

Renewable Energy Monitor

January/ February 2018

Policy



- India to set up \$350 million fund for solar energy projects
- U.P. to set up 6,000 plants to meet clean energy target
- India hits 20 GW solar capacity milestone
- Outlook stable for renewable energy sector in 2018-19.
- Govt floats tender for 2,000 MW wind power projects
- Govt extends transmission charge waiver to solar, wind power till March 2022

Solar



- GAIL commissions India's second largest rooftop solar plant in UP
- Solar city initiative launched
- UP to invite bids for 100 MW solar power projects in March
- WTO: India-US dispute over solar cells, modules intensifies
- Gujarat to conduct auctions for 500 MW solar projects

Wind



- Enercon readies biggest wind turbines for India
- Torrent Power, ReNew, Green Infra win big projects in fourth wind bidding.
- Senvion to deliver 101.2 MW wind energy project in India
- Wind energy tariffs don't fall further in latest auction

Investment



- Actis set to buy Bhoruka's renewable energy assets
- SBI-UK DFID invest in India's SunSource Energy
- India needs \$125 billion to fund renewables dream
- ReNew Power inks pact with UP govt to set up 1200 MW renewable energy capacity
- AIIB approves \$1.5 billion in loans to India for infrastructure projects
- Avaada Power to invest Rs 3,500 cr to build 500 MW solar capacity in Andhra Pradesh

Policy

India to set up \$350 million fund for solar energy projects. The government is going to set up a \$350 million fund for financing solar projects. This announcement was made by Minister of State (Independent Charge) for Power and Renewable Energy, Raj Kumar Singh, during the Future World Energy Summit 2018 in Abu Dhabi, UAE on 17 January 2018.

The International Solar Alliance will help mobilise sufficient funds for solar energy projects. Interim Director-General of ISA, Mr Upendra Tripathy, said that over 100 projects will be signed by April 2018 under the ISA umbrella. During the event, YES Bank committed to finance solar projects of over \$5 billion. CLP and NTPC also announced a partnership deal with the ISA and committed to make a voluntary contribution of \$1 million each to the ISA fund corpus.

U.P. to set up 6,000 plants to meet clean energy target. The Uttar Pradesh government will set up around 6,000 solar power plants to meet its clean energy target of 10,700 MW in the next five years, Additional Energy Sources Minister Brijesh Pathak said. Uttar Pradesh has a solar energy potential of 22,300 MW, which the State intends to harness to meet the solar power generation target of 10,700 MW fixed by Union Ministry of New and Renewable Energy. The government will provide transmission lines up to 15 kilometres from solar energy plants of 50-150 MW capacity. The Uttar Pradesh Solar Power Policy, 2017, targets implementation of 10,700 MW of grid-connected solar power projects by the end of 2022.

India hits 20GW solar capacity milestone. India has achieved 20 GW cumulative solar capacities, achieving the milestone four years ahead of the target for 2022 originally set in the National Solar Mission. According to the latest India research report by green energy market tracker Mercom Capital, the utility-scale cumulative installations now stand at approximately 18.4 GW, with rooftop solar accounting for another 1.6 GW. For the first time, solar was the top source of new power capacity additions in India during the calendar year 2017, with preliminary figures showing solar installations reaching 9.6 GW in this period and accounting for 45% of total capacity additions.

Govt floats tender for 2,000 MW wind power projects. To achieve the target of having 60 GW of installed wind energy capacity by 2022, the government has invited tenders for 2,000 MW of wind power projects connected to the inter-state transmission system. The Solar Energy Corporation of

India would sign 25-year PPAs with the winning bidders and sell the power to electricity discoms. The ceiling tariff has been set at Rs 2.93 per unit. A company can bid for a minimum capacity of 50 MW and a maximum capacity of 300 MW. Acquiring land, permissions and other infrastructure to connect the upcoming wind projects to the electricity grid would be the responsibility of the developer.

Outlook stable for renewable energy sector in 2018-19. India Ratings anticipates favourable environment for wind and solar energy sectors as bids get driven by the Central government agencies and power purchase agreements are becoming favorable to developers in terms of addressing grid curtailment and termination issues. Few hurdles such as uncertainties in solar panel costs, unpredictable behavior of distribution companies and operational troubles from wind turbine manufacturers need to be addressed by developers. [Ind-Ra](#) foresees adequate liquidity back-ups and counter-party risks as the most critical factors for renewable projects.

Tamil Nadu among nine global market leaders in renewable energy. A new research by US-based IEEFA ([Institute for Energy Economics and Financial Analysis](#)) showed how nine major global power markets, including India's Tamil Nadu, have achieved an outsize share of wind and solar generation while assuring the security of supply. They are providing compelling examples of the fast-moving evolution of electricity generation. The [report, 'Power-Industry Transition, Here and Now'](#), includes case studies of markets ranked by relative share of reliance on variable renewables that include Denmark, South Australia, Uruguay, Germany, Ireland, Spain, Texas, California and the Indian state of Tamil Nadu. Wind and solar accounted for 14.3 per cent of Tamil Nadu's total electricity generation in 2016-17.

Govt extends transmission charge waiver to solar, wind power till March 2022. The government has extended the waiver of inter-state power transmission charges and losses for the solar and wind power projects commissioned till 31 March 2022, with a view to giving a boost to clean energy sources. Earlier, the waiver was available to solar and wind power projects commissioned till 31 December 2019, and 31 March 2019, respectively. The waiver was available for a period of 25 years from the date commissioning of the project provided the developers sign power purchase agreements with entities, including discoms, for sale of power for compliance of their renewable purchase obligation, the order said.

[The Hindu Business Line, 18 January 2018](#) | [The Hindu Business Line, 30 January 2018](#) | [The Economic Times, 31 January 2018](#) | [The Indian Express, 7 February 2018](#) | [The Economic Times, 14 February 2018](#) | [The Hindu Business Line, 16 February 2018](#) | [The Economic Times, 19 February 2018](#) | [Mint, 19 February 2018](#)



GAIL commissions India's second largest rooftop solar plant in UP.

State-owned gas utility GAIL India Ltd said it has commissioned the country's second largest rooftop solar power plant. The firm has installed a 5.76 MWp (Mega Watt peak) solar plant at its petrochemical complex at Pata in Uttar Pradesh. The plant over the roofs of warehouses covers a total area of 65,000 square meters.

Solar city initiative launched. To promote the use of renewable energy in the Capital, BRPL (BSES Rajdhani Power Limited), in partnership with United States Agency for International Development -PACE-D and Indo-German Collaboration (GIZ), launched a 'solar city initiative' on 7 January 2018. The BSES said in a statement that the 'utility anchored rooftop programme' aims to maximise utilisation of solar rooftop potential in south and west Delhi. Under this programme, rooftop solar

installations will be provided at a single point for the entire apartment complex. In the first phase [Solarise Dwarka], around 150 societies will be targeted in Dwarka.

UP to invite bids for 100 MW solar power projects in March. Uttar Pradesh government is planning to invite bids for 100 MW of solar power projects by March. The bids are for projects on open access basis to be set up in the Bundelkhand region. The projects will be based on an open access, as defined under the UP Solar Policy 2017. The Uttar Pradesh Solar Power Policy 2017 targets implementation of 10,700 MW of grid-connected solar power projects by the end of 2022. Of the total capacity, 4,300 MW is targeted to be achieved through deployment of grid connected rooftop projects, and 6,400 MW through ground mounted utility scale power projects.

WTO: India-US dispute over solar cells, modules intensifies. India and the US clashed in their festering trade dispute over solar cells and solar modules after New Delhi rejected a “vague” request from Washington seeking WTO’s (World Trade Organization) permission to impose trade retaliatory measures against India. In a strong communication circulated by the WTO on Monday, India maintained there is “no legal basis” in the US request for authorization from the WTO’s dispute settlement body (DSB) to suspend concessions under Article 22.2 of the dispute settlement understanding because India has “ceased to impose any measures found inconsistent with the DSB’s rulings and recommendations” in the solar dispute.

Gujarat to conduct auctions for 500 MW solar projects. Gujarat is inviting tenders to set up 500 MW of solar projects in the state under the reverse-auction mechanism, under which bidders who quote the lowest tariffs for selling power get to develop projects. The state has also provided an additional 500 MW under the “greenhoe option”, where it can allocate the capacity to companies if they agree to match the lowest tariff discovered in the auction for the initial 500 MW. The greenhoe option would only be available to companies which do not make it to the final list of bidders vying for the first 500 MW auction. The reverse auction is expected to be completed in the final week of March 2018.

[The Economic Times, 1 January 2018](#) | [The Hindu, 8 January 2018](#) | [The Financial Express, 10 January 2018](#) | [Mint, 10 January 2018](#) | [The Financial Express, 10 February 2018](#)



Enercon readies biggest wind turbines for India. For its second innings in India, German wind turbine manufacturer [Enercon](#) plans to bring in machines that will be the biggest to be sold in the country. The firm’s Chief Risk Officer, Mr Wolfgang Juilfs, said the company has started offering machines of rated capacity of 3.5 MW. It is developing suppliers for the machines, which will come in two versions one with blades that will sweep a circle of 138 metres and the other 126 metres. The height of the tower on top of which the turbines would be placed will depend upon the site, but it could be as high as 131 metres, in which case the tower will be a hybrid of a concrete structure and tubular steel.

Torrent Power, ReNew, Green Infra win big projects in fourth wind bidding. In the fourth bidding held by SECI (Solar Energy Corporation of India Limited) to award 2,000 MW wind power projects, six players won by quoting large project size and moderate tariff. ReNew Power, Green Infra (now owned by Sembcorp India), Inox Wind and Torrent Power quoted the lowest tariff of Rs 2.44/unit. Adani Green Energy and Saudi Arabian Alfanar Energy quoted Rs 2.45/unit. As the bidding follows bucket fill method all the players would get the quoted project capacity. Torrent Power quoted

the highest capacity of 499 MW followed by ReNew Power with 400 MW. Inox Wind got 200 MW, Green Infra 300 MW, Adani Green Energy and Alfanar got 250 MW and 300 MW, respectively. In earlier bidding held in Gujarat, lowest tariff received was Rs 2.43/unit.

Senvion to deliver 101.2 MW wind energy project in India. German wind turbine manufacturer Senvion has secured a contract from Indian clean energy firm ReNew Power to deliver the 101.2MW Bhuwad Wind project in India. Located in Gujarat, the Bhuwad project is said to be Senvion's first of its kind in India. With 44 Senvion 2.3M120 turbines placed at a height of 120m, the project will be able to generate enough clean energy to supply the power needs of almost 100,000 Indian homes. Under the deal, Senvion will also offer comprehensive operations and maintenance (O&M) services for a period of ten years. The project is expected to be commissioned within the next 12 months.

Wind energy tariffs don't fall further in latest auction. [Torrent Power](#), [Re-New Power](#), Green Infra Wind Energy and [Inox Wind Infrastructure](#) were among bidders that won contracts in India's largest auction of wind energy projects with tariffs that were at about the same level reached in the previous sale. Solar Corporation of India's latest wind auction of 2,000 MW, the largest so far in the country, attracted bids of Rs 2.44 and Rs 2.45 per unit, while the lowest so far has been Rs 2.43 per unit at a sale conducted by [Gujarat's Urja Vikas Nigam](#) in December 2017. To the relief of the wind industry, the winning tariffs didn't slip appreciably lower. Tariffs had fallen so steeply in the wind energy auctions held so far that many stakeholders, especially lenders, feared for the viability of the projects won. The bidders at Rs 2.44 per unit were Torrent Power, which got 499.8 MW, ReNew Power (400 MW), Green Infra Wind Energy (300 MW) and Inox Wind Infrastructure (200 MW).

[The Hindu Business Line](#), 28 January 2018 | [Business Standard](#), 13 February 2018 | [Power Technology](#), 23 February 2018 | [The Economic Times](#), 27 February 2018 |

Investments

Actis set to buy Bhoruka's renewable energy assets. Global private equity fund [Actis LLP](#) is poised to acquire renewable energy assets of Karnataka-based [Bhoruka Group](#), a person familiar with the negotiations said. The deal will be based on enterprise value of about Rs 2,700 crore. Bhoruka Group, which also has interests in real estate, coal mining, gas and steel, is selling its entire renewable energy portfolio of 321 MW under its subsidiary [Bhoruka Power Corp Ltd](#) to [Actis](#). Yes Securities, a subsidiary of Yes Bank, is the sole investment manager for the deal.

SBI-UK DFID invest in India's SunSource Energy. India's largest public sector lender SBI ([State Bank of India](#)) has invested an undisclosed amount from its Neev Fund in Indian solar player [SunSource Energy](#). The investment is towards developing solar project assets in states with low levels of capital investment. [SunSource Energy](#), a solar project developer and EPC services provider, currently has 200 MWs of solar projects in India and abroad. The company targets to reach 1.5 GW of capacity by 2025, the statement said. Founded in 2010, the company's turnover has been rising at a compounded growth rate of nearly 200 percent year-on-year. The Neev Fund, an initiative of SBI and UK's DFID (Department for International development), is an infrastructure private equity fund which aims to invest in low income or developing states in India, with a focus on infrastructure sub-sectors such as renewable energy, agricultural supply chain, among others.

India needs USD125 billion to fund renewables dream. India will need at least \$125 billion to fund its ambitious plan to increase the share of renewable power supply in the country's grid by 2022. The South Asian nation is one of the world's most important growth markets for renewable energy. Millions of Indians are not yet linked up to the power grid but as the country of more than a billion people prospers, it is experiencing surging demand. To put India's \$125 billion requirement in context, global corporate funding for the solar industry - the world's fastest growing electricity source was a tenth of that amount in 2017 at \$2.8 billion, research firm Mercom says.

ReNew Power inks pact with UP govt to set up 1200 MW renewable energy capacity. ReNew Power Ventures said it has inked a pact with the Uttar Pradesh government to invest Rs 8,000 crore for 1,200 MW of renewable energy capacity, a move which can create 12,000 jobs in the state. An investment of Rs 8,000 crore is proposed to commission these projects which are slated to help the state meet its energy needs.

AIIB approves \$ 1.5 billion in loans to India for infrastructure projects. Beijing-based AIIB ([Asian Infrastructure Investment Bank](#)) has approved \$1.5 billion in loans to India for infrastructure-related projects in 2018, a senior official of the AIIB said on 27 February 2018. China plans to invest more than \$100 billion through its Belt and Road scheme to build highways, rail lines, ports and other infrastructure linking Asia, Europe and Africa. The funds would be used for investment in India's energy, roads and urban development projects. AIIB's loans include a \$200 million commitment to India's National Investment and Infrastructure Fund to spend on roads, housing and urban development, and the bank will let the Indian government decide how to use that money.

Avaada Power to invest Rs 3,500 cr to build 500 MW solar capacity in Andhra Pradesh. Clean energy company Avaada Power plans to develop 500 MW of solar capacity in Andhra Pradesh at an outlay of Rs 3,500 crore. The proposed utility-scale solar project is expected to generate over 1,200 jobs. [Avaada](#) signed up with Andhra Pradesh at the recently concluded CII Partnership Summit 2018 in Vishakhapatnam. The Mumbai-based company had earlier committed Rs 10,000 crore investment in Uttar Pradesh to develop 1,600 MW solar projects. The company's long-term plan is to invest about Rs 25,000 crore in the renewable energy sector, both solar and wind, in India and other markets in Asia and Africa, in a phased manner.

[The Economic Times, 15 February 2018](#) | [The Economic Times, 16 February 2018](#) | [The Hans India, 20 February 2018](#) | [India Today, 21 February 2018](#) | [Reuters, 27 February 2018](#) | [The Hindu Business Line, 28 February 2018](#)