

1. Nationally Determined Contribution COP 30 – Environment

India to submit updated carbon-reduction targets by the beginning of COP30 on November 10. India is preparing to submit its new climate targets (NDCs) for 2035 at COP30, building on its early achievement of some 2030 goals. The new commitments are expected to emphasize energy efficiency, carbon markets, and sustainable lifestyles to bolster its climate action plan.

India's Upcoming Nationally Determined Contributions (NDCs) for COP30

India is set to submit its updated Nationally Determined Contributions (NDCs) at the 30th Conference of the Parties (COP30) in Belém, Brazil, in November 2025. This submission is part of its commitment under the Paris Agreement to progressively enhance its climate action goals.

Understanding Nationally Determined Contributions (NDCs)

Definition – NDCs are national climate action plans submitted by countries under the 2015 Paris Agreement. They outline specific pledges to reduce greenhouse gas emissions and manage fossil fuel consumption.

Primary Goal – The collective aim of NDCs is to limit the rise in global temperature to well below 2°C, and preferably to 1.5°C, compared to pre-industrial levels.

Update Mechanism – The Paris Agreement mandates that countries must review and submit updated, more ambitious NDCs every five years.

Key Metric – Emissions Intensity of GDP – This refers to the volume of greenhouse gas emissions released per unit of a country's economic output (GDP). It is important to note that a reduction in emissions intensity does not necessarily mean a reduction in the country's absolute emissions, especially if the economy is growing rapidly.

India's Climate Commitments and Progress

Historical Context – As a signatory to both the UNFCCC and the Paris Agreement, India submitted its First NDC in 2015 and an updated version in August 2022.

The 'Panchamrit' Pledge (Announced at COP26, Glasgow) – These five commitments form the core of India's enhanced climate action strategy.

1. Achieve 500 GW of non-fossil fuel energy capacity by 2030.
2. Source 50% of total energy requirements from renewable energy by 2030.
3. Reduce the emissions intensity of its GDP by 45% by 2030, from 2005 levels.
4. Achieve a total reduction of 1 billion tonnes in projected carbon emissions by 2030.
5. Reach the target of net-zero carbon emissions by 2070.

India's Last NDC Update (2022) –

Emissions Intensity – Formally committed to reducing the emissions intensity of its GDP by 45% by 2030 from 2005 levels.

Energy Sourcing – Pledged to achieve about 50% of cumulative electric power installed capacity from non-fossil fuel-based sources by 2030.

Carbon Sink – Aimed to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through expanded forest and tree cover by 2030.

Progress So Far – India successfully reduced the emissions intensity of its GDP by 33% between 2005 and 2019. As of June 2025, India reported that 50% of its cumulative electric power capacity was sourced from non-fossil fuels, achieving this key target five years ahead of schedule.

Expectations for India's NDC 3.0 (Commitments for 2035)

India's third NDC update (NDC 3.0) will outline its climate targets for the period up to 2035. Key features are likely to include –

Greater Emphasis on Energy Efficiency – Implementation of more stringent energy efficiency standards across key sectors like industry, transport, appliances, and buildings.

Expansion of PAT Scheme – The Perform, Achieve and Trade (PAT) scheme, which sets energy-saving targets for industries, is expected to be expanded.

Operationalisation of India Carbon Market – Scheduled to be operational by 2026, this market will

assign mandatory emission-intensity targets to 13 sectors and allow for the trading of emission reduction certificates.

Integration of Mission LiFE – The 'Lifestyle for Environment' mission will be integrated to promote sustainable consumption patterns and encourage demand-side emission reductions.

Global Context and Key Challenges

International Commitments for 2035

Country/Region	Proposed 2035 Emission Reduction Target	Base Year	Status
European Union	66–72% reduction	1990	Proposed, but the final decision has been delayed.
Australia	62–70% reduction	2005	Officially announced.
United States	Uncertain	N/A	Trajectory is unclear due to its earlier withdrawal from the Paris Agreement.
China	Not yet announced	N/A	Commitments are awaited.

Global Trajectory – Despite these pledges, a UN report estimates that even if all current NDCs are fully implemented, the world is still on a path to approximately 3°C of warming by 2100.

Finance and Bilateral Mechanisms – India has signed a Joint Crediting Mechanism (JCM) with Japan to facilitate bilateral clean energy projects and share carbon credits. Similar bilateral agreements are currently under discussion with other developed nations.

Persistent Challenges – A major hurdle is the failure of developed nations to provide adequate and timely climate finance. This places developing countries like India in a difficult position, as they remain dependent on fossil fuels to power their economic growth.

Significance of Raising India's Energy Efficiency Target

Enhancing the energy efficiency goal in NDC 3.0 holds several strategic advantages for India –

1. **Cost-Effective Emission Reduction** – Implementing energy efficiency measures is often more economical and faster than commissioning new renewable energy capacity.
2. **Enhanced Energy Security** – Greater efficiency reduces the overall demand for energy, thereby decreasing India's reliance on costly fossil fuel imports.
3. **Economic Co-Benefits** –
 1. Lower energy consumption leads to reduced electricity bills for households and businesses.
 2. It improves the competitiveness of Micro, Small, and Medium Enterprises (MSMEs).
4. **Strengthened Climate Diplomacy** – A more ambitious energy efficiency target would bolster India's leadership position and influence in international climate negotiations at COP30.

Source – <https://www.thehindu.com/sci-tech/energy-and-environment/india-to-submit-updated-carbon-curbing-targets-around-november/article70085220.ece>