Exploring Opportunities for Linking Emissions Trading Systems among CAREC Countries

Policy and Management Consulting Group - PMCG

ADVANCING THE GREEN TRANSITION IN CAREC:

POLICY PATHWAYS FOR LOW-CARBON GROWTH

Table of Contents

Introduction and Rationale

Climate Change impact is becoming increasingly prominent

Evident consequences:

- Extreme weather,
- Rising sea levels,
- Disrupted ecosystems,
- Increasing economic loss.

Case of Central Asia

- Heavy reliance on fossil fuels
- High vulnerability toward climate change
- Threats to growth, prosperity, socio-political stability
- Disproportionate effects on vulnerable groups, poverty, and inequality.

Current Mitigation Efforts

- ✓ CAREC countries' NDCs submitted to UNFCCC
- ✓ Decarbonization targets and green economy strategies
- ✓ Only China and Kazakhstan implementing ETS

- However, for **more efficiency** there is need for coordinated approach and joint resource management.
- On this background, **ETSs and their linkages** arise as globally established effective mechanism for mitigating climate risk.

Research Objectives

This research aims to address the complexities of linking Emission Trading Systems (ETS) and identify opportunities and potential benefits within the CAREC region.

Objective 1: Mapping ETS Landscape in CAREC countries

Objective 2: Exploring Regional ETS Linking

Objective 3: Identifying Opportunities and Challenges

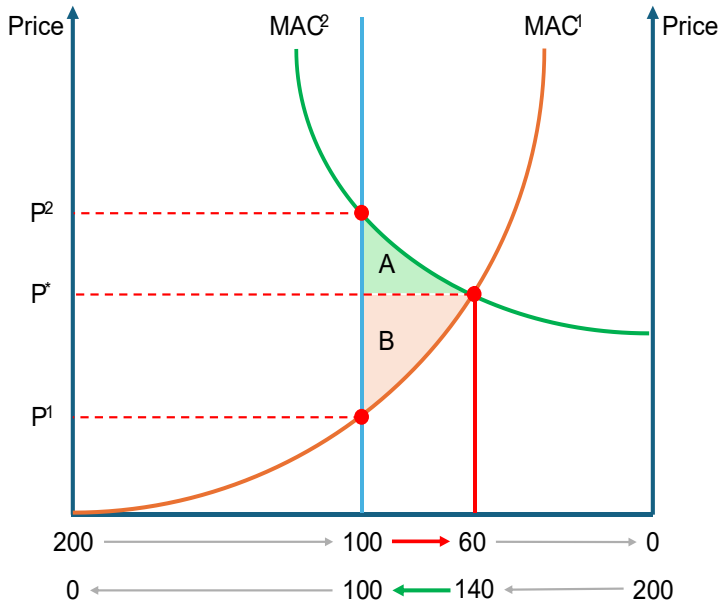
Objective 4: Assessing Applicability of ETS Linking in CAREC

Objective 5: Providing Policy Recommendations

Linking Emissions Trading Systems

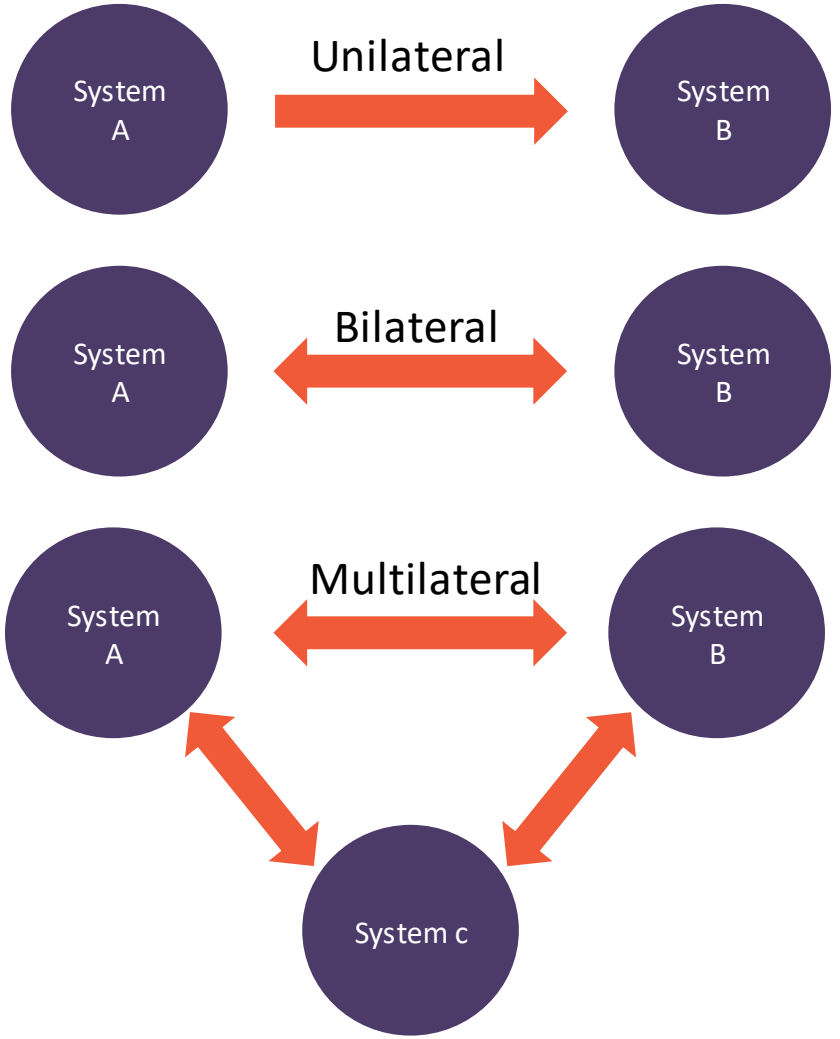
Linking occurs when two or more ETS systems are interconnected in a manner that allows participants in one system to use compliance instruments (i.e. allowance) issued by the administrators of any linked system to meet their regulatory obligations.

Economic Rationale of Linking ETS



- Linking facilitates gains from trade by leveraging differing abatement cost curves across countries.
- Linking leads to price convergence, lowering aggregate compliance costs of reducing GHG emission.

Types of ETS Linking



Linking Emissions Trading Systems

Advantages

- Linking increases market size, improving liquidity and reducing price volatility.
- A larger network better absorbs shocks, promoting stable pricing.
- Reduces carbon leakage risk by creating a unified regulatory environment.
- Reinforces political commitment to climate action, making it harder to backtrack on environmental targets.

Risks

- Risk of reduced innovation incentives due to lower allowance prices.
- Potential for smaller systems to set less ambitious caps.
- Loss of some control over domestic policy due to the need for coordination with partners
- Increased risk of "imported risk"

Enabling Factors of ETS Linking in the CAREC Region

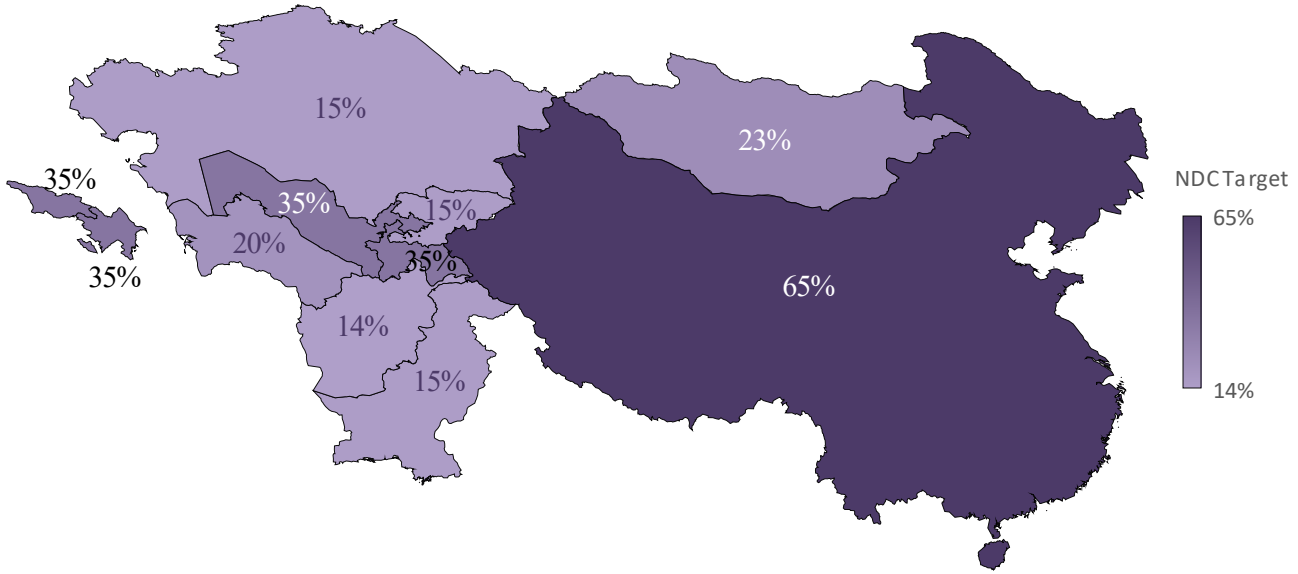
Environmental Ambition

- Environmental Ambitions based on Unconditional GHG Emission Reduction Targets.
- China stands out as the sole country in this group, making it a potential leader in regional ETS linking initiatives.
- Countries with moderate environmental ambition could be potential partners for China of the EU in future linking endeavors, provided they strengthen their ETS infrastructure and regulatory frameworks.
- linking low-ambition countries might not result in substantial overall emission reductions.

Low Ambition: Afghanistan, Kazakhstan, Kyrgyzstan, Turkmenistan, Mongolia and Pakistan

Moderate Ambition: Azerbaijan, Georgia, Uzbekistan, and Tajikistan

High Ambition: China



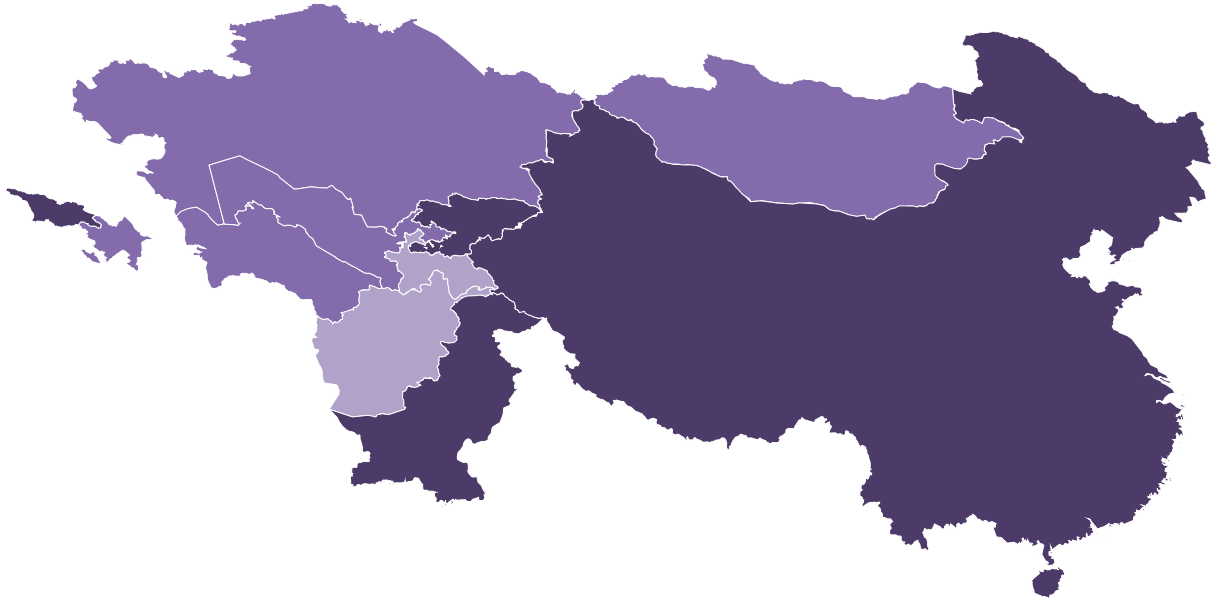
Enabling Factors of ETS Linking in the CAREC Region

Economic Composition

Agriculture Dependent Economies – 20%+ in GDP, relatively low energy and carbon intense, reliant on agricultural exports

Energy-Intensive Industrial Economies – 30%+ in GDP, high energy and carbon intense, reliance on energy exports

Diversified Economies with Growing Service Sectors - balanced % of agriculture, industry, and services in GDP, varying levels of energy and carbon intensity



- **Agriculture Dependent Economies** could potentially benefit from linking with partners who have complementary economies, such as those with strong service sectors, to diversify their economies and gain access to new markets.
- **Energy-Intensive Industrial Economies** could benefit from linking with partners with strong environmental policies and advanced low-carbon technologies to help them decarbonize their economies and diversify their energy mix.
- **Diversified Economies** have more flexibility in choosing linking partners, as they can prioritize either economic complementarity or environmental ambition depending on their specific goals and priorities.

Enabling Factors of ETS Linking in the CAREC Region

Political and Economic Cooperation

Higher coordination in common ETS Frameworks can be facilitated by established economic and political cooperation.

Examples of strong economic ties in CAREC region though RTAs:

- Georgia with China, Azerbaijan, Kazakhstan, Turkmenistan
- Azerbaijan with Kyrgyzstan, Kazakhstan
- Kazakhstan, Kyrgyzstan, Uzbekistan
- Pakistan and China

On this note, implications of existing political and institutional frameworks for ETS linking can be:

- ✓ Facilitation of negotiations and implementation of cross-border carbon markets
- ✓ Creation of effective regional approach to climate change mitigation
- ✓ Contributions to integrated regional climate change mitigation

Major Challenges and Complexities

- Resource and time intensiveness of linked ETS Infrastructure
- Harmonization of Monitoring, Reporting and Verification (MRV)
- Lack of technical expertise and capacity
- Economic and political variabilities on national and regional levels
- Challenging regulatory alignment
- Economic structures divergence
- Private sector and public acceptance
- Insufficiency of financial resources

Findings and Recommendations

Finding 1: Insufficient support and understanding of linked ETS benefits

✓ **Recommendation 1:** Communicate the economic and environmental benefits of linked ETSs

Finding 2: Technical gaps and low awareness impede ETS implementation

✓ **Recommendation 2:** Enhance technical capacity and awareness for effective ETS implementation

Finding 3: Inconsistent knowledge sharing and experiences within the region

✓ **Recommendation 3:** Facilitate knowledge exchange in the CAREC region

Finding 4: Insufficient dialogue on ETS among CAREC countries

✓ **Recommendation 4:** Utilize the CAREC platform to foster dialogue on ETS linking

Findings and Recommendations

Finding 5: Lack of continuous strategic alignment and collaborative engagement in ETS development

✓ **Recommendation 5:** Create a collaborative roadmap for climate change mitigation through ETSs

Finding 6: High complexities associated with immediate regional ETS implementation

✓ **Recommendation 6:** Develop a phased approach for linked ETSs

Finding 7: Diverse ETS frameworks hinder regional integration

✓ **Recommendation 7:** Harmonized implementation of national ETS frameworks

Finding 8: Unclear optimal partnerships for ETS linkages

✓ **Recommendation 8:** Conduct individual quantitative modeling for optimal partnership identification

Finding 9: Technical challenges and financial constraints in ETS initiatives

✓ **Recommendation 9:** Seek international support for cooperative ETS initiatives

Thank you for your attention!

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