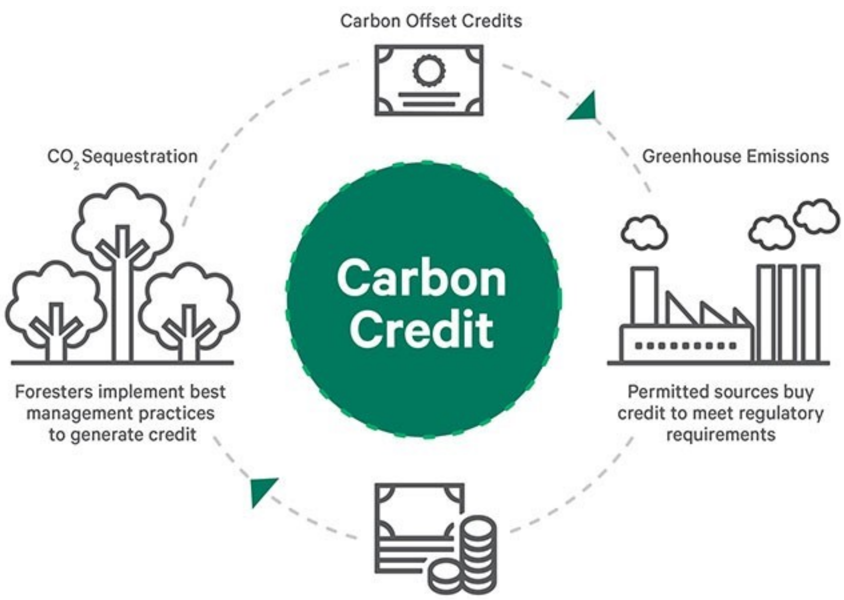
UN Framework About Carbon Market

Why in news?

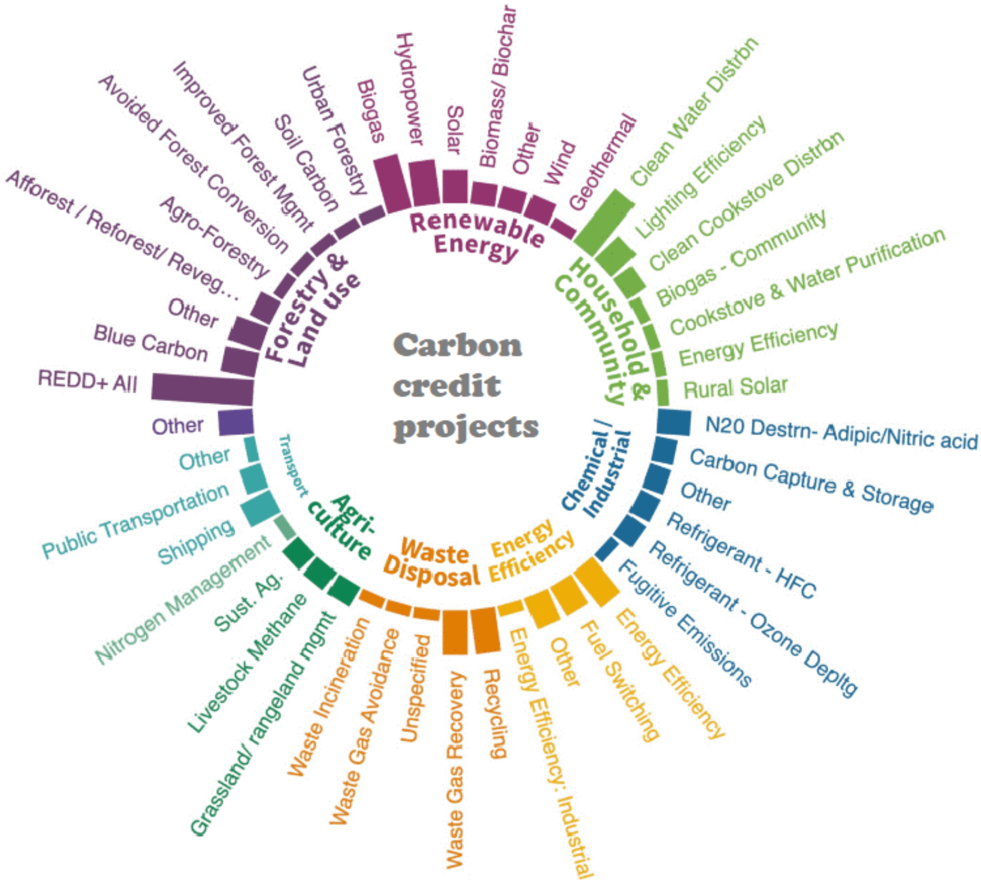
The new rules by United Nations about carbon trading between nations was recently approved at 29th edition of the Conference of the Parties (COP) in Baku, Azerbaijan.

What is carbon market?

- **Carbon market** – It is a trading system where carbon credits are bought and sold.
- **Key Features**:
  - **Carbon Credits** – One tradable carbon credit is equal to one tonne of carbon dioxide or its equivalent amount of a different greenhouse gas reduced, sequestered or avoided.
  - **Offsets** – Once used, carbon credits become offsets and are no longer tradable.
  - **Standardization** – To compare GHG effects, emissions are standardized in CO_2-equivalents (CO_{2e}) using 100-year Global Warming Potentials (GWPs).



- **Article 6** – It was *first introduced in Paris Agreement 2015*, which offers carbon trading as a way for countries to reduce their greenhouse gas emissions cooperatively.
- **Significance** – Carbon markets are seen as ***key tool in achieving net-zero goals by 2050***.
- They enable countries to balance their emissions by offsetting them through credit trading.
- *Carbon markets are one of the ways to deliver on the New Collective Quantifies Goals (NCQG)*.



- **Global cooperation –** The market allows for cooperation across borders, reducing the cost of implementing climate action plans.

The COP 29 estimated that carbon market could reduce the cost of implementing national climate plans by 250 billion dollar per year by enabling cooperation across borders.

What is the framework for carbon market approved in COP 29?

- **Article 6** – Under this article, ***COP 29 approved two pathways*** for countries and companies to trade carbon offsets.
  - **Article 6.2** – Direct country-to-country trading (bilaterally trade)
  - **Article 6.4** – Separate UN-backed marketplace (global carbon.
  - **Article 6.8** – The third cooperative carbon-reduction mechanism wasn't discussed much at COP29 is for *non-market approaches*.

Global carbon trading mechanism could be a reality and that the first UN-sanctioned carbon credits would be available in 2025.

- **Supervisory Body** – It is established *to ensure the integrity and effectiveness of the carbon market* by setting rules and standards for carbon credit transactions.
- **Credit verification** – Verification of carbon credits which come from genuine green

projects.

- **Registry oversight** – It provides *centralized tracking of traded credits* to prevent double counting.
- **Host country approval** – The country where the carbon reduction project occurs, the host country must approve the project.
  - This ensures that the projects align with national climate plans.
- **Sustainable development goals** – Carbon market projects should contribute to the broader goals of sustainability, such as poverty reduction, health improvements or biodiversity conservation.

What are the shortcoming of carbon market?

- **Greenwashing** – When a company or government makes deceptive claims about its environmental efforts.
  - Only *16% of carbon credits* result in actual environmental benefits.
- **Lack of transparency** – Countries participating in the carbon market under Article 6.2 are not required to disclose how they plan to prevent double counting of credits, leaving room for uncertainty.
  - This weakens the enforcement of compliance and leaves room for countries to trade flawed or unverified carbon credits
- **Lack of compliance** – The COP29 rules are ***not mandatory*** for countries to stop using *carbon credits from projects which are incompliance with emission standards.*
  - Sharing key details about carbon trading such as risk of project failure, is also optional.
- **Overemphasis on offsetting** – Carbon markets allow developed countries to *offset rather than reduce emissions* at their source.
  - This reliance on offsetting rather than direct reductions delays meaningful action against climate change
- **Loopholes in methodologies** – The formula for calculating carbon credits does not account for the complexities of long-term environmental outcomes.
- **Concern of additionality principle** – It is when carbon credit projects claim emission reductions that would have occurred even without the project.
  - It makes the credits ineffective in addressing actual climate change mitigation.

What are the significance of this carbon market to India?

- **Economic gains** – Attracting investments through FDI for renewable energy and green projects.
  - Revenue generation by selling carbon credits in global markets.
- **Climate goals support** – The funding from carbon markets will fuel energy transition in India.
- **Technology transfer** – Access to low-carbon technologies, fostering innovation and industrial modernization in India.
- **Social and regional development** – Rural employment through afforestation, clean energy, and conservation projects.
  - Better infrastructure through carbon-linked projects.
- **Achieving equity** – In addressing climate change through fair carbon market rules for

developing nations.

- **Climate leadership** – India's active participation in carbon markets demonstrates leadership in climate action, bolstering its international reputation while negotiating favorable terms in global forum.

What lies ahead?

- Global Implementation cross-border cooperation in carbon credit trading.
- Integrity in addressing concerns like double counting and additionality.
- Strict monitoring and stricter verification mechanisms are needed to maintain the integrity of the system.
- Technological Innovations for carbon capture and storage (CCS) and other innovative methods of emission reductions to meet the growing demand for credits.

Quick facts
India's carbon trading market • The Carbon Credit Trading Scheme (CCTS) is a market-based mechanism in India to reduce carbon emissions. • **Key features** – The CCTS includes two key mechanisms: - **Compliance mechanism** – Addresses emissions from energy use and industrial sectors. - **Offset mechanism –** Incentivizes *voluntary actions* from entities not covered under compliance. • The CCTS is expected to take *effect by 2026*. • The Ministry of Power (MoP) will oversee the regulatory framework of the CCTS, with the Bureau of Energy Efficiency acting as the designated administrator.

Reference

1. The Hindu | Global Carbon Market Gets Green Signal At COP29
2. Carbon Market Watch |Pushing Ill-Conceived Carbon Market