Carbon Credits, the Key: There's no PLANet B!

Wednesday Wisdom
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The urgency of addressing climate change was underscored in the case MK Ranjithsinh & Ors v Union of India[1]. Article 21 and Article 14 are important sources of the right to a clean environment and the right of individuals against the adverse effects of climate change has been recognized in this judgement.

While Article 48A of the Constitution provides that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country, there are certain actions expected from citizens as well. Clause (g) of Article 51A stipulates that it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.

Climate change, with its ever-growing tendrils threatening our planet's health, has ignited a collective search for answers. One innovative solution gaining traction is the concept of carbon credits.

1.What are carbon credits?[2]

Carbon Credits serve as permits to business units, allowing the emission of a specific quantity of carbon dioxide or other greenhouse gases. Each credit corresponds to one ton of carbon dioxide or its equivalent in other greenhouse gases. Companies that emit pollutants are granted credits enabling them to emit up to a designated limit, which decreases over time. Simultaneously, these companies can sell any surplus credits to others in need. This system provides a dual incentive for private enterprises to curb emissions. Firstly, they must invest in additional credits if their emissions surpass the allotted cap. Secondly, they stand to profit by cutting emissions and selling excess allowances. Ultimately, the aim of carbon credits is to diminish greenhouse gas emissions.

[1] MK Ranjithsinh & Ors v Union of India Writ Petition (Civil) No. 838 of 2019 and with Civil Appeal No. 3570 of 2022

[2] The article reflects the general work of the authors and the views expressed are personal. No reader should act on any statement contained herein without seeking detailed professional advice.

2. Ever wondered of the impact of Cap-and-Trade Program on carbon credit regulations?

Cap-and-trade program (CTP) is a government regulatory program to limit or cap the total level of emissions of carbon dioxide, as a result of industrial activity. It is a regulatory initiative outlined by government of several countries to curb carbon dioxide emissions stemming from industrial activities[3]. It operates by establishing a limit, or "cap," on the total volume of emissions permitted within a specified timeframe. Companies are allocated emissions allowances, which they can trade among themselves. This market-based approach incentivizes emission reductions while providing flexibility for businesses to comply with regulatory targets.

3. How are carbon credits and carbon offsets created?

Carbon credits are typically issued by national or international governmental organizations, with the number of credits issued annually often tied to emissions targets. These credits are distributed under cap-and-trade programs, where regulators establish a limit on carbon emissions known as the cap. Over time, this cap diminishes, increasing the challenge for businesses to comply. Entities that undertake activities to reduce carbon already in the atmosphere, such as tree planting or investments in renewable energy, may issue carbon offsets. The acquisition of these offsets is voluntary.

Let’s understand this with help of an example:

Two companies, Company A and Company B, are only allowed to emit 500 tons of carbon. However, Company A is on track to emit 600 tons of carbon this year, while Company B will only be emitting 400 tons. To avoid a penalty comprised of fines and extra taxes, Company A can make up for emitting 100 extra tons of CO_2e by purchasing credits from Company B, who has extra emissions room to spare due to producing 100 tons less carbon this year than they were allowed to.

[3] https://www.epa.gov/emissions-trading-resources/what-emissions-trading

4. Offsets v Credits: What's the difference?

Carbon credits and carbon offsets are terms often used interchangeably, but they hold distinct meanings.

Credits originate from compliance markets, where companies are mandated to engage in cap-and-trade programs. Conversely, offsets stem from voluntary markets, offering individuals or companies the opportunity to purchase credits to offset their emissions. This support is typically directed towards projects that mitigate or eliminate greenhouse gases elsewhere, such as renewable energy initiatives or reforestation efforts.

5. What are the different worldwide initiatives related to Carbon Credits?

- The Kyoto Protocol (1997)[4]: This landmark agreement established the Clean Development Mechanism (CDM), the first international scheme for generating emission reduction credits. Under the CDM, developed countries could invest in emission reduction projects in developing countries and earn tradable credits in return.
- California's Pioneering Cap-and-Trade Program[5]: The California-Quebec Cap-and-Trade Program, initiated in 2013, stands as a prominent model of a regional carbon market in North America. By integrating the emissions trading systems of California and Quebec, this program demonstrates the potential for regional collaboration in carbon pricing initiatives. Its regulations encompass major electric power plants, industrial facilities, and fuel distributors within the state.
- The Paris Agreement (2015)[6]: Though it doesn't establish a compulsory trading system, the Paris Agreement recognizes the significance of market mechanisms in reaching emission reduction goals.

[4]https://unfccc.int/process-and-meetings/the-kyoto-protocol/history-of-the-kyoto-protocol/text-of-the-kyoto-protocol
[5] https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program
[6] https://unfccc.int/process-and-meetings/the-paris-agreement

- The EU Emissions Trading System (EU ETS)[7] stands as the globe's largest cap-and-trade scheme, encompassing slightly over one-third of the EU's greenhouse gas emissions. The UK Emissions Trading System (UK ETS) commenced operations on January 1, 2021, succeeding the UK's involvement in the EU ETS. Additionally, cap-and-trade programs are operational in Australia, Brazil, China, and various states within the US, albeit with differing structures and regulations.
- A significant development expected to affect the carbon credit market is the USA's Inflation Reduction Act, signed into law on August 16, 2022[8]. This landmark legislation targets deficit reduction, inflation mitigation, and carbon emissions reduction concurrently.

6. What is the legal framework for trading of carbon credits in India?

The Energy Conservation Act, 2001, is the fundamental piece of legislation in India's fight against climate change. It aims to promote energy efficiency and conservation across various sectors like industries, buildings, and transportation. The Energy Conservation (Amendment) Act, 2022, marked a significant step towards carbon credit trading in India. Notably, Section 14AA[9] empowers the central government to specify a carbon credit trading scheme, paving the way for a potential national market for carbon credits.

Section 14AA (1) *states that, the Central Government, or any agency authorised by it may issue carbon credit certificate to the registered entity which complies with the requirements of the carbon credit trading scheme.*

Section 14AA (2) *states that the registered entity shall be entitled to purchase or sell the carbon credit certificate in accordance with carbon credit trading scheme.*

[7] https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en
[8] https://home.treasury.gov/policy-issues/inflation-reduction-act
[9]https://powermin.gov.in/sites/default/files/The_Energy_Conservation_Amendment_Act_2022_0.pdf

In June 2023, The Ministry of Power also issued the Carbon Credit Trading Scheme, 2023. The amendment hasn't yet specified the nitty-gritty of the carbon trading scheme, such as credit issuance procedures or eligibility criteria for participation. However, it lays the groundwork for a potential national market for carbon credits in India.

The legal framework for carbon credit trading can be intricate, and its specifics depend on the type of market (compliance vs. voluntary) and the implementing authority.

When it comes to the sale of carbon credits within the carbon marketplace, there are two significant, separate markets to choose from:

Compliance Markets	Voluntary Markets
The governing body responsible for the program establishes a legal framework through regulations. These regulations typically address: • Credit Issuance: Criteria for entities to qualify for credit issuance, including methodologies for quantifying emission reductions. • Verification: Processes for independent verification of emission reductions to ensure their accuracy and credibility. • Registries: Establishment and maintenance of a central registry for tracking ownership and transfer of credits. • Enforcement Mechanisms: Procedures for addressing non-compliance, including penalties for exceeding emission allowances or trading fraudulent credits.	Voluntary markets, though less stringent than compliance markets, often adhere to established standards to maintain the environmental integrity of credits. In the voluntary market, buyers of carbon offsets must consider legal aspects primarily within the purchase agreement. These contractual terms typically cover matters such as credit validity, verification reports, and potential liabilities.

Compliance Markets	Voluntary Markets
The European Union Emissions Trading System (EU ETS) and California's Cap-and-Trade Program are prime examples of established compliance markets with well-defined legal frameworks.	The International Emissions Trading Association (IETA) is an organization working to develop standardized legal documentation for voluntary carbon transactions. This initiative aims to bolster market transparency and efficiency. Examples of such standards include the Verified Carbon Standard (VCS) and the Gold Standard.

7. Interesting facts and figures

- In 2023, the global carbon trading markets experienced robust growth, reaching a record value of over $947 billion, representing a 2% increase from the previous year. The EU's Emissions Trading System (ETS) maintained its position as the most valuable market, accounting for 87% of the global total.[10]
- The Ministry of Power notified the Carbon Credit Trading Scheme, 2023, to develop the domestic carbon market as the country aims at decarbonising the economy and has committed to cut emissions by 45% from the 2005 levels by 2030.[11]
- Investigation by Down To Earth and the Centre for Science and Environment (DTE-CSE) shows that till June 2023, India had 860 registered and a total of 1,451 projects under various stages of consideration at the world's two leading carbon crediting programmes, Verra and Gold Standard, which certify projects to receive credits.[12]

[10]https://carboncredits.com/india-revises-its-carbon-credit-trading-scheme-for-voluntary-players/#:~:text=India%20made%20a%20bold%20move,address%20their%20planet%2Dwarming%20emission
[11] https://www.icsi.edu/media/webmodules/CSJ/November/28.pdf
[12]https://www.downtoearth.org.in/news/climate-change/due-credit-the-indian-voluntary-carbon-market-is-growing-exponentially-92091ss

8. How are carbon credits doing in India currently?

As of now, India lacks a national cap-and-trade program. However, in 2023, it introduced the 2023 Carbon Credit Trading Scheme (CCTS), covering both compliance and voluntary sectors. While the compliance segment is set to begin in 2025-26, there's no specified timeline for launching the voluntary carbon market. Furthermore, India engages in the Clean Development Mechanism (CDM) under the Kyoto Protocol, enabling CDM projects to produce tradable credits. Following the successful hosting of the G20 Summit last year, India has emerged as an attractive destination for energy transition investments.

9. How does ABC Ltd., a company in India trade in the carbon market?

ABC Ltd., a company registered under the Companies Act 2013 may utilize voluntary carbon market (VCM- as explained under question 6 above) to address their environmental impact. By partnering with environmental service providers, it can invest in renewable energy projects in India. These projects generate carbon credits that the ABC Ltd. can then use to offset their emissions, contributing to the nation's clean energy goals and showcasing its commitment to a sustainable future.

10. What's the bottom line on carbon credits and their role in shaping our environmental future?

Carbon credits represent a complex yet promising instrument in combating climate change. The trajectory of carbon credits in India depends on several important factors. These include the development of a sturdy legal framework, guaranteeing transparency and environmental credibility of credits, and nurturing a vibrant voluntary market. As the international market progresses and India assesses its strategies, legal expertise will play a vital role in navigating the regulatory framework and upholding environmental standards. We are witnessing growing awareness in India regarding the importance of carbon credits. It's foreseeable that companies will soon embark on internal sustainability projects to earn carbon credits for negating their excess emissions. This incentivizing seed of carbon credits is anticipated to blossom into a massive sustainability initiative, leading to a greener future.

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