

India best placed to export components for over 60 GW of upcoming global offshore wind capacity

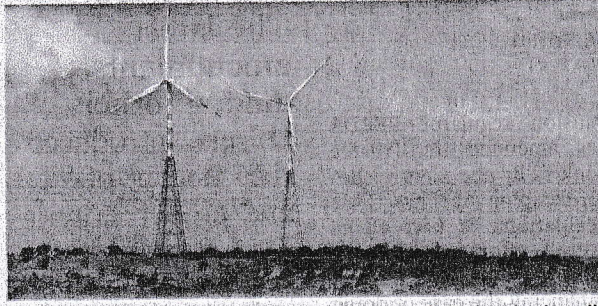
Rishi Ranjan Kala

New Delhi

International wind turbine manufacturers command large production bases in India, which can double as an export hub, particularly to tap the more than 60 gigawatt (GW) of upcoming global offshore wind capacity, S&P Global Commodity Insights said in its latest report.

"We expect average annual wind additions (onshore) of around 4 GW between 2024 and 2030. Based on that, the Indian market is already around 4 times oversupplied," S&P Global Commodity Insights Associate Director of Analysis of Gas, Power and Climate Solutions Indra Mukherjee said.

A lot of the manufacturing in India is owned by regionally diversified western turbine makers, who supply al-



WINDS OF CHANGE. Global installations of wind and solar will reach one terawatt in the next two years, finds a report NAGARA GOPAL

most everywhere outside China and prominently in Europe and the US. This opens opportunities for exports, he added. Prominent western turbine makers such as Vestas as well as specialist equipment makers like TPI Composites have scaled up and modernised their India manufacturing footprint — priming it as an export hub.

"Exports of wind turbine components in 2023 were nearly twice that of 2019

levels in revenue terms. Export opportunities are more attractive for standardised and labour-intensive components like towers and blades and is growing for nacelles too," Mukherjee noted. "However, not all the capacity is suited for exports. A lot of it is owned by domestic turbine makers who don't have international order books," he pointed out.

According to S&P Global Commodity Insights' top 10

trends in clean energy technology in 2024, global installations of wind and solar will reach one terawatt (TW) in the next two years, taking global installations to 3.5 TW and pressing an urgent need for more flexible power systems. But it is offshore wind that is set for an "unprecedented milestone" year.

"More than 60 GW of new offshore capacity are set to be auctioned in at least 17 different markets — an all-time record high," S&P Global Commodity Insights Clean Energy Technology Lead Eduard Sala de Vedula said.

SOLAR MODULES

India leads solar PV manufacturing expansions outside of mainland China. "India has now significant solar PV module manufacturing to serve the growing domestic market and to export to international markets (mostly US) after success of local in-

centive manufacturing program (PLI) and duties (BCD)," S&P Global Commodity Insights' principal research analyst of gas, power and climate solutions Jessica Jin said.

India was heavily dependent on module imports until the implementation of the basic custom duty (BCD) in April 2022. The production linked incentive (PLI) scheme stimulates PV manufacturing and will be central to reach module self-sufficiency before 2026, she added.

Module capacity in India by the end of 2023 was 10 GW more than anticipated at the beginning of the year. New investors entered module manufacturing apart from winners of the PLI rounds, stimulated by both attractive local manufacturing policies and opportunities to manufacture in India and ship to the international markets.