

## How can India Meet its Rising Power Demand?

Pathways to 2030

Disha Agarwal, Arushi Relan, Rudhi Pradhan, Sanyogita Satpute, Karthik Ganesan, and Shalu Agrawal

Report | March 2025





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Suggested citation:

Agarwal, Disha, Arushi Relan, Rudhi Pradhan, Sanyogita Satpute, Karthik Ganesan, Shalu Agrawal. 2025. *How can India Meet its Rising Power Demand? Pathways to 2030*. New Delhi: Council on Energy, Environment and Water.

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Organisation:

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The <u>Council on Energy</u>, <u>Environment and Water (CEEW)</u> is one of Asia's leading not-for-profit policy research institutions and among the world's top climate think tanks. The Council uses **data**, **integrated analysis**, **and strategic outreach to explain — and change — the use, reuse, and misuse of resources.** The Council addresses pressing global challenges through an integrated and internationally focused approach. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with the wider public. <u>CEEW</u> is a strategic/knowledge partner to 11 ministries for India's G20 presidency.

The Council's illustrious Board comprises Mr Jamshyd Godrej (Chairperson), Mr S. Ramadorai, Mr Montek Singh Ahluwalia, Dr Naushad Forbes, Dr Janmejaya Sinha, Dr Suresh Prabhu, and Ms Vinita Bali. The 330+-strong executive team is led by Dr Arunabha Ghosh. CEEW has repeatedly featured among the world's best managed and independent think tanks.

In over 14 years of operations, The Council has engaged in 500+ research projects, published 460+ peer-reviewed books, policy reports and papers, created 220+ databases or improved access to data, advised governments around the world 1400+ times, promoted bilateral and multilateral initiatives on 160+ occasions, and organised 610+ seminars and conferences. In July 2019, Minister Dharmendra Pradhan and Dr Fatih Birol (IEA) launched the CEEW Centre for Energy Finance. In August 2020, <a href="Powering Livelihoods">Powering Livelihoods</a> — a CEEW and Villgro initiative for rural startups — was launched by Minister Piyush Goyal, Dr Rajiv Kumar (then NITI Aayog), and H.E. Ms Damilola Ogunbiyi (SEforAll).

The Council's major contributions include: Informing India's net-zero goals; work for the PMO on accelerated targets for renewables, power sector reforms, environmental clearances, *Swachh Bharat*; pathbreaking work for India's G20 presidency, the Paris Agreement, the HFC deal, the aviation emissions agreement, and international climate technology cooperation; the first independent evaluation of the *National Solar Mission*; India's first report on global governance, submitted to the National Security Advisor; support to the National Green Hydrogen and Green Steel Missions; the 584-page National Water Resources Framework Study for India's 12th Five Year Plan; irrigation reform for Bihar; the birth of the Clean Energy Access Network; the concept and strategy for the International Solar Alliance (ISA); the Common Risk Mitigation Mechanism (CRMM); India's largest multidimensional energy access survey (ACCESS); critical minerals for Make in India; India's climate geoengineering governance; analysing energy transition in emerging economies, including Indonesia, South Africa, Sri Lanka, and Viet Nam. CEEW published Jobs, Growth and Sustainability: A New Social Contract for India's Recovery, the first economic recovery report by a think tank during the COVID-19 pandemic.

The Council's current initiatives include: State-level modelling for energy and climate policies; consumer-centric smart metering transition and wholesale power market reforms; <a href="modelling carbon markets">modelling carbon markets</a>; piloting business models for solar rooftop adoption; fleet electrification and developing low-emission zones across cities; <a href="assessing green">assessing green</a> jobs potential at the state-level, circular economy of solar supply chains and wastewater; assessing carbon pricing mechanisms and India's carbon capture, usage and storage (CCUS) potential; <a href="developing a first-of-its-kind Climate Risk Atlas for India">developing a first-of-its-kind Climate Risk Atlas for India</a>; sustainable cooling solutions; developing state-specific dairy sector roadmaps; supporting India's electric vehicle and battery ambitions; <a href="mailto:andennative">and enhancing global action for clean air via a global commission 'Our Common Air'</a>.

The Council has a footprint in over 20 Indian states, working extensively with 15 state governments and grassroots NGOs. Some of these engagements include supporting power sector reforms in Uttar Pradesh, Rajasthan, and Haryana; energy policy in Rajasthan, Jharkhand, and Uttarakhand; driving low-carbon transitions in Bihar, Maharashtra, and Tamil Nadu; promoting sustainable livelihoods in Odisha, Bihar, and Uttar Pradesh; advancing industrial sustainability in Tamil Nadu, Uttar Pradesh, and Gujarat; evaluating community-based natural farming in Andhra Pradesh; and supporting groundwater management, e-auto adoption and examining crop residue burning in Punjab.