CareEdge-ESG's view on

Indian Carbon Market Framework

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Indian Carbon Market Framework

A much-needed initiative for India's decarbonisation strategy

Government of India announced its commitment to roll out a Carbon Credit Trading Scheme (CCTS) by 2025-2026. This has been primarily driven not only by the country's climate action goals and Nationally Determined Contributions (NDCs), but also by the evolving global sustainability landscape, which includes EU Carbon Border Adjustment Mechanism (CBAM) and rising carbon taxes.

Global Carbon Markets

Article 6 of the Paris Climate agreement underpins the importance of international carbon markets in reducing global Greenhouse Gas (GHG) emissions cost-effectively.

Globally, there are broadly two types of carbon markets: compliance and voluntary. Compliance markets are created as a result of national, regional, and/or international policy or regulatory requirement. Voluntary carbon markets, national and international, refer to the issuance, buying and selling of carbon credits, on a voluntary basis.

One widely adopted compliance market mechanism is the Emissions Trading Systems (ETS), which basically operates on a "cap-and-trade" principle. The EU launched the world's first international ETS in 2005. In 2021, China launched the world's largest ETS. Presently, numerous national and subnational ETS are either operational or under development. Key countries that have already implemented an ETS comprise New Zealand, Kazakhstan, Australia, Japan, Canada, Mexico, Indonesia, and UK. In countries such as China, South Korea, Australia, and Japan, there are government-operated voluntary mechanisms.

Indian Carbon Market

In October 2024, The Bureau of Energy Efficiency (BEE) announced further developments to India's Carbon Credit Trading Scheme. Key highlights are below:

1. A robust National Framework for Indian Carbon Market (ICM) through a reliable national carbon credit electronic platform is being developed.
2. The Indian Carbon Market Framework has two key mechanisms –
    a. **Compliance mechanism:** A mandatory programme for the energy-intensive industries where the Government will set the GHG emission intensity targets. The obligated entities reducing their GHG emission intensity below the target GHG emission intensity shall be eligible for issuance of Carbon Credit Certificates (CCC) and the entities that are unable to achieve the target will be required to

surrender/purchase equivalent number of certificates based on shortfall. The current PAT Scheme will be transitioned gradually (for the relevant sectors and entities) to the compliance mechanism under CCTS. The nine sectors – Aluminium, Chlor Alkali, Cement, Fertiliser, Iron & Steel, Pulp & Paper, Petrochemicals, Petroleum refinery, and textile are to be considered for gradual transition and more sectors would be included in future.

b. **Offset mechanism:** This mechanism aims to incentivise the voluntary actions from entities (not covered under compliance) for GHG reduction. The projects will undergo an independent evaluation before it becomes eligible for issuance of CCCs. The first phase of the offset mechanism will focus on sectors such as energy, chemical manufacturing, waste handling, and agriculture, with technologies such as green hydrogen production, biochar usage, landfill gas capture, and afforestation being highlighted as solutions to reduce emissions. The second phase will include other sectors such as construction, fugitive emissions from fuels, and carbon capture, utilisation, and storage (CCUS).

3. The validation and/or verification activities are to be conducted by Accredited Carbon Verification Agency (ACVA).
4. The National Steering Committee for Indian Carbon Market (NSCICM) is expected to recommend to Ministry of Power for the formulation and finalisation of guidelines regarding trading of carbon credit certificates outside India.

CARE ESG Ratings Limited (CareEdge-ESG) believes that this is a significant step in reducing fossil fuel use, as this market will enable polluters to exchange credits equivalent to a specific amount of emissions, incentivising companies to reduce their carbon footprint. This will also provide much needed market support mechanism to new mitigation opportunities and simultaneously establish enough momentum to drive demand. By creating a common marketplace for emissions trading through development of a meta-registry, India will not only move closer towards meeting / exceeding the NDC targets, but also pave way for a meaningful implementation of Article 6 of the Paris Agreement.

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