

India's Journey to Net Zero: A conceptual framework for analysis

Date: 20 May 2024

Time: 3.00 p.m. to 4:00 p.m.

Online Mode

At COP 28 in November 2023, the IPCC warned that with current policies, global warming was set to cross 3°C. At COP 26 held at Glasgow, Prime Minister also announced that India would become net zero by 2070. India's declaration to achieve net zero emissions by 2070 and updated NDCs to achieve fifty percent of its installed generation capacity from non-fossil sources and a 40-45% reduction in the by 2030 marks a momentous step in the global battle against climate change. This announcement signifies India's leadership in forging a low carbon economic development model. This is one of the highest increases in ambition of responsible climate leadership in the short run. It has the potential to serve as a guiding blueprint for other developing economies seeking sustainable pathways.

This, therefore, seems the right time for serious analysis and discussion on how India's journey to net zero could be undertaken and what it would entail. This paper is a preliminary attempt in this direction. It assumes that India in the coming decades would become a developed country with their levels of per capita incomes, consumption, and consequently energy consumption.

In this study, TERI has considered sectors which account for major shares of India's GHG emissions now. For each sector, it attempts a conceptual framework for analysis of the feasible transition to net zero. The study is based on the underlying premise that decoupling of the rise in carbon emissions from growth would be the key to moving towards net zero. This paper considers factors which would lead to inflection points for decoupling.

TERI's discussion paper titled: ***India's Journey to Net Zero: A conceptual framework for Analysis*** is an attempt to delineate the contours of the transition to net zero of India's major carbon-emitting sectors, namely, electricity, transport, residential cooking, industry, and agriculture the prism of decoupling the sectoral energy consumption growth with the rise in emissions. With decoupling India's growth and transition to becoming a developed economy would be delinked from carbon emissions. In fact, emissions would decline and move to net zero while growth would continue.

This study presents a simplified macro view of what the transition to net zero. It is time to begin the process of more rigorous sectoral analysis, modelling, generation of scenarios with cost implications, projection of alternative trajectories of movement down the cost curve. These would generate policy options for least cost sectoral transitions to net zero.

TERI plans to present the discussion paper on 20 May 2024 from 3:00 p.m. to 4:00 p.m. in an online mode. This would be an excellent opportunity to bring all the stakeholders towards the deliberations on India's low carbon trajectory.