



YOUTH GENERAL ASSEMBLY

CARBON CREDITS, CBAM AND JUST ENERGY TRANSITION IN PAKISTAN: WHAT'S GOING ON?

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Printed in Pakistan

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Introduction

Pakistan's unique combination of geography, varied landscape, and socio-economic factors makes it particularly susceptible to climate change impacts. So, we should develop the carbon credits and Carbon Border Adjustment Mechanism (CBAM) to cut emissions. Carbon credits represent a limited allowance for emitting carbon dioxide and other greenhouse gases. Meanwhile, the European Union's Carbon Border Adjustment Mechanism (CBAM) is a policy tool that sets a carbon price on specific goods imported from countries with less rigorous climate regulations, aiming to level the playing field and encourage more sustainable practices globally. Regarding this, the Sindh Forest Department is currently the only seller of carbon credits in Pakistan. NDRMF has initiated numerous information-sharing and knowledge-building events and sessions, while on May 7, 2024, Romina Khurshid Alam, the Prime Minister's Coordinator on Climate Change, announced that the government plans to implement policy reforms, sector-specific initiatives, and engage in a series of discussions with both public and private stakeholders to raise awareness about the effects of the Carbon Border Adjustment Mechanism (CBAM) on Pakistan's export industry.

Carbon Credits in Pakistan

Carbon credits are a currency used in carbon markets, where they are bought and sold. Each carbon credit represents a tonne of CO₂ or equivalent greenhouse gases that mitigation facilities can reduce or avoid. Pakistan's carbon credit ecosystem is developing and holds the potential to contribute significantly to the country's climate change mitigation efforts and sustainable development. The Clean Development Mechanism (CDM) is a project-based approach rather than a sector-wide approach to climate mitigation. Pakistan's share of global CDM projects is small, accounting for less than 0.6% of the annual Certified Emissions Reductions (CERs) expected. In Pakistan, carbon offset projects can be categorized into five types: industrial gas destruction, renewable energy, fuel switch (biomass), energy efficiency, and waste management. The Sindh Forest Department is currently the only entity selling carbon credits in Pakistan, with two projects, Delta Blue Carbon (DBC-1) and DBC-2, focusing on restoring and planting mangrove forests in the Indus Delta. The impact of the China-Pakistan Economic Corridor (CPEC) on generating carbon credits in Pakistan is challenging, as reducing carbon emissions, carbon capture, and carbon sequestration are difficult due to the reliance on coal-based energy projects. About 75% of the energy generated from CPEC projects in Sindh, Punjab, and

Baluchistan comes from coal. The preference for coal over renewable energy is driven by the national grid's energy shortage and the high cost of renewable energy technology.

CBAM in Pakistan

A Carbon Tariff, or Carbon Border Adjustment Mechanism (CBAM), is a financial measure imposed on imports based on the carbon emissions produced during their manufacturing process. Its primary goal is to discourage carbon emissions and ensure a level playing field between countries with stringent climate regulations and those without, thereby promoting global decarbonization. The European Union has been at the forefront of implementing CBAM as part of its Green Deal, which aims to address climate change, emissions, pollution, and biodiversity loss. While the CBAM seeks to extend decarbonization efforts beyond Europe and ensure fair trade, it has sparked controversy. Critics argue that it lacks sufficient differentiation based on the country of origin, potentially disadvantaging underdeveloped nations that may not meet the stringent requirements of leading markets.

Pakistan's economic landscape poses unique challenges for carbon pricing, which could negatively impact the competitiveness of its export market. Since 1990, Pakistan's greenhouse gas emissions have surged over 160%, below the 175% average increase among the Middle East, North Africa, Afghanistan, and Pakistan (MENAP) region, but significantly above the global average of 50%. Pakistan faces potential pressure from significant trading partners like the EU and UK to introduce carbon pricing, as they consider border carbon adjustments on imports from countries without explicit carbon prices. However, there is a lack of consensus within Pakistan on the competitiveness and leakage risks of unilaterally implementing carbon pricing. While carbon border fees could incentivize Pakistan to adopt carbon taxes, they may also risk retaliation if policies are not carefully designed and discussed (Khokhar). The CPEC could be affected by CBAM policies and potential mitigation strategies. CPEC projects, especially those related to manufacturing and industrial production, may face higher costs when exporting to the EU due to carbon pricing under CBAM. Products from Pakistan and indirectly from China through CPEC might become less competitive in the EU market if they carry additional carbon costs compared to local EU products.

Just Energy Transition in Pakistan

A steady supply of inexpensive, clean, and continuous energy is essential for long-term, sustainable economic growth. Due in large part to a high import bill associated with energy, Pakistan's economic performance has suffered over time from energy shortages and an unfavorable balance of payments scenario. Furthermore, Pakistan's heavy reliance on fossil fuels to supply its energy demands is a contributing factor to environmental deterioration, an increase in the frequency of natural catastrophes, and climate change. Pakistan is predicted to have a feasible capacity of producing 120,000 MW⁴ of energy from wind power, while its solar power potential is enormous. The total installed proportion of renewable energy is 34%, which includes hydro, solar PV, wind, and bagasse-based plants. The remaining 66% is derived from thermal

projects, which include nuclear, RFO, RLNG, imported coal, local gas, and coal (CPDI). Just Energy Transition Partnerships (JETP), which seek to hasten decarbonization in poor nations while implementing steps to reduce societal costs, are another option Pakistan is considering. Fundamentally, international solutions are needed to address the complicated global challenge of climate change. To produce power, the China-Pakistan Economic Corridor (CPEC) is investing \$33 billion in the energy industry. All projects have to be finished by 2026, as per the agreement. The investment was expected to be used in 19 energy projects, including those in the solar, wind, hydro, and coal sectors.

Challenges and Opportunities

The economy's heavy reliance on imported fossil fuels, the significant carbon emissions from the power sector, and the nationally owned oil, gas, and transport sectors all require further consideration. Pakistan needs more consensus on the competitiveness and leakage risks of unilaterally implementing carbon pricing. Beyond domestic carbon taxes and trading schemes, Pakistan has opportunities for international engagement through carbon market collaboration. In January 2025, China will launch the world's largest national carbon emissions trading program. Carbon markets drive investment into emissions-reducing projects, and Pakistan could gain substantial economic and environmental benefits by cooperating with China's carbon market (*"Third Quarterly Report for FY18"*, 2018).

Conclusion

In the end, the conversation emphasized how vital carbon credits and the Carbon Border Adjustment Mechanism (CBAM) are to the advancement of a fair energy transition. These resources are essential for encouraging sustainable habits and lowering carbon emissions worldwide. Prioritizing sustainable development and climate action is not only necessary for the environment but also presents an economic opportunity for Pakistan. To secure a resilient future, Pakistan has to embrace renewable energy, develop its carbon credit market, and adhere to international climate regulations. The China-Pakistan Economic Corridor (CPEC) offers Pakistan a special chance to meet its climate targets. CPEC may promote sustainable development, generate green employment, and lower carbon footprints by incorporating green technology and infrastructure, establishing Pakistan as a regional leader in climate action. To take advantage of this potential for a sustainable and successful future, swift and decisive action is required.

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