
CARBON MARKETS IN PAKISTAN/SOUTH ASIA

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PAKISTAN'S CLIMATE GOALS

- A conditional target of a 50% reduction in emissions by 2030 (15% unconditionally, and another 35% conditionally)
- Pakistan needs USD 348 billion by 2030 for climate related challenges, with USD 196 billion for mitigation/decarbonization
- Only the priority actions will require USD 2.367 billion for mitigation, adaptation and socioeconomic development goals
- Funding Options include **Integrating Article 6/Carbon markets** in the Domestic, Private, and International Finance of the Country to ensure improved finance mobilization.

Energy Sector	Industrial Sector	Agriculture Sector	Waste Sector	Land Use, Land-Use Change and Forestry (LULUCF) Sector	Disaster Preparedness & Health Sector
<ul style="list-style-type: none">• Prioritize RE projects• Grid infrastructure development• Exploring hydrogen economy	<ul style="list-style-type: none">• Establishing greenhouse gas baselines,• Implementing MRV mechanisms, and• adopting emissions capping.	<ul style="list-style-type: none">• High-efficiency irrigation,• Renewable energy integration, and• Climate Smart Agriculture	<ul style="list-style-type: none">• Waste reduction schemes• 4R implementation• Scientific landfills	<ul style="list-style-type: none">• Eco-tourism,• Afforestation,• Wildlife preservation, and• Ecosystem restoration	<ul style="list-style-type: none">• digitalization,• early warning systems,• disaster management programs, and• sustainable health management

Priority Actions in Prioritized Sectors

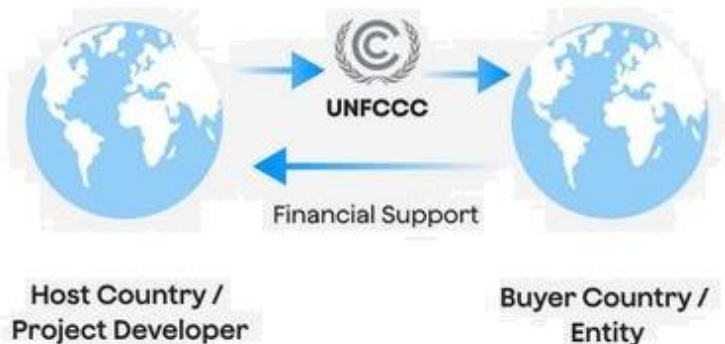
ARTICLE 6 OF THE PARIS AGREEMENT

Host country transfers Article 6.2 units (ITMOs) to **buyer country** through bilateral agreement



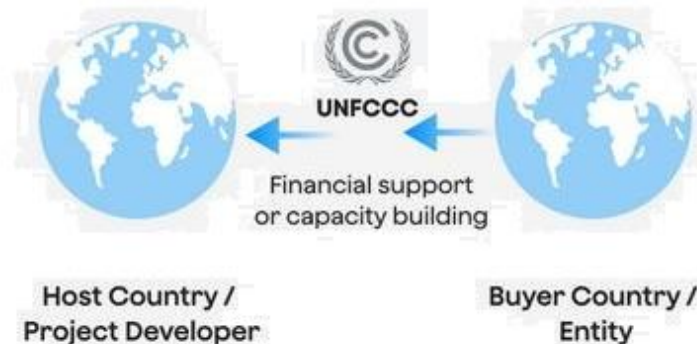
Article 6.2
(market)

Host country generates units through a UNFCCC centralised mechanism and transfers them to **buyer country**



Article 6.4
(market and non-market)

UNFCCC web platform could be voluntarily used to facilitate matching projects with financial and technical support available in several focus areas



Article 6.8
(non-market)

CARBON MARKETS STATUS

- Carbon market in Pakistan is at a **nascent stage** but has the potential to generate USD 2 billion – USD 5 billion by 2030 if properly developed and managed as per a seasoned energy expert.
- Pakistan has participated in **Voluntary Carbon Market (VCM)**
- In 2024, Pakistan drafted “**Pakistan Policy Guidelines for Trading in Carbon Markets**” which is approved in 2025.
 - Under these guidelines government envisions establishment of:
 - VCM
 - Compliance Market

Foster low emissions sustainable economic development

Enhance climate resilience, environmental integrity and socioeconomic well-being

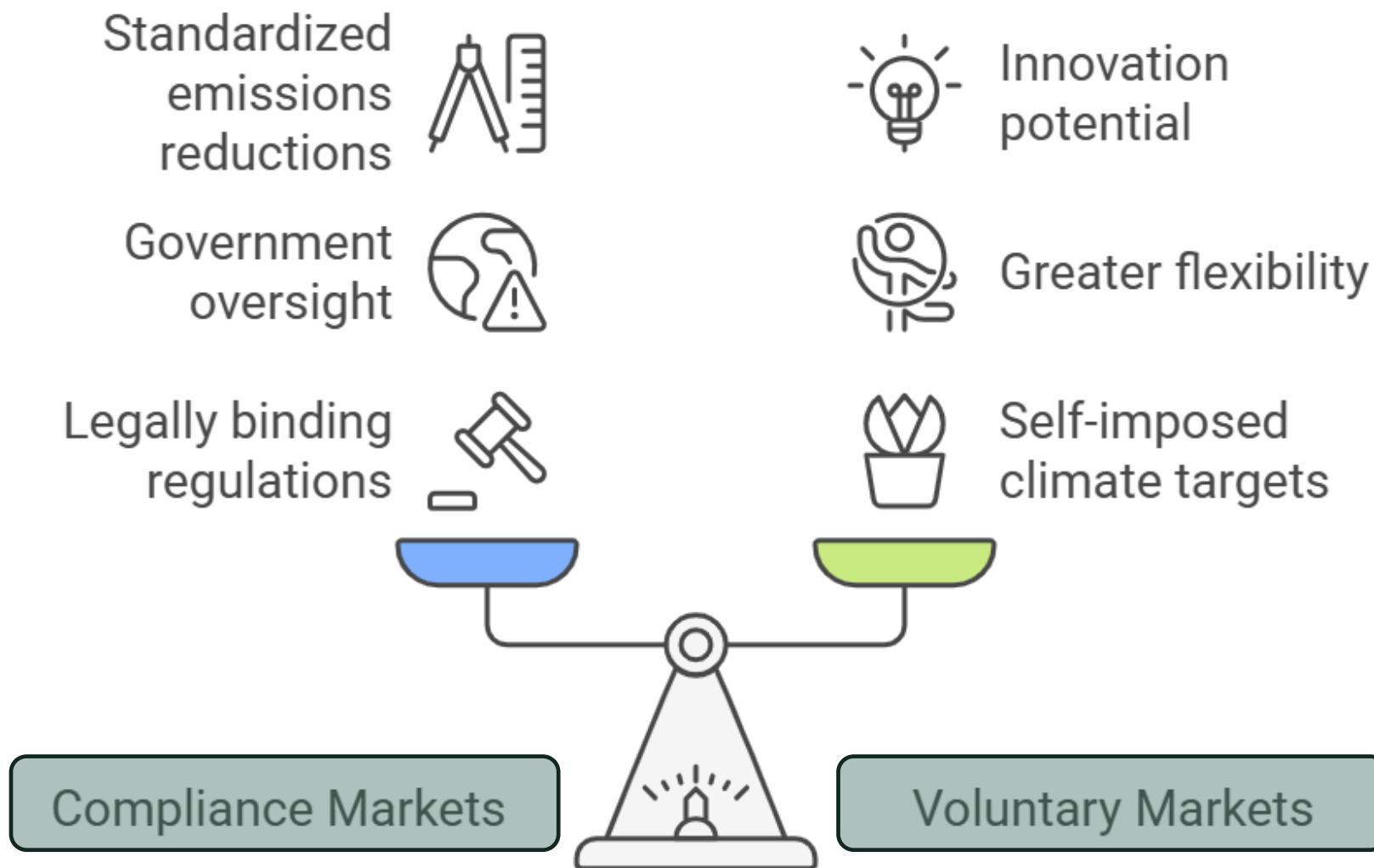
Encourage private sector participation and financial flows for carbon offsetting and emissions reduction projects

Comply with the international Paris Agreement

Implement transparent and robust measurement, reporting, and verification (MRV) systems aligned with international standards.

Generate high quality carbon credits which are additional, verifiable, and not claimed by any other entity

CARBON MARKETS



CURRENT PROJECTS / SIGNIFICANT MILESTONES

➤ **Delta Blue Carbon Project**

[world's largest mangroves reforestation project]

- **Established under** public private partnership of the Delta Capital Limited and the Government of Sindh Forest Department, the project has achieved removal of estimated 142 m tCO₂e emissions.
- Singapore-based carbon exchange, has auctioned 50,000 tonnes of credits from the Delta Blue Carbon project in Pakistan.

➤ **Host Country Approval under Article 6.4 for a Clean Drinking Water Project for Credits Sale to South Korea**

- This project estimates 1.5 m tCO₂ emissions reductions

➤ **Ravi Urban Development Authority secured Letter of Intent under Article 6.2 for a Landfill Transformation Project**

- This project estimates production of 930,000 tonnes of CO₂ credits by 2040

➤ **Many projects are under review Process**

WAY FORWARD FOR PAKISTAN

Capacity Building

Provide training and technical assistance to project developers and potential investors to enhance their understanding of carbon credit trading mechanisms and methodologies, focusing on agricultural applications.

Adequate Incentives

Offer financial incentives to encourage participation in emissions reduction projects, such as subsidies, tax breaks, or guaranteed offtake agreements for renewable energy.

Streamlined Process for Project Registration

Streamline the process for project registration and approval, reducing bureaucratic hurdles and supporting the implementation of emissions reduction initiatives in agriculture.

Carbon Registry & MRV System

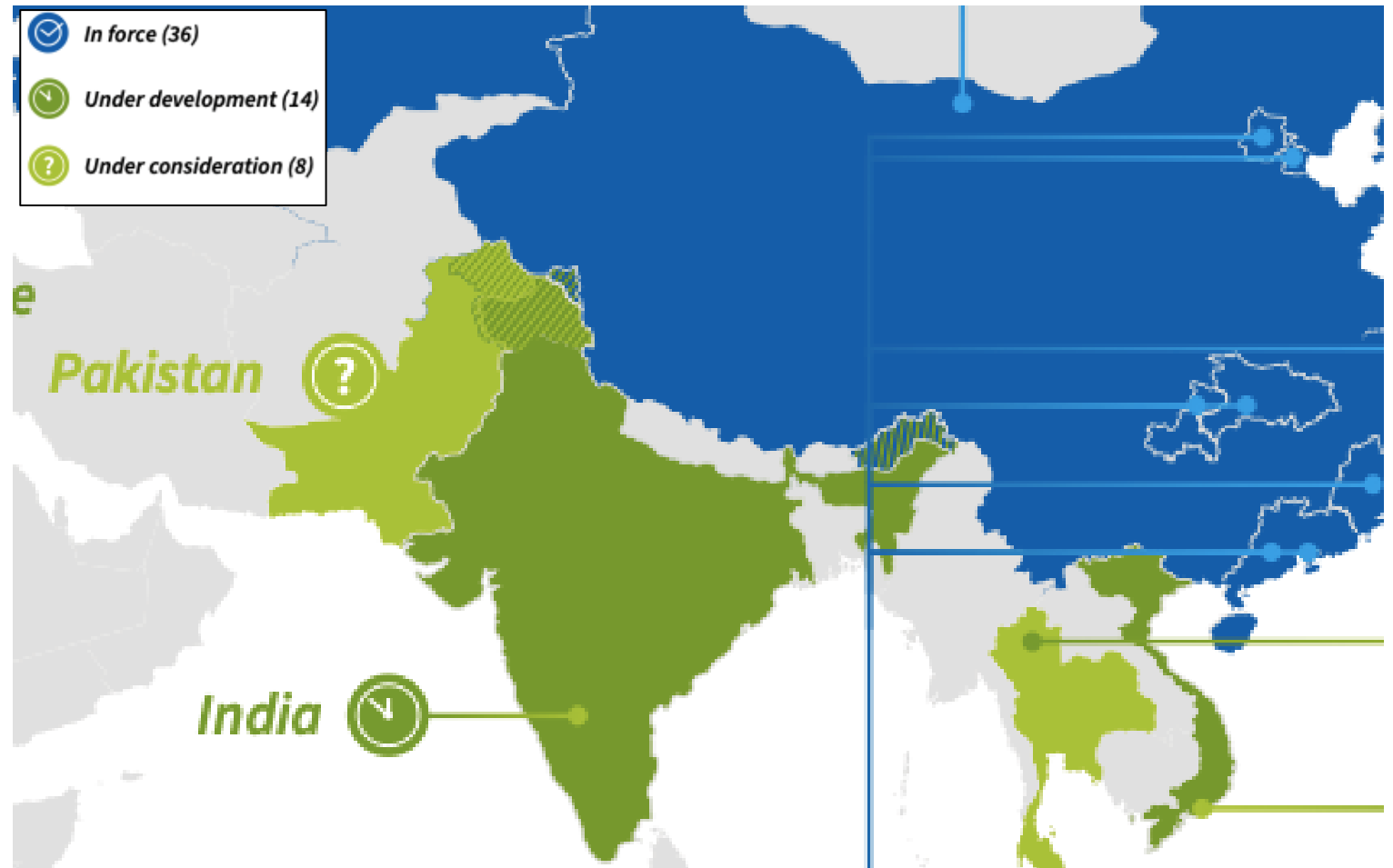
Build a national carbon registry & MRV system and encourage companies to adopt transparent sustainability reporting practices, including disclosure of their emissions footprints and carbon reduction strategies.

- While carbon markets are important in opening financial flows and offsetting CO₂ emissions, they should not be taken as the only means to decarbonize economies. The focus should be on inhouse emissions reductions in carbon intensive sectors of the economies.

CHALLENGES AND BARRIERS TO AN EFFECTIVE IMPLEMENTATION

- The operations of carbon markets must be robust and transparent, to ensure their competitiveness, efficiency and attractiveness to the potential investors.
- Pakistan has to ensure that it is producing high quality carbon credits so that it becomes a credible player in international carbon markets
- Pakistan should take mechanisms such as EU's CBAM (Carbon Border Adjustment Mechanism) as an opportunity to decarbonize the export supply chains and lead way for sustainable manufacturing and green exports

Carbon Markets in South Asia



Source: International Carbon Action Partnership, 2024

STATE OF CARBON MARKETS IN SOUTH ASIA

India

- India targets to reduce emissions intensity by 45% below 2005 levels and be net zero by 2070
- Indian government is advancing work to establish a domestic carbon market. According to current plans, this will include a compliance scheme covering energy-intensive industrial sectors, and a voluntary offset mechanism.
- Under the CCTS, emissions intensity targets will be announced every three years to enable longer-term planning for covered entities
- India is developing a compliance based carbon market

Bangladesh

- Bangladesh's is still in infancy in terms of its carbon markets as no carbon market exists as of now
- Bangladesh could benefit from CDM in limited capacity as throughout the period of CDM, it only registered 10 CDM projects, resulting in 1.26 million tonnes of CERs, representing only 0.53% of the total issuance till December 2023.

Sri Lanka

- Sri Lanka is actively preparing to participate in carbon markets, but currently in the phase of doing assessment of carbon sequestration potential of its trees.
- Currently Sri Lanka is working on establishing a regulatory framework and investing in monitoring systems to support its participation in the compliance and voluntary carbon markets

STATE OF CARBON MARKETS IN SOUTH ASIA

Bhutan

- Bhutan is a carbon negative country (it absorbs more carbon than it emits)
- Bhutan is actively working to participate in carbon markets
- Signed an agreement with Singapore to sell carbon credits
- It has established a national carbon registry to track and manage carbon credits

Maldives

- Maldives is actively developing a carbon market for the sale of carbon credits.
- It is working with international agencies to assess the carbon storage capacity of these areas and establish a framework for carbon credit sales.

SIGNIFICANT MILESTONES ACHIEVED IN SOUTH ASIA

- Countries in South Asia are focused on leveraging the Article 6 of the Paris Agreement
- Most of the South Asian countries have achieved significant financial flows from CDM (India being the largest recipient of CDM projects)
- They are either in the phases of developing guidelines for carbon markets or are assessing their potential to benefit from the carbon markets

FUTURE OUTLOOK OF CARBON MARKETS IN SOUTH ASIA

- South Asian carbon markets present a promising start with India leading the way
- Countries are actively focusing on their readiness to enter and effectively participate in the carbon markets
- Countries like Bangladesh need to realize their potential in benefiting from carbon markets and focus on targeted capacity building programmes for professionals and organisations to implement high-quality carbon reduction projects



THANK YOU

