

Carbon Pricing Policy Opportunities in Central Asia and Azerbaijan

Preliminary findings of the joint EDB and CI study

***4th CAREC Working Group on Climate Change
7-9 April, 2025
Bishkek***

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Knowledge for Prosperity

Overview of Carbon Pricing Frameworks

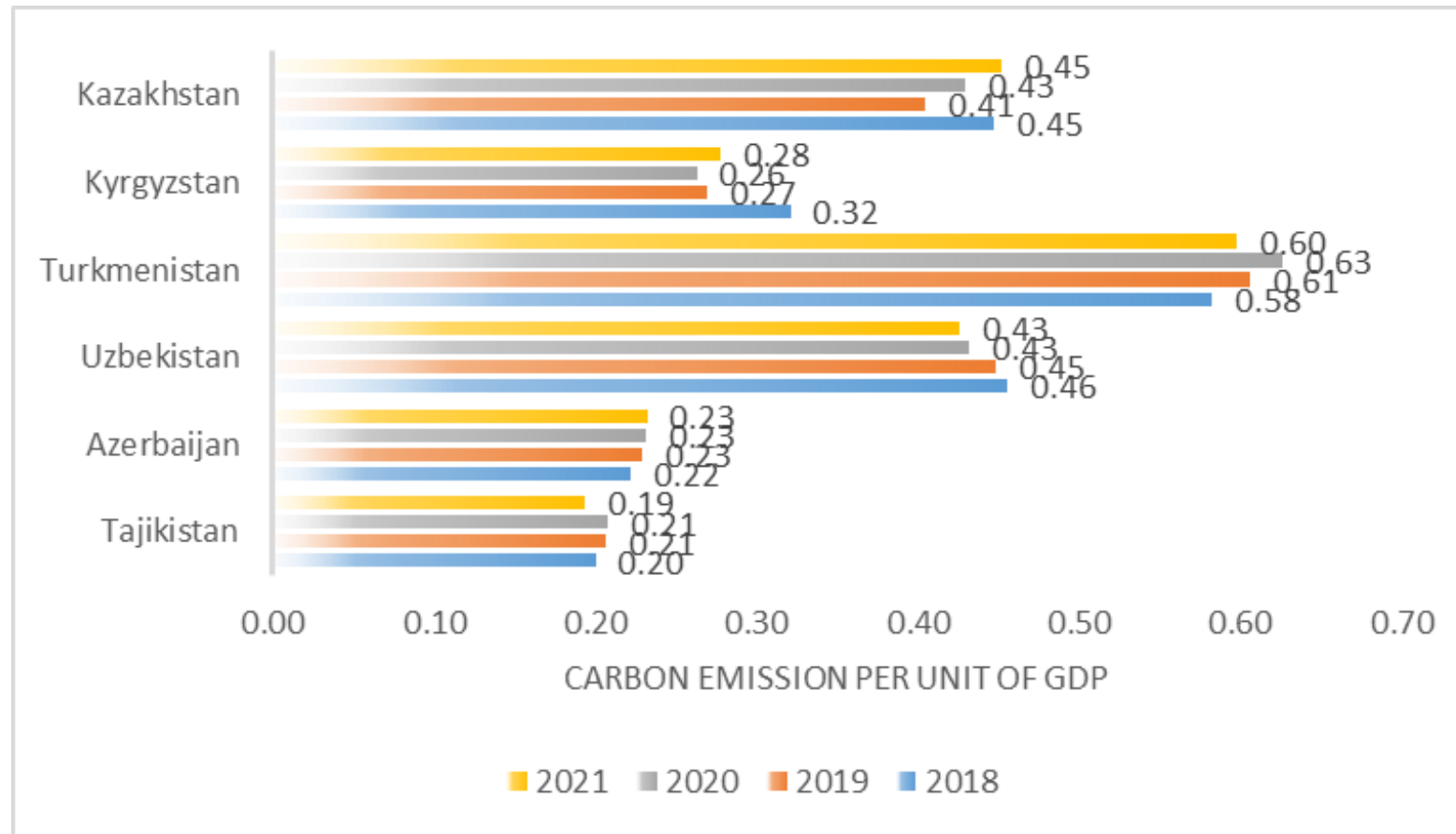
Carbon pricing instruments (CPIs) is one of the most powerful climate-related policy instruments

CPIs may have a direct impact on emissions reduction

It requires robust policy, regulatory frameworks and institutional capacity

The study seeks to identify the country-level prerequisites for introducing carbon pricing instruments

The share of countries of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) and Azerbaijan in global greenhouse gas (GHG) emissions is very small (1.4%)



Emission Intensity of GDP, 2018-2021, kg CO₂ per USD

GHG Emissions in Selected Countries

Central Asian region shows the accelerating emissions

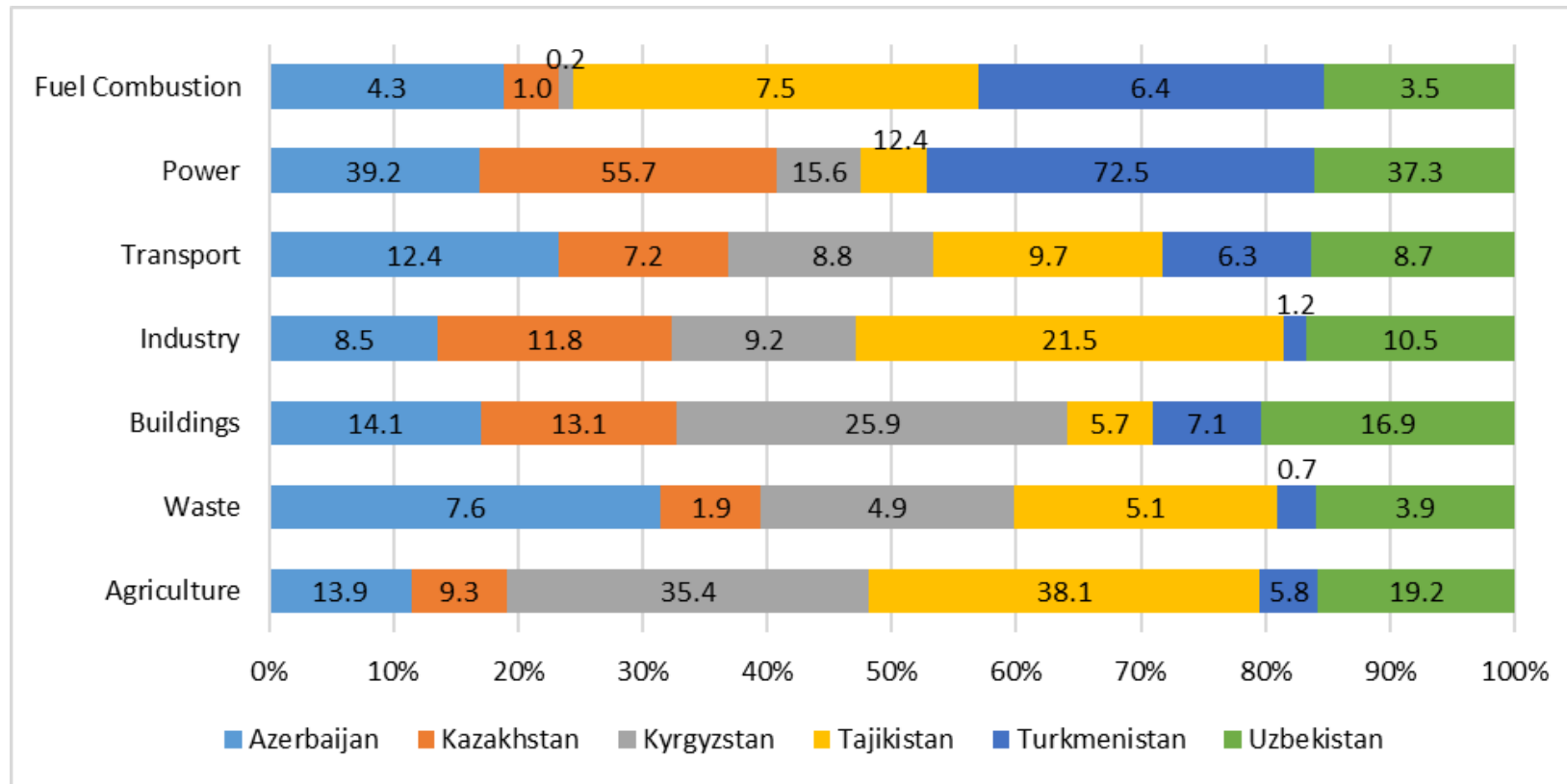
The energy sector is responsible for the major share of carbon emissions

In Kyrgyzstan and Tajikistan agriculture is the largest emitting sector

Central Asian countries and Azerbaijan are actively integrating climate-related provisions in their policies

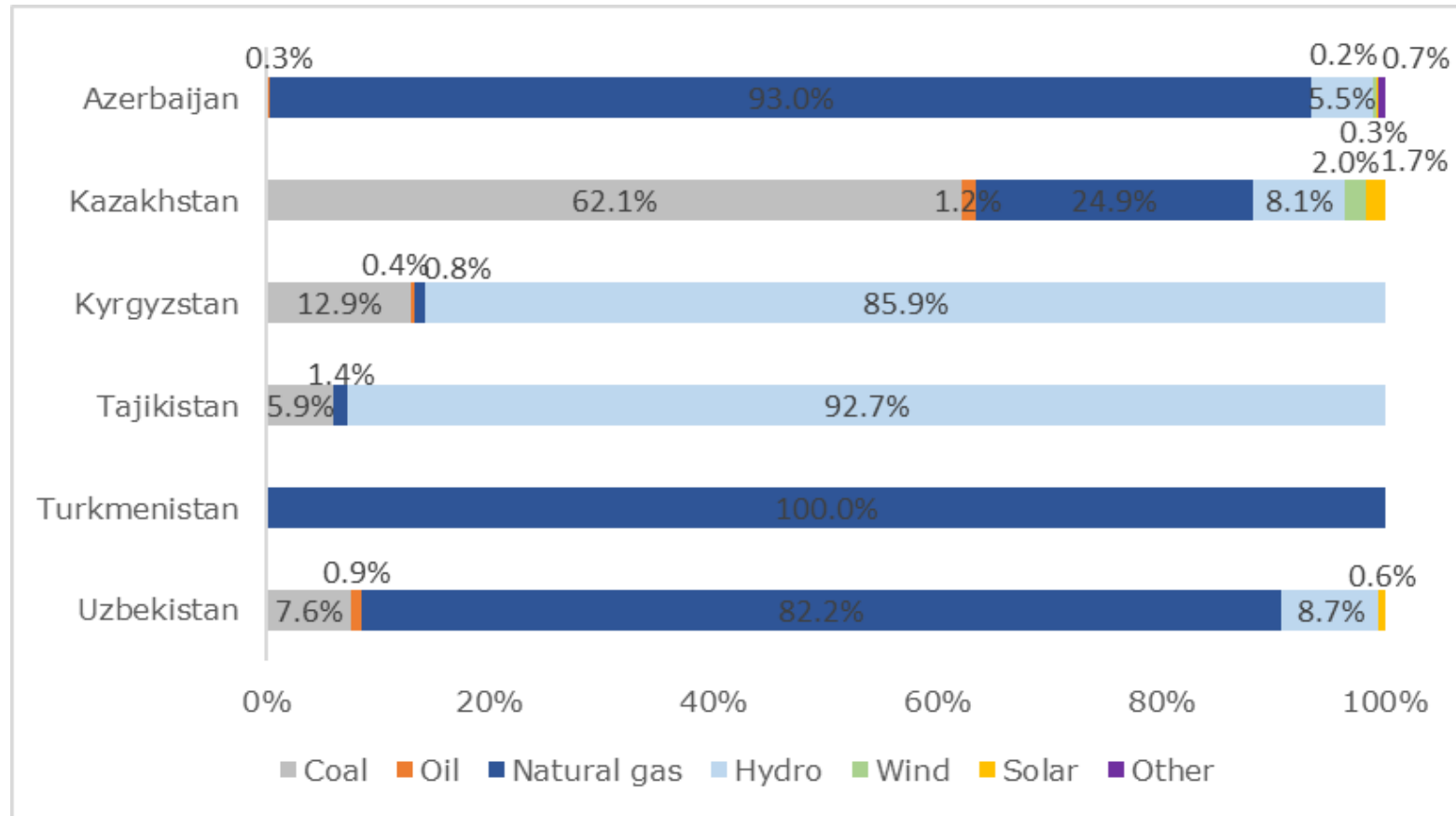
Carbon tax could generate about 2.6% of GDP in revenue in the Caucasus and Central Asia

CO2 emissions in the region main trends from sectors: power industry, industrial process and buildings, agriculture, waste, and fuel exploitation



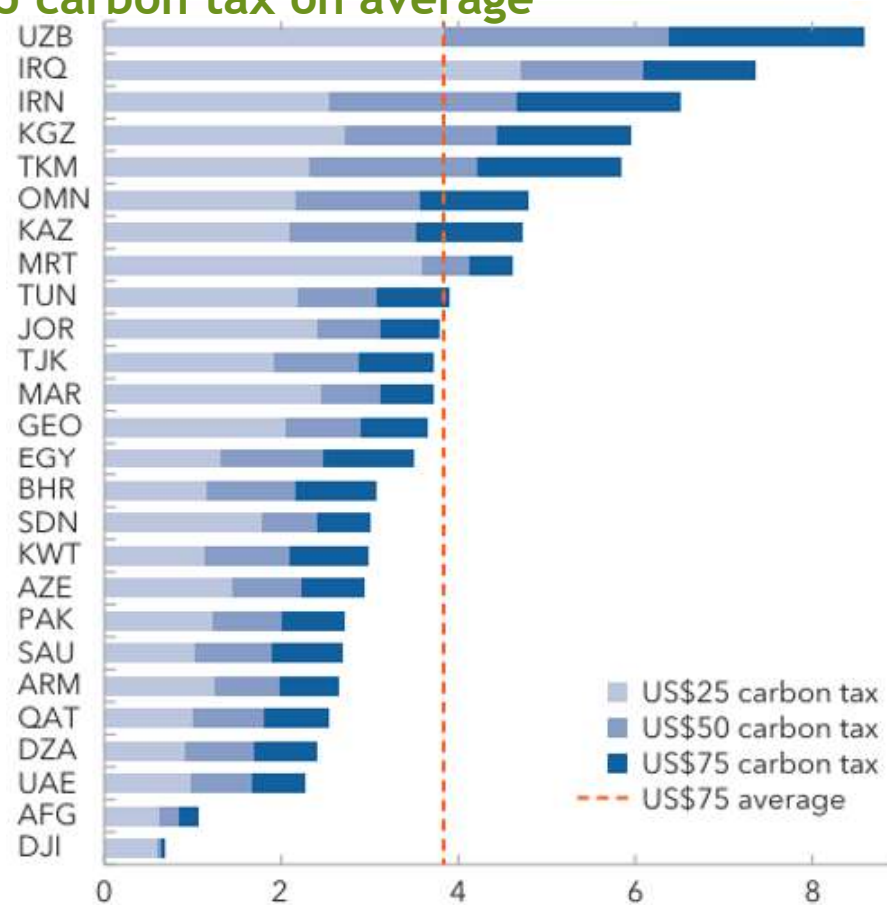
Sector Wise Emission, %, 2020

Kazakhstan, Uzbekistan and Turkmenistan have a larger footprint due to their dependence on coal, oil and natural gas for power generation, industry and transportation activities



Electricity Generation Sources, % (IEA, 2022)

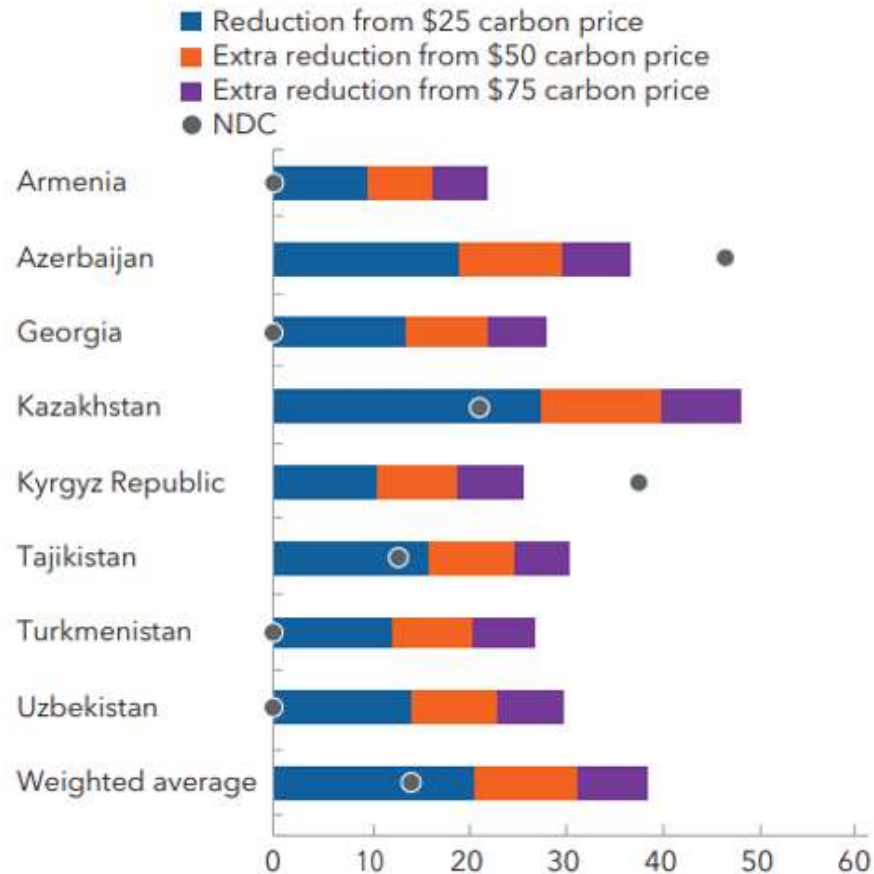
IMF assess that the weighted average Nationally Determined Contributions (NDC) emissions target in the Caucasus and Central Asia can be met with a uniform US\$25 carbon tax on average



Sources: Country authorities; and IMF staff calculations.
 Note: Estimations are based on a model calculation from the IMF Fiscal Affairs Department's Carbon Pricing Assessment Tool.

Potential carbon tax revenue, % of GDP, 2030

Carbon taxation is considered to be a powerful tool to meet the Paris Agreement commitments and corresponding NDCs



Sources: IMF CPAT tool; and IMF staff estimates.

Note: Armenia, Georgia and Uzbekistan have pledges that imply emissions increase in 2030 against the baseline. Turkmenistan's NDC is unquantifiable.

Emission Reduction and Pledges, emission, % of baseline

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All the countries have pledged to reduce emissions

Countries specific Carbon Pricing Instruments (CPIs) are strikingly different

CPI could not be considered as a “one-size-fits-all” approach:

- ***Azerbaijan*** is more integrated into the international trade, and indicates some efforts to join carbon markets and pave the way for further diversification of carbon-intensive economy

- **Kazakhstan** has CPI in form of the ETS operational and considers carbon pricing as one of the suggested approaches that would foster long-carbon development
- **Kyrgyzstan** has a unique climate intention to create a vision of a “negative emissions” country. Considering the country’s energy mix and its ambition to further increase RES generation, introduction of CPI is not a binding requirement for the country to achieve its climate commitments
- **Tajikistan** is the region’s lowest CO2 emitter and prioritizes adaptation over mitigation given its acute vulnerability to climate change effects. The country also has opportunities for green growth that are sufficient to reach NDC and could be beneficial at international carbon markets

- ***Turkmenistan** is the largest emitter of GHG emissions relative to GDP in the Central Asia, and does not plan to raise the climate mitigation ambitions prioritizing economic growth. Introduction of CPI could be considered as a beneficial, but premature measure since the country lacks initial elements of the climate regulation*
- ***Uzbekistan** has the majority of prerequisites for an efficient carbon pricing in place, and introducing CPI could be considered as a reasonable next step on the country's low-carbon development path. Moreover, the country also has some experience in global carbon trade and is already establishing its MRV system that would provide assistance in future CPI implementation*

The following steps can be recommended when considering introduction of CPI:

- Conduct readiness assessment to identify level of development of carbon pricing policy, mechanisms and instruments, and technical readiness required in each country***
- The carbon pricing enablers should be considered and strengthened***
- Alignment and strengthening of the carbon pricing policies with complementary country's policies as well as harmonization of the CPI frameworks with national and regional context***
- A country could still unlock a wide range of complimentary instruments to promote low-carbon growth***
- Instruments could include feed-in-tariffs incentivizing renewable energy investments, mechanisms for the generation of emission reductions or tradable carbon credits, and international funding opportunities via development banks, funds, and other agencies***

Thank you!