NEXT IAS

DAILY EDITORIAL ANALYSIS

TOPIC

CARBON PRICING IN INDIA: STRATEGY AND FUTURE ROADMAP

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Context

- India's approach to the **EU Carbon Border Adjustment Mechanism (CBAM)**, currently focused on seeking exemptions, needs to evolve into a **proactive carbon pricing strategy** to secure long-term trade competitiveness, fiscal stability, and climate leadership.

Carbon Border Adjustment Mechanism (CBAM) of European Union

- It is designed to ensure **carbon neutrality in trade**, and mirrors the principle of the **Value-Added Tax (VAT),** a destination-based tax applied where consumption occurs.
- It is **reshaping global trade** by imposing a carbon tax on imports of **carbon-intensive goods** such as **steel, cement, aluminum, and fertilizers.**
- It aims to prevent carbon leakage, where companies relocate production to countries with laxer climate regulations and to **level the playing field for EU producers** subject to strict emissions rules.
- From January 2026, CBAM will directly link climate policy with economic competitiveness in the European Union (EU).
  - The **United Kingdom** has expressed interest in **adopting a similar mechanism**, and other **OECD countries** are likely to follow.

For India

- India is a major exporter of steel and aluminum to the EU.
- CBAM requires exporters to report embedded emissions in their products and, starting in 2026, pay a carbon price equivalent to the **EU's Emissions Trading System (ETS) rate.**

About Carbon Pricing

- It is a policy tool that puts a financial cost on greenhouse gas emissions, primarily carbon dioxide, to incentivize reductions in pollution and promote a shift towards cleaner energy sources.
  - It works by making emitters pay for the environmental damage caused by their pollution, encouraging them to reduce emissions.
- The **World Bank's 'State and Trends of Carbon Pricing 2025'** report has recognized India's growing role among emerging economies in shaping global climate finance and carbon pricing frameworks.

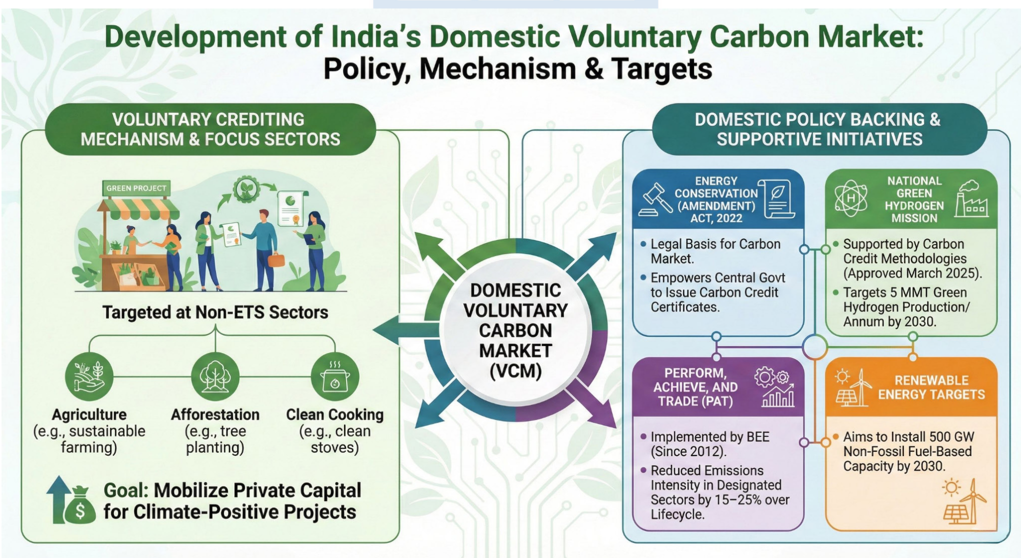
Why India Needs To Adopt A Robust Carbon Pricing Strategy?

- **Structural vulnerability to CBAM:** India's exports, especially steel, aluminum, and cement are among the most carbon-intensive globally.
  - They **expose exporters to future carbon tariffs** once the EU phases in full coverage, while temporary CBAM exemptions may defer compliance costs.
  - Indian firms risk **double taxation** *(foreign CBAM and domestic mitigation costs)* without domestic carbon pricing.
- **Support Economy**: In India, only about **23% of Indian steel exports** currently qualify for CBAM exemptions.
  - It can be neutralized by enabling Indian exporters to claim **'equivalent carbon cost adjustments'**, effectively reducing EU CBAM liabilities.
  - A transparent carbon pricing system can convert compliance costs into **domestic revenue**, rather than EU-bound tax transfers.
  - The *OECD Green Fiscal Reform Report (2024)* estimates India could raise **up to 1.5% of GDP annually** through carbon taxes or emissions trading, funds that could finance **green infrastructure and energy transition** programs.

- **Industrial Competitiveness & Low-carbon Innovation:** According to ***IEA India Energy Outlook 2024*** and ***TERI Policy Paper on Carbon Pricing (2024)***, carbon pricing incentivizes energy-intensive firms to invest in low-emission technologies, improving productivity.
  - Evidence from South Korea and China shows that **carbon markets reduce emission intensity by 10–15%** within five years.
  - India can **future-proof its industries** against border taxes while driving innovation in renewables and green hydrogen by internalizing the carbon cost.
- **Geopolitical Leverage In Climate Negotiations:** A domestic carbon market can signal commitment to **global net-zero targets** and strengthen India's negotiating power in **G20 and WTO CBAM discussions**.
- **Institutional readiness:** India already has the **Perform, Achieve, and Trade (PAT)** scheme and **Renewable Energy Certificates (RECs)**, both precursors to a **national carbon market** under the Energy Conservation (Amendment) Act, 2022.
  - Integrating these into a **unified carbon pricing framework** would allow India to link with global markets by 2030.

India's Rational Response

- **The Carbon Credit Trading Scheme (CCTS):** India's proposed CCTS (set to launch mid-2026) is a step in the right direction. However:
  - A **cap-and-trade system**, while elegant, is **institutionally complex**.
  - It demands strong regulatory capacity and sophisticated financial infrastructure, features that developing economies are still building.
- **The Carbon Tax Alternative:** A **carbon tax** offers a simpler, more transparent, and administratively feasible solution.
  - It can be integrated with India's **Goods and Services Tax (GST)** system.
  - It provides **price certainty** for industries planning long-term investments.
  - It ensures that India's fiscal policy aligns with **global decarbonisation trends**.



Way Forward: Roadmap for Phased Carbon Pricing in India

- **Phase 1: Foundation Building (2025–2027):** It includes establishing **Legal and Institutional Framework**, and setting up a **central Carbon Market Authority** to oversee design, implementation, and compliance.
  - It needs to develop **Monitoring, Reporting, Verification (MRV) Infrastructure,** and mandate emissions reporting for large industrial emitters across sectors like power, steel, cement, and oil & gas.

- **Phase 2:** Transition to Compliance Market (2027–2030):
  - **Launch a National Emissions Trading System (ETS)** with a **cap-and-trade system for large emitters** in key sectors (e.g., power, steel, cement), and **introduce Carbon Tax for Non-Covered Sectors** like transport and residential.
  - **Link with International Carbon Markets** like EU ETS to allow credit trading and reduce CBAM exposure.
- Phase 3: Expansion and Deepening (2030–2035):
  - **It includes** expanding sectoral coverage in **agriculture, aviation, and shipping; increasing carbon price progressively**; and strengthening international cooperation.

Conclusion: A Strategic Reset

- The **Carbon Border Adjustment Mechanism** represents a regime change in the global economic order. For India, success lies in:
  - **Accepting CBAM as a global norm**, not an imposition.
  - **Implementing a domestic carbon tax** to capture revenue and protect exporters.
  - **Pursuing deep EU integration** as a foundation for sustainable trade.
- The CBAM is an opportunity for India to **align fiscal policy, trade strategy, and environmental responsibility**, marking the true beginning of its green economic transformation far from being a threat.

Daily Mains Practice Question

[Q] Discuss the importance of implementing a carbon pricing mechanism in India. What measures need to be taken to ensure that such a policy aligns with its developmental goals and international climate commitments?