

purchase green power voluntarily. Captive Consumers can take power under Green Open Access with no minimum limit. Discom Consumers can demand a supply of green power to them. The Green Open access is allowed to any consumer and the limit of Open Access Transaction has been reduced from 1 MW to 100 kW for green energy, to enable small consumers also to purchase renewable power through open access.

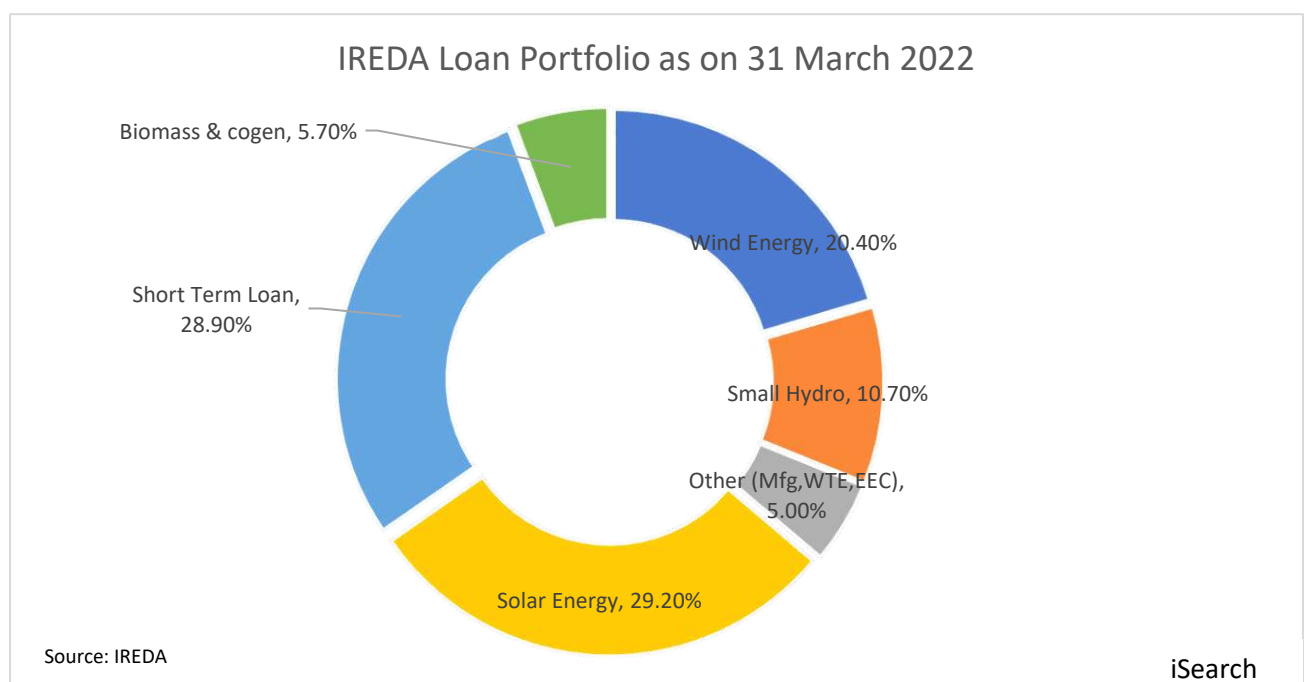
Rooftop Solar Programme Approved in J&K Under Solar City Mission

The Jammu and Kashmir Administrative Council (AC), which met under the chairmanship of Lieutenant Governor Manoj Sinha, approved the installation of 200 MW of grid-tied rooftop solar power plants under the ‘Solar City Mission’ in Jammu. Under the project, 200 MW grid-tied rooftop solar power plants will be installed on 50,000 residential buildings in Jammu by the J&K Energy Development Agency (JAKEDA) under its ‘Solar City Mission’ at an estimated cost of ₹1,040 crore (\$130.17 million). The project will be completed by March 2024 and will have a shelf-life of 25 years. The rooftop solar program will provide subsidized installation of solar power panels on residential houses at the cost of ₹58,739, ₹53,995, ₹52,594, and ₹51,309 for Category-A (Up to 1 kW), Category-B (1 kW to 2 kW), Category-C (2kW up to 3 kW), and Category-D (3 kW up to 10 kW), respectively.

IREDA Voyage in Renewable Sector

IREDA dashboard of loan portfolio show, Solar Energy contributed the maximum percentage of the total renewable energy financed across the loan portfolio, followed by Short-term Loan. As of March 2022, the IREDA loan portfolio includes Solar Energy with ₹8,678.05 crore (\$1.1 billion), Wind Energy with ₹ 6,242.53 crore (\$791.47 million), Small Hydro with ₹ 4,058.6 crore (\$514.574 million), Short-Term Loan with ₹ 11,792.62crore (\$1.49514 billion), Biomass & Cogen with ₹ 1,565.89 crore (\$198.53 million) & Other (Mfg., WTE, EEC) ₹1,592.91crore (\$201.96 million).

IREDA has posted a Profit Before Tax (PBT) of ₹ 339.86 crores (\$0.043 million) in the Q1 FY 2022-23, which is 72% higher compared to ₹197.20 crores (\$0.025 million) in the Q1 of the previous FY. IREDA's Net Non-Performing Assets (NPAs) have been reduced to 2.92% in Q1, FY 2022-23 from 4.77% in Q1, FY 2021-22, a significant reduction of 39% YoY.



Funds Release for Renewable

State-wise details of Central Financial Assistance (CFA) were released for the implementation of various renewable energy schemes/programs by the Ministry from 2019-20 to 2021-22 (till 30th June 2022).

STATE-WISE DETAILS OF FUNDS RELEASED UNDER VARIOUS SOLAR SCHEMES OF MNRE DURING LAST THREE YEARS (in ₹Crores)			
State	2019-20	2020-21	2021-22
Andhra Pradesh	194.04	51.49	10.48
Arunachal Pradesh	17.01	19.76	10.54
Andaman & Nicobar	6.77	0.35	37.97
Assam	33.07	0	9.19
Bihar	1.38	2.93	0
Chandigarh	5.13	0.85	0
Chhattisgarh	13.45	0	7.1
Delhi	0.6	23.29	26.17
Goa	0.5	0	3.59
Gujarat	81.19	101.3	1242.71
Haryana	22.44	65.89	175.08
Himachal Pradesh	8.09	23.43	33.44
Jammu & Kashmir	16.68	4.89	42.26
Jharkhand	29.79	31.28	15.16
Karnataka	219.51	160.64	141.91
Kerala	0	18.46	36.34
Ladakh	0	0	12.41
Lakshadweep	0	0	0
Madhya Pradesh	159.33	93.69	64.95
Maharashtra	117.32	114.48	95.16
Manipur	16.86	23.06	14.89
Meghalaya	3.47	1.13	0
Mizoram	15.33	19.73	2.35
Nagaland	13.55	10.69	5.86
Odisha	30.17	4.01	33.47
Puducherry	0.79	0	0

Source: Lok Sabha Update

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Solar Parks in India

The Government is implementing a scheme for the development of Solar Parks for setting up 50 Solar Parks with 40,000 MW capacity in the country. So far, 61 Solar Parks, with an aggregate capacity of 40 GW have been sanctioned in 16 States across the country under the scheme. Solar Parks are meant to provide developed infrastructure to facilitate the installation of Solar power projects in a plug-and-play model. Central Financial Assistance of up to ₹25 Lakhs (\$32,800) for the

preparation of the Detailed Project Report and ₹20 Lakhs (\$26,240) per MW for the development of the Solar Park is provided under the scheme.

Government has sanctioned 61 Solar Parks in 16 States including Jharkhand under the Scheme for “Development of Solar Parks and Ultra-Mega Solar Power Projects”. State-wise details of the Solar Parks with their sanctioned capacity and commissioned capacity, and also of the fully commissioned Solar Parks are given below

S No.	State	Number of Solar Parks Sanctioned	Sanctioned Capacity (MW)	Commissioned Capacity (MW)
1	Andhra Pradesh	5	4200	3050
2	Chhattisgarh	1	100	0
3	Gujarat	7	12025	785
4	Himachal Pradesh	2	1280	0
5	Jharkhand	5	180	0
6	Jharkhand/West Bengal	2	989	0
7	Karnataka	2	2500	2000
8	Kerala	2	155	100
9	Madhya Pradesh	9	6080	1000
10	Maharashtra	3	1250	0
11	Manipur	1	20	0
12	Meghalaya	1	20	0
13	Mizoram	1	20	0
14	Odisha	3	340	0
15	Rajasthan	10	7036	2901
16	Uttar Pradesh	7	3805	165
	Total	61	40000	10001

Source: Lok Sabha Update

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Solar Water Pump

For Component-B and Component-C, Government is providing central financial assistance (CFA) of 30% of the benchmark cost or cost discovered through tender, whichever is lower. In the case of North-Eastern States including Sikkim, hilly States of Himachal and Uttarakhand, UTs of Jammu and Kashmir, Ladakh, Andaman & Nicobar Island, and Lakshadweep a higher CFA of 50% of benchmark cost or cost discovered through tender, whichever is lower, is provided.

As PM-KUSUM is a demand-driven scheme, targets are not fixed by the Central Government. Allocations under the Scheme are made to states based on demands received. State-wise and component-wise capacities sanctioned and capacity achieved under Component-B and Component-C, including for the State of Rajasthan, are placed in the below table.

State	Component-B (Nos)		Component-C (Nos)		
	Sanctioned	Installed	Sanctioned (IPS)*	Sanctioned (FLS)#	Installed
Arunachal Pradesh	50	0	0	0	0
Assam	1000	0	603	0	0

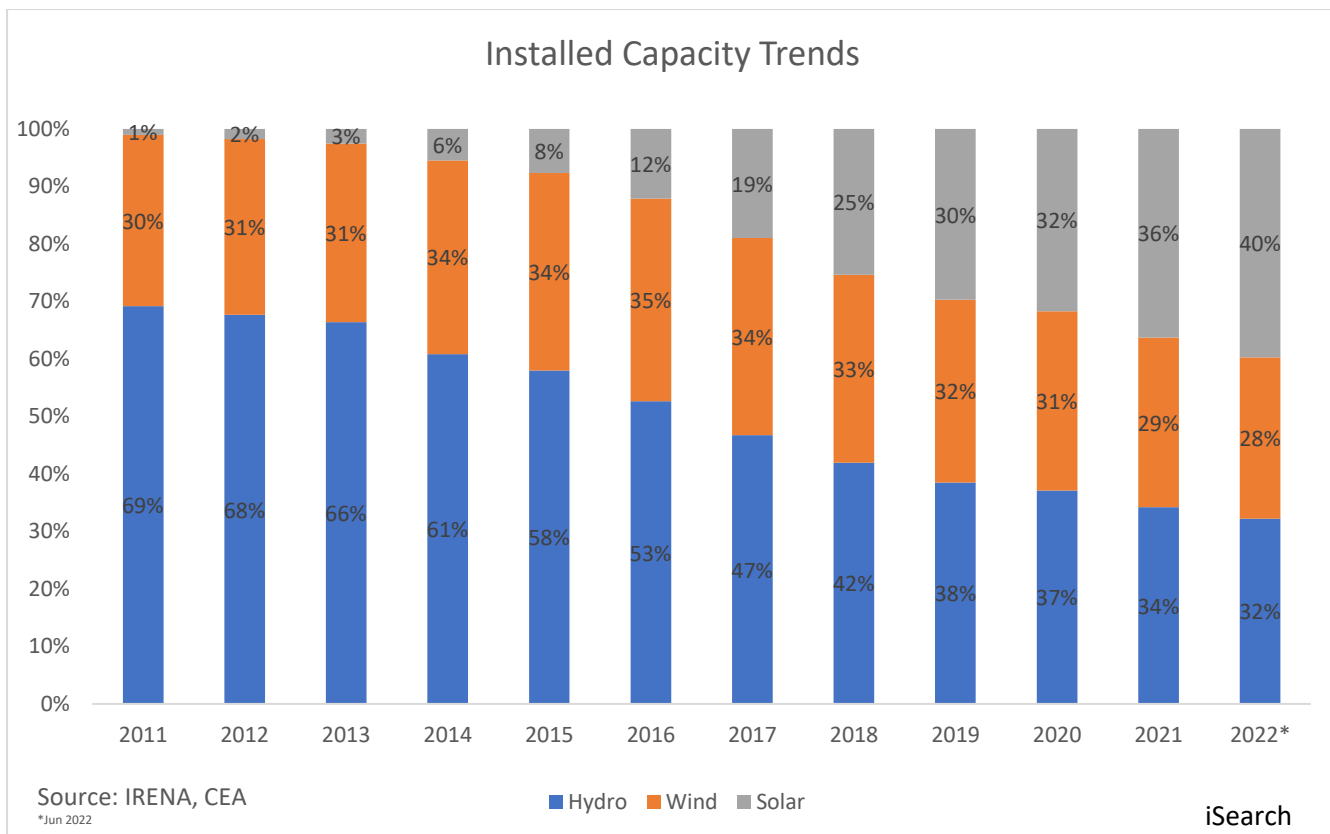
Chhattisgarh	0	0	0	43265	0
Gujarat	2459	459	7000	39832	0
Goa	200	0	11000	0	0
Haryana	39326	36793	0	37142	0
Himachal Pradesh	1180	359	0	0	0
Jammu & Kashmir	5000	323	0	0	0
Jharkhand	16717	6717	208	10000	0
Karnataka	10314	314	0	250000	0
Kerala	100	0	9448	2000	21^
Ladakh	600	0	0	0	0
Madhya Pradesh	57000	7234	0	187455	0
Maharashtra	100000	5822	0	250000	0
Manipur	78	28	0	0	0
Meghalaya	35	35	0	10000	0
Nagaland	50	0	0	0	0
Odisha	5741	997	8310	0	0
Punjab	12000	10131	39	38111	0
Rajasthan	76210	44340	10764	25000	1026^
Tamil Nadu	6200	1766	20000	1311	0
Tripura	3021	947	2600	0	0
Uttar Pradesh	21842	6842	0	30000	0
Uttarakhand	338	73	200	0	0
West Bengal	0	0	5478	0	0
Total	359461	123180	75650	925427	1047

Source: Lok Sabha Update, iSearch

* IPS: Solarization of individual grid-connected agriculture pumps, # FLS: Solarization of agriculture feeders, ^ Installed under Individual Pump Solarization (IPS)

Installed Capacity Trends

The share of Wind Power has increased by 1.76 percent in Q2 2022 compared to Q1 2022 installation, as it has a market share of 29 percent by the end of 2021, of the total installed capacity among Hydro (excluding pumped storage), Wind and Solar. In Q2 2022, Solar Power installed capacity grow by 16.94 percent over the previous quarter. Total Renewable capacity (Solar, Wind, Hydro) increased by 6.92 percent quarter over quarter by the end of June 2022. The share of Solar and Hydro increased, while Wind installed capacity in the second quarter of 2022 was slow.



Since 2016, there was a continuous decrease in the wind share of the total installed renewable capacity as mentioned above, even the focus on Hydropower plants has been reduced, the major contributors among the renewable were Solar which shows a gradual increase in the capacity addition since the announcement of JNNSM target for 2022.

Approved List of Models and Manufacturers (ALMM)

The Ministry of New & Renewable Energy has issued an Approved List of Models and Manufacturers (ALMM) order dated 2nd January 2019. Due to the pandemic and outbreak in China again, government officials were not able to inspect the Chinese production unit, and even a few domestic players are facing issues to enlist their capacity. Below are the only Indian manufacturers who can get their registration under the ALMM list-I by August 2022.

Many large Solar PV tenders are mentioning the requirement of ALMM registered panels, also to decide the tariff based on that, but the Indian Solar Market is being dominated by Chinese players who are not able to get their capacity under ALMM to be supplied to this project. As of Q2 2022, around 16,850 MW of manufacturing installed capacity has been enlisted with 66 companies, compared to Q1 2022 where 58 companies were listed with 12,847 MW of capacity.

Approved list - I of Solar PV Module Manufacturers as Per the List issued by MNRE

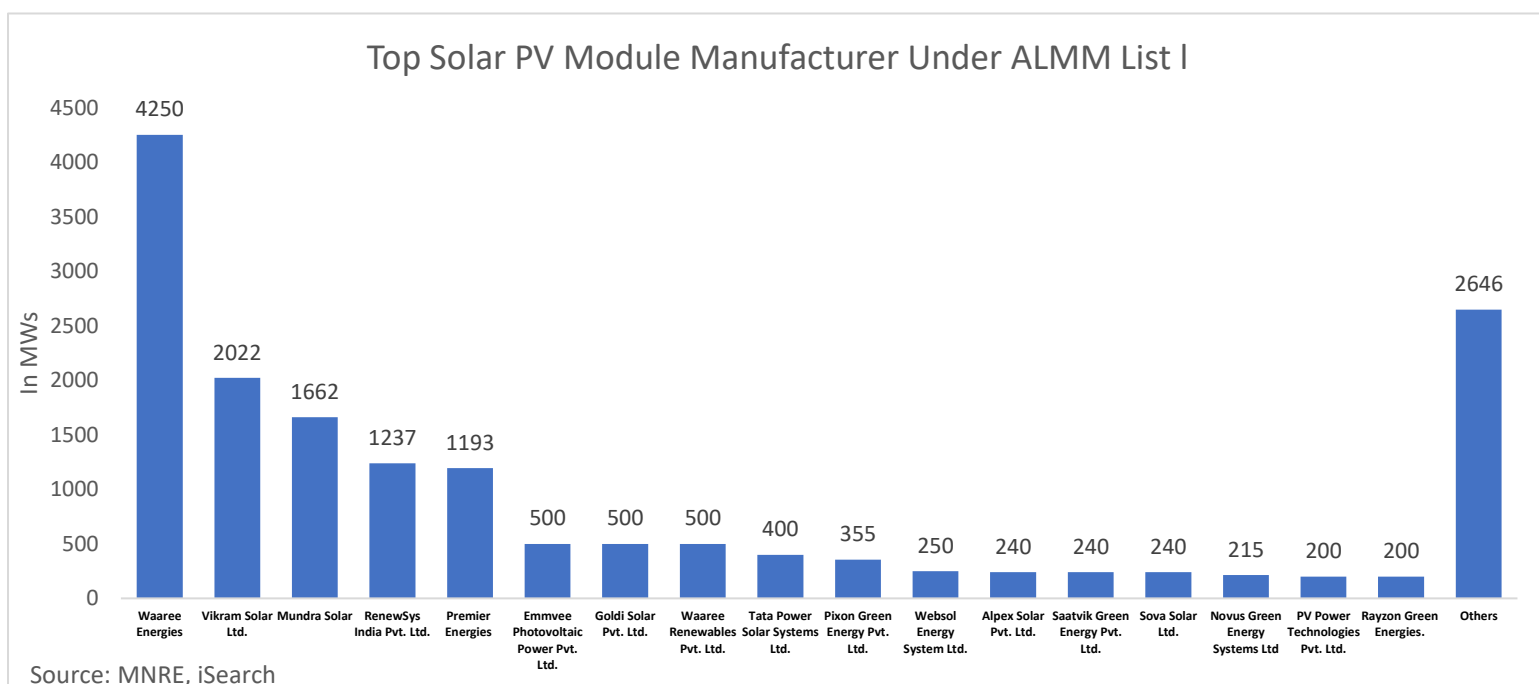
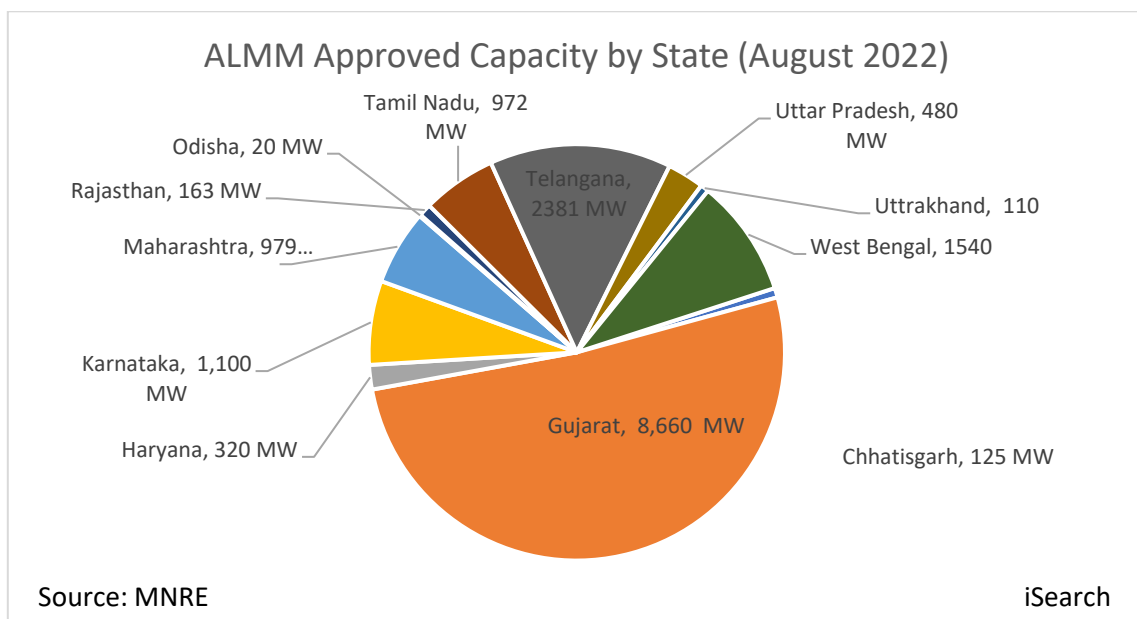
Sl. No.	Manufacturer	Enlisted Capacity (MWs / Year)	Location	Country
1	Mundra Solar PV Ltd.	1100	Tunda, Mundra SEZ, Mundra, Gujarat, India	India
2	Vikram Solar Ltd.	1050	Falta SEZ, South 24 Parganas, West Bengal, India	India
3	Bharat Electronics Ltd.	10	Jalahalli, Bengaluru, Karnataka, India	India
4	Emmvee Photovoltaic Power Pvt. Ltd.	500	Bettahalasuru, Bengaluru, Karnataka, India	India
5	ORB Energy Pvt. Ltd.	50	Yeshwanthapura, Bengaluru, Karnataka, India	India
6	Tata Power Solar Systems Ltd.	300	Electronic City, Bengaluru, Karnataka, India	India
7	Swelect Energy Systems Ltd.	140	Dabaspet, Nelamangala, Bengaluru, Karnataka, India	India
8	RenewSys India Pvt. Ltd.	750	FAB City, Hyderabad, Telangana, India	India
9	Premier Energies Ltd.	482	Annaram, Medak, Telangana, India	India
10	Visaka Industries Ltd.	30	Gajalapuram, Miryalagunda, Nalgonda, Telangana, India	India
11	Websol Energy System Ltd.	250	Falta SEZ, 24 Parganas (South), West Bengal, India	India
12	Sova Solar Ltd.	240	Banskopa, Durgapur, West Bengal, India	India
13	Goldi Solar Pvt. Ltd.	500	Pipodara, Surat, Gujarat, India	India
14	Australian Premium Solar (India) Pvt. Ltd.	50	Tajpur, Sabarkantha, Gujarat, India	India
15	Solex Energy Ltd	45	GIDC, Vitthal Udyognagar, Anand, Gujarat, India	India
16	Topsun Energy Ltd.	100	Linch, Mehsana, Gujarat, India	India
17	Waaree Energies Ltd.	1100	Tumb, Umbergaon, Valsad, Gujarat, India	India
18	Waaree Energies Ltd.	500	Surat SEZ, Diamond Park, Sachin, Surat, Gujarat, India	India
19	Waaree Renewables Pvt. Ltd.	500	Nandigram, Umbergaon, Valsad, Gujarat, India	India
20	Icon Solar-En Power Technologies Pvt. Ltd.	125	Dighari, Mandir Hasaud, Arang, Raipur, Chhattisgarh, India	India
21	PV Power Technologies Pvt. Ltd.	200	Tarapur Textile Park Ltd., Boisar East, Palghar, Maharashtra, India	India
22	Saatvik Green Energy Pvt. Ltd.	240	Dubli, Ambala, Haryana, India	India
23	Navitas Green Solutions Pvt. Ltd.	100	Hojiwala Industrial Estate, Surat, Gujarat, India	India
24	Central Electronics Ltd.	35	Industrial Area, Sahibabad, Uttar Pradesh, India	India
25	Patanjali Renewable Energy Pvt. Ltd	70	UPSIDC Industrial Area, Greater Noida, Uttar Pradesh, India	India
26	Jakson Engineers Ltd.	80	Ecotech III, Udyog Kendra, Greater Noida, Uttar Pradesh, India	India
27	Himalayan Solar Pvt. Ltd.	40	HSIIDC Industrial Estate, Alipur Barwala, Panchkula, Haryana	India
28	Sun N Sand Exim (India) Pvt. Ltd.	40	HSIIDC Industrial Estate, Bahadurgarh, DisttJhajjar, Haryana	India
29	Insolation Energy Pvt. Ltd	100	Khasra No 766/2, Vill-Bagwara, TehAmer Jaipur, Rajasthan	India
30	Pennar Industries Ltd	75	Chandpur, Sadasivapet, Sangareddy, Telangana	India
31	GreenBrilliance Renewable Energy LLP	50	GIDC Estate, Waghodia, Vadodara, Gujarat	India
32	Sanelite Solar Pvt. Ltd.	20	Bhagyalaxmi Industrial Estate, Rakanpur, Gandhinagar, Gujarat	India
33	Gautam Solar Pvt. Ltd.	110	Sector-8A IIE, Sidcul Haridwar, Uttrakhand249403, India.	India
34	Solarium Green Energy LLP.	70	At Bhamasra, Ta:Bavla, Dist: Ahmedabad 382240, Gujarat, India	India
35	Novasys Greenergy Pvt. Ltd	100	Khasra No. 185, Mouza: Mahalgaon, Tehsil: Kamptee, Nagpur-4	India
36	Pahal Solar	100	189, Block No.-71, Olpad Sayan Road, Atodara, Olpad Surat-3945	India
37	Pixon Green Energy Pvt. Ltd.	355	R.S. No. 157/1, 158/1, 158/2, 165/1, 166 of Khijadiya Nana, R.S. N	India
38	Alpex Solar Pvt. Ltd.	240	Plot No. I-25 &I-26, UPSIDC, Site-5, Kasna, Greater Noida, Uttar	India
39	Vikram Solar Ltd.	972	B1000A, B1100C, Indospace Industrial Park, Panruti Pvt. Ltd., Su	India
40	Contendre Greenergy Pvt. Ltd.	47	Unit No: I/6, Rajlakshmi HiTech Industrial Park, Sonale Village, I	India
41	Ritika Systems Pvt Ltd.	40	G-166, Industrial Area, Neemrana - II, Alwar-301705, Rajasthan,	India
42	M/s. ECE (India) Energies Pvt. Ltd.	45	F-27, Express Highway, MIDC, Amravati-444607, Maharashtra	India
43	M/s. Rayzon Green Energies.	200	Block No-105, B/H Aron Pipes, B/H hariya Talav, Kim mandvi Roa	India
44	M/s. Lubi Electronics	125	Survey No -75, Opp. Essar Petrol Pump, Prantiya, Gandhinagar,	India
45	M/s. Kosol Energie Pvt. Ltd.	171	Survey No: 415/B, Opp. Super Gas, Village: Bhayla, Bavla-Bagod	India
46	M/s. Citizen Solar Pvt. Ltd.	50	New Survey No-966, Village: Indrad, Chhatral Kadi Road, Ta: Ka	India
47	M/s. The Wolt Techniques	20	16, Satyam Estate-1, Near. Royal Galaxy Complex, Kubadthal Ro	India
48	M/s. Redren Energy Pvt. Ltd	71	Survey No. 154/1, 154/2, Opposite Rangpar, Bus Stand, National	India
49	M/s. Nyakaran Energy LLP	50	SR No: 69P1, Village Chanchavadarda, Chanchavadarda Road, M	India
50	M/s. JJ PV Solar Pvt. Ltd	17	Survey No-236, Plot No. 2, Near Vikas Stove, B/H, Hargange Wa	India
51	M/s. Premier Energies Photovoltaic Pvt. Ltd	711	Plot No-8/B/1 & 8/B/2, SY No. 62 P 63 P and 88 P, E City, Village	India
52	M/s. Sri Savitr Solar Pvt. Ltd	68	Plot No. 34/1, Sy No. 374, C.I.E. Phase 2, Gandhi Nagar, Quthbul	India
53	M/s. Novus Green Energy Systems Ltd	215	SY. No. 920/A, 921/A, Nandigama Revenue Village, Mekaguda, I	India
54	M/s. Sirius Solar Energy Systems Pvt. Ltd	50	Plot No. 30 & 46, Aleap Industrial Estate, Pragathi Nagar Gajular	India
55	M/s. Tata Power Solar Systems Ltd	100	Plot No. 24-B, Industrial Shed, SY No 123, Jigani 1st Phase, Ind	India
56	M/s. Integrated Batteries India Pvt. Ltd	35	D 127, Sector 63, NOIDA, Uttar Pradesh, India 201301	India
57	M/s. Bluebird Solar Pvt. Ltd	20	Plot No: 5, Ecotech II, Udyog Vihar, Khasra No. 739, Greater Noi	India
58	M/s. Shanti Solar	20	EMC Oark, Info Valley-2, S-4-EI 20/A, Harekrushnapur, Jatani, Bl	India
59	M/s. Rajasthan Electronics and Instruments	23	2, Kanakpura Industrial Area, Sirsi Road, Jaipur 302040	India
60	M/s. Neety Euro Asia Solar Energy	28	E-153, GIDC Electronics Estate, Sector-26, Gandhinagar, Gujarat	India
61	M/s. Shivam Photovoltaics Private Limited	30	101 New Ahmedabad Industrial Estate, Near Zydus Research Ce	India
62	M/s. Sahaj Solar Private Ltd	100	Survey No. 69/2, AhmedabadMehsana Highway, Opp Madhu Mi	India
63	M/s. Raajratna Ventures Limite	96	Survey No. 69/2, AhmedabadMehsana Highway, Opp Madhu Mi	India
64	M/s. Mundra Solar Energy Ltd	562	Survey No. 180/P, APSEZ, Village Tunda, Mundra, Kachhh, Gujar	India
65	M/s. Renewsys India Pvt. Ltd	487	Plot No. E141, Additional Industrial Area, MIDC, Patalganga, Tal	India
66	M/s. Waaree Energies Limited	2650	Survey No. 1934, 1939, 1941, 1942, NH-48, Degam, Chikhali, Nav	India

Source: MNRE

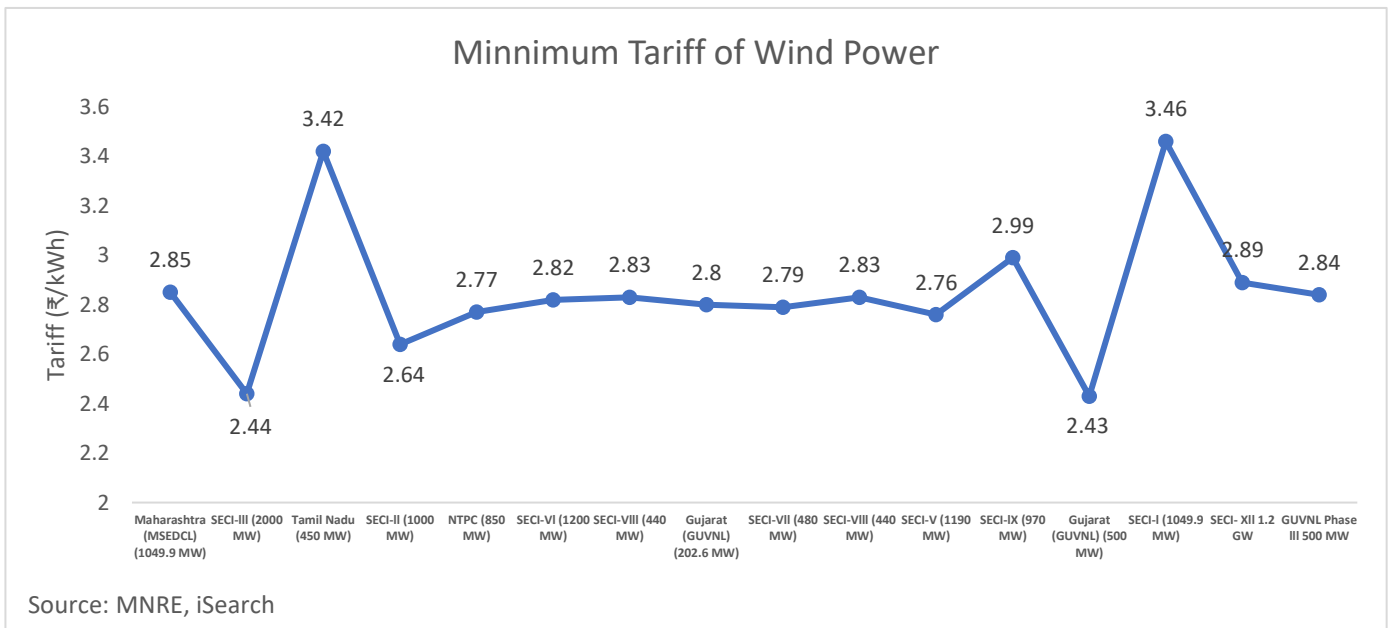
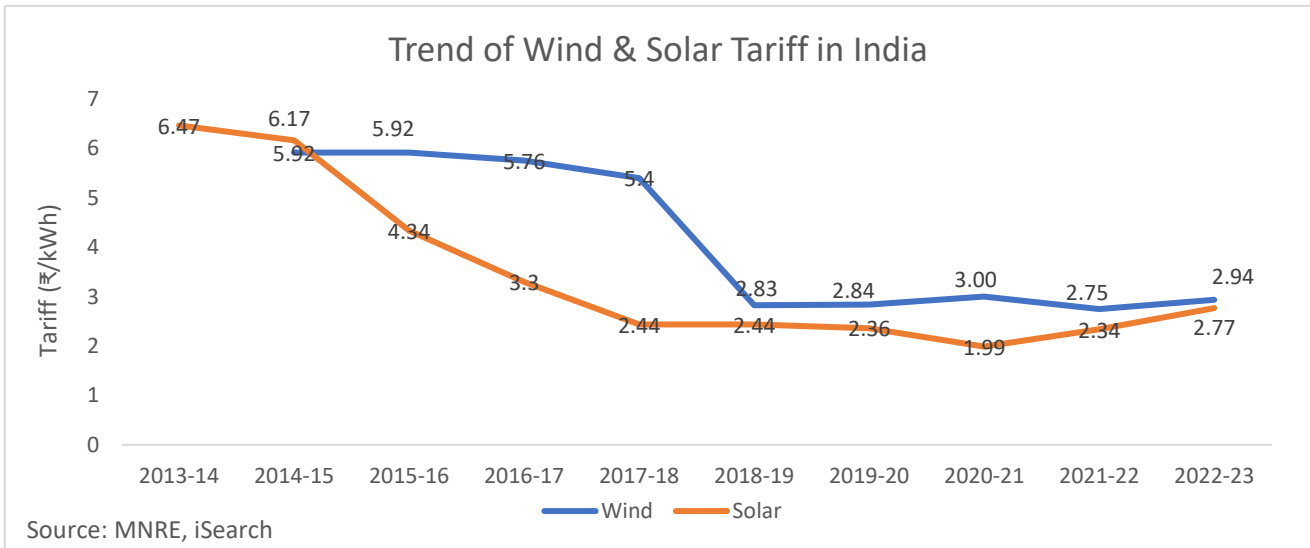
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The Solar PV module manufacturers from Gujarat got the maximum capacity of approved capacity under the ALMM List-I, having a capacity of 8,660 MW with 27 manufacturers, followed by Telangana with 8 manufacturers of 2,381 MW capacity. Karnataka, Maharashtra, and Uttar Pradesh got six manufacturers each listed with 1.1 GW, 979 MW, and 480 MW of production capacity. West Bengal, Rajasthan, and Haryana got three manufacturers each with 1.54 GW, 163 MW, and 320 MW of production capacity. Chhattisgarh, Odisha, Tamil Nadu, and Uttarakhand with just a single manufacturer listed under ALMM List-I.

Tamil Nadu has an upcoming Solar Panel manufacturing unit of 4 GW from Tata Power Solar, the state has announced the inauguration of 1.2 GW of Solar PV Module manufacturing unit of Vikram Solar in 2021. Even, First Solar also announced 3.3 GW of manufacturing units in Tamil Nadu, soon going to be online. The MNRE has extended the deadline for implementing ALMM on panels from 01 April 2022 to 31st October 2022. All open access, net metering, and government Solar development projects were required to use modules only approved under ALMM.



Tariff Trend in India (Wind/Solar)



Hydrogen Updates

Oil India Signs MoU with HomiHydrogen for Green Hydrogen

Oil India Ltd has signed an initial agreement with HomiHydrogen to work together in the green hydrogen value chain. The memorandum of understanding (MoU) signed with HomiHydrogen Pvt Ltd is to boost India's efforts towards energy transition for achieving net-zero by 2070 and support the development of indigenous technology and manufacturing under Aatmanirbhar Bharat in the field of hydrogen and green energy technology. HomiHydrogen is a joint venture company established by electrolyzer experts from Germany, Switzerland, Italy, and Norway to manufacture all four types of electrolyzers under one roof. It is promoted by well-established companies like h2e Power Systems NSE 2.31 % Pvt Ltd, Bluebasic Ama Engineering Pvt Ltd, and Greenstat Hydrogen India Pvt Ltd.

PTC India, Greenstat Hydrogen India Sign Pact to Develop Green Hydrogen Solutions

PTC India Ltd signed a pact with Greenstat Hydrogen India Pvt Ltd to jointly develop green hydrogen solutions for Indian power market beneficiaries. PTC India and Greenstat Hydrogen India have entered into MoU with the purpose of joint development of green hydrogen solutions for Indian power market beneficiaries. Under this MoU, both will jointly work towards the development of green hydrogen projects in India. The areas of development shall include feasibility studies and/or project management services for green hydrogen solutions to potential beneficiaries in India. "Green hydrogen has huge potential to meet the future energy demand sustainably and also support the transition to net zero economies. Under this association, PTC and Greenstat would play an important role in the adoption of green hydrogen in India," Rajib K Mishra, CMD, PTC India, said.

ACME Group to Invest \$6.7 billion in Green Hydrogen Project in Karnataka

ACME Cleantech Solutions Private Limited Signed MoU with the Karnataka government proposing to invest ₹51,865 crore (\$6.49148 billion) in the state within five years for setting up a green hydrogen and ammonia plant with an associated solar power unit in Mangalore. According to the MoU, in the first phase, the company proposes to invest ₹5,300 crore (\$663.35 million), and in the second phase ₹46,565 crore (\$5.828 billion). It has proposed to generate 1,800 jobs. The MoU said the Karnataka government would facilitate ACME to obtain all necessary permissions, registrations, approvals, clearances, and incentives from the department concerned of the state government according to its prevailing policies, rules, and regulations.

Oil India Commissioned India's First Pure Green Hydrogen Plant in Assam

Oil India Limited (OIL) has taken the first significant step towards Green Hydrogen Economy in India with the commissioning of India's First 99.999% pure Green Hydrogen pilot plant, with an installed capacity of 10 kg per day at its Jorhat Pump Station in Assam. The plant was commissioned in a record time of 3 months. The plant produces Green Hydrogen from the electricity generated by the existing 500 kW Solar plant using a 100 kW Anion Exchange Membrane (AEM) Electrolyser array. The use of AEM technology is being used for the first time in India. This plant is expected to increase its production of green hydrogen from 10 kg per day to 30 kg per day in future. The company has initiated a detailed study in collaboration with IIT Guwahati on blending of Green Hydrogen with Natural Gas and its effect on the existing infrastructure of OIL.

EV Updates

CESL Discovers the Lowest Ever Prices for 5,450 Buses Under the FAME II Scheme

Convergence Energy Services Limited (CESL) announced prices discovered for the biggest ever demand electric buses. The Grand Challenge tender comprises demand for 5,450 buses across five major Indian cities – Kolkata, Delhi, Bangalore, Hyderabad, and Surat. Prices discovered are the lowest ever and more importantly, at par with or very close to the operational cost of diesel buses. The lowest price discovered for a 12-meter bus is Rs. 43.49 (\$0.5682)/km, and a 9-m bus is ₹39.21 (₹51.23)/km. This includes the cost of electricity for charging the buses. The value of the tender is over ₹5000 crore (\$653.28 million). The buses are expected to operate around 4.71 billion kilometers over twelve years saving 1.88 billion liters of fossil fuel. This will result in 3.31 million tonnes of CO₂e from tailpipe emissions, a major step towards mitigating climate change.

BPCL to Invest ₹200 crore to Set Up 100 Fast EV Charging Corridors With 2,000 Stations

Bharat Petroleum will invest around ₹200 crores (\$26.13 million) this fiscal to set up 100 fast electric vehicle charging corridors having 2,000 stations along the busiest 100 national highways. The company has recently opened its first EV charging corridor along the Chennai-Trichi-Madurai highway with one charging unit. The second corridor will come up on the Kochi-Salem section of the National Highway 47 within the next two months, BPCL executive director for retail

Olectra Bags Biggest Ever Order of Electric Buses Worth ₹3,675 crore

Electric bus manufacturer Olectra Greentech, part of Megha Engineering and Infrastructures Ltd, has announced securing the biggest ever order in its history for 2,100 electric buses from Bhrihanmumbai Electric Supply and Transport (BEST) worth ₹3,675 crore (\$473.76 million). Evey Trans Private Ltd (EVEY), an arm of Olectra, has obtained the letter of award from BEST after being declared as an L1 (least quoted) bidder. EVEY shall procure these 2,100 electric buses either directly by itself or through its special purpose vehicle from Olectra Greentech to be delivered over 12 months.

Mahindra and Volkswagen Explore Strategic Alliance to Accelerate Electrification of Indian Automotive Market

Mahindra & Mahindra Ltd. (M&M) and The Volkswagen Group signed a Term Sheet on the supply of MEB electric components for Mahindra's new, purpose-built electric platform INGLO, deepening the Partnering Agreement from earlier this year. The cooperation intends to have a volume of more than one million units over a lifetime and includes the equipment of five all-electric SUVs with MEB components. In addition, the two companies will explore further opportunities for collaboration, opening the perspective toward a broader strategic alliance to accelerate the electrification of the Indian automotive market.

Tata Power Signs MoU with NAREDCO to Install 5,000 EV Charging Points Across Maharashtra

Tata Power has collaborated with the National Real Estate Development Council (NAREDCO), Maharashtra to install up to 5,000 EV charging points across its member developer properties. The MoU was signed at The Real Estate Forum, 2022 in Mumbai. The move will give a boost to EV adoption in the state. Tata Power will provide a comprehensive EV charging solution across member developers of NAREDCO. This will include installation, maintenance, and upgradation of the chargers as and when required. EV owners across NAREDCO's member developers' properties will have access to 24x7 vehicle charging, monitoring, and e-payments facilities through Tata Power's EZ Charge mobile app.

Haryana Approves State EV Policy, Announces SOPS to Manufacturers

The Haryana Government on approved the State Electric Vehicle (EV) Policy 2022 offering several financial incentives to EV manufacturers. A decision in this regard was taken at a meeting of the state cabinet. The EV policy offers various financial incentives to EV manufacturers by giving incentives on Fixed Capital Investment (FCI), net SGST, stamp duty, employment generation, etc, an official statement said. There is a 100 percent reimbursement of stamp duty along with an exemption in electricity duty for 20 years. Under this policy, units setting up batteries disposal units will get 15 percent of FCI up to ₹1 crore (\$128,914).

Conclusion and Suggestions

The installations in the second quarter of CY 2022 were lower than the Q1 CY 2022. There is a decline in Solar installation during this quarter. BCD force the developers to commission their projects during this period as they would have procured the panels at the start of 2022.

The distributed sector was moving in an upward direction, and Commercial and Industrial (C&I) segment installations were high compared to the previous quarter. C&I consumers have huge demand as the manufacturing sector is doing well and festive seasons are on their way, so they want to install the projects on their premises so that they can get the benefit of their power bill.

The installations on Utility-scale were low compared to the first quarter of 2022, there is a downfall of around 25 percent quarter over quarter. But there is a wait and watch the situation in 2022 as BCD imposed on Solar PV modules, the domestic developers, as well as Chinese suppliers' negotiations, are going on. Even though the government has extended the ALMM date till October 2022, none of the Chinese manufacturers were there on the list-I as per the latest update. Around 16,850 MW of domestic production capacity of Solar PV modules has been registered.

The installation in 2022 will be the highest among the previous yearly installation which already crossed 8.1 GW in the first half of CY 2022, as this is going to be the crucial year for India as the JNNSM target of 100 GW of Solar capacity, will end in the next two quarters. There is a Covid outbreak in China at the start of 2022 due to which the movements of goods were at a halt, which will again affect the yearly installations in India as well as the JNNSM target, as India installed around 57.7 GW of Solar PV installations by the end of Q2 2022. As per the analysis, the JNNSM target for a Utility-scale of 60 GW might be achieved. As of 30th June 2022, 60.66 GW capacity is at various stages of implementation and 23.14 GW capacity is under bidding stage as per the latest Lok Sabha update.

The government should postpone the duty hikes for at least two years, provides incentives and grants to the domestic manufacturer, and also hold the ALMM for another couple of year till the market stabilizes and foreign companies especially Chinese can get their panels listed under ALMM List-I. Also, the module prices in the Chinese market are touching 30 cents per watt, which is a difficult situation for the whole Solar industry. Indian manufacturers will be facing a hard time.
