

# Energy News Monitor

## SOLAR PROJECTS LEAD GROWTH IN RENEWABLES Monthly Non-Fossil Fuels News Commentary: October - November 2020

### India

#### Solar Manufacturing

MASMA has charged MSEDCL with scuttling the solar roof top industry in the state by adopting negative policies. MASMA said that since April 2019 there was no subsidy scheme for solar roof top in Maharashtra and MSEDCL demanded just 25 MW subsidies for the entire state from the MNRE last year. According to the solar entrepreneur, when MASMA narrated the entire episode to the newly-appointed Energy Minister Nitin Raut, he intervened and instructed MSEDCL to restart the subsidy process immediately. Maharashtra Energy Development Agency which started phase 1 of the subsidy almost two years ago has more than 700 registered vendors. Currently, the solar fraternity of the state has more than 6000 integrators. Only 316 purchased the MSEDCL tender and just 81 of them could submit it. Only 50 percent are estimated to qualify or accept MSEDCL terms and hardly 40 integrators will be empanelled.

#### Solar Projects

In a greatly encouraging response, over 5000 MW of bids were received for the 1070 MW solar tender issued by the SECI, which analysts said may lead to record low tariffs. SECI is the nodal agency through which the ministry of new and renewable energy conducts wind and solar auctions. In the bid submission that took place, almost all the major developers in the country expressed interest in

taking part. During the early solar auction years (between 2015 and 2017), tenders were heavily oversubscribed in a similar manner. The renewable energy ministry has been moving away from conducting auctions for plain solar and wind projects of late. This tender may have received an overwhelmingly enthusiastic response because Rajasthan distribution companies have agreed to purchase the power.

The Uttarakhand Renewable Energy Development Agency has invited bids to empanel firms to develop 250 MW of solar power projects. The projects would be set up under the Mukhyamantri Saur Swarojgar Yojana. Under the program, 10,000 solar projects would be installed, and the maximum benchmark cost for a 1 kW solar power project has been set as ₹40,000 (~\$541.04)/kW. The state recently extended the control period for benchmark capital costs and generic tariffs as a one-time exception. This was done for 10,000 25 kW grid-connected solar projects totalling 250 MW that would be set up to create income opportunities for youth who had to migrate back home due to the Covid-19 lockdown. The scope of work includes the design, manufacture, supply, installation, testing, commissioning, and maintenance of 10,000 solar power projects under the state program. The last date to submit the bids has been set as 30 November 2020, and the pre-bid meeting will take place on 3 November 2020. The projects must be completed before 31 March 2022. Interested bidders will have to submit an amount of ₹1 mn (~\$13,526) as

the bid security amount. A maximum capacity of 25 kW will be allocated to a single bidder, and the total cost for the installation of a 25 kW solar power project will be ₹1 mn (~\$13,526). The projects will be allocated only to the unemployed youth and low-income residents of the state.

To boost rooftop solar installations in the city, BSES discoms in Delhi are launching “Solarise Safdarjung” and “Solarise Karkardooma” community-based demand aggregation programmes, which will be expanded if the pilot projects are successful. The programme is an extension of BSES Solar City Initiative and brings residents welfare associations and solar vendors on a common platform. Adapting to the new Covid normal, a 100 percent virtual campaign will be carried out. The areas under BSES Rajdhani and BSES Yamuna already have over 2,800 such installations with an installed load of above 90 MWp. The initiative aims to maximise the utilisation of solar rooftop potential in a targeted area. It seeks to create a market-based approach for scaling up rooftop solar utilities.

NHPC Ltd, is planning to develop a solar park of around 600 MW capacity in Deoria district of UP. The proposed site is an island with Ghaghra river flowing from both its sides. The company said the project is expected to be completed by the end of 2022 or beginning of 2023 and it would be developed in a joint venture with the UP government or special purpose vehicle mode. However, a final decision would be taken after assessing the viability of the project. NHPC is planning to conduct a more detailed survey of the topography and the soil conditions and appraise the developers in the coming months. The hydropower generator in May decided to foray into the solar power business and diversify its portfolio by developing solar projects as intermediary procurer through developers. NHPC presently has an installation base of 7,071.2 MW from 24 power stations on ownership basis including projects taken up in joint venture.

NTPC Ltd's 8 MW solar energy generation capacity at its Auraiya project in Uttar Pradesh has been made commercially operational. The remaining 12 MW solar capacity under implementation is expected to be operational by March 2021. The present installed capacity

of NTPC Group comprises 46 NTPC stations--24 coal-based, 7 combined cycle gas/liquid fuel, 1 hydro, 14 renewables.

Tata Power has got a letter of award from GUVNL to develop a 100 MW solar project in Dholera Solar Park of Gujarat. The energy will be supplied to GUVNL under a power purchase agreement valid for 25 years from scheduled commercial operation date. Tata Power won this capacity in a bid announced by GUVNL in March. The project has to be commissioned within 15 months from the date of execution of power purchase agreement. With this award, the cumulative capacity under development in Gujarat will be 620 MW out of which 400 MW will be in Dholera Solar Park. Tata Power is India's largest integrated power company and, together with its subsidiaries and jointly controlled entities, has an installed capacity of 12,742 MW. With nearly 2.6 GW of renewable energy assets in solar and wind accounting for 30 percent of the company's portfolio, it is a leader in clean energy generation.

A 218 kW solar power plant was inaugurated at Lady Irwin College, New Delhi. The power plant will generate over 300,000 kWh of power each year resulting in a reduction in CO<sub>2</sub> emission of 274 tonnes annually. A solar energy-driven miniature train, billed as the country's first of its kind, was inaugurated at the Veli Tourist Village. The station house was also designed in a traditional style. The surplus energy generated by the system will be routed to the Kerala State Electricity Board's grid.

The Airports Authority of India signed an MoU with an NTPC subsidiary to promote usage of electric vehicles and set up solar power plants at its airports. NTPC Vidyut Vyapar Nigam, a subsidiary of NTPC, will be provided adequate land and rooftop space free of cost at identified AAI airports to set up solar power plants. AAI airports in Tamil Nadu have solar power plants with 3.5 MWp capacity currently. It stated 12 MW solar energy is being purchased through open access for the Chennai airport. A plan will be developed for adoption of electric vehicles on city side and air side at various airports and provision of electric vehicle charging stations.

While the Joint Electricity Regulatory Commission has asked the UT administration to carry out a demand survey for installation of rooftop solar plants under the RESCO model, the administration has put the information about the scheme on web portal [www.solarchandigarh.com](http://www.solarchandigarh.com), where interested consumers can apply for the same. As residents were not coming forward for installation of solar plants because of initial capital investment, the Chandigarh Renewable Energy and Science and Technology Promotion Society, the nodal agency for installation of solar plants in the city, has decided to install solar plants under the Resco model. The scheme of Crest for installation of rooftop SPV Power Plants on RESCO with Built Operate Transfer model under which a total of approximately 2,400 SPV power plants have been proposed to be installed on a first come first serve basis. The capacity of plants will be 5 to 10 kWp for residential sectors. Under the RESCO model, the UT will rope in private companies where they will install solar plants on private properties. In return, the building owner will be charged a much lesser tariff (₹3.44/kWh) for the solar-produced electricity in the tariff bills as compared to normal electricity tariff (₹2.75 to ₹5.20/kWh). The plant will be installed for around a period of 15 years (the details of exact years will be finalised after tender process), and after that the house owner will be given the power plant. The building owner and private company will sign an agreement. The plant will be installed under net metering mode, whereby a solar power system will be connected to the electrical connection of a building owner and solar energy exported to the grid will be adjusted in terms of units imported from the electricity department during a billing cycle. With the ongoing Covid-19 pandemic impacting project activity, the total installations of solar PV systems in India is likely to drop to a four year-low in 2020, according to WoodMac. Wood Mac said coronavirus cases in India are continuing to rise and social distancing measures are likely to slow installation activity for the rest of the year at the very least.

### **Wind Projects**

Denmark based wind turbine manufacturer Vestas is keen to expand its footprint in India despite having gone

through a difficult phase in the country. Industry insiders claimed that the company was not taking on new orders because it felt India is not as profitable a market as some others. Many wind turbine manufacturers – domestic and global – believe that the tariffs reached in Indian wind auctions are too aggressive and the margins too low. Vestas has installed 1 GW of turbines in the last two years. MNRE has gradually been moving away from issuing tenders for plain vanilla wind and solar projects. It has decided to focus only on hybrid projects. Gujarat, one of the best wind producing states in the country, has been reluctant to lease land to winners of auctions conducted by central agencies.

Inox Wind has won orders to supply and install wind turbine generators of 40 MW capacity from retail customers across various industries. The projects will be executed on a turnkey basis across locations in Gujarat and Karnataka. Inox Wind provides its customers with end-to-end integrated solutions for the entire wind power value chain. The orders are expected to be commissioned by March 2021

### **Bio Fuels / Biomass**

Ethanol is a big focus area in the government's plan towards clean energy sources. The government has set a target of 20 percent ethanol blending with petrol by 2030. Successful implementation of a bio-ethanol pilot project in Pune and how it is contributing towards fulfilling the targets set by the government. Also, another pilot project for blending 10 percent Hydrogen with CNG will be set up in Delhi to improve efficiency and reduce emissions of vehicles. Huge resources of bio-diesel available in India and expensive prices hindering its large-scale use. The government has plans to initiate research and investment to make biodiesel more affordable. Compressed biogas is an untapped resource that will significantly benefit farmers. The FSSAI launched Repurpose Used Cooking Oil initiative to collect and convert used cooking oil into bio-diesel. The FSSAI has issued directions to all the states food authorities to initiate the process of disposal and collection of used cooking oil. More than 50 food business operators from across the city along with authorised aggregators and bio-diesel manufacture were present on the occasion.

Amid increasing pollution level in the country, a renewable energy company is helping in the generation of electricity using stubble. 'Verve Renewables' collects stubble and supplies it to a sugar mill that generates electricity from it--converting residue into energy. It aims at connecting farmers with energy producers. The company collected 75,000 tonnes stubble last year (2019) and they are now aiming for 150,000 tons this year (2020).

### **Policy & Financing**

According to the IEA, renewable power is growing robustly around the world this year, contrasting with the sharp declines triggered by the Covid-19 crisis in many other parts of the energy sector such as oil, gas and coal. India and the European Union will be the driving forces behind a record expansion of global renewable capacity additions of nearly 10 percent next year -- the fastest growth since 2015, according to the report. India is expected to be the largest contributor to the renewables upswing in 2021, with the country's annual additions doubling from 2020. Over the first 10 months of 2020, China, India and the European Union have driven auctioned renewable power capacity worldwide 15 percent higher than in the same period last year -- a new record that shows expectations of strong demand for renewables over the medium and long term.

The MNRE proposed a framework for promoting application of DRE in rural areas. DRE applications are those which are powered by renewable energy and used for earning livelihoods directly such as solar dryer, solar powered cold storage, solar charkha, solar lighting systems. For the standardisation of research and development, MNRE and other ministries would be helping in development of new devices and applications for the rural economy. MNRE would be pursuing financial institutions for credit facilitation. The market for distributed solar products for rural areas -- such as solar lanterns, pump sets and mini-grids -- was estimated to grow to ₹101.17 bn by 2023 before the pandemic hit. It is now reeling under financial stress due to lack of liquidity to support operations and government schemes yet to make a visible impact.

Andhra Pradesh, a major producer of RE has installed RE generation capacity of about 8,207 MW till 30 September 2020. The state had an installed RE capacity of about 8,203 MW till 31 July 2020. Of the 8,207 MW capacity installed till September, wind energy projects took the largest share with 4,080 MW capacity, followed by solar energy with a capacity of 3,535 MW commissioned, according to the NREDCAP. The total solar capacity commissioned up to 2019-20 was about 3,522 MW. The renewable energy status update also showed that out of all the segments, only solar projects of 13.75 MW capacity were commissioned during 2020-21. In small hydro projects, the state has commissioned a total of 103 MW capacity till 31 September of this year, while biomass, biomass energy co-generation, and bagasse projects contributed a total of 443 MW to the state's renewable energy capacity. The share of municipal solid waste and industrial waste capacity stood at 47 MW, according to the NREDCAP document. It said that the total renewable energy capacity commissioned up to 2019-20 in the state was 8,194 MW. The Andhra Pradesh government in July had announced its renewable energy export policy, 2020 which would apply to solar, wind, and wind-solar hybrid projects. Under this policy, the land in the state would be used for renewable energy projects for the purpose of export to other states. Andhra Pradesh government clarified that the state government is not going to privatise Rayalaseema Thermal Power Plant and that it opposes Electricity (Amendment) Bill, 2020. Fixing of meters to motors of farm pump-sets will ensure free nine hours uninterrupted quality power supply to the farmers during daytime. The government has been preparing plans for effective implementation of the scheme for next 30 years.

Global investment firm KKR launched Virescent Infrastructure, a newly-created platform to acquire renewable energy assets in India. Headquartered in Mumbai, Virescent aims to expand its portfolio of operational renewable energy assets, facilitated by investments predominantly made through KKR's infrastructure fund. Virescent will identify investment opportunities that have stable cash flows stemming from long-term contracts with state and central government counterparties across India. It currently owns 317 MW of

solar assets located in Maharashtra and Tamil Nadu. KKR has also entered into definitive agreements to acquire other operating solar projects across three different states. Once closed, these projects will also become part of the Virescent platform. The company has invested in renewable energy businesses with more than 10,000 MW of total operational capacity.

### **Hydro Projects**

The 24 MW Baitarani Small Hydro Power Project at Singhanali in Odisha's tribal-dominated Keonjhar district has commenced operations. The Hyderabad-based Baitarani Power Project Private Ltd commissioned the hydropower project which will generate 100 mn units of electricity and supply power to the state grid. The project over river Baitarani did not displace anyone. People of Anandapur in Keonjhar district can avail quality power being generated from the new project.

### **Rest of the World**

#### **Global**

Wind energy will achieve record growth globally over the next five years, the GWEC trade association said, as the impact of Covid-19 has only been to delay, not cancel, projects. In total some 348 GW of new onshore and offshore capacity are expected by the end of 2024, which would take cumulative wind power capacity to almost 1,000 GW, GWEC said. The costs of wind energy have fallen rapidly over the last few years and are expected to continue to decrease. Governments are also under pressure to cut carbon emissions, which is helping to shift investment away from fossil fuel and into renewable energy, such as wind.

#### **Asia**

Engie Australia and New Zealand announced the purchase of a 420 MW capacity Hills of Gold Wind Farm development in New South Wales, Australia. The \$750 mn facility was acquired from Wind Energy Partners Pty Ltd, and is expected to start construction in early 2022 following development approvals. Australia's New South Wales state said it would shift toward renewable energy from coal and aimed to lure A\$32 bn (\$23.3 bn) of private investment into the sector in the next decade. Australia's

most populous state said it would cut red tape and speed up approvals for businesses to invest in renewable energy projects, with four of its five coal-fired power plants expected to close in the next 15 years. The plans would create close to 10,000 jobs and aimed to bring 12 GW of wind and solar power and 2 GW of storage, such as pumped hydro, online by 2030. Most Australian states support greater use of renewable energy but the federal government has refused to match other developed countries in setting a target for net zero carbon emissions by 2050. Instead, Canberra says zero emissions will be reached sometime after 2050. Australia is so far well short of meeting its Paris accord target of cutting carbon emissions by 26 percent to 28 percent from 2005 levels by 2030.

Australia will fast track the approvals process for one of the world's biggest wind and solar projects in Western Australia, which aims to start generating power and producing hydrogen and ammonia. Canberra awarded "major project status" to AREH, a \$36 bn project that aims to initially build 15 GW of power capacity and eventually expand to 26 GW. The project, on the drawing board since 2014, has switched from a plan to produce wind and solar power and transmit it to Asia, to a plan to use clean power to split water and produce hydrogen and then ammonia for export. AREH aims to make a final investment decision in 2025. AREH received environmental approval from the West Australian government for the first stage of the project, comprising 10 GW of wind capacity and 5 GW of solar.

Indonesia's government is finalising a draft regulation aimed at simplifying pricing for electricity from renewable sources and to encourage more investment in the sector, the energy ministry said. The government aims to have 23 percent of Indonesia's energy coming from renewable sources by 2025, up from around 9 percent in July, but progress developing renewable power projects has been slow. Authorities currently forecast only 2,500 MW of additional renewable power capacity by 2025, while around 10,000 MW are needed between 2019-2025 to reach the energy mix target. The government hoped the new regulation would improve the appetite for investment into renewables. The government will focus

on boosting solar since the infrastructure was becoming more affordable and hydropower due to big potential in places like North Kalimantan province.

Singapore plans to trial clean energy imports from Malaysia to boost the security of its energy supply. Meanwhile Singapore is aiming for a massive boost in solar power as its most viable renewable energy source to generate electricity. The target is to raise its solar generation capacity to at least 2 GWp, referring to nameplate capacity, by 2030, up from around 390 MWp in the second quarter this year. Singapore also announced a \$49 mn research fund for low-carbon energy solutions that will support projects in low-carbon energy.

International technology group ANDRITZ announced it has received an order from the KC Group to supply turbines, generators and auxiliaries for the 32 MW Karuwa Seti hydropower plant in Nepal. The contract comprises design, engineering, manufacture, supply, installation, testing, and commissioning of three 10.66 MW Francis turbines and generators as well as auxiliaries for the electrical and mechanical equipment. The project is expected to start operations in March 2023. KC Group Nepal is a private company with diversified businesses and targets to operate 100 MW of combined, renewable energy production by the end of 2023.

## **Africa**

Sudan and the UAE signed an MoU for the construction of solar energy plants with a capacity of 500 MW. UAE, represented by one of its private companies, will supply, build, install and operate plants for 20 years. The Gulf country will also train and employ Sudanese workers throughout the contract period, with a commitment by the Sudanese government to purchase electricity at a competitive price.

## **Europe and UK**

The EU is considering a plan to increase its offshore wind energy capacity five-fold this decade and 25-fold by 2050, as it seeks to become climate neutral by mid-century, according to a draft policy. The 27-nation EU, which is already home to 42 percent of the world's offshore wind capacity, says the technology produces clean power at a lower price than any fossil fuel-based source. A draft of

the European Commission's strategy for offshore renewable energy, says the bloc should aim for 60 GW of offshore wind by 2030 and 300 GW by 2050. Its current capacity is 12 GW. The draft includes a goal of 60 GW of wave and tidal energy by 2050.

Norwegian solar firm Scatec Solar said it had agreed to buy state-owned hydropower firm SN Power in a \$1.17 bn deal as it transforms itself into a global renewables company. The combined company would have 450 employees and own 3.3 GW of in operation and under construction power plant capacity in 14 countries, and annual production of 4.1 TWh, Scatec Solar said. Scatec owns and runs solar farms in Africa, Asia, Europe and Latin America, while SN Power builds and operates dams in southeast Asia and Africa. The deal would also help Scatec Solar expand in growth markets for renewable energies such as sub-Saharan Africa and southeast Asia. Norwegian energy firm Equinor said it had submitted two bids in New York's second offshore wind auction, following a deal it signed with BP to cooperate on offshore wind in the US. Equinor is bidding for two projects off the US East Coast, Empire Wind Phase 2 and Beacon Wind, which together have the potential to power more than one million US homes, with BP becoming a 50 percent non-operating partner. Equinor, which is already developing the 816 MW capacity Empire Wind Phase 1 offshore wind park, plans to use the South Brooklyn Marine Terminal for construction activities. The Empire Wind project is located about 15-30 miles (24-48 km) southeast of Long Island, while Beacon Wind is about 20 miles south of Massachusetts and 60 miles east of New York. BP acquired stakes in Equinor's offshore wind power for \$1.1 bn in September. The British oil and gas firm has set a goal of significantly boosting its renewable power generation capacity.

Britain's wind power capacity could grow by around 5 percent this winter as new wind farms come online due to a government support scheme, research by energy consultancy Cornwall Insight showed. The analysts said 1.3 GW of new capacity could come online through March next year, which would take total capacity to 25.4 GW, a rise of 5 percent. The new capacity is largely due to the government's contracts-for-difference scheme,

which guarantees qualifying projects a minimum price at which they can sell electricity, with renewable power generators bidding for contracts in a round of auctions. However, the amount of new capacity coming online falls short of what is needed to reach the government's target of net zero emissions by 2050.

## **USA & Canada**

Renewable fuels are a niche market for now, but with Democratic President-Elect Joe Biden set to enter office with a divided Congress, legislation supporting demand for products like renewable diesel could garner bipartisan support. Biden has pledged to move the US to a zero-carbon emissions scheme by 2050. Under a divided Congress, however, ambitious plans to tackle rising emissions may be put on ice. Renewable fuels, however, may be different: their development is supported by some in both the oil and green energy industries. The US consumes roughly 21 mn barrels of renewable diesel per year, compared with 4.1 mn barrels used every day for conventional distillate fuel oil, according to US Energy Department data.

The US and Poland have struck a nuclear power agreement in which Poland will likely buy \$18 bn in nuclear technology from US companies. The US has been competing with China and Russia and other countries to supply nuclear power technology to countries hoping to build their first reactors, or boost their programs. Poland, traditionally a large purchaser of Russia's natural gas, which competes with nuclear power, aims to halt those purchases after 2022. Over the next 18 months, the US and Poland will work on a report for the program that seeks to build six reactors, as well as potential financing arrangements.

New York utility regulators approved rules that will allow the state to procure renewable power needed to achieve the goals of the state's clean energy law. New York has mandated that 70 percent of the state's electricity come from renewable sources by 2030 and all power come from zero-emission sources by 2040. In 2019, 36 percent of New York's power came from burning natural gas, 34 percent from nuclear, 23 percent from hydropower, 3 percent from wind and 1 percent each from biomass and other sources, according to federal energy data. The rules announced give the state the authority to issue requests for proposals for renewable power needed to implement the state clean energy plan. The state will increase the use of offshore wind from 2,400 MW by 2030 to 9,000 MW by 2035.

MNRE: Ministry of New and Renewable Energy, MSEDCL: Maharashtra State Electricity Distribution Company Ltd, MASMA: Maharashtra Solar Manufacturer's Association, MW: megawatt, GW: gigawatt kW: kilowatt, mn: million, bn: billion, SECI: Solar Energy Corp of India, discoms: distribution companies, MWp: megawatt peak, GWp: gigawatt peak, kWh: kilowatt hour, UP: Uttar Pradesh, GUVNL: Gujarat Urja Vikas Nigam Ltd, CO<sub>2</sub>: carbon dioxide, MoU: Memorandum of Understanding, UT: Union Territory, RESCO: Renewable Energy Service Company, SPV: solar photovoltaic, WoodMac: Wood Mackenzie, CNG: compressed natural gas, FSSAI: Food Safety and Standards Authority of India, IEA: International Energy Agency, DRE: distributed renewable energy, RE: renewable Energy, NREDCAP: New and Renewable Energy Development Corp of Andhra Pradesh GWEC: Global Wind Energy Council, AREH: Asian Renewable Energy Hub, EU: European Union, UAE: United Arab Emirates, TWh: terawatt hour, km: kilometre, US: United States, , UK: United Kingdom



## NATIONAL: OIL

### Indian oil firms need to bring in foreign players to unlock resources: Oil Minister

**17 November.** Oil Minister Dharmendra Pradhan asked exploration companies to consider farming out their acreages to global players with advanced technology to expedite development and raise oil and gas output. India, the world's third biggest oil importer and consumer, depends on foreign purchases for over 80 percent of its oil needs. The nation's oil and gas output has been stagnant for years, forcing it to raise reliance on imports to meet rising fuel demand. Indian exploration companies should work at "exponential speed" to unlock resources, Pradhan said at production sharing signing ceremony of 11 oil and blocks by Oil and Natural Gas Corp (ONGC) and Oil India Ltd. India's exploration licensing rounds have so far seen a lukewarm response from global oil majors, with most of the blocks awarded to local companies, mainly ONGC and Oil India.

Source: *Reuters*

### India's diesel sales fall 5 percent in early November

**16 November.** India's diesel sales dipped in the first half of November after briefly recovering from the impact of the Covid-19 pandemic in October, raising concerns

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*Fall in diesel demand growth is a sign of economic slowdown!*  
**Bad!**

about industrial growth in Asia's third largest economy. Diesel sales by the country's state-run refiners fell 5 percent during the first fifteen days of November compared with the year earlier period, to 2.86 million tonnes (mt), according to provisional data compiled by Indian Oil Corp (IOC). India's diesel consumption, which accounts for about 40 percent of overall refined fuel sales in the country and is a key parameter linked to its economic growth, had risen for the first time in eight months in October. IOC, Hindustan Petroleum Corp Ltd (HPCL) and Bharat Petroleum Corp Ltd (BPCL) own

about 90 percent of India's retail fuel outlets. Lower diesel sales in the world's third largest crude importer could be bad news for oil producers and refineries as the fuel accounts for the bulk of refiners' output.

Source: *The Economic Times*

### India's October fuel demand marks first year-on-year gain in 8 months

**12 November.** India's fuel consumption in October registered its first year-on-year increase since February, as slowing coronavirus cases and increased mobility accelerated an economic recovery, data showed. Consumption of refined fuels, a proxy for oil demand, rose 2.5 percent in October from the prior year to 17.78 million tonnes (mt) and nearly 15 percent higher from the previous month, data from the Petroleum Planning and Analysis Cell of the Ministry of Petroleum & Natural Gas showed. Diesel consumption, a key parameter linked to economic growth and which accounts for about 40 percent of overall refined fuel sales in India, rose 7.4 percent to 6.99 mt on an annual basis, and climbed about 27 percent month-on-month. Sales of gasoline, or petrol, rose by 4.3 percent from a year earlier to 2.65 mt, and by 8.2 percent from 2.45 mt from September. Cooking gas or liquefied petroleum gas (LPG) sales increased by 3 percent to 2.42 mt from a year earlier and 6.6 percent from the previous month, while naphtha sales rose 15 percent to 1.30 mt and about 14 percent month-on-month.

Source: *Reuters*

### Cairn's temporary extension for Barmer block continues, latest till January

**11 November.** The country's most prolific Barmer oilfield operated by Cairn Oil and Gas has been denied full extension of production sharing contract once again with the government allowing the company to operate the oilfield only for three more months. The temporary extension has been given to the company on five occasions since the expiry of the initial licence period in May. The latest extension is now till 31 January 2021.

Source: *The Economic Times*



## NATIONAL: GAS

### Finally, GAIL completes Kochi-Mangalore pipeline

**17 November.** The much-delayed Kochi-Mangalore natural gas pipeline project is finally ready for commissioning any day as the GAIL (India) Ltd has completed the final 540-metre treacherous stretch across the Chandragiri river in northern Kerala. The 444-km long natural gas pipeline was launched in 2009 at an estimated cost of ₹ 29.15 bn and was to be commissioned in 2014. The first phase of the project was commissioned in August 2013 in the Kochi metropolitan area with industrial supplies and domestic supplies from February 2016 by Adani Gas. The pipeline supplies 3.8 mn cubic metres of gas every day to industrial and residential customers in Kochi and is set to cross 4 mn cubic metres soon in the city itself, while Mangalore has a potential of 2.5 million cubic metres per day. With the commissioning of the pipeline, gas demand in the state will touch 80-90 mn cubic metres per annum from 60 mn cubic metres.

**Source:** *The Economic Times*

### AAI awaiting ONGC's feasibility report on sour gas pipelines

**15 November.** The extension of the runway at the Surat airport has run into rough weather with the Oil and Natural Gas Corp (ONGC) yet to submit the report on feasibility survey as its sour gas pipelines pass from close distance to the runway. The Airport Authority of India (AAI) had proposed the expansion of runway from the current 2,905 metres to 3,705 metres towards the Dumas side. Currently, the 36-inch diameter pipeline of ONGC passes about 250m away from the runway and the 42-inch pipeline is 350m away. The proposed extension of 800m is towards 36-inch diameter pipeline on Dumas side. ONGC had concluded its feasibility survey for gauging the possibilities for constructing a culvert to protect its buried sour gas pipelines, which are the major hindrance in the runway extension project, in November 2019. The culvert will be a concrete structure, which will cover the buried pipeline, and have the capacity to handle more than 140 tonne per square metre weight, which is enough for the wide-bodied aircrafts for

landing and take-off. The two pipelines 36-inch and 42-inch South Bassein Hazira Trunk pipelines were laid in the year 1985 and 1996 respectively to transport sour dry natural gas from Bassein Platform A and Bassein Platform B offshore process platforms to the onshore gas processing plant located at Hazira in Surat.

**Source:** *The Economic Times*

### Oil India makes gas discovery in Assam

**13 November.** Oil India Ltd, the nation's second-largest state oil producer, said it has made a natural gas discovery at a well drilled in Tinsukia, Assam. Oil India said well Dinjan-1 in Tinsukia petroleum mining lease (PML) in the upper Assam basin struck hydrocarbons. On testing, it produced gas at the rate of 115,000 standard cubic meters per day. Oil India, whose majority of operations are concentrated in the north-east, did not indicate the reserves the discovery may hold.

**Source:** *The Economic Times*

### India's Petronet has no plans to invest in LNG developers

**12 November.** India's Petronet LNG Ltd has no plans to invest in liquefied natural gas (LNG) developers as the market is awash with cheaper fuel, its finance chief said, indicating it may shelve plans to invest in Tellurian Inc's US project. Petronet, the country's top gas importer, has time until December-end to consider investing \$2.5 bn for 5 million tonnes per annum (mtpa) of LNG in Tellurian's Driftwood project to end-2020. India has been scouting for cheap gas for price-sensitive consumers as Prime Minister Narendra Modi wants to raise the share of natural gas in the national energy mix to 15 percent by 2030 from the current 6.2 percent to reduce pollution. Petronet has a deal to purchase 7.5 mtpa of LNG from Qatar and 1.44 mtpa from Exxon Mobil Corp's Gorgon project in Australia. Spot LNG prices are currently high due to the surge in demand during winters, he said, adding that the prices would drop to \$4-\$6 per million metric British thermal units (mmbtu) after January.

**Source:** *Reuters*

## NATIONAL: COAL

### **CIL floats tenders for 35 mining projects identified for mechanised coal transportation**

**16 November.** Coal India Ltd (CIL) said it has issued tenders for all 35 mining projects identified for mechanised transportation of dry fuel and setting up coal handling plants and silos for rapid loading at an estimated cost of ₹ 125 bn. Under mechanised transportation, coal would be moved through piped conveyor belt mode promoting cleaner environment. With reduced movement of coal-laden trucks on roads, it brings down dust pollution to the comfort of people residing in the proximity of the mines. First-mile connectivity refers to transportation of coal from CIL's pitheads to despatch points. Coal handling plants and silos for rapid loading system would be commissioned across six of CIL's subsidiaries, under the tenders. To come up by FY24 at an estimated investment of ₹ 125 bn, the coal handling capacity of the 35 projects will be 406 million tonnes (mt) per year. Currently, CIL spends around ₹ 34 bn on coal transportation costs which could be brought down substantially with the introduction of mechanised coal transport in the first mile. CIL expects more than 12 percent internal rate of return once it switches over to the mechanised transport means. Already, mechanised conveyor system and computerised loading is operational in 19 projects of CIL having 151 mt per year capacity.

**Source: *The Economic Times***

### **Coal handling at Mormugao Port Trust to be reduced: Goa CM**

**16 November.** Goa Chief Minister (CM) Pramod Sawant said the coal handling at the Mormugao Port Trust (MPT) would be reduced by more than 50 percent by introducing alternative tourism projects including launching of a RORO (Roll On Roll Off) ferry service. Handling of coal at the MPT will be reduced by more than 50 percent by introducing several other alternative tourism projects.

**Source: *The Economic Times***

### **Next round of commercial coal mine auction in January: Coal Minister**

**12 November.** Coal Minister Pralhad Joshi said the Centre is planning to go for next round of auction of blocks in January and also appealed to the states to cooperate with commercial mine allottees to facilitate early operationalisation of the blocks as it would create a positive atmosphere and boost confidence of investors. The statement assumes significance as of the total 35 coal mines successfully auctioned in the last 10 tranches of auction, only 14 blocks could begin operations. The Minister said that before the sale of blocks began, the Jharkhand government was of the view that if the auction took place during Covid-19 times, not much revenue would be generated. Jharkhand had earlier expressed apprehensions about subdued participation from bidders during the auctions. The Minister exuded confidence that in the next round of auctions there would be participation from global players. The recent auction of coal mines for commercial mining witnessed "fierce competition" and the 19 blocks that went under the hammer can generate total revenues of around ₹ 70 bn per annum and create more than 69,000 jobs once they are operationalised, Joshi had said. The auction of blocks for commercial mining has opened the coal sector to the private players. Joshi had said 42 companies participated in the auction, out of which 40 were private players. Total 76 bids were received for 23 mines, wherein 19 mines had received two or more bids and were found eligible for opening of technical bids. In June, Prime Minister Narendra Modi launched the auction process for 41 coal blocks for commercial mining.

**Source: *The Economic Times***

## NATIONAL: POWER

### **UP's first supercritical power plant in Meja to be fully operational by December: CEO**

**15 November.** The Meja Thermal Power Plant, Uttar Pradesh (UP)'s first supercritical power plant, will be fully operational by December, MUNPL (Meja Urja Nigam

Pvt Ltd) Chief Executive Officer (CEO) Asim Kumar Samanta said. MUNPL is a 50:50 joint venture (JV) of NTPC Ltd and Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd (UPRVUNL). The JV was incorporated in 2008 to set up a 1,320 MW (with 2X660 MW units) coal-based Meja Thermal Power Plant at Meja, about 45 km from the state's Prayagraj district. Currently, the plant is operating at a plant load factor (PLF) of 80-85 percent, Samanta said.

**Source:** *The Economic Times*

#### **AAP's mobile app compares Bengaluru's power bill with Delhi's**

**14 November.** Aam Admi Party (AAP) sought to expose the ruling BJP in Karnataka by releasing a mobile app, through which citizens can see how much more they will pay for their electricity consumption next month, and for an entire year. The AAP has taken on the BJP on the issue of power tariff hike even as it is preparing to contest in all 198-wards in the forthcoming civic body (BBMP) polls in Bengaluru. The party's app also reveals how much citizens pay for the same amount of electricity in Delhi where the party is in power. The party's Karnataka convenor Prithvi Reddy released the app, and said the party will launch an agitation against the power tariff hike if Chief Minister BS Yediyurappa does not roll back the increase forthwith. He urged the citizens to download the app, and see how much more they are forced to pay by entering their current bill.

**Source:** *The Economic Times*

#### **Kalpataru fully commissions Kohima-Mariani power transmission project**

**13 November.** Kalpataru Power Transmission Ltd (KPTL) said it has fully commissioned Kohima-Mariani electricity transmission project. In July, Kohima-Mariani Transmission Ltd (KMTL), a special purpose vehicle, had commissioned Element-1 (substation) and Element-3 (New Kohima-New Mariani Line). With the commissioning of Element 2 (Imphal-New Kohima Line), the project is complete, KPTL said.

**Source:** *The Economic Times*

#### **Karnataka restores power supply to Halebeedu temple after outcry**

**13 November.** The famous Hoysaleswara temple in Halebeedu in Karnataka, which was in dark for more than 10 days, finally saw light. The Chamundeshwari Electricity Supply Corp Ltd (CESCO), Mysuru, had pulled the plug for non-payment of pending electricity bills that had accumulated for more than a year. The CESCO had disconnected power supply to the temple on October 29 before restoring the connection after public outcry. CESCO is yet to recover the dues. According to the CESCO, cumulative due from 16 electric meters from this complex stands at ₹ 52,765 for the last one year, which includes ₹ 26,057 dues from temples that are situated in this complex.

**Source:** *The Economic Times*

#### **No power tariff hike, slabs unchanged in UP**

**12 November.** Ushering cheer for power consumers before Diwali, UP (Uttar Pradesh) Electricity Regulatory Commission (UPERC) declined to raise power tariff and retained the slabs of 2019-2020 fiscal. The regulatory commission decided not to change the slab category and the fixed charge, which was kept at ₹ 110/kW/month. An urban domestic consumer would continue to pay at the rate of ₹ 5.50 per unit for first 150 units, followed by ₹ 6 per unit on consumption of 150-300 units. Likewise, for the slab between 301-500 units, a consumer would be required to pay at the rate of ₹ 6.50. Consuming electricity above 500 units will require the consumer to shell out ₹ 7 per unit. The tariff has also been kept unchanged for rural households and industrial units. In case of rural consumers, consumption up to first 100 units would invite ₹ 3.35 per unit, followed by ₹ 3.85 for consumption of 101-150 units. For next 151-300 units, a consumer would be required to pay at the rate of ₹ 5 per unit, followed by ₹ 5.50 per unit for next 301-500 units. Power consumption above 500 units would invite energy charge of ₹ 6 per unit.

**Source:** *The Economic Times*

# NATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

## EESL signs pact with Goa government for decentralised solar power projects

**17 November.** Energy Efficiency Services Ltd (EESL), a joint venture of firms under the power ministry, signed an agreement with the Goa government to implement decentralised solar power projects in the state, a first initiative under the newly formed Convergence Energy Services Ltd (CESL). Under the pact, EESL and the Department of New and Renewable Energy (DNRE) in Goa will carry out feasibility studies and implementation of decentralized solar energy projects including installation of 100 MW decentralized ground-mounted solar power projects on government land to be used for agricultural pumping, replacing 6,300 agricultural pumps and distributing 16 lakh LED (light emitting diode) bulbs for rural domestic households.

Source: *The Economic Times*

## India experienced first decrease in carbon emissions in four decades

**17 November.** Lower energy consumption during the lockdown period related to Covid-19 and a decreased share of coal in the electricity mix has led to the first

### QUICK COMMENT

*Economic contraction cannot be sustained to reduce carbon emission reduction!*

**Ugly!**

decrease in carbon dioxide (CO<sub>2</sub>) emissions in four decades in India, according to a recent report by consulting firm Capgemini. It said that though temporary, the country experienced a 15 percent decrease in emissions in March and a 30 percent decrease in April this year. According to the report, most of the drop in total power demand was borne by coal-based generation, which fell by 15 percent in March and 31 percent in the first three weeks of April. While the share of coal in the energy mix decreased from about 75 percent pre-lockdown to 65 percent. It said that the share of

renewables in the power mix increased from about 17 percent to above 25 percent, especially due to low operating costs and priority access to the grid through regulation.

Source: *The Economic Times*

## Government expands scope of PM-KUSUM for harnessing solar energy by farmers

**13 November.** The renewable energy ministry has expanded the scope of PM-KUSUM scheme to enable greater solar energy generation in farm sector. The ministry has amended the guidelines of the scheme based on the learning from its implementation during the first year. To support small farmers, solar projects smaller than 500 kW may be allowed by states based on techno-commercial feasibility, the Ministry of New and Renewable Energy (MNRE) said.

Source: *The Economic Times*

## Government's move to boost solar industry garners mixed reactions

**13 November.** The Union Cabinet's decision to include 'high efficiency solar photovoltaic modules' among the sectors covered by its production linked incentive (PLI) scheme has drawn mixed responses from the industry. While some greatly welcomed the decision, others felt the amount allocated was too small. As part of its Make in

### QUICK COMMENT

*Production Linked Incentives for solar will contribute to economic efficiency and carbon reduction!*

**Good!**

India drive, the cabinet had approved an additional ₹ 45 bn for the Ministry of New and Renewable Energy (MNRE) to boost manufacturing of such modules. The MNRE held a meeting with industry stakeholders, where it clarified that the scheme would be applicable only to new investments.

Source: *The Economic Times*

## INTERNATIONAL: OIL

### Iran's next annual budget eyes oil prices at \$40 a barrel

**17 November.** Iran's budget for next year could be based on an oil price of \$40 a barrel, the government said. Iran's oil exports have shrunk from more than 2.5 mn barrels per day since 2018, when the United States withdrew from Tehran's 2015 nuclear deal with six world powers and reimposed sanctions that have hammered the country's economy.

**Source:** *Reuters*

### US shale oil output to drop 139k bpd to 7.51 mn bpd in December: EIA

**17 November.** US (United States) oil output from shale formations is expected to decline by about 139,000 barrels per day (bpd) in December to about 7.51 mn bpd, the lowest level since June, the US Energy Information Administration (EIA) said. Output at nearly all seven major formations is expected to fall, except the Haynesville region, where output is forecast to remain largely steady. The biggest decline is expected to come from the Permian basin of Texas and New Mexico, where production is expected to drop by about 37,000 bpd, the biggest decline since May, to 4.3 mn bpd. The second biggest drop is forecast to be in the Bakken, where output is expected to decline for the third straight month, by about 32,500 bpd, to 1.13 mn bpd.

**Source:** *Reuters*

### US asks oil companies to nominate drilling parcels in Alaska refuge

**16 November.** The Trump administration issued a request to energy companies to identify what specific land areas in the Arctic National Wildlife Refuge should be offered for sale, according to a government document. The move is a key step toward pulling off a sale of oil drilling leases in a pristine area of the Arctic before Democrat Joe Biden, who opposes energy development there, becomes president. Drilling had been banned in ANWR for decades before Republican-led tax legislation signed in 2017 removed that ban. Lawmakers in Alaska

have long pushed to open up the ecologically sensitive area to oil and gas exploration.

**Source:** *Reuters*

### First oil flowing from Anyala offshore field: Nigeria's NNPC

**12 November.** Nigerian state oil company NNPC and First E&P have begun oil production at the Anyala oilfield, NNPC announced. The shallow offshore field is in Oil Mining Leases 83 and 85 and will have peak production of 60,000 barrels per day (bpd), NNPC said. Production will feed into the Abigail-Joseph FPSO, which connected to the field on 21 October. Nigeria's oil production is limited by a supply-cut pact with the Organization of the Petroleum Exporting Countries (OPEC) and other producer nations such as Russia. Low oil prices brought on by coronavirus containment measures has also cut oil company budgets, limiting new exploration.

**Source:** *Reuters*

### Ghana imposes conditions for Eni and Springfield to combine oilfields

**12 November.** Ghana has imposed terms and conditions for Italian major ENI and Ghanaian operator Springfield E&P to combine their adjacent oil and gas fields, after the parties failed to reach an agreement, according to a letter from the energy ministry. The letter said the decision was made to ensure optimum exploitation of the Afina and Sankofa fields. Ghana directed Eni and Springfield to begin talks to combine their adjacent oil and gas fields in April and gave them until 18 September to reach an agreement. Sankofa is part of Eni's Offshore Cape Three Points project off Ghana's Atlantic Coast, which it says has reserves of about 40 billion cubic meters of gas and 500 mn barrels of oil. Springfield, a wholly owned Ghanaian company, said in December that it had discovered 1.5 bn barrels of oil and 0.7 trillion cubic feet of gas at its Afina field.

**Source:** *Reuters*

### **Minnesota regulators approve permits for Enbridge's Line 3 oil pipeline project**

**12 November.** Minnesota regulators approved key permits for Enbridge Inc's Line 3 crude pipeline replacement project, paving the way for the project to receive federal permits from the US (United States) Army Corps of Engineers after facing years of delays. Line 3, built in the 1960s, carries less oil than it was designed for because of age and corrosion. Replacing it would allow the company to boost flow from a Canadian oil hub in Edmonton, Alberta, to Midwest refiners.

**Source: Reuters**

### **Global oil demand unlikely to get vaccine boost until later in 2021: IEA**

**12 November.** Global oil demand is unlikely to get a significant boost from the roll-out of vaccines against Covid-19 until well into 2021, the International Energy Agency (IEA) said, a view that curbed oil price gains since vaccine progress was announced. Brent crude fell 0.8 percent to \$43.46 a barrel in early London trade, snapping three straight days of gains. While noting that OECD (Organization for Economic Cooperation and Development) countries had modestly drawn down their crude oil stocks for two months in a row by September, the IEA said that storage levels were still not far from peaks in May at the height of the pandemic. Plans by the OPEC and allies such as Russia to boost output by 2 mn bpd from January would mean supply would outweigh demand, the IEA warned. Draws on oil storage would halt in the first quarter of 2021 if the producer group carried through on its plans to taper their production cut pact. The IEA revised up its prediction for demand growth in 2021, which will still represent a drop of 3 mn bpd below pre-pandemic levels in 2019.

**Source: Reuters**

### **OPEC+ could deepen oil cuts if needed: Algerian Energy Minister**

**11 November.** OPEC+ could extend the group's current oil production cuts into 2021 or deepen them further if market conditions require, Algerian Energy Minister Abdelmadjid Attar said. The OPEC (Organization of the

Petroleum Exporting Countries) and allies led by Russia, a group known as OPEC+, are due to reduce their existing cuts of 7.7 mn barrels per day (bpd) by about 2 mn bpd in January. Attar said that Algeria, which currently holds the OPEC presidency, supported an extension of the current cuts into next year, adding that the next OPEC+ meeting could consider a six-month extension.

**Source: Reuters**

## **INTERNATIONAL: GAS**

### **TAP pipeline opens for business with commercial gas operations**

**16 November.** The Trans Adriatic Pipeline (TAP), which will bring Azeri gas into Italy, has kicked off commercial operations, more than four years after construction work first began, TAP said. The pipeline, whose shareholders include Snam and BP, said it had begun to offer capacity along the 878 km line which will be able to carry 10 billion cubic meters (bcm) of gas per year. TAP is the final leg of a \$40 bn project named the Southern Gas Corridor, which is a cornerstone of the European Union's energy security policy to wean the bloc off Russian gas.

**Source: Reuters**

### **China's Sinopec adds new gas reserve at large Sichuan field**

**12 November.** China Petroleum and Chemical Corp said that it has added 83 billion cubic meters (bcm) of newly proven natural gas reserve at the Chuanxi field in the Sichuan basin. The new reserve, certified by the Ministry of Natural resources, raises the field's total proven reserve to 114 bcm, Sinopec said. Sinopec in October announced some 192 bcm of certified new reserve at its top shale gas project Fuling, China's first major commercial development of the unconventional resource that sits also in the Sichuan basin. China sees natural gas a key bridge fuel on its long journey to its carbon-neutral target in 2060, with national energy producers vowing to boost the share of the fuel in their oil and gas portfolios over the next 10 to 15 years.

**Source: Reuters**

### **Australia's North West Shelf LNG may have to shut one train from 2024: Woodside**

**11 November.** Woodside Petroleum said it would have to shut one of the five trains, or processing units, at the North West Shelf LNG plant in Australia as early as 2024 if no third party gas supply agreement is reached. North West Shelf LNG, operated by Woodside, is Australia's oldest and largest LNG project with a capacity of 16.9 million tonnes (mt) a year. The project's owners are aiming to line up deals with other resource owners (ORO) by the end of 2020 to supply gas as the project's original fields dry up.

**Source:** *Reuters*

### **Sanctions on Russia gas pipeline included in annual US defense bill**

**11 November.** Sanctions that could hinder one of Moscow's most important projects in Europe, the Nord Stream 2 natural gas pipeline, have been included in the annual US (United States) defense policy bill, two congressional aides said. The \$11 bn Nord Stream 2, led by Russia's state energy company Gazprom, would double its existing pipeline capacity to take gas undersea to Europe via Germany. It would bypass Ukraine, which depends on lucrative transit fees. Gazprom and Germany say Nord Stream 2 is purely a commercial project. Gas demand in Germany is growing as it cuts dependence on nuclear and coal power.

**Source:** *Reuters*

## **INTERNATIONAL: COAL**

### **China launches yearlong campaign of coal-mining safety checks**

**17 November.** China has launched a safety inspection effort targeting all working coal mines and coal-mining projects after several recent fatal accidents. The world's largest coal miner and coal consumer reported more than 100 coal mining accidents in 2020. National coal mine safety authorities vowed to tighten scrutiny over local

government checks on coal safety. The latest campaign is expected to put a brake on expansion of coal production and further tighten supply of the fuel, as stringent curbs on coal imports halved October arrivals in China. China produced 3.13 bn tonnes of coal in the first 10 months, up just 0.1 percent from the corresponding period last year. The most-active thermal coal futures at the Zhengzhou Commodity Exchange hit a record high of 619 yuan (\$94.28) a tonne.

**Source:** *Reuters*

### **Japan's Toshiba retreats from coal-fired power stations**

**11 November.** Japanese engineering giant Toshiba will not build any more coal-fired power plants and will shift to renewable energy in a bid to reduce greenhouse emissions, the company's president Nobuaki Kurumatani said. But none of its existing coal-power construction projects will be scrapped, said the firm, which has around 10 underway worldwide. Japan's 140 coal-fired power plants provide nearly a third of its total electricity generation.

**Source:** *The Economic Times*

## **INTERNATIONAL: POWER**

### **Nord Pool exchange to offer new Norway-Britain power cable capacity**

**16 November.** Energy exchange Nord Pool will provide a platform offering traders day-ahead capacity on a new subsea power cable linking Norway to Britain from 2021, it said. Nord Pool would offer capacity for the 1,400 MW North Sea Link cable on behalf of its operators, British electricity system operator National Grid and its Norwegian counterpart Statnett. Nord Pool already runs day-ahead power auctions for Britain, the Nordics, Germany, France, Belgium, Austria and the Netherlands. The North Sea Link will be the first power cable directly linking Britain and Norway.

**Source:** *The Economic Times*



# INTERNATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

## Israel launches 10-year national energy efficiency plan

**17 November.** Israel has launched a national plan for energy efficiency and dealing with the climate crisis, the government announced. The Ministry of Energy said the new plan, which refers to the years 2020-2030, was formed to reduce energy consumption and greenhouse gas emissions to deal with the climate crisis and the accelerated urbanization process. It includes promoting the transition to renewable energy production and the use of electrical technologies instead of technologies that consume fossil fuels. The ministry estimates that the plan's measures will result in a reduction of 7.5 percent (6 mt) of greenhouse gas emissions per year. The plan will also help achieve the national target, according to which electricity generation from renewable energy will reach 30 percent by 2030.

Source: *The Economic Times*

## Britain's Tesco fast tracks emissions target with solar push

**13 November.** Britain's biggest retailer Tesco will set up solar farms, fit more solar panels in its stores and roll out electric vehicles, bringing forward a target for its UK (United Kingdom) business to be net zero carbon emissions by 15 years to 2035, it said. Britons have become increasingly aware of the urgency of addressing climate change, spurred on by campaigners including veteran naturalist and broadcaster David Attenborough and Swedish teen activist Greta Thunberg. Tesco said a new partnership with renewable energy investor, Low Carbon, will see three solar farms set up in Anglesey, Wales, and in Essex and Oxfordshire in southern England. Tesco has committed to use only renewable electricity by 2030, saving 30,308 tonnes of CO<sub>2</sub> (carbon dioxide) per year, the equivalent of taking 14,457 cars off the road. Tesco said it would begin sourcing renewable energy from five onshore windfarms. It is fitting thousands of solar panels across its UK store network, with 60 stores fitted out so far.

Source: *Reuters*

## Sweden, Norway expect 18 TWh of new renewable power by 2022

**13 November.** Norwegian and Swedish authorities said a further 18 terawatt hours (TWh) of additional renewable electricity generation capacity will be completed by 2022 under a joint subsidy scheme. Projects currently under construction totalled 7.4 TWh in Norway and 10.6 TWh in Sweden, a new monthly progress report showed. The price has plunged 35 percent since the start of the month however, amid growing oversupply due to windy and wet weather in the hydropower-dominated region and a rush to complete projects before the 2022 deadline. The build-out of onshore wind power is expected to slow down in the following years amid growing local opposition, especially in Norway.

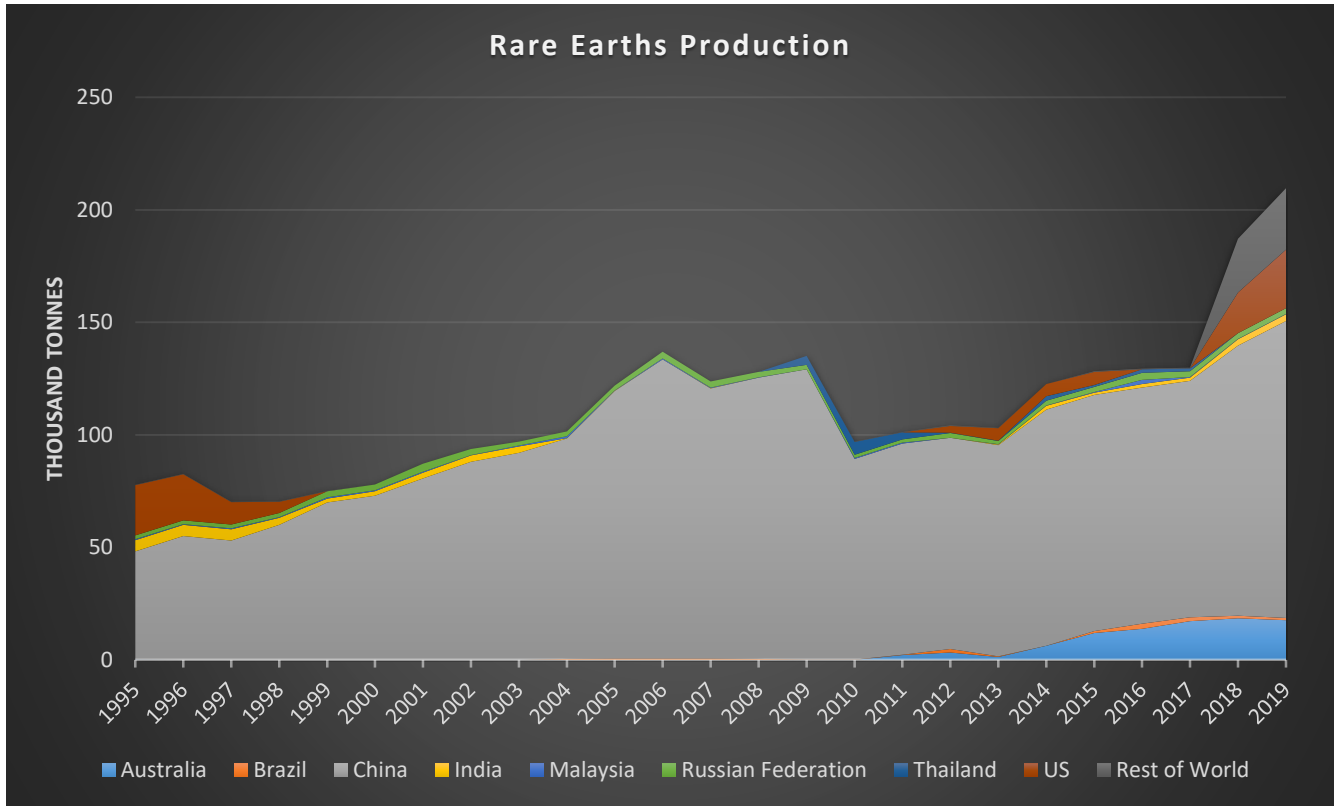
Source: *The Economic Times*

## Belarus nuclear plant stops power output soon after opening

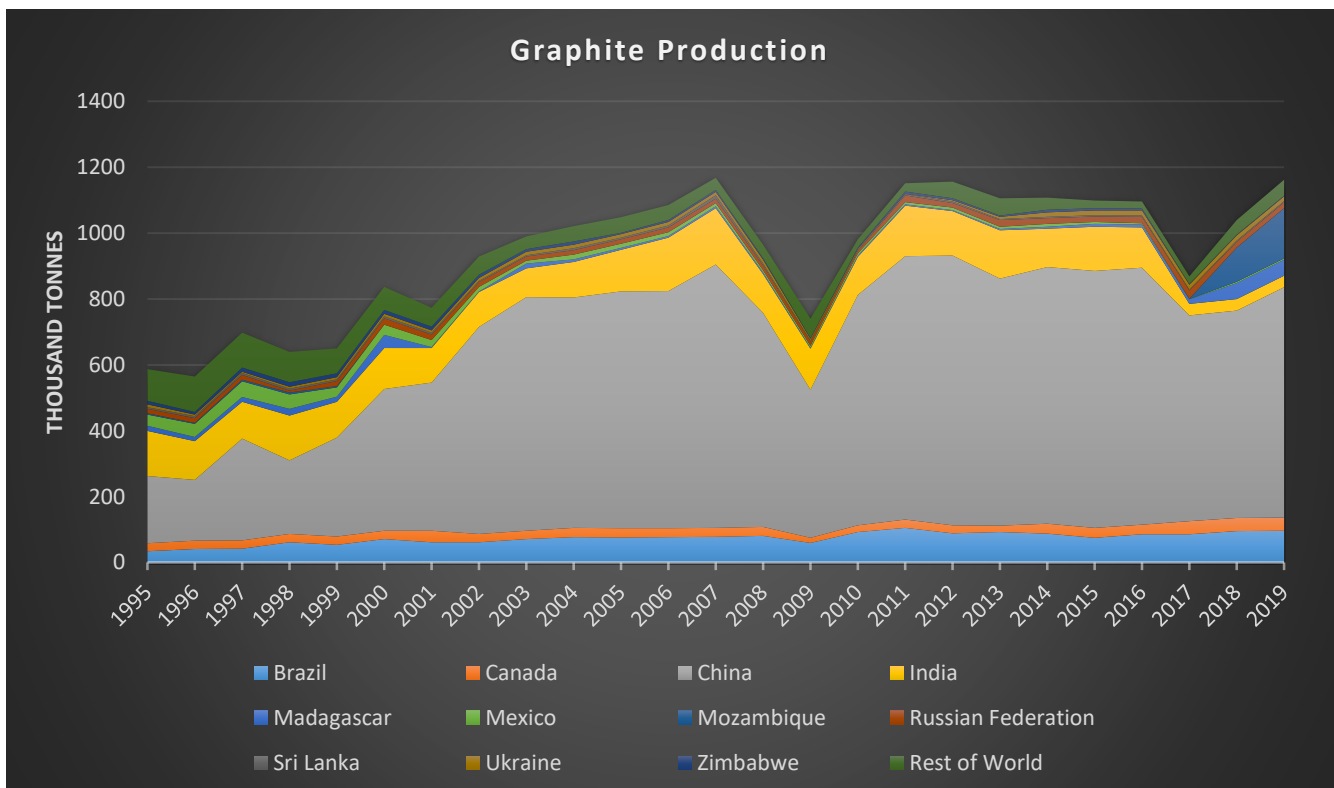
**11 November.** Belarus' first nuclear power plant stopped generating electricity the day after it was formally opened by President Alexander Lukashenko and some of its equipment needs to be replaced. Lukashenko inaugurated the Russian-built and -financed Astravyets plant. The plant stopped producing power because some electrical equipment broke down, according to Oleg Sobolev, a consultant at the Belarusian emergency ministry's department of nuclear and radiation safety. Russian state nuclear corporation Rosatom, which built the plant, has rejected the Lithuanian complaints, saying the plant's design conforms to the highest international standards as confirmed by the International Atomic Energy Agency. In line with a law banning electricity imports from Belarus once the nuclear plant started up, Lithuania's Litgrid power operator cut the inflow of electricity from Belarus when the plant began producing electricity. Upon its planned completion in 2022, the plant is to have two reactor units, each generating 1200 MW.

Source: *The Economic Times*

## DATA INSIGHT



Source: BP Statistical Review of World Energy 2020



Source: BP Statistical Review of World Energy 2020

This is a weekly publication of the Observer Research Foundation (ORF). It covers current national and international information on energy categorised systematically to add value. The year 2020 is the seventeenth continuous year of publication of the newsletter. The newsletter is registered with the Registrar of News Paper for India under No. DELENG / 2004 / 13485.

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