

## New renewable energy capacity addition doubled during FY2022: CEEW-CEF

- Peak power demand fell short of 1.4 GW in March 2022 compared to just 0.5 GW in March 2021.
- EV sales jumped more than 230% due to additional government incentives and a surge in petrol prices

New Delhi, 5 May 2022: New capacity addition of non-hydro renewable energy increased to 15.5 GW during FY22, compared to just 7.7 GW installed in the preceding fiscal year, according to the latest edition of the CEEW Centre for Energy Finance (CEEW-CEF) Market Handbook released today. Net coal-based capacity added during the year dropped by around 33% compared to the year before. Also, during FY22, peak power demand soared to unprecedented levels, falling short of 1.4 GW in March 2022, compared to just 0.5 GW in the year-ago period.

At the end of FY22, India's renewable energy generation capacity (including hydro) stood at 150 GW. This is far off from its target to install 500 GW of non-fossil fuel capacity by 2030 and will require an annual deployment of ~40 GW/ year to achieve the 2030 target.

Gagan Sidhu, Director, CEEW-CEF, said, "Over 100% rise in RE capacity addition this fiscal versus capacity addition in FY21 is heartening. However, the recent stress seen in the power sector, with several states facing the prospect of power cuts, underscores the central role that thermal power continues to play in India's energy mix. Further increase in RE can provide a significant degree of protection from the kind of supply chain issues plaguing thermal power, but for that battery storage needs to be deployed at scale to address RE's one big drawback - intermittency. Other innovative procurement formats such as hybrid and round-the-clock (RTC) also offer a certain degree of protection against intermittency. Interestingly, of the 17.5 GW of RE capacity auctioned in FY22, 4.3 GW representing a 25% share was under such innovative procurement formats. We can expect this share to increase further as it appears that discoms are increasingly looking to developers to address RE's intermittency challenge."

Overall, in terms of net capacity additions, renewable energy formed a little more than **89%** of the total **17.3 GW** capacities added in the power sector during FY22. The share of RE in net capacity additions stood at little more than **63%** in FY21. Further, solar energy comprised **90%** of the total RE capacity added during the year, driven partly by a **21%** rise in installations of rooftop solar to **2.3 GW**. An increase in the cost of raw materials and supply chain constraints resulted in rising solar PV module costs. Higher module costs and the imminent imposition of basic customs duty led to a rise in the lowest solar tariff discovered to **2.14 INR/kWh** in FY22 from **1.99 INR/kWh** in FY21. In this year's budget, the centre announced additional incentives worth more than INR 19000 crore to push local manufacturing of solar cells and modules.

The CEEW-CEF Handbook also highlighted that total outstanding dues of power distribution companies for the period also increased by **32**% to INR **1.28** lakh crore from the previous fiscal.

The CEEW-CEF Handbook further highlighted that sales of electric vehicles jumped by more than 230% to over 4.2 lakh units in FY22 compared to around 1.2 lakh units in the last fiscal. Share of EVs in total vehicles sold during the year increased to over 2.6% compared to less than one percent in the last fiscal. The surge in petrol prices, introduction of new models along with incentives under the Faster Adoption and Manufacturing of Electric and Hybrid vehicle (FAME-II) scheme contributed to the growth in sales of zero-emission vehicles, especially electric two-wheelers. In the Union Budget



2022-23, funds earmarked for the FAME-II scheme increased significantly from INR 800 crores to INR 2,908 crores in FY21.

"At a national level, EVs crossed 4% of the total vehicle sales in March 2022. Unpacking the numbers reveals that the transition is highly skewed towards electric two and three-wheelers, including e-rickshaws. Since these classes of EVs don't require sophisticated charging infrastructure, smaller towns/cities may be well-placed to participate in the transition." said, Ruchita Shah, Research Analyst, CEEW-CEF.

The CEEW-CEF Market Handbook for the period FY2022 can be accessed here.

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## **About CEEW-CEF**

The CEEW Centre for Energy Finance (CEEW-CEF) is an initiative of the Council on Energy, Environment and Water (CEEW), one of Asia's leading think tanks. CEEW-CEF acts as a non-partisan market observer and driver that monitors, develops, tests, and deploys financial solutions to advance the energy transition. It aims to help deepen markets, increase transparency, and attract capital in clean energy sectors in emerging economies. It achieves this by comprehensively tracking, interpreting, and responding to developments in the energy markets while also bridging gaps between governments, industry, and financiers.