

RE Monitor Jan/Feb 2021



Trending topics

Policy / Development



- Indian renewable energy sector will need investments of \$500 billion to meet 450 GW target: Report
- Hydrogen Mission to float India's Green Energy
- India on track to meet 175 GW renewable energy targets by 2022: ETILC Members
- India needs \$1.4 trillion funding for clean energy technologies: IEA
- Budget 2021: Focus on renewable energy and Discom viability to transform power sector
- Maharashtra's new renewable energy policy to attract Rs 75,000-cr investments: Nitin Raut
- India's green energy goals boosted by return of foreign backers
- Government to charge solar, wind power companies for weather data

Solar Energy



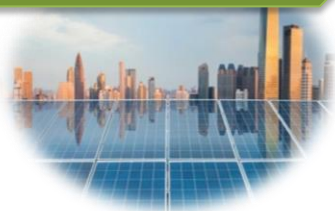
- India's coal power use may have already peaked, says report
- Solar energy to power Indian Railways passenger coaches! More coaches to get this green technology
- Women's group set up solar panel making unit in Maha village
- MoU signed between India and Uzbekistan for solar energy cooperation

Wind Energy



- Continuum Wind Energy to raise \$560 m in green bond sale
- Rajasthan: Wind power firms to lose government land for not starting projects
- Denmark plans to explore setting up of wind energy hubs in India
- Inox Wind climbs over 2% on bagging orders of 62 MW from IPPs and retail customers
- Cyclones reduce India's wind power generation

Corporates



- Big oil companies invests in startup that drills for clean energy
- Premier Energies to set up Rs 483 crore solar cell facility in Hyderabad
- Power Grid bags two power transmission projects in Rajasthan
- Crisil assigns provisional 'AAA/Stable' rating to Virescent Renewable Energy Trust
- Cipla sets up 30 Megawatt solar power plant in Maharashtra
- Tata Power Solar wins Rs 1,200 cr order to set up 320 MW project

Policy/ Development

Indian renewable energy sector will need investments of \$500 billion to meet 450 GW target: Report. The Indian renewable energy sector will need investments of \$500 billion over the coming decade to meet its 450 GW target, a report titled 'Capital Flows Underpinning India's Energy Transformation Global Capital Is Primed and Ready' by the Institute for Energy Economics and Financial Analysis (IEEFA) said. The report identifies fresh capital flowing into new projects and infrastructure investment trust (InvIT) structures, as well as the capital recycling opportunities for the National Investment and Infrastructure Fund (NIIF) for operational projects.

Figure 2: India's Electricity Capacity, Generation and Share (2020/21)

	Capacity		Generation		Capacity	Increase
	GW	%	TWh	%	Utilisation	GW yoy
Coal-fired	208.2	54.6%	953.8	69.8%	52.7%	3.0
Gas-fired	24.9	6.5%	54.5	4.0%	24.9%	0.0
Diesel-fired	0.5	0.1%	0.5	0.0%	12.0%	0.0
Large Hydro	46.0	12.1%	158.0	11.6%	39.3%	0.3
Nuclear	7.5	2.0%	43.4	3.2%	69.5%	0.7
Renewables	94.2	24.7%	151.7	11.1%	19.1%	7.2
Bhutan (Import)	n.a.	n.a.	4.9	0.4%	n.a.	
Total	381.3	100.0%	1,366.7	100.0%		11.2
Captive power	51.4					
Total	432.7					

Source: Central Electricity Authority (CEA), IEEFA calculations.

Hydrogen Mission to float India's Green Energy. India will launch its National Hydrogen Energy Mission (NHEM) in 2021-22. Climate concerns and increasing focus on zero-carbon RE globally have made hydrogen-based energy sources more relevant than ever. Stricter carbon abatement regulations have also pushed hydrogen producers to move away from conventional fossil fuels to green power sources, like wind, solar, biomass, hydro-electric power, and so on. It is crucial for India to get ahead

in the race of new and upcoming green technologies and become self-reliant. Being an early adopter of hydrogen energy technology will pay off in the long-term, given hydrogen's cross-sectoral sustainability.

India on track to meet 175 GW renewable energy targets by 2022: ETILC Members. The government is totally committed to enable its Paris Agreement commitments and companies are taking many efforts to ramp up capacity. India ranks second in [BNEF climatescope](#) report which evaluates investment conditions for clean energy in emerging economies across 108 countries. During the pandemic, the government's policy initiatives like - supporting force majeure, reducing repo rate, making solar plant O&M an essential service, removing tariff caps for solar tenders, PLU scheme amongst others clearly indicates the growing support towards solar energy.

India needs \$1.4 trillion funding for clean energy technologies: IEA. India will need to invest \$1.4 trillion into clean energy technology over the next two decades, the International Energy Agency (IEA) said in a report. The report, titled '[India Energy Outlook 2021](#)', said that the figure represents a 70% increase from the present policy of the government, that aims to achieve 450 GW worth of renewable energy capacity by 2030.

Budget 2021: Focus on renewable energy and Discom viability to transform power sector. The [Union Budget 2020-21](#) has outlined multi-pronged budgetary measures for the power sector in line with the Prime Minister's ambitious energy transition initiatives. Finance Minister Ms Nirmala Sitharaman has announced many forward-looking plans in the budget for the power sector.

Renewable Energy

- Additional capital infusion of INR 1,000 Cr to SECI and Rs 1,500 Cr to IREDA.
 - To promote domestic production and build up domestic capacity under [Atmanirbhar Bharat](#), the Government will notify a phased manufacturing plan for solar cells and solar panels.
 - To encourage domestic production, duty on solar inverters has been increased from 5% to 20%, and on solar lanterns from 5% to 15%.
 - Exemption to all items of machinery, instruments, appliances, components, or auxiliary equipment for setting up of solar power generation projects is being rescinded. This is mainly to focus on domestic manufacturing and reducing the imports from China.
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Maharashtra's new renewable energy policy to attract Rs 75,000-cr investments: Nitin Raut.

Maharashtra's New Renewable Energy Policy will attract Rs 75,000-crore investments, said the state's Power and New & Renewable Energy Minister Mr Nitin Raut on 28 January 2021. The policy aims to implement 17,000 MW of renewable power projects in the next 5 years. It is expected to create direct and indirect employment for one lakh people, along with giving priority to hybrid power projects.

India's green energy goals boosted by return of foreign backers. India's goal of doubling renewable power by next year is getting a boost from international investors who see the massive market's potential outweighing significant risks. French oil major Total SA's \$2.5 billion investment in Adani Green Energy Ltd. last week is a sign that global companies increasingly under pressure to invest in environmental assets are eyeing India's 1.3 billion energy users, despite a mounting debt at generation companies and attempts by some provinces to renege on power purchase contracts.

Government to charge solar, wind power companies for weather data. The Ministry of Earth Sciences is in the process of formulating a policy to charge solar and wind energy companies that it provides weather data to. The policy is likely to be announced in another month's time, say officials, adding

that the same is being formulated keeping in mind the expected surge in production of renewable energy over the next few years.

[The Economic Times, 16 February 2021](#) | [The Economic Times, 16 February 2021](#) | [The Economic Times, 9 February 2021](#) | [The Economic Times, 04 February 2021](#) | [The Economic Times, 29 January 2021](#) | [Mint, 26 January 2021](#) | [The Indian Express, 13 January 2021](#)



Solar Energy

India's coal power use may have already peaked, says report. India's use of coal may have peaked in 2018, according to a new report by according to U.K.-based clean energy group Ember. That's sooner than many experts have forecast. The share of the dirtiest fossil fuel in India's power mix fell for the second year in a row in 2020, according to the report released on 16 February 2021, due to an economic slowdown in 2019 followed by a pandemic-induced recession.

Solar energy to power Indian Railways passenger coaches! More coaches to get this green technology. Eco-friendly step by Indian Railways! In July 2017, Solar Power Technology was introduced by the national transporter on passenger train running between Sarai Rohila (Delhi) to Farrukh Nagar (Haryana) for meeting the load requirement of lights and fans. So far, as many as 60 passenger coaches have been equipped with solar panels for meeting the power requirements of lights and fans, according to the information given by Railway Minister in the parliament. Besides these 60 passenger coaches, 10 Non-air-conditioned coaches at Mathura to run in the Mathura-Alwar railway section as well as 30 Non-air-conditioned passenger coaches in the Lucknow-Varanasi railway section are to be equipped with solar power technology, Mr Goyal said.

Women's group set up solar panel making unit in Maharashtra village as part of a project aimed at encouraging women to take up jobs and sustain their livelihood. Wardha Zilla Parishad's Chief Executive Officer Dr Sachin Ombase claimed it to be the first such unit set up by a rural women's self-help group in the state. The unit, set up by the Tejaswi Solar Energy Backward Women's Industrial Society, comprises of 214 members which include 200 from backward classes. The Indian Institute of Technology (IIT) Bombay provided technical support for the project.

MoU signed between India and Uzbekistan for solar energy cooperation. The Union cabinet on 20 January 2021 was informed of signing of a MoU between India and Uzbekistan for solar energy cooperation. India is running the world's largest clean energy programme and has established its green energy credentials, with the country's solar tariffs falling to a record low of ₹1.99 per unit. India is also trying to access energy-rich Central Asia.

[Mint, 16 February 2021](#) | [The Financial Express, 11 February 2021](#) | [The Economic Times, 21 January 2021](#) | [Mint, 20 January 2021](#)



Wind Energy

Continuum Wind Energy to raise \$560 m in green bond sale. Morgan Stanley-controlled Continuum Wind Energy is in international markets with a USD 560-million dollar-denominated green bond issue, according to two merchant banking sources. The city-based green energy player that began operations in June 2009 has grown through a string of acquisitions of wind and solar assets, and currently has a portfolio of about 2 GW, of which 757.4 MW are operational across Gujarat, Maharashtra, Madhya Pradesh, and Tamil Nadu; and 428 MW in the construction stage.

Rajasthan: Wind power firms to lose government land for not starting projects. The wind power developers who had taken government land and have not been able to execute the projects are set to

lose their land. Rajasthan Renewable Energy Corporation Ltd (RRECL) has written a letter to the revenue department to expedite the process for cancellation of the land. In the letter, RRECL said that more than 3000 bigha has been allotted to about 20 companies which has not developed projects.

Denmark plans to explore setting up of wind energy hubs in India. Denmark, close on the heels of its decision to construct an artificial island in the North Sea and use it as a clean energy hub, is exploring wind energy hubs along Indian coasts. The proposal is expected to get a push at a high-level meet in near future and a Special Purpose Vehicle for the same can also be considered.

Inox Wind climbs over 2% on bagging orders of 62 MW from IPPs and retail customers. Inox Wind Limited, India's leading wind energy solutions provider, announced on 17 February 2021 new orders for the supply and installation of wind turbine generators of 62 MW from IPPs and retail customers spread across various industries for third party sales and captive consumption. The projects will be executed on a turnkey basis across locations in Gujarat and Karnataka. The contracts include supply and commissioning of 2 MW DFIG 113 meters rotor diameter WTGs as well as providing comprehensive operations and maintenance services for the life time of the project.

Cyclones reduce India's wind power generation. A series of cyclones that hit the country's coasts reduced the amount of electricity generated by wind. The storms forced operators to shut down the turbines to prevent damage, which caused a 20% drop in production. India witnessed five cyclones last year, with the two latest, Nivar and Burevi, making landfall in November. Wind power generation capacity has significantly increased in recent years. It is concentrated across India's windiest southern, western and northern regions.

[The Economic Times, 17 February 2021](#) | [The Economic Times, 16 February 2021](#) | [The Economic Times, 02 February 2021](#) | [India Infoline, 17 February 2021](#) | [Climate News Network, 05 January 2021](#)



Corporates

Big oil companies invests in startup that drills for clean energy. Companies including the venture arms of BP Plc and Chevron Corp. invested \$40 million in a startup that aims to use the fossil fuel industry's drilling experience to expand a technology that harvests low-carbon energy from heat below the earth's surface.

Eavor Technologies Inc. plans to expand geothermal power beyond places like Iceland that have volcanic conditions. The technology could be a way to replace fossil fuels and nuclear power plants as a low-carbon source of electricity that can be dispatched to the grid whenever it's needed.

Premier Energies to set up Rs 483 crore solar cell facility in Hyderabad. The Greenfield Project, spread across 25 acres, is slated to triple Premier Energys current capacity. The plant will produce 1.5 GW of solar cells and modules against the current capacity of 500 MW, a company press release said. It is expected to be commissioned in the next two months. Besides working towards reaching their stated objective of cleaner air and a greener world, the new venture will position the company amongst the top five solar manufacturing companies in India.

Power Grid bags two power transmission projects in Rajasthan. State-run Power Grid Corporation of India (PGCIL) has won two electricity transmission projects in Rajasthan under tariff-based competitive bidding. PGCIL has been declared as the successful bidder under tariff-based competitive bidding to establish two transmission systems, the company said in a BSE filing. The company, however, did not disclose the value of these two projects. The firm bagged a "transmission

system strengthening scheme for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under phase II - Part A" on build, own operate and maintain basis.

Crisil assigns provisional 'AAA/Stable' rating to Virescent Renewable Energy Trust. The 'AAA/Stable' rating is the highest provisional rating that CRISIL assigns. The proposed Virescent Infra investment trust (InvIT) is awaiting final approval from the Securities and Exchange Board of India. VRET is the first renewable energy InvIT in India to have been assigned a provisional AAA rating from CRISIL, and among the few domestic infrastructure companies which have been assigned an AAA rating, it said. The AAA rating reflects Virescent's healthy revenue visibility due to long-term power purchase agreements at pre-determined tariffs, in addition to its track record of enhanced generation capabilities, healthy financial risk profile, and its expectation of low leverage, it added.

Cipla sets up 30 Megawatt solar power plant in Maharashtra. Drug major Cipla on 27 January 2021 said it has set up a 30 MW solar group captive project at Tuljapur, Maharashtra, to support green energy requirements for its plants and reduce environmental footprint. Spread across 115 acres, the solar project has been commissioned in partnership with AMP Energy India, Cipla said in a regulatory filing. The project will support the company's green energy requirements for its manufacturing units at Kurkumbh and Patalganga in Maharashtra. It will also help the company cut emissions by as much as 35,000 tonnes of carbon dioxide equivalent annually over its project life of 25 years, it added.

Tata Power Solar wins Rs 1,200 cr order to set up 320 MW project. Tata Power Solar on 23 January 2021 announced that it has bagged an order worth Rs 1,200 crore from state-run power giant NTPC for setting up of 320 MW ground mounted solar project. The scope of work includes the land, acquisition, engineering, procurement, installation, and commissioning of the grid-connected solar project on a turnkey basis along with three years of operations and maintenance services for the solar plant, power evacuation system and telemetry up to the interconnecting state transmission utility (STU) substation.

[Mint](#), 16 February 2021 | [The Economic Times](#), 12 February 2021 | [The Economic Times](#), 11 February 2021 | [The Economic Times](#), 10 February 2021 | [The Economic Times](#), 28 January 2021 | [The Financial Express](#), 23 January 2021