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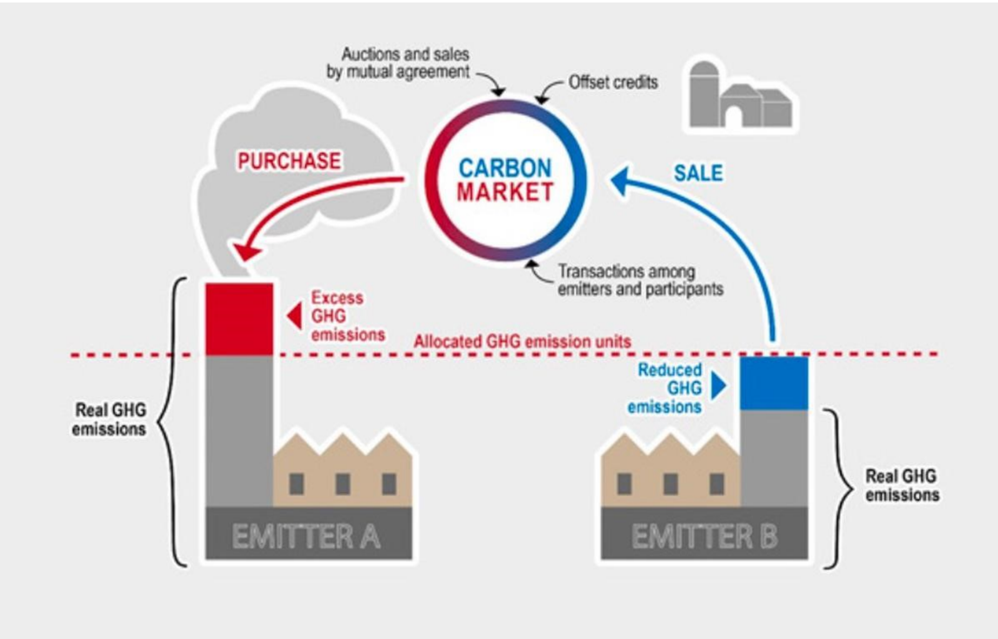
Carbon Markets & Energy Conservation (Amendment) Bill 2022

Why in news?

The Parliament passed the Energy Conservation (Amendment) Bill, 2022 declining the Opposition's demands to send it for scrutiny to a parliamentary committee and amid concerns expressed by members over carbon markets.

What are carbon markets?

- Carbon markets are essentially a **tool for putting a price on carbon emissions** - they establish trading systems where carbon credits or allowances can be bought and sold.
- As per the United Nations standards, a carbon credit is a kind of tradable permit that equals one tonne of carbon dioxide removed, reduced, or sequestered from the atmosphere.
- Meanwhile, carbon allowances or caps are determined by countries or governments according to their emission reduction targets.
- According to a United Nations Development Program (UNDP) release, interest in carbon markets is growing globally.
- 83% of NDCs submitted by countries mention their intent to make use of international market mechanisms to reduce greenhouse gas emissions.



What are the types of carbon markets?

Voluntary markets

- Voluntary markets are those in which emitters - corporations, private individuals, and others - buy carbon credits to offset the emission of one tonne of CO_2 or equivalent greenhouse gases.
- Such carbon credits are created by activities which reduce CO_2 from the air, such as afforestation.
- In a voluntary market, a corporation looking to compensate for its unavoidable GHG emissions purchases carbon credits from an entity engaged in projects that reduce, remove, capture, or avoid emissions.
- In voluntary markets, credits are verified by private firms as per popular standards.
- There are also traders and online registries where climate projects are listed and certified credits can be bought.

Compliance markets

- Compliance markets or regulated markets - set up by policies at the national, regional, and/or international level - are officially regulated.
- Today, compliance markets mostly operate under 'cap-and-trade' principle, most popular in the European Union (EU).
- Under the EU's emissions trading system (ETS) launched in 2005, member countries set a cap or limit for emissions in different sectors, such as power, oil, manufacturing, agriculture, and waste management.
- This cap is determined as per the climate targets of countries and is lowered successively to reduce emissions.
- Entities in this sector are issued annual allowances or permits by governments equal to the emissions they can generate.
- If companies produce emissions beyond the cap, they have to purchase additional permit, either through official auctions or from companies that have their emissions below the limit.
- Other national and sub-national compliance carbon markets also operate or are under development around the world - China, North America, Australia, Japan, South Korea, Switzerland, and New Zealand.

The World Bank estimates that trading in carbon credits could reduce the cost of implementing NDCs by more than half - by as much as $250 billion by 2030.

What is the carbon market that is envisioned?

- In order to keep global warming within 2°C, ideally no more than 1.5°C, global greenhouse gas (GHG) emissions need to be reduced by 25 to 50% over this decade.
- Nearly 170 countries have submitted their nationally determined contributions (NDCs) so far as part of the 2015 Paris Agreement.

NDCs are climate commitments by countries setting targets to achieve net-zero emissions. These countries have agreed to update every 5 years.

- India, for instance, is working on a long-term roadmap to achieve its target of net zero emissions by 2070.
- In order to meet their NDCs, one mitigation strategy is becoming popular with several countries - carbon markets.

Article 6 of the Paris Agreement provides for the use of international carbon markets by countries to fulfil their NDCs.

- The U.N. international carbon market envisioned in Article 6 of the Paris Agreement is yet to kick off as multilateral discussions are still underway about how the inter-country carbon market will function.
- Under the proposed market, countries would be able to offset their emissions by buying credits generated by greenhouse gas-reducing projects in other countries.
- In the past, developing countries, particularly India, China and Brazil, gained significantly from a similar carbon market under the Clean Development Mechanism (CDM) of the Kyoto Protocol, 1997.
- But with the 2015 Paris Agreement, the global scenario changed as even developing countries had to set emission reduction targets.

What are the challenges to carbon markets?

- The UNDP points out serious concerns pertaining to carbon markets like
  1. Double counting of greenhouse gas reductions,
  2. Quality and authenticity of climate projects that generate credits to poor market transparency.
  3. Greenwashing - companies may buy credits, simply offsetting carbon footprints instead of reducing their overall emissions or investing in clean technologies.
- As for regulated or compliance markets, ETSs may not automatically reinforce climate mitigation instruments.
- The International Monetary Fund (IMF) points out that including high emission-generating sectors under trading schemes to offset their emissions by buying allowances may
  1. Increase emissions on net and
  2. Provide no automatic mechanism for prioritizing cost-effective projects in the offsetting sector.

What does the Energy Conservation Bill 2022 say about carbon markets?

- The Energy Conservation (Amendment) Bill 2022 amends the Energy Conservation Act, 2001.
- The Bill seeks to empower the Central Government to establish carbon markets in India and specify a carbon credit trading scheme.
- Under the Bill, the central government or an authorised agency will issue **carbon**

credit certificates to companies or individuals** registered and compliant with the scheme.
- These carbon credit certificates will be tradeable in nature. This means that other persons would be able to buy these certificates on a voluntary basis.
- But, the Bill doesn't provide clarity on the mechanism to be used for the trading of carbon credit certificates - whether it will be like the cap-and-trade schemes or another method - and who will regulate such trading.

What are the concerns?

- **Introduction of Bill** - The carbon market schemes in other jurisdictions like the U.S., United Kingdom, and Switzerland are framed by their environment ministries.
- Unlike other countries, the Indian Bill was tabled by the Ministry of Power instead of the Ministry of Environment, Forest, and Climate Change (MoEFCC).
- **Existing certificates** - Another important concern raised is that the Bill does not specify whether certificates under already existing schemes would also be interchangeable with carbon credit certificates.
- Notably, two types of tradeable certificates are already issued in India - Renewable Energy Certificates (RECs) and Energy Savings Certificates (ESCs).
- These are issued when companies use renewable energy or save energy, which are also activities which reduce carbon emissions. The question is whether all these certificates could be exchanged with each other.
- There are concerns about whether overlapping schemes may dilute the overall impact of carbon trading.

Reference

1. The Hindu Explained | What are carbon markets and how do they operate?