

July 2025

# INDIA'S CARBON CREDIT TRADING SYSTEM SCHEME (CCTS)

## Compliance Mechanism

<b>Years in operation</b>	<p>The detailed regulation for India's compliance mechanism was adopted in July 2024 to operate as an intensity-based baseline-and-credit system.</p> <p>The initial targets are set for two fiscal years: 2025-2026 (FY 2025-26) 2026-2027 (FY 2026-27)</p> <p>Trading is expected to start in the second half of 2026.</p>
<b>Overall cap and trajectory</b>	<p>Total emissions limit under the Indian CCTS is the sum of the bottom-up output-based emissions limits for all individual covered entities. However, the bottom-up emissions limits do not represent an absolute cap.</p>
<b>Emissions covered</b>	<p>CO<sub>2</sub></p> <p>Perfluorocarbons (PFCs)</p>
<b>NDC targets</b>	<p>By 2030: Reduce emissions intensity by 45% below 2005 levels.</p> <p>By 2070: Net Zero</p>
<b>Sectors covered</b>	<p>CCTS covers nine sectors including:</p> <ul style="list-style-type: none"><li>• Aluminum</li><li>• Chlor-alkali</li><li>• Cement</li><li>• Pulp &amp; Paper</li><li>• Fertilizers</li><li>• Iron &amp; Steel</li><li>• Petrochemicals</li><li>• Petroleum Refineries</li><li>• Textiles</li></ul>
<b>Number of covered entities</b>	<p>Approximately 800 entities</p>
<b>Target(s) for compliance entities</b>	<p>The Ministry of Environment, Forest and Climate Change (MoEFCC) notified a draft of the Greenhouse Gas (GHG) Emission Intensity Target Rules for CCTS in May 2025, covering four sectors for 2025-2026 and 2026-2027, using 2023-2024 as the baseline.</p> <p>A total of 282 plants within these sectors are covered under the initial phase. Notification of targets for the other compliance sectors is upcoming.</p> <p>The reduction targets are phased. For FY 2025-26, the required reductions are averaging roughly 2-3%. The targets become more stringent for FY 2026-27, with more ambitious cuts (e.g., 3.3-7.5% or higher for some sub-sectors).</p>

	<p>Sector-specific target ranges mentioned include:</p> <p>Cement: 0.85% to 7.6% for OPC and PPC units.</p> <p>Aluminum: 1.9% to 7.06%.</p> <p>Pulp &amp; Paper: Up to 15% over two years.</p> <p>Chlor-alkali: 1.32% to 4.53%.</p> <p>Obligated entities will be informed of their annual GHG targets for 3 years. Steel and Iron, Petrochemicals &amp; Petro Refinery, Fertilizers, Textiles will be receiving targets in the coming months.</p>
<b>Trading rules</b>	<p>The Central Electricity Regulatory Commission (CERC) will act as a primary regulatory body for overseeing the trading of carbon credits on power exchanges. Carbon Credit Certificates (CCCs) issued by BEE and approved by the government can be traded on any power exchange following the applicable rules. Trading will occur monthly as approved by CERC.</p> <p>Unlimited banking of CCCs is allowed. Borrowing is not allowed. Trading of CCC's is expected to begin in 2026.</p>
<b>Use of offsets and linking</b>	<p>The Indian CCTS is not linked with any other systems.</p> <p>So far, the use of offsets is not allowed under compliance mechanism.</p> <p>There is no indicated linkage between voluntary and offset mechanism and the offset component of market is entirely voluntary in nature.</p>
<b>Penalties for non-compliance</b>	<p>In case an obligated entity fails to comply; the Central Pollution Control Board will impose penalties for the shortfall in the respective compliance year equal to twice of the average price at which CCCs traded during the trading cycle of that compliance year. The average price shall be determined by the BEE.</p>
<b>Other features</b>	<p>The CCTS builds on India's Perform-Achieve-Trade (PAT) scheme, that has been in operation under the Bureau of Energy Efficiency since 2012. PAT scheme covered 1000 entities from 13 energy intensive sectors which will be gradually transitioned into the compliance mechanism.</p> <p>A National Steering Committee for the Indian Carbon Market (NSCICM) has been established to oversee the Indian Carbon Market framework.</p> <p>A price stability mechanism is under consideration.</p>
<b>Use of revenue</b>	<p>Not defined.</p>

## Offset Mechanism

<b>Years in operation</b>	<p>The Indian government established the Offset Mechanism, as part of the Carbon Credit Trading Scheme (CCTS), in December 2023. 1<sup>st</sup> Jan 2025 is the official start date for ICM project registrations.</p> <p>It serves as a domestic crediting mechanism.</p>																		
<b>Entities applicable</b>	Any entity can register as a non-obligated entity under the Offset Mechanism.																		
<b>Sectors approved under the Offset Mechanism</b>	The project should be within one of the ten sectors published: Energy, Industries, Waste handling and disposal, Agriculture, Forestry, Transport, Construction, Fugitive Emissions, Solvent Use, CCUS.																		
<b>Protocols approved till date</b>	<p>8 protocols notified till date:</p> <table> <tr> <th>Sector</th><th>Methodology</th></tr> <tr> <td>Energy</td><td>Grid-connected electricity generation from renewable sources</td></tr> <tr> <td>Energy</td><td>Hydrogen production from electrolysis of water</td></tr> <tr> <td>Industries</td><td>Energy efficiency and fuel switching measures for industrial facilities</td></tr> <tr> <td>Industries</td><td>Hydrogen production using methane extracted from biogas</td></tr> <tr> <td>Industries</td><td>Landfill methane recovery</td></tr> <tr> <td>Waste Handling and Disposal</td><td>Flaring or use of landfill gas</td></tr> <tr> <td>Agriculture</td><td>Methane recovery from livestock and manure management at households and small farms</td></tr> <tr> <td>Forestry</td><td>Afforestation and reforestation of degraded mangrove habitats</td></tr> </table>	Sector	Methodology	Energy	Grid-connected electricity generation from renewable sources	Energy	Hydrogen production from electrolysis of water	Industries	Energy efficiency and fuel switching measures for industrial facilities	Industries	Hydrogen production using methane extracted from biogas	Industries	Landfill methane recovery	Waste Handling and Disposal	Flaring or use of landfill gas	Agriculture	Methane recovery from livestock and manure management at households and small farms	Forestry	Afforestation and reforestation of degraded mangrove habitats
Sector	Methodology																		
Energy	Grid-connected electricity generation from renewable sources																		
Energy	Hydrogen production from electrolysis of water																		
Industries	Energy efficiency and fuel switching measures for industrial facilities																		
Industries	Hydrogen production using methane extracted from biogas																		
Industries	Landfill methane recovery																		
Waste Handling and Disposal	Flaring or use of landfill gas																		
Agriculture	Methane recovery from livestock and manure management at households and small farms																		
Forestry	Afforestation and reforestation of degraded mangrove habitats																		
<b>Registry</b>	Registry for issuance operated by Grid Controller of India Limited (GCIL), yet to be setup.																		

<b>Other features</b>	<ul style="list-style-type: none"> <li>• Project should not be concurrently registered with any other carbon market. Exception applies for India's Green Credit Programme.</li> <li>• If the project activity matches MoEFCC's Article 6.2 list, non-obligated entities may seek authorisation for corresponding adjustments and trade CCCs internationally via the ICM portal.</li> <li>• Non-labelled CCC's (outside of Article 6.2) may still be allowed to sell internationally for voluntary purposes, as emission reductions will be accounted towards India's NDC targets.</li> </ul>
-----------------------	--

## MAJOR DEVELOPMENTS

- i) **Article 6 Whitelist:** In 2023, The Ministry of Environment, Forest, and Climate Change rolled out a list of activities for trading of carbon credits eligible under Article 6.2 mechanism of Paris Agreement. The list of activities was initially approved for the first 3 years and may be revised by NADAIPA. Link [here](#). List for eligible activities for Article 6.4 Mechanism for Paris Agreement was rolled out in June 2024 and can be found [here](#). At the time of writing, India has not concluded negotiations around any bilateral cooperative approaches.
- ii) **Draft Notification for GEI Reduction Targets under Compliance Mechanism:** The Ministry of Environment, Forest and Climate Change (MoEFCC) notified a draft notification concerning potential targets for certain industries on April 16th, 2025. This draft notification notifies Greenhouse Gas Emission Intensity (GEI) reduction targets for certain industries such as aluminum, cement, chlor-alkali, and pulp and paper entities. Formal targets will be notified in a subsequent notification. Draft targets for the remaining sectors, namely Fertilizers, Iron & Steel, Petrochemicals, Petroleum Refineries, and Textiles are likely to be introduced in later notifications.
- iii) **Applications open for ACV agencies, projects and entities to register for offset mechanism:** On June 4<sup>th</sup> 2025, the Bureau of Energy Efficiency also opened applications for entities interested in becoming Accredited Carbon Verification (ACV) Agencies for the Indian CCTS. Link to registration is attached [here](#). On June 6<sup>th</sup>, 2025, the Bureau of Energy Efficiency announced the opening of registrations for entities to register themselves as non-obligated entities under the offset mechanism. The form is available [here](#). The Bureau is also inviting entities to express their interest in registering their project activities within the 'Offset Mechanism' of the Carbon Credit Trading Scheme. Link attached: [Project Information Form](#)

## REFERENCES

Bureau of Energy Efficiency (BEE)

[Carbon Credit Trading Scheme Notification, 2023](#)

Bureau of Energy Efficiency (BEE), July 2024

[Detailed Procedure for Compliance Mechanism under CCTS](#)

Bureau of Energy Efficiency (BEE), March 2025

[Detailed Procedure for Offset Mechanism under CCTS](#)

Ministry of Power

[Offset Mechanism Notification](#)

Office Memorandum, Bureau of Energy Efficiency

[Sectoral Scope and Approved Sectors under Offset Mechanism](#)

Bureau of Energy Efficiency (BEE)

[Methodologies under Offset Mechanism](#)

Bureau of Energy Efficiency (BEE), July 2024

[Accreditation Procedure and Eligibility Criteria for Accredited Carbon Verification Agency](#)

Government of India, Ministry of Environment, Forest and Climate change

[Draft Target Setting Notification for Certain Sectors](#)

Bureau of Energy Efficiency

[Portal for Application to be Accredited Carbon Verification \(ACV\) Agencies for India CCTS](#)

Bureau of Energy Efficiency

[Registration Form for Entities to Register as Non-Obligated Entities under the Offset Mechanism](#)

## AUTHORS

**Kajol Tandon**

India Representative

IETA

[tandon@ieta.org](mailto:tandon@ieta.org)

**Björn Fondén**

International Policy Manager – APAC Lead

IETA

[fonden@ieta.org](mailto:fonden@ieta.org)

**Mitul Kaushal**

Associate

CKinetics

<https://www.cKinetics.com>

**Nikhil Agarwal**

Director

CKinetics

