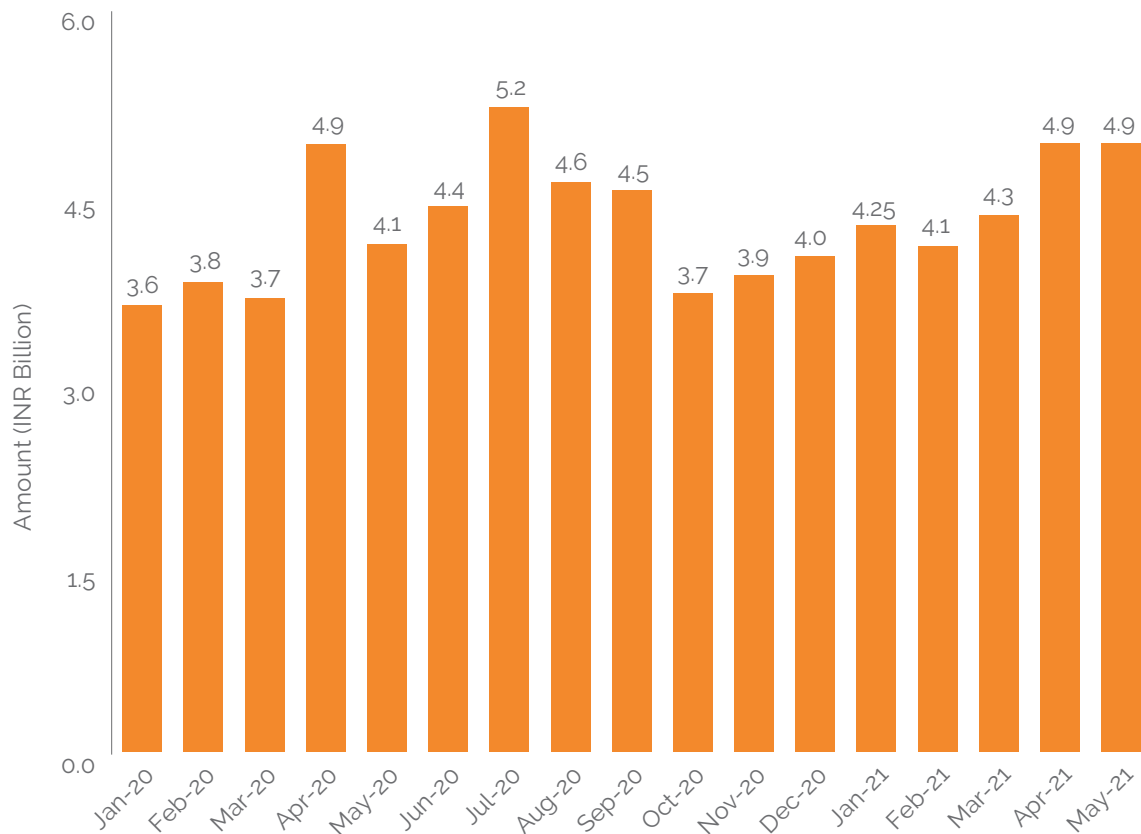
Renew Power eyes Morgan Stanley stake in Continuum

Renew Power has revealed its interest in buying US investment bank Morgan Stanley' majority stake in Continuum Green Energy (India) Pvt. Ltd. Continuum Green Energy has currently 807.4 MW of operational wind and solar assets. In addition to this, they have 1.07 GW capacity under various stages of development. After Renew Power's merger with Nasdaq-listed special purpose acquisition company (SPAC) RMG Acquisition Corp. II (RMG II) it lead to the interest in Continuum renewable energy assets.

5. Monthly SECI Payments

The Solar Energy Corporation of India Limited (SECI) paid nearly INR 4.91 billion to developers for the purchase of solar and wind power in May 2021.

Figure 5.1: Monthly payments by SECI to solar and wind developers



Source: SECI, JMK Research

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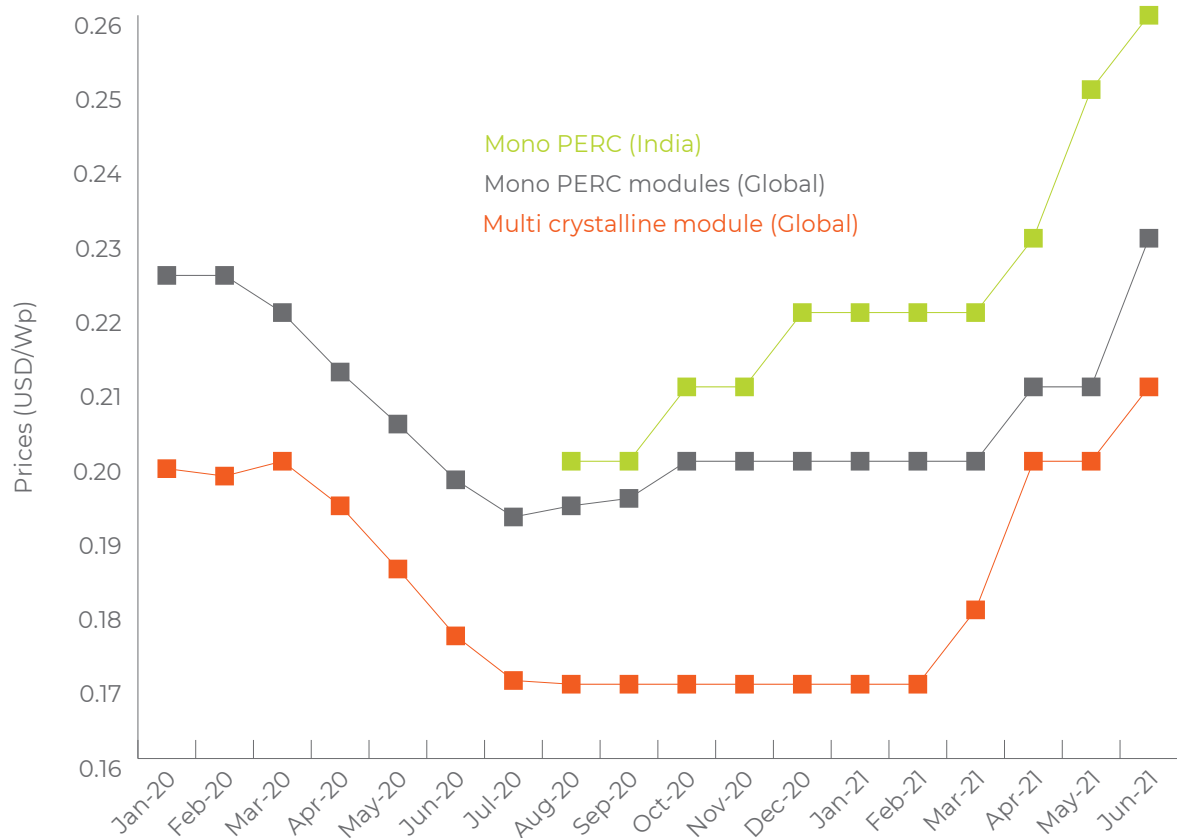
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6. Module Price Trends

Prices of global multi crystalline modules, mono PERC modules and mono PERC module (India) have increased by 3.5%, 6.6% and 6% respectively in June 2021 (m-o-m basis). From Feb 2021- June 2021, price increase is about 20% for mono PERC modules (India)

Fig 6.1: Solar Cells and Module price trends



Source: PVInfoLink, JMK Research

Note: India prices are FOB prices.

7. Policies and Regulations

Central

MNRE Increases Commissioning Time Allowed for CPSU Solar Projects to 30 Months

- MNRE with its Order dated 2nd June 2021 has extended the commissioning for solar projects under Tranche-III of the Central Public Sector Undertaking (CPSU) program Phase-II to 30 months from the existing 24 months from when the letter of award (LoA) is issued.
- MNRE has further increased the timeline for the award of the engineering, procurement, and construction (EPC) contracts for projects under Tranche-I and Tranche-II to 12 months from the existing six months from the date of the LoA.
- Since SECI is the implementing agency for the CPSU program, the Ministry has asked the body to submit the compliance report within 14 days from the date of the notification.
- In case EPC contract was awarded after six months and before 12 months from the date of the LoA, such delay should be regularized, and the government agencies should keep time for the completion of the project within 30 months from the date of the LoA.
- In case EPC contract has not been awarded even after 12 months, SECI should assess the readiness of the project for commissioning within 30 months and based on that, decide to give more time for the award of the EPC project. The overall completion time of the project in such cases would continue to be 30 months from the date of the issuance of the LoA. All other projects will be cancelled, and they can apply afresh in future CPSU tenders.
- The above timelines do not include extensions given on account of the Covid-19 pandemic.

CERC Accepts Tariff for 2 GW of ISTS Solar Projects

- CERC with its Order dated 2 June 2021 has adopted tariffs of Rs. 2.55/kWh and Rs. 2.56/kWh which has been determined through competitive bidding by NHPC for 2 GW solar projects. The charges would remain valid throughout the period covered in the power purchase agreements (PPAs) and the power sale agreement (PSAs).

- Softbank, Axis Energy, O2 Power, and EDEN were awarded 600 MW, 400 MW, 380 MW, and 300 MW, respectively at Rs. 2.55 /kWh. Avaada Energy, which had placed bids for 600 MW, was awarded 320 MW at a tariff of Rs. 2.56 /kWh.
- NHPC has submitted that the distribution licensees of Chhattisgarh, Madhya Pradesh, Jammu & Kashmir, and Punjab had agreed to purchase the entire 2,000 MW capacity of 1,680 MW at Rs. 2.55/kWh and 320 MW at Rs. 2.56/kWh plus the trading margin of Rs. 0.07/kWh.
- CERC directed NHPC to remove clause 12.1.1 (g) regarding the 'Change in Law' compensation and execute the supplementary PPAs and place the same on record of the Commission within two months from the issuance of the order.
- According to clause 12.1.1 (g), in case of 'Change in Law' on account of anti-dumping duty or safeguard duty or customs duty on solar modules, the solar developer will be entitled to an increase or decrease in tariff for an amount equivalent to Rs. 0.05 /kWh for every Rs. 100,000 /MW of impact on the cost of solar modules. This difference in tariff due to the change in the cost of solar modules will be limited up to 150% of the solar project capacity allocated to the developer.

Ministry of Power Issues Discussion Paper on Restructuring Renewable Energy Certificates Mechanism

- Ministry of Power has recently released a discussion paper on re-designing the renewable energy certificate (REC) mechanism for stakeholder comments. Interested stakeholders can submit their comments up to 25 June 2021.
- As per this discussion paper validity of REC will remain until it is sold. At present, the validity of RECs is for 1,095 days.
- There is no need for floor and forbearance prices to be specified as the RECs will be perpetually valid and REC holders will have the freedom to decide when they want to sell the RECs.
- CERC Order notifying the floor and forbearance prices effective from 1 July 2020, is sub-judice.
- As per aforementioned draft discussion paper the renewable energy generators will be eligible to issue RECs for 15 years from the date of commissioning of the projects. Similarly, the existing renewable energy projects would continue to get RECs for 25 years.
- As per this notification a technology multiplier can be allocated in

various baskets specific to technologies depending on maturity. Also, once a multiplier is given, it would continue for 15 years for that project.

- For example, Technology-A, which is at a nascent stage, can be issued 3 RECs for every MWh energy sale, which is subject to a 3X multiplier.
- To incentivize renewable energy procurement beyond the renewable purchase obligation (RPO) targets, only DISCOMs will be issued RECs for quantity beyond RPO.
- The small buyers can bank on the traders for buying RECs. This will ensure that even the small buyers who find difficulty in trading in the REC market will fulfil their RPO targets.

MoP Issues Discussion Paper on New Mechanism to Reduce Cost of Power and Renewable Curtailment

- Ministry of Power (MoP) has released a discussion paper on market-based economic dispatch (MBED) of power and has requested interested stakeholders to provide their comments on the mentioned paper by 30 June 2021.
- In this discussion paper the power demand by all states is proposed to be met through a central pool allocating power at the optimal price. Presently, DISCOMs have been sourcing power from available sources within the state, invariably ending up with a higher cost of power.
- Savings from the proposed mechanism would be 3.74%, amounting to Rs. 122.95 billion, considering the total power generation of 1,393 billion units in the country whose weighted average power price is Rs. 2.36 /kWh.
- To ensure that DISCOMs are not burdened with such huge upfront payments, a centrally designated agency such as the Power Finance Corporation or REC could provide a line of credit to DISCOMS who require such working capital. The DISCOM could repay such amount along with interest within 45-60 days from the date of disbursement of each tranche.
- As per the existing mechanism, a 1.5% rebate is provided to the DISCOMs, if the payment is made to the generating companies within five days from the invoice date and a 1% rebate if the pay-

ment is made within 30 days from the invoice date.

- It has been proposed that a total rebate of 2% could be offered to DISCOMs on the payment for the volume of power procured through the exchange.

MoP Announced Waiver of ISTS Charges for Solar and Wind Projects until June 2025

- Ministry of Power (MoP) with its notification dated 21 June 2021 has announced an extension to the inter-state transmission system (ISTS) charges waiver on solar and wind energy projects commissioned up to 30 June 2025.
- The waiver applies to ISTS charges only and not to the losses with effect from date of this notification.
- Earlier in August 2020, MoP had waived ISTS charges and loss-es on all solar and wind projects commissioned before June 30, 2023.
- These waivers are also applicable to pumped hydro storage projects and battery energy storage systems (BESS) commissioned by 30 June 2025, provided they meet the prescribed conditions.
- As per the terms notified by MoP at least 70% of the annual electricity requirement for pumping water in the pumped hydropower project will have to be met through solar and or wind power. Additionally, at least 70% of the annual electricity requirement for charging BESS will have to be met through solar and or wind power.
- The ISTS charges for power generated from pumped hydro and BESS would be levied gradually, i.e., 25% of the short-term open access (STOA) charges for the first five years of operation, which would be gradually increased by 25% after every third year to achieve 100% of STOA charges from the 12th year onwards.
- ISTS waiver would be allowed for trading electricity generated and supplied from solar, wind, pumped hydro, and BESS in the green term ahead market (GTAM) for two years until 30 June 2023.
- According to this notification ISTS used for transmission of electricity across the territory of an intervening state and transmission of electricity within the state that lies on the path of the interstate electricity transmission would be included for sharing ISTS charges.

- Any waiver of ISTS charges that apply to inter-state transmission would also apply to such intra-state transmission. Thus, the transmission charges of such intra-state transmission systems would be reimbursed by the Central Transmission Utility.

MNRE Grants Time Extension for RE Projects Commissioning considering Pandemic Effects

- MNRE with its notification dated 29 June 2021 has granted time extension in Scheduled Commissioning date of renewable projects considering ongoing pandemic effects.
- MNRE stated that second surge of Covid-19 begins from 1st April 2021 to 15th June 2021, and the same period can be allowed as time extension to RE projects being implemented by MNRE designated agencies.

Ministry Approves Net Metering for Rooftop Solar Systems Up to 500 kW Capacity

- Ministry of Power (MoP) has issued amendment to the Electricity (Rights of Consumers) 2020 Rules concerning net metering for rooftop solar installations.
- According to this, the arrangements for net-metering, gross-metering, net-billing or net feed-in shall be in accordance with the regulations made by the State Commission.
- Provided that where regulations does not provide for net-metering, net-billing or net feed-in, the Commission may allow net metering for loads up to 500 kW or upto the sanctioned load, whichever is lower and net-billing or net feed-in for other loads.
- Provided further that in the case of Prosumers availing net-billing or net feed-in, the Commissions may introduce TOD tariffs whereby Prosumers are incentivised to install energy storage for utilization of stored solar energy by them or feeding into the grid during peak hours.
- Provided also that in case of net-metering or net-billing or net feed-in, the distribution licensee may install a solar energy meter to measure the gross solar energy generated from the SPV system for the purpose of RPO credit, if any.

- Provided also that the Commission may permit gross-metering for Prosumers who would like to sell all the generated solar energy to the distribution licensee instead of availing the net-metering, net-billing or net feed-in facility and the Commission shall decided for this purpose the generic tariff for gross-metering as per tariff regulations'

Gujarat

Captive Solar Projects Surplus Energy to be Compensated at Rs. 1.99/ kWh in Gujarat

- Gujarat Urja Vikas Nigam Limited (GUVNL) in its recent notification has announced that the average of solar tariffs discovered and contracted through competitive bidding process conducted by GUVNL for non-park based captive solar projects during the period from 1 October 2020 to 31 March 2021, was Rs. 1.99 /kWh.
- Accordingly, as per the provisions of the Gujarat Solar policy, 2021, DISCOM will pay this tariff of Rs. 1.99 /kWh to compensate for surplus solar energy injected into the grid. This will apply to projects commissioned or to be commissioned during the period from 1 April 2021 to 30 September 2021.
- The Gujarat government has announced the new 'Gujarat Solar Power Policy 2021' with incentives for residential, commercial, and industrial rooftop solar developers in December last year. The policy will be valid until 31 December 2025.
- As per the Solar Policy, in case of captive projects or third-party sale under the renewable energy certificate (REC) mechanism, the surplus energy after being set off on a 15-minute time block basis will be compensated by the DISCOM at 65% of the tariff discovered by GUVNL.
- It was also proposed that the rate of purchase be decided on six months basis in which the plant is commissioned. For this request, the Commission had replied that the proposed rate for the purchase of surplus power is not fixed in nature, and it is difficult to decide given the conditions of the competitive bidding.
- GERC also noted that the determination of tariff through competitive bidding was a process that cannot be compared to the determination of APPC.
- GERC has issued the tariff framework for solar power procurement by distribution licensees in the state. The Commission had said that the new control period of the tariff framework would be effective up to 31 March 2023.

GERC Accepts GUVNL Gujarat Solar Policy, 2021 Provisions

- Gujarat Urja Vikas Nigam Limited (GUVNL) to the earlier order passed by the Commission for tariff framework to procure power by distribution companies (DISCOMs).

Category	Residential Consumers	Captive Consumers	Third Party Sale
Capacity Restriction	No restriction on installed capacity	No restriction on installed capacity	No restriction on installed capacity
Transmission and Wheeling Charges	None	As decided by the Commission from time to time	As decided by the Commission from time to time
Cross Subsidy and Additional Surcharges	Not applicable for self-consumption. Applicable in case of third-party sale.	Exempted	As decided by the Commission from time to time
Energy Accounting	As per billing cycle	For HT/EHV consumers: Energy set-off between 07.00 to 18.00 hours of same day For LT demand-based consumers: Energy set-off between 07.00 to 18.00 hours in the billing cycle For LT other than demand based consumers: Energy set-off shall be on billing cycle basis.	For HT/EHV consumers: Energy set-off between 07.00 to 18.00 hours of same day For LT demand-based consumers: Energy set-off between 07.00 hours to 18.00 hours in the billing cycle For LT other than demand based consumers: Energy setoff shall be on billing cycle basis.
Surplus Injection Compensation	For self-consumption: Rs. 2.25/Unit for first 5 years, thereafter 75% of average tariff discovered in state auctions For third party sale: 75% of average tariff discovered in state auctions	Solar For MSME: Rs. 2.25/Unit for first 5 years, thereafter 75% of average tariff discovered in state auctions For others: 75% of average tariff discovered in state auctions	75% of average tariff discovered in state auctions
Banking Charges	None	MSME units and other than demand based consumers: Rs. 1.10/kWh on energy consumed For demand-based consumers: Rs. 1.50/kWh on energy consumed For Government Buildings: Exempted	MSME units and other than demand based consumers: Rs. 1.10/kWh on energy consumed For demand-based consumers: Rs. 1.50/kWh on energy consumed For Government Buildings: Exempted

Maharashtra

MSEDCL Asked Not to Levy Additional Surcharge for a Captive Open Access Solar Project

- The Maharashtra Electricity Regulatory Commission (MERC), in its recent order has asked Exide Industries not to pay any additional surcharge for captive power consumption and instructed the Maharashtra State Electricity Distribution Company Limited (MSEDCL) not to impose any additional surcharge in the future.
- They have also asked the DISCOMs to refund the additional surcharge which is already paid by Exide.
- The Commission clarified that it had not gone into the details of the issue pointed by the MSEDCL where they have mentioned that there could not be any sale or purchase of power in captive open access transaction and the current petition had been decided excluding the issue raised by the DISCOM.
- MERC has further said that MSEDCL could file a separate petition where the issue raised by it could be adjudicated more holistically as per the regulations of the Electricity Act and open access regulations.
- Exide Industries had filed a petition seeking directions against MSEDCL, claiming that MSEDCL had illegally imposed the additional surcharge on the captive consumption of power generated from the project at the CSE Solar Sunpark and supplied to the petitioner under captive open access arrangement.
- It had also requested the Commission to instruct MSEDCL not to levy additional surcharge in the future and directed MSEDCL to refund the additional surcharge paid by Exide.

Punjab

PSERC Reliefs Retail Residential Consumers in the Wake of Covid-19, Tariff Order 2021-22

- Punjab State Electricity Regulatory Commission (PSERC) has recently issued the tariff order for the financial year FY 2021-22. The new tariffs will be applicable from 1 June 2021 and will be valid until 31 March 2022.
- Considering ongoing pandemic effects, PSERC has decided to reduce the tariffs for residential consumers with load up to 2 kW and consumption slabs of 0 to 100 units and 101 units to 300 units by Rs.1 /kWh and Rs. 0.50 /kWh, respectively. The tariffs for both the categories have been set as Rs. 3.49 /kWh and Rs. 5.84 /kWh,

which was earlier Rs. 4.49 /kWh and Rs. 6.34 /kWh, respectively.

- Above mentioned reduced charges are expected to result in financial relief to the tune of Rs. 6.82 billion.
- PSERC in its Tariff Order has determined the aggregate revenue requirement of Punjab State Power Corporation as Rs. 329.82 billion and Rs. 13.32 billion for the Punjab State Transmission Corporation for FY 2021-22.
- In this Order the tariff of the agricultural pump set category has been increased by Rs. 0.09 /kWh, and the cross-subsidy surcharge for the category has been reduced from 14.41% to 12.05%.
- In this Order the cross-subsidy surcharge for large supply consumers has been set as Rs. 0.65 /kWh, and for non-residential supply it is Rs. 1.28 /kWh. The cross-subsidy surcharge has been set as Rs.1.27 /kWh for bulk supply.
- PSERC has continued with the special night tariff with 50% set charges and energy charges of Rs. 4.86 /kVAh for industrial consumers using power between 10 PM, and 6 AM (the next day).

Uttar Pradesh

UPERC Directed Uttar Pradesh DISCOM to Pay Rs. 14.59 billion for RPO Shortfall

- Uttar Pradesh Electricity Regulatory Commission (UPERC) in its recent order directed Uttar Pradesh Power Corporation Limited (UPPCL) to deposit Rs. 72.45 billion in the renewable purchase obligation (RPO) Regulatory Fund including Rs. 14.59 billion on account of shortfall in RPO compliance until the FY 2020-21 and Rs. 57.85 billion against projected RPO requirements for FY 2021-22.
- UPERC directed UPPCL to deposit the amount in ten equal installment and stated that the amount would be used to procure renewable energy, including hydropower. The payment for purchasing hydropower will be also made through the RPO Regulatory Fund.
- On behalf of the DISCOMs of Uttar Pradesh, UPPCL had filed a petition seeking relaxation regarding the implementation of the RPO Regulatory Fund as mandated by the UPERC order dated 30 December 2019.
- UPPCL stated that according to the directions issued by UPERC, the payments to renewable generators were being routed

through the RPO Regulatory Fund created by UPPCL. The DISCOM added that a total payment of Rs. 7.09 billion had been made to renewable generators until May 2021.

- UPPCL further submitted that the backlog of non-solar RPO and hydropower purchase obligation (HPO) was largely due to the delay in the commissioning of some projects on account of the Covid-19 pandemic.
- UPERC directed UPPCL to revisit their RPO strategy and asked the DISCOMs to deposit the amount equivalent to the respective shortfall in RPO units until FY 2020-21 at the rate of Rs.1/kWh in the RPO Regulatory Fund.

Andaman & Nicobar

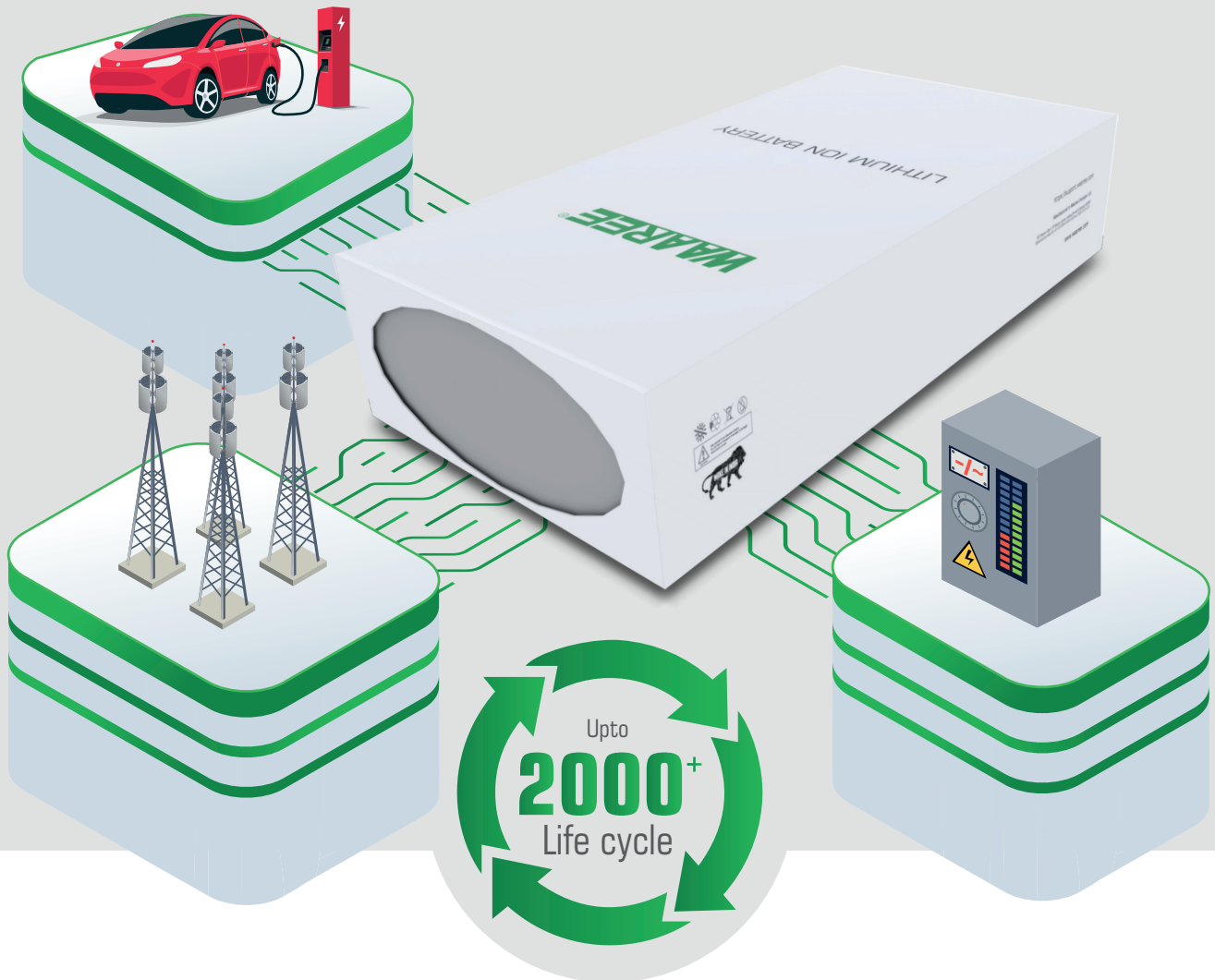
JERC Hikes Power Tariff for Consumers in Andaman & Nicobar Islands

- JERC has approved a tariff hike of 3.36% for FY 2021-22 over the tariff for FY 2020-21. JERC has also approved the average billing rate for FY 2021-22 as Rs. 6.85/kWh as against the approved average cost of supply of Rs. 29.51 /kWh. The revenue gap will be Rs. 22.66/kWh.
- The Electricity Department of Andaman & Nicobar Islands has confirmed that the approved standalone revenue gap of Rs. 4.75 billion would be borne by the Administration of Andaman & Nicobar Islands, with budgetary support from the Government of India.
- This order is applicable from 1 June 2021 and remain valid until further orders.
- JERC has increased the tariffs by 13% for domestic and commercial users and by 7% for industrial users, specifically those who consume more than 500 units of power.
- In FY 2020-21, the tariff was Rs. 7.5/kWh for domestic consumers, with consumption above 500 units; for FY 2021-22, the tariff has been hiked to Rs. 8.5 /kWh for FY 2021-22. Tariff for commercial users consuming over 500 units was Rs. 12 /kWh in FY 2020-21, which was raised to Rs.12.75 /kWh this year. Similarly, the tariff for industrial users was Rs. 8 /kWh in FY 2020-21, increased to Rs. 9 /kWh for FY 2021-22.
- JERC has approved the RPO target of 39.43 MU, comprising 18.56 MU solar and 20.88 MU non-solar for the FY 2021-22. The Electric-

ity Department of Andaman & Nicobar Islands had claimed to purchase solar energy of around 23.70 MU and non-solar energy of 10.56 MU, thereby resulting in a shortfall in RPO compliance of 10.32 MU for non-solar.

- JERC had noted that there is a net shortfall of 5.18 MU in RPO compliance for FY 2021-22 and a cumulative shortfall of 17.18 MU until FY 2021-22. JERC has directed the Electricity Department of Andaman & Nicobar Islands to complete the RPO obligation on priority.
- The consumers will be considered for reduced energy charges under the domestic, commercial, and industrial solar categories only if they have installed rooftop or ground-mounted solar power projects in their premises equivalent to 15% of the connected load or 25% of the roof area (whichever is less).

HIGH PERFORMANCE LITHIUM ION RANGE



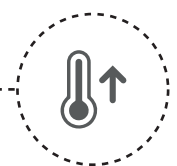
High Energy
Density



Lightweight &
Compact Size



Fast & Efficient
Charging



High Temperature
Performance

OUR LITHIUM ION BATTERIES ARE MANUFACTURED WITH UTMOST CARE & PASSES THROUGH
30+ QUALITY TESTS BEFORE REACHING YOU



Combustion test



Acupuncture test



Thermal shock test



Drop test



Temperature cycling test



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