New Research Report

POWER GENERATION MARKET IN INDIA 2023

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Release Date: April 30, 2023

The country's power generation segment is witnessing a major shift, with renewables replacing thermal power in the installed capacity mix at a fast pace. As of November 2022, the country's installed capacity stood at 409 GW with coal- and lignite-based plants (210 GW) accounting for a major share of 52 per cent and renewables (119 GW) accounting for the second-largest share at 29 per cent. Capacity addition from conventional sources (thermal, hydro and gas) stood at 4,878 MW in 2021-22 (4,485 MW was added by thermal and 393 MW was added by hydroelectric plants). Meanwhile, renewables' capacity addition has continued to grow apace and stood at more than 14,076 MW for 2021-22 of which about 91 per cent was accounted for by solar power. The draft National Electricity Plan 2022 projects the capacity addition required during 2022-27 to meet peak demand and energy requirement by 2026-27 is 228,541 MW. This will comprise 40,632 MW of conventional capacity addition (coal and lignite 33,262 MW, gas 370 MW and nuclear 7,000 MW) and 187,909 MW of renewable energy-based capacity addition (large hydro 10,951 MW, solar 132,080 MW, wind 40,500 MW, biomass 2,318 MW, and pumped storage plants 2,060 MW). The overall installed capacity of RE (including large hydro and PSP) is expected to reach 344,517 MW if it materializes by 2027. Its share in total installed capacity would be 55 percent by 2027, larger than that of coal.