

The Indian Carbon Market (ICM) as an instrument on India's Pathway to Net Zero by 2070

Mohua Mukherjee

September 28, 2023

“Prior Actions” in a Nutshell

- ▶ India updated NDCs in August 2022
- ▶ Energy Conservation Act Legislation passed December 2022
- ▶ Notified Carbon Market Rules -- January 2023
- ▶ Intention is to modify two existing market instruments as building blocs: PAT and REC

Sector-wise share of carbon emission in India

● Thermal power plant ● Iron & steel ● Cement ● Refineries ● Other



Note: Others include aluminium, fertiliser, petrochemical, buildings & chlor alkali paper, and textile

Source: Bureau of energy efficiency | Reuters, Dec. 20, 2022 | By Riddhima Talwani

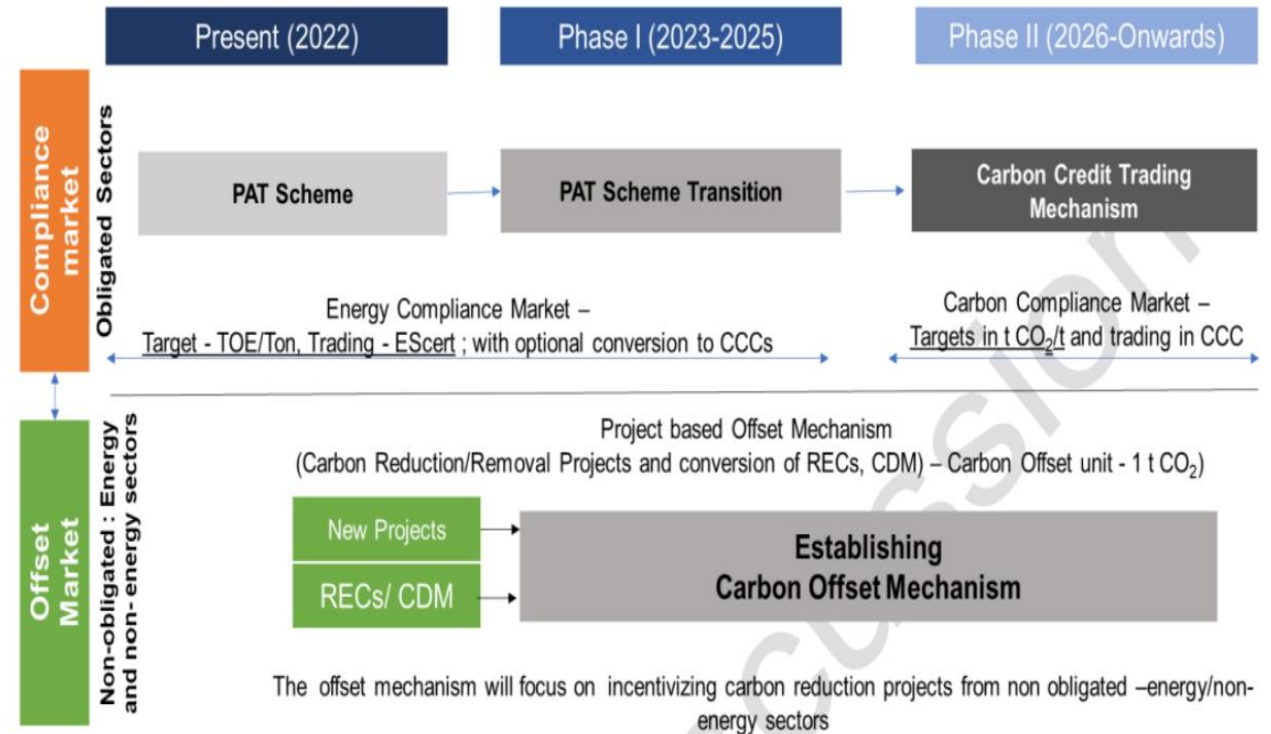
Reuters Graphics

A Closer Look at PAT (compliance) and REC (semi-compliance/hybrid)

- ▶ Currently focused on Energy Efficiency and expanding Renewable Energy capacity
- ▶ Not carbon-denominated at present, no link to CO2 equivalent
- ▶ Government objective: align outcomes with GHG reduction target mentioned in NDC
- ▶ Mature technologies by domestic players - no international carbon credit trading until NDC is met
- ▶ Limited Exceptions

Features of the new Indian Carbon Market

- ▶ How will India regulate carbon credits exported for trade in the international voluntary market?
- ▶ Phased Introduction, limited players in the first round of “designated consumers”
- ▶ Convert existing units to tons of CO₂ equivalent; capacity upgrades of existing inspectors
- ▶ Trading expected to start late 2024/early 2025



Note: CCC: carbon credit certificates; CDM: clean development mechanism; ESCert: energy-efficiency saving certificate; PAT: Perform–Achieve–Trade; REC: renewable energy certificate.

Source: Bureau of Energy Efficiency (2022), [Policy Paper on Indian Carbon Market \(ICM\)](#), Government of India,

Government is applying lessons learned from PAT and REC

- ▶ Market reception to the ICM Notification has been positive
- ▶ Government shows that it has understood the importance of demand side, do not limit the number of eligible buyers
- ▶ Hybrid between compliance and voluntary
- ▶ **Effectiveness of the carbon market will depend on the accuracy of carbon price discovery (too high, and MSMEs can't participate; too low and it's cheaper to pollute--removes the incentive for real emissions reduction)**
- ▶ Phase 1 (up to 2026) focuses on the compliance market, with limited guidance for non-obligated entities

Lessons learned (continued)

- ▶ What is required institutionally? What kind of capacity building?
- ▶ Federal and state government burden sharing
- ▶ How can government incentivize voluntary participation through its public procurement policies?
- ▶ ECO-Mark
- ▶ CBAM
- ▶ “Sectoral approach” can avoid placing the full inspection cost on individual companies
- ▶ Avoid CDM debacle
- ▶ Distribution utilities financial weakness to comply with purchase of RECs—how to address this

Contribution of the Voluntary Market

- ▶ Voluntary Market has large capacity to contribute to emission reductions
- ▶ “Mission LIFE” Demand side recognition; Draft Policy for Green Credits announced in June 2023; holistic approach to meeting NDC targets
- ▶ “How will we know when we have arrived” with respect to the Indian Carbon Market?
 - ▶ build a common carbon currency for establishing a clear price signal, ***creating fungibility of credits across schemes***, and developing strong incentives for decarbonisation everywhere
- ▶ THANK YOU FOR YOUR ATTENTION!