

International News

India has gifted 193 solar panels to the United Nations (UN) for each of the 193 member nations and these will be installed on the roof of the UN headquarters in New York. They are expected to generate peak power of 50 kW. The panels have been valued at approximately \$1 million. The installation has been named the Gandhi Solar Park and was inaugurated in New York on September 24, 2019.

The State Power Investment Corporation, a Chinese power generator, has started construction of a 6 GW wind farm located at Ulanqab city in the Inner Mongolia autonomous region. The wind farm is expected to supply around 20 billion kWh of electricity per annum to the Beijing-Tianjin-Hebei region. The wind farm will supply energy for the 2022 Winter Olympic Games in Beijing and the neighbouring Hebei province.

Swiss energy trader DXT Commodities has agreed to buy the output of a solar plant being built in Italy in a five-year power purchase agreement (PPA) with the German investment company KGAL and steelmaker ORI Martin. Under the deal, DXT will buy all the power produced by the plant, totalling around 95 GWh, paying developer KGAL a fixed price for five years. ORI Martin will then buy the green energy through virtual PPAs from DXT, after it is injected into the country's power grid, to fuel its steel plant. The 53 MW solar farm will start operations in the second half of 2020.

The Norwegian company Equinor and the UK's SSE Renewables have won a tender to build three offshore wind projects off the coast of the UK. The wind farm will be developed at an investment of Euro 10.2 billion. The offshore wind projects, with a cumulative capacity of 3.6 GW, will be located in the North Sea's Dogger Bank area and are expected to produce enough energy to power the equivalent of 4.5 million homes.

The Sustainable Energy Authority (SEA), part of Sri Lanka's Ministry of Power, Energy and Business Development, has floated two expressions of interest (Eoi) for domestic and foreign companies to develop solar projects of 10 MW capacity with 20 per cent energy storage systems. The projects will be developed under a joint venture with the SEA at the Hambantota Solar Energy

Park. According to the tender guidelines, bidders are expected to provide financial and technical capability for the development of the projects as part of the bid. The SEA has arranged land and other approvals (up to the signing of the PPA) for solar power projects. Further, the projects will be approved under a feed-in tariff mechanism and they are expected to be commissioned within six months. The submission deadline for the Eoi was October 15, 2019.

The Asian Development Bank (ADB), the Green Climate Fund and the Australian government have signed an agreement to develop renewable energy projects in Tonga. The total grant for the African country amounts to \$44.6 million. The grants will be used to help improve the energy security and access for people in the outer islands of Eua, Vava'u, O'ua, Tungua, Kotu, Mo'unga'one and Niuafu'ou. The projects will be funded under the ADB-supported Pacific Renewable Energy Investment Facility, which supports renewable energy projects in 11 small islands in the Pacific. The project will also provide technical solutions, such as battery energy storage systems, to promote more private sector investments in the renewable energy segment.

The European Bank for Reconstruction and Development has approved \$329 million for the Kazakhstan Renewables Framework to support renewable energy in the country. The framework will also be supported by concessional finance from the GCF. The facility will promote solar, wind, hydro, biogas, distribution and transmission projects and is expected to reduce carbon emissions by at least 500,000 tonnes per year.

India expressed intent to increase its renewable energy capacity target from 175 GW to 450 GW at the UN's Climate Action Summit in New York. The Jal Jeevan (water life) Mission for water conservation, rainwater harvesting and development of water resources was also mentioned. The government plans to spend approximately \$50 million on this mission in the next few years. Moreover, in order to make infrastructure disaster-resilient, India is also launching a Coalition for Disaster Resilient Infrastructure.

The Indian Academy, Dubai, recently partnered with CleanMax Solar to install a 192 kW rooftop solar project on its premises. According to the company's press release, the project is expected to generate 307,000 kWh of electricity per year and will help meet 70 per cent of the school's electricity requirement. The amount of clean electricity generated by the project is likely to help abate 135 tonnes of carbon dioxide emissions annually. On days when the solar power project produces more electricity than what the school can use, the school can supply the excess electricity back to the Dubai Electricity and Water Authority's grid in exchange for credits, which can be used against the school's future electricity bills.

The Office of the United States Trade Representative (USTR) has withdrawn the exclusion of bifacial modules from the ambit of

safeguard measures that was **applicable** on **imported solar equipment**. The change in policy will take effect as of October 28, 2019 and bifacial modules will now incur a 25 per cent duty as opposed to the 30 per cent rate set in early 2018.

The French energy group **Total** has **begun** the **construction** of the **Miyagi Osato Solar Park**, its **third solar power plant** in **Japan**. The solar park is planned to support a peak capacity of 52 MW. The project is to start in 2021 and will provide clean and reliable electricity to Japanese households.

ENGIE EPS has been **selected** by the **Power Authority of Guam**, as **a successful bidder** for the **construction** of **two solar-plus-storage projects** under a **20-year PPA**. The two systems proposed by ENGIE integrate 50 MW of solar PV with around 300 MWh of battery storage to provide 100 per cent of the daily solar production available for up to seven hours after sunset. The company will supply the battery storage design and act as a full energy storage solution provider as well as system integrator, supported by its strategic partner, Samsung SDI.

Japan's power generator, **JERA Co.** is **set to buy a 49 per cent stake** in the **376 MW Formosa 2 offshore wind project** in **Taiwan** from **Macquarie Capital**. The project is due to start operation at the end of 2021. JERA already holds a 32.5 per cent stake in Taiwan's first commercial offshore wind project Formosa 1, which has a capacity of 128 MW.

Uruguayan state-owned power company **PTE** has **issued a tender** for the **development** of **65 MW of solar projects** in the **country**. The scope of work in this tender includes the construction, commissioning, and operations and maintenance of solar projects. According to the tender documents, PTE is expected to provide solar modules and transmission infrastructure for the projects. The construction of the projects is expected to begin in the first quarter of 2020.

The **Da Mi Hydro Power Joint Stock Company** has **signed an agreement** with **ADB** to **provide funding** for the **development** of a **47.5 MW floating solar power plant** in **Vietnam**. The floating solar plant will be built at the utility's existing 175 MW hydropower plant. ADB is contributing \$17.6 million in a loan, along with \$15 million from the Canadian Climate Fund. ADB's leading Asia's Private Infrastructure Fund, in cooperation with the Japan International Cooperation Agency, will further provide a \$4.4 million loan.

The **Spanish company Iberdrola** and Mexico's **Grupo Alquimara** have **announced an investment** of **\$235 million** to **build a solar power plant** with a **capacity** of **300 MW** in the **municipality of Cuyoaco, Puebla, Mexico**. The plant will cover 755 hectares of agricultural land in the municipalities of Cuyoaco and Ocoatepec, where solar panels will cover 674 hectares and substations will occupy the remainder. Around 1,500 people will be employed in its con-

struction. This is the third project carried out by Iberdrola and Alquimara in Puebla. The project is expected to be completed by the end of 2020.

Canadian Solar has **won three solar projects** with a **total generation capacity** of **393.7 MW** in **two private auctions held** in **Brazil**. Two of the projects are to be set up in the states of Pernambuco and Ceará, with 190.5 MW and 76.2 MW capacities respectively. The energy generated will be sold under a 15-year PPA to the Companhia Paranaense de Energia. Canadian Solar also secured a 127 MW project in Minas Gerais state. The three new projects will use bifacial modules made by Canadian Solar. The construction of these plants should start in 2021 and finish before 2023.

A consortium of **ib vogt** and **AG Agro Industries** has **won a contract** to **develop a 50 MW grid-tied solar project** in **Chittagong district of Bangladesh**. The company is expected to enter into a PPA with the Bangladesh Power Development Board for 20 years. It is expected to procure power at a tariff of \$0.1094 per kWh. The project will be developed on a build-own-operate basis.

GE Renewable Energy has **received the first order** for its **Cypress turbines** to be **installed** at the **Ventos da Bahia wind farm** in **Brazil**. The company won a deal to supply 25 units of 5.3 MW to EDF Renewables. It will produce turbines at its local facility in the state of Bahia, while its subsidiary, LM Wind Power, will supply blades from its factory in Pernambuco, also in eastern Brazil.

Renewable sources in the **UK** have **generated more electricity** than **fossil fuels** in the **third quarter of 2019**. Renewable energy sources generated 29.5 TWh of energy during July, August and September, 2019, compared to 29.1 TWh from fossil fuels. Of the 29.5 TWh of renewable energy, 14.6 TWh came from wind, 8.8 TWh from biomass, 4.7 TWh from solar and 1.4 TWh from hydropower. Of the total 29.1 TWh from fossil fuels, 28.4 TWh came from gas, 0.4 TWh came from coal and 0.3 TWh from oil.

Equinor will **invest close to \$549 million** to **build floating wind turbines** that will **supply power** to **several North Sea oil and gas platforms**. The 88 MW capacity project, called Hywind Tampen, comprising 11 turbines, will meet about 35 per cent of the electricity needs at the Gullfaks and Snorre fields. The wind farm will be located some 140 km from the shore between the Snorre and Gullfaks platforms. The turbines are scheduled to start producing electricity at the end of 2022.

A consortium led by **Masdar**, a subsidiary of the Mubadala Investment Company, inaugurated **Cibuk 1**, the **largest utility-scale commercial wind power project** in **Serbia** and the **western Balkans**. Built over 50 km from the capital Belgrade, Cibuk 1 has a capacity of 158 MW and will provide power to 113,000 homes and displace over 370,000 tonnes of carbon dioxide per year. ■