FISCAL POLICIES SUPPORTING THE GREEN TRANSITION IN CENTRAL ASIA

ADVANCING THE GREEN TRANSITION IN CAREC: POLICY PATHWAYS FOR LOW_CARBON GROWTH
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Presentation outline:

1. Why Green Fiscal Policy Matters
– Global context and lessons for Central Asia

2. Central Asia’s Energy and Emissions Profile
– Economic structure, electricity mix, intensity trends

3. Country Case Highlights
– Kazakhstan, Uzbekistan, Tajikistan, Kyrgyz Republic, Turkmenistan

4. Regional Cooperation
– CAREC role, Dushanbe Pact, CAPS revival

5. Policy Recommendations
– Fiscal tools for an inclusive and sustainable transition

GREEN FISCAL POLICY IN CENTRAL ASIA: WHY IT MATTERS

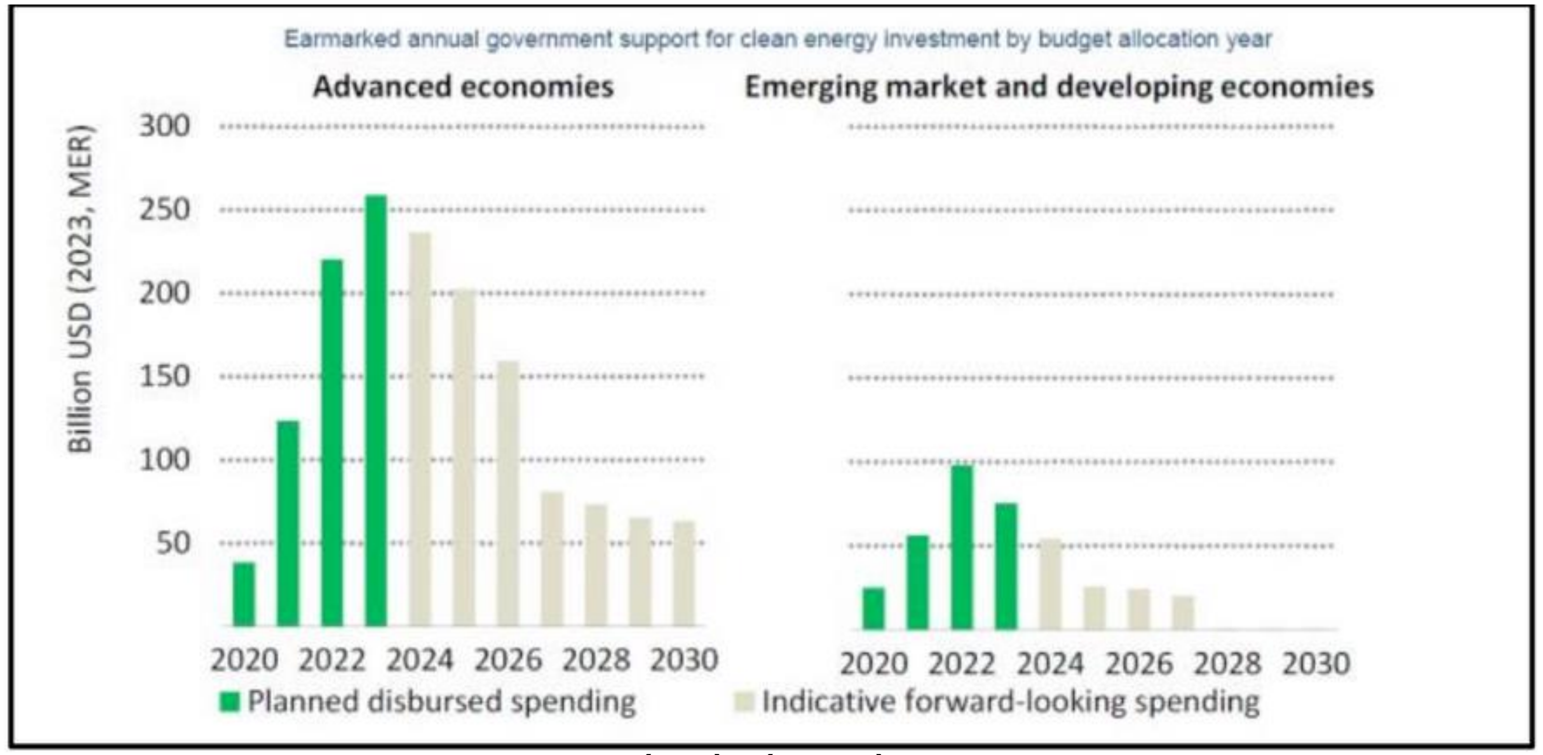
The presentation explores how fiscal instruments—such as green taxes, subsidies, and climate finance—can support the green energy transition in Central Asian countries. It draws on recent research to analyze country-specific efforts, challenges, and policy innovations aimed at decarbonizing economies while maintaining growth and energy security.

As climate risks intensify and global energy systems shift, Central Asia’s fossil fuel-heavy economies face pressure to reform. Fiscal tools are essential to realign incentives, mobilize finance, and ensure a just and sustainable transition aligned with regional and global commitments.

A GLOBAL SHIFT AND CENTRAL ASIA'S PATH FORWARD

- Climate risks and sustainability have made green transition a global economic priority
- Fiscal policy is a key tool—governments are using taxes, subsidies, and spending to promote clean energy and innovation
- Advanced economies have allocated over $640B and emerging markets $240B in clean energy since 2020 (IEA, 2024)
- Sweden's carbon tax ($127/ton) cut emissions by 25% while growing GDP by 75%, proving fiscal tools can align growth with sustainability
- CAREC countries are committed to the Paris Agreement but face structural and fiscal constraints
- Achieving the green transition requires bold, balanced, and socially just fiscal reforms supported by regional cooperation

Comparison of Government Support for Clean Energy Investments: Advanced vs. Emerging Economies (2020-2030)



International Energy Agency (IEA). (2024). Government energy spending. In State of Energy Policy 2024.

FISCAL POLICY TOOLS FOR GREEN ENERGY TRANSITION

- Green fiscal policies aim to address environmental degradation while supporting sustainable development
- Tools are flexible and must be tailored to each country's economic, social, and environmental context
- No universal "rule of thumb" — tools depend on energy reliance, fiscal space, and political will
- Developing countries may prefer support tools like subsidies and FiTs
- Policy design must balance environmental goals, fiscal realities, and social equity

THREE MAIN CATEGORIES OF TOOLS:

Revenue-generating

- Carbon taxes
- Emission Trading (Auctioned permits)

Revenue-spending

- Subsidies
- Feed-in tariffs (Fits)
- Public investment

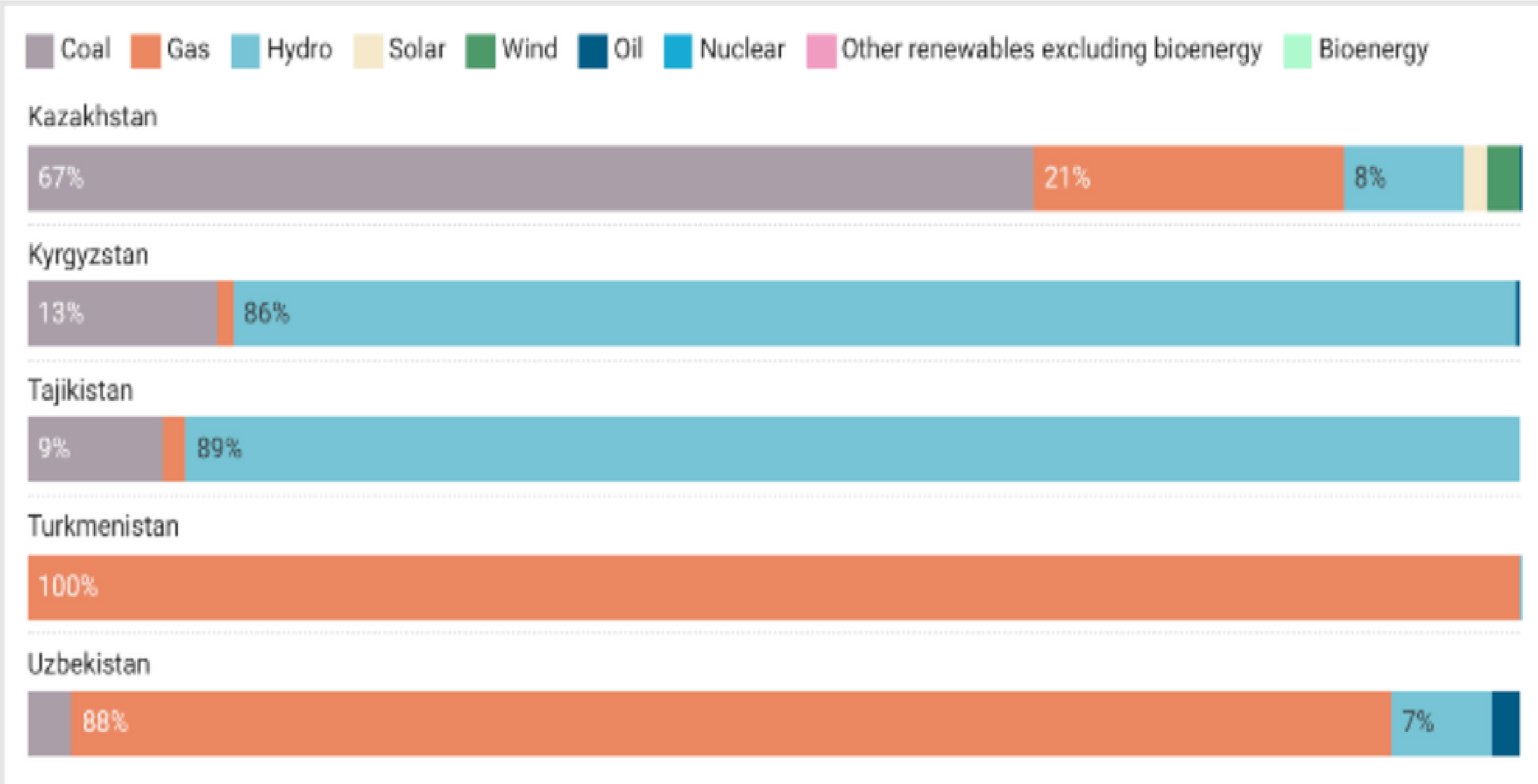
Revenue-neutral

- Cap and trade (free permits)
- Deposit refund schemes

CENTRAL ASIA'S GROWTH AND ENERGY PROFILE: A DIVERSE PATH TOWARD GREEN TRANSITION

- Region is resource-rich (oil, gas, minerals) but faces geographic and sustainability challenges
- Kazakhstan, Uzbekistan, and Turkmenistan dominate regional GDP; Kyrgyzstan and Tajikistan show fast growth
- Sectoral structure varies: agriculture leads in Tajikistan & Uzbekistan; industry in Turkmenistan & Kazakhstan; services in Kazakhstan
- Electricity mix diverges by country:
- Kazakhstan: 67% coal, 21% gas
- Turkmenistan: 100% gas
- Uzbekistan: 88% gas, small hydro/oil
- Kyrgyzstan & Tajikistan: ~90% hydro (clean but climate-sensitive)
- Highlights need for tailored green fiscal reforms across varied economies and energy systems

Share of Electricity Production by Energy Source in Central Asian Countries, 2022



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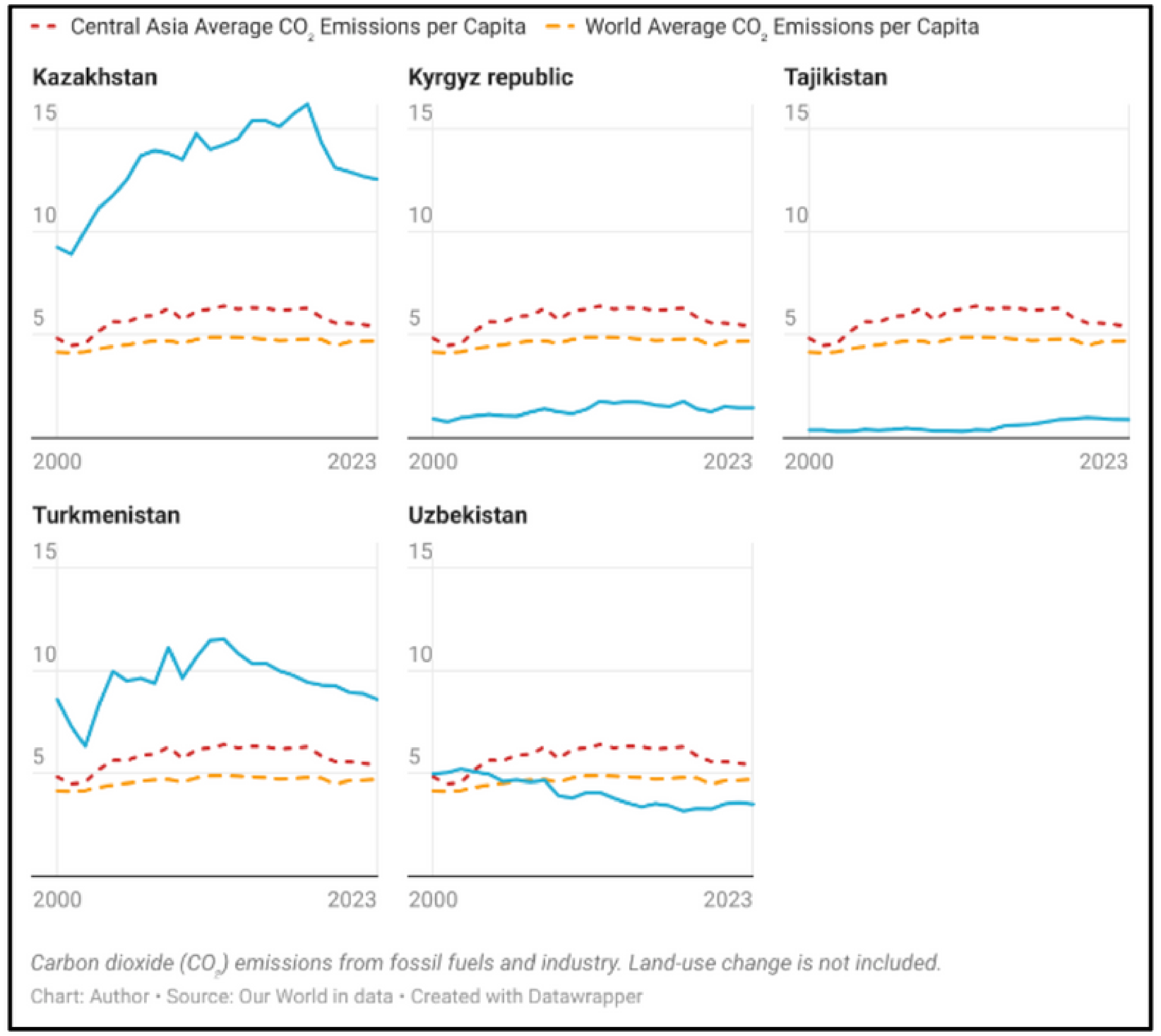
ENERGY, EMISSIONS, AND GREEN FISCAL REFORMS IN CENTRAL ASIA

- High fossil fuel use in Kazakhstan, Turkmenistan, and Uzbekistan → high energy intensity and CO_2 emissions
- Hydropower-based countries (Kyrgyz Republic, Tajikistan) show low energy and CO_2 intensity
- Uzbekistan has reduced CO_2 intensity of GDP by ~50% since 2010 through industrial modernization
- CO_2 per capita: Kazakhstan and Turkmenistan exceed regional & global averages; Kyrgyzstan and Tajikistan remain below
- National GHG reduction targets:
  - Kazakhstan: 15–25% by 2030
  - Uzbekistan: 35% by 2030
  - Tajikistan & Kyrgyzstan: 50–60% by 2030 (updated targets)
- Green fiscal reforms across CA: carbon pricing, RE incentives, energy efficiency subsidies, and modernization policies

Per capita CO2 emissions in Central Asian countries compared to Regional and Global averages. (2000-2023, in tons per person)



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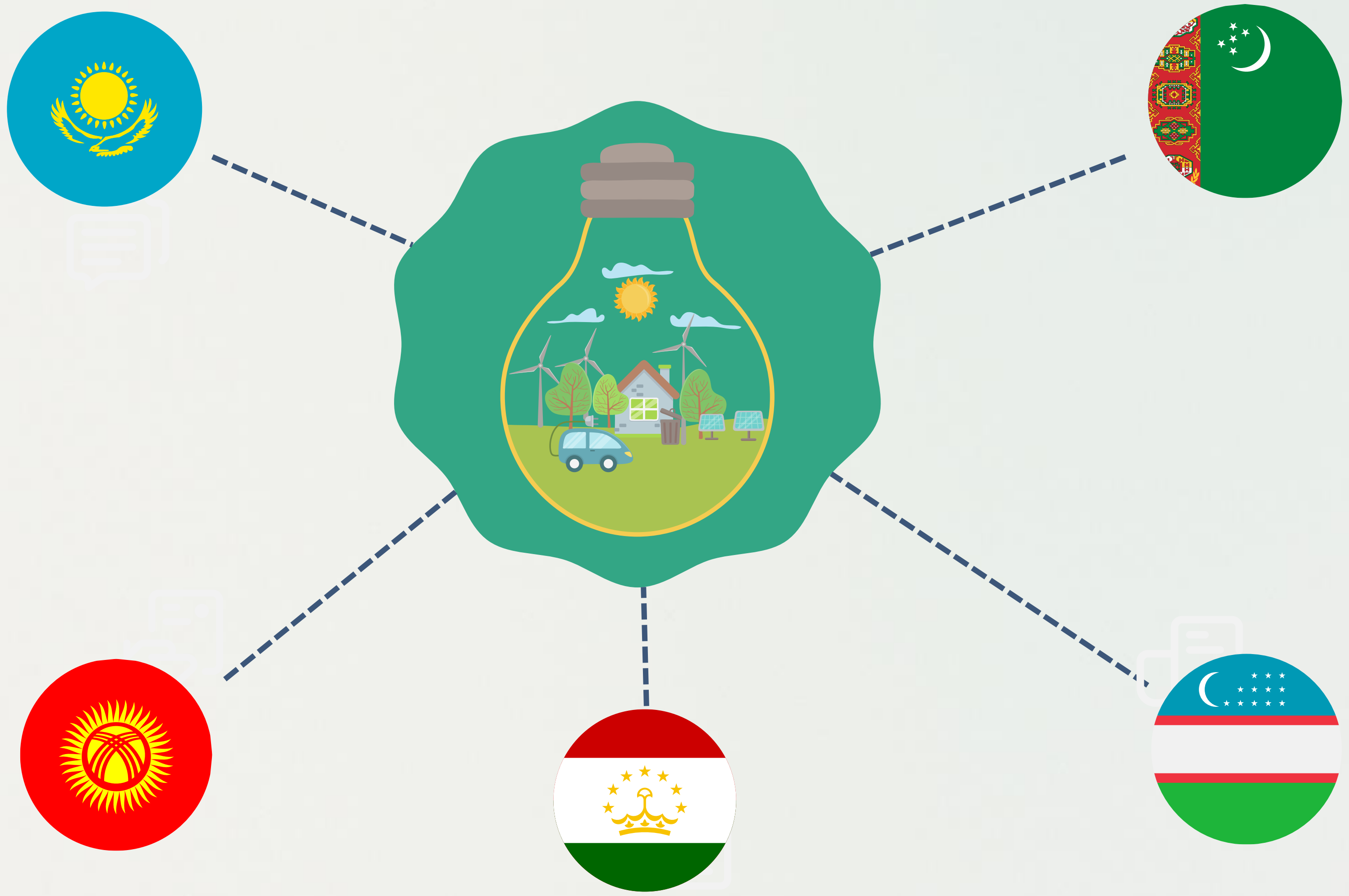
ONE REGION, MANY TOOLS: MAPPING THE GREEN POLICY SHIFT



Transitioning from Fossil Fuels to Green Leadership

- Introduced ETS in 2013 — first in CA, covers 20,000+ tons of CO_2 annually
- Target: 40% reduction in power sector emissions by 2050 (from 2012 levels)
- Renewable energy auctions (2018–2021): 75 contracts, 3,106 MW added
- Phasing out ~$9B in fossil fuel subsidies; implemented tariff reforms and social support
- Launched carbon farming initiative at COP29
- Strong focus on MRV frameworks and nuclear energy investments

Exploring Pathways for Green Fiscal Reform

- Adopted Law on RES in 2021; updated NDC under Paris Agreement
- Began subsidy reform with 2017 tariff hike; further reforms anticipated
- Engaging with GCF and international donors to support transition
- Faces structural constraints: low transparency, weak interagency coordination
- Opportunity to introduce RE incentives and carbon pricing with clearer frameworks

Building Green Foundations through Fiscal Reform

- National Development Strategy 2040 aims for CO_2 neutrality
- Law on Renewable Energy (2008); FIT reforms in 2019 to boost RE uptake
- Green Budget Tagging Guidelines (2024–2028) align spending with climate goals
- $50M ADB support for climate-oriented PFM and governance reforms
- Challenges: low fiscal space, hydro-dependence, adaptation funding gaps
- Focused on SDG alignment and integrated climate budgeting

Addressing Fiscal Constraints in Green Development

- Green Economy Strategy (2023–2037) prioritizes sustainable, inclusive growth
- Passed carbon tax law: $10–30/ton CO_2 by 2030
- Plans to eliminate energy subsidies by 2027
- Issued first green bond (Eskhata Bank + IFC) to fund climate projects
- Heavy reliance on external climate finance (grants, loans)

Advancing Green Finance and Policy Innovation

- Issued $349M sovereign and $100M corporate green bonds
- Targeting 40% RE share in electricity mix by 2050; building nuclear plant with Russia
- ADB-backed green mortgages and renovation loans ($150M)
- Introduced SDG-based budgeting and green taxonomy (2022–2023)
- Phasing out $3.8B in fossil fuel subsidies (2020 baseline)
- Challenges: heavy gas reliance, regulatory gaps, underdeveloped green finance market

Policy Recommendations for Advancing Green Energy Transition in Central Asia

01

Recognize the Social Cost of Carbon (SCC):
Integrate SCC into budgeting to reflect full environmental costs of emissions and improve fiscal decision-making in carbon-intensive economies.

02

Adopt Precautionary Policies:
Address uncertainty in climate impacts by setting conservative carbon price estimates and using climate-risk-informed fiscal planning.

03

Promote Hybrid Carbon Pricing:
Combine carbon taxes and ETS; gradually align CA countries with international benchmarks

04

Leverage Global Tools:
Apply frameworks like IMF's Climate-PIMA and Green PFM to integrate climate objectives into budgeting and investment.

05

Advance Clean Transport & Integration:
Support EV adoption, energy efficiency standards, and grid connectivity for low-emission mobility and renewable uptake.

06

Develop CCS Potential:
Use fiscal tools (e.g., tax credits, infrastructure support) to unlock regional carbon capture and storage capacity.

07

Strengthen Regional and Global Cooperation:
Participate in cross-border platforms (e.g., Coalition of Finance Ministers for Climate Action) to harmonize reforms and attract green finance.

08

Revive CAPS & Modernize Energy Infrastructure:
Reconnect the Central Asian Power System, integrate energy storage, smart grids, and coordinate regional power markets.