Kuat Akizhanov Deputy Director April 2025



Knowledge for Prosperity

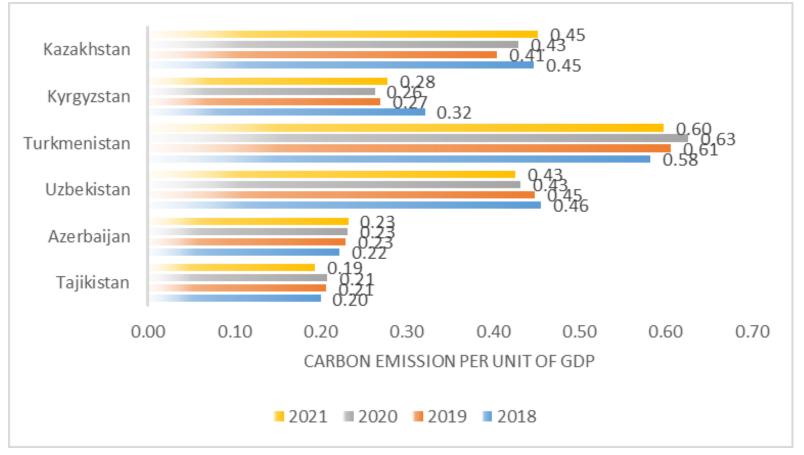


Carbon pricing instruments (CPIs) is one of the most powerful climate-related policy instruments allowing to reduce carbon emissions in a flexible way. It can also generate revenue that can be reinvested to promote green technologies and provide market participants with more clarity and predictability about emissions levels

The deployment of CPIs presents significant challenges as it requires robust policy and regulatory frameworks as well as institutional capacity.

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

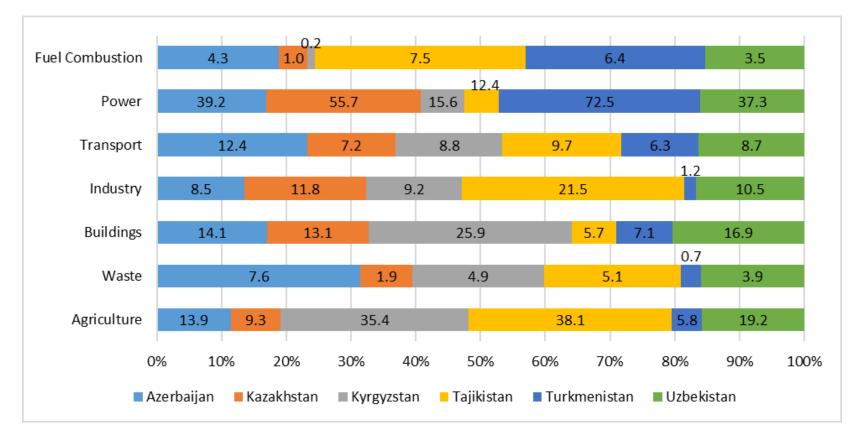


The energy sector is responsible for the major share of carbon emissions in all countries except Kyrgyzstan and Tajikistan where agriculture is the largest emitting sector

Central Asian countries and Azerbaijan are actively integrating climate-related provisions in their policies, considering international agreements and tailoring best practices to national conditions and priorities

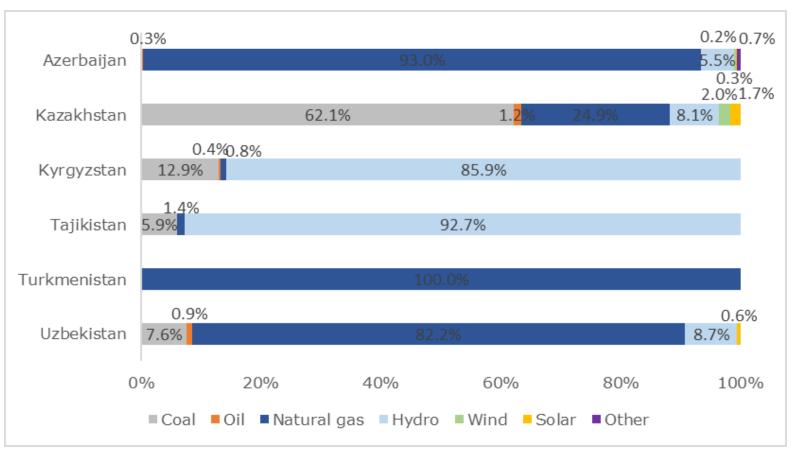
IMF assess that the weighted average NDC emissions target in the Caucasus and Central Asia can be met with a uniform US\$25 carbon tax on average that could generate about 2.6% of GDP in revenue in the Caucasus and Central Asia





Sector Wise Emission, %, 2020

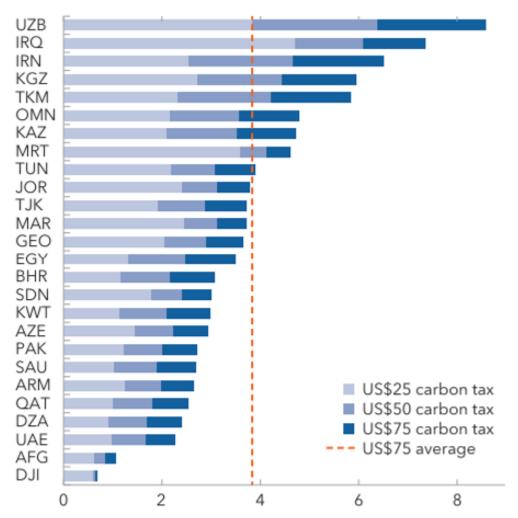




Electricity Generation Sources, % (IEA, 2022)

CAREC

Carbon Pricing
Policy
Opportunities in
Central Asia
and Azerbaijan

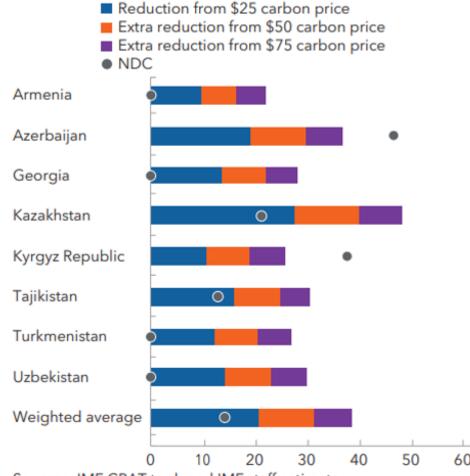


Sources: Country authorities; and IMF staff calculations.

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





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



Although all the countries in the scope of the research have pledged to reduce emissions, their approach, willingness and readiness to move to specific CPIs are strikingly different

The results of the analysis of the Central Asian countries and Azerbaijan demonstrates that 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. Using the momentum of a COP29 host country, Azerbaijan could consider fiscal carbon measures to raise the competitiveness of its export and pave the way for further diversification of carbon-intensive economy



- Kazakhstan demonstrates the unique example of the country that already 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 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 have 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:

- it is recommended to conduct readiness assessment to identify level of development of carbon pricing policy, mechanisms and instruments, and technical readiness required in each country
- in case the results of preparatory work indicates a need and readiness of a country to implement CPIs, the carbon pricing enablers should be considered and strengthened. This stage could include 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. These 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!