

No Silver Bullet Considerations for India's Net-Zero Strategy

Event Overview

India submitted its long-term low-carbon development strategy (LT-LEDS) to the UNFCCC at COP27 recently, in compliance with the mandates of the Paris Agreement. The strategy lays out the context in which India will transition to net zero. It emphasises India's relatively lower share in cumulative GHG emissions, the rise in energy demand that will come with meeting basic development goals. It also points out that India's current per capita energy consumption levels are far below the global average. The LT-LEDS then dives into sector-specific transformations and interventions, first outlining the current policy scenario and then describing the actions and technologies that would be required, along with the potential challenges of implementing them.

Insights from modelling studies can help design a comprehensive strategy for each sector and determine the system-wide trade-offs that would have to be addressed before implementation. CSTEP's work on modelling net-zero scenarios for India has thrown up some interesting questions and considerations. These questions were highlighted in our recent report No Silver Bullet: Essays on India's Net-Zero Transition. Some of these questions include estimation techniques to project future demand, behavioural changes that are conducive to net zero, decarbonisation of the power sector beyond renewables, industrial decarbonisation strategies aside from electrification, and carbon pricing for economic systems transformation.

These questions will be discussed at our upcoming virtual event on 15 December 2022. Through the event, we hope to take discussions around these issues a bit further. Ms Richa Sharma (Additional Secretary, MoEFCC), who was part of the delegation that presented India's LT-LEDS at COP27 will present her insights at the event. She will speak about the LT-LEDS formulation and how modelling insights can help inform India's net-zero strategy. This will be followed by a panel discussion among modelling experts where they will share in detail their views on the issues brought up by the report.

We believe these discussions can help us better understand how models can be effectively used in strategy-making, potential challenges for India in transitioning to net-zero emissions, and India's plans in the coming decades.