

## India will require investments worth over USD 10 trillion to achieve net-zero by 2070: CEEW-CEF

- Investments worth over USD 8.4 trillion would be needed by the power sector alone
- Foreign investment support of USD 1.4 trillion needed as concessional finance

**New Delhi 18 November 2021:** India would need cumulative investments of USD 10.1 trillion to achieve net-zero emissions by 2070, according to an independent study released today by the CEEW Centre for Energy Finance (CEEW-CEF). These investments would help decarbonise India's power, industrial, and transport sectors. However, the first-of-its-kind study also estimated that India could face a significant investment shortfall of USD 3.5 trillion to achieve its net-zero target. Hence, investment support of USD 1.4 trillion, in the form of concessional finance, would be required from developed economies to mobilise foreign capital that bridges the gap.

The CEEW-CEF study 'Investment Sizing India's 2070 Net-Zero Target' also highlighted that the majority of the investments would be needed to transform India's power sector. Such investments, totalling USD 8.4 trillion, would be required to significantly scale up generation from renewable energy and associated integration, distribution and transmission infrastructure. Another USD 1.5 trillion would have to be invested in the industrial sector for setting up green hydrogen production capacity to advance the sector's decarbonisation.

Dr Arunabha Ghosh, CEO, CEEW, said: "At COP26, India announced bold near-term and long-term climate targets. Our analysis finds that a transition to net-zero emissions would require mammoth investment support from developed countries. Developed countries must ramp up hard targets for climate finance over the coming years. Also, on the domestic front, financial regulators like RBI and SEBI need to create an enabling ecosystem for financing India's transition to a green economy. Finally, given the size of the investments required, private capital, from both domestic and international institutions, should form the bulk of investment, while public funds should play a catalytic role by de-risking investments in existing and emerging clean technologies."

The CEEW-CEF study also pointed out that India's USD 1.4 trillion concessional finance requirement would not be uniformly spread across the five decades till 2070. The average annual concessional finance requirement would vary from USD 8 billion in the first decade to USD 42 billion in the fifth decade.

Vaibhav Pratap Singh, Programme Lead and lead author of the study said, "India's 2070 net-zero target is a bold commitment that would not only contribute to global decarbonisation efforts but would also shape how businesses and jobs of the future would look like. Traditional domestic and foreign sources such as domestic banks and non-banking financial companies (NBFCs), and debt capital markets - both local and international - would not be able to fund the massive investments needed by themselves. Therefore, access to foreign capital, on concessional terms, would have to play a key role."

This study follows CEEW's 'Implications of a Net-zero Target for India's Sectoral Energy Transitions and Climate Policy' study, launched on October 12, which estimated how five key sectors would need to evolve if India were to achieve net-zero by 2070. According to that study, India's total installed solar power capacity would need to increase to 5,630 gigawatts by 2070. The usage of coal, especially for power generation, would need to peak by 2040 and drop by 99% between 2040 and 2060. Further, crude oil consumption across sectors would need to peak by 2050 and fall substantially by 90% between 2050 and 2070. Green hydrogen could contribute 19% of the total energy needs of the industrial sector.

At the recently concluded COP26, Prime Minister Narendra Modi announced India's aim to achieve net-zero emissions by 2070.

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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.