Uzbekistan's Potential in Carbon Markets: National Circumstances and Climate Policy Objectives

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Greenhouse gas emissions in Uzbekistan

Total GHG emissions: 209.61 million tons CO_2-eq

- Total emissions: 209.61
  Natural absorption: 8.46
  Net emissions: 201.15

- **Trends (2010 – 2022):**

  Overall emissions increased by 20.9%

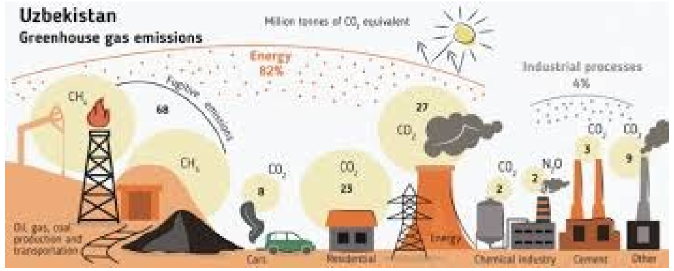
  Largest growth observed in:

  Industry: +99.14%

  Agriculture: +50.42%

Share of GHG emissions by gas

- CO_2 (Carbon dioxide) – 135.55 (64.7%)
- CH_4 (Methane) – 60.20 (28.7%)
- N_2O (Nitrous oxide) – 12.74 (6.1%)
- HFCs (Hydrofluorocarbons) – 1.13 (0.5%)



Sectoral distribution of GHG emissions

- Energy – 133.51 (63,7%)
- Industry – 30.25 (14,4%)
- Agriculture – 35.35 (16,9)
- Waste – 10.50 (5%)

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Uzbekistan’s Climate Strategies

Nationally Determined Contributions:

- The goal to reduce Greenhouse Gas (GHG) emissions per unit of GDP by 35% by 2030 (2010 baseline)
- Long-term vision: carbon neutrality by 2055

Key Sector Priorities:

- Energy: Expansion of renewable energy (solar, wind, hydropower, and nuclear); target 54% of electricity from renewables by 2030
- Industry: Modernization to reduce carbon intensity; adoption of cleaner technologies; increase energy efficiency by at least 20%
- Agriculture: Adoption of climate-smart practices; water productivity technologies; irrigation infrastructure modernization
- Waste Management: Improved solid waste treatment; deployment of waste-to-energy plants
- Forestry & Land Use: Afforestation; combating desertification; Aral Sea restoration projects; restore 6.1 million hectares of forest by 2030 (total restoration potential: 10 million hectares)

Policy Integration

- Law on Limiting Greenhouse Gas Emissions (April 2025)
- National Green Economy Taxonomy (October 2023)
- Presidential Decree on Measures to Introduce a National Transparency System in the Transition to a Green Economy (MRV) June 2024
- Strategy of the Republic of Uzbekistan for Low-Carbon Development and Achieving Carbon Neutrality by 2055 (Project)
- National Program for Improving the Green Finance System (Project)
- The law and strategy on Climate change (Project)
- Improving the system of public administration and developing investment activities for projects in the field of green finance and sustainable development (Project)
- Implementing the Carbon Pass’ System for Foreign Tourists Traveling in Uzbekistan (Project)

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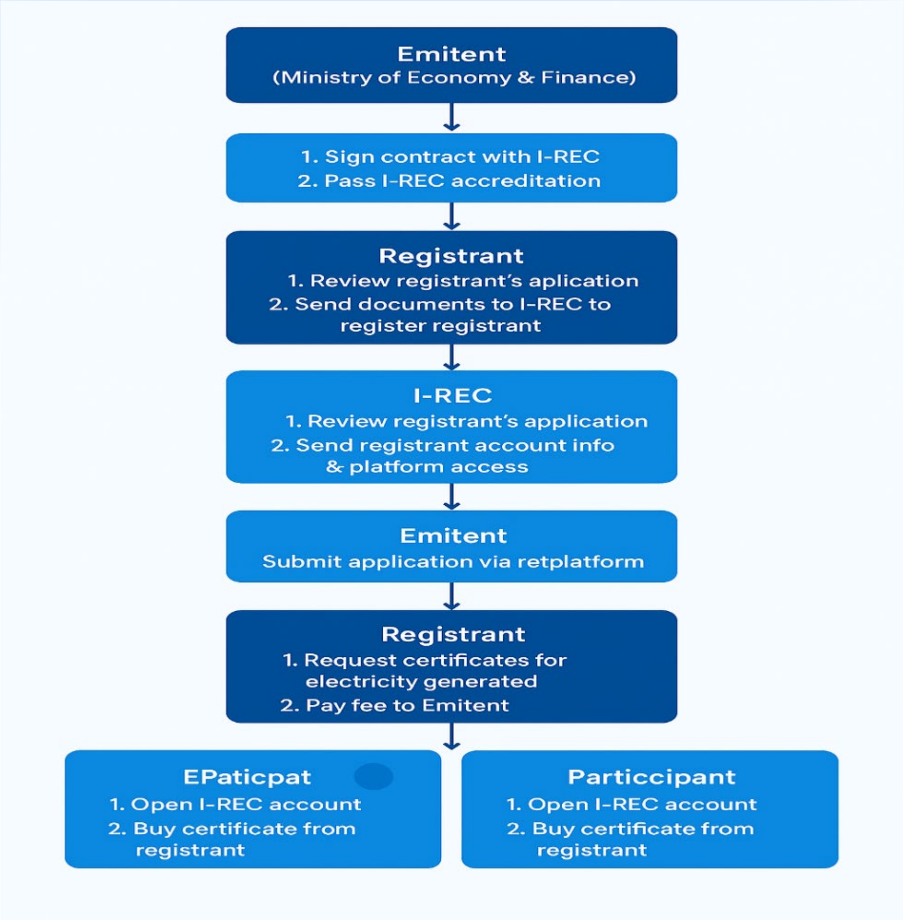
Process flow of “ Yashil” Energiya Certificate registration and trading



- “Yashil energiya” certificate — a record confirming the amount of electricity generated by a registered facility and delivered to the national grid or end-user. A Yashil Energiya’ certificate is placed for exchange trading by the registrant in standard lots. In trading sessions, one lot of a Yashil Energiya’ certificate is set at 1,000 kWh
- Emitent — Ministry of Economy & Finance of Uzbekistan
- I-REC — International Renewable Energy Certificate, a non-profit organization that provides a robust, globally recognized standard for tracking renewable energy attributes
- Registrant (Generator) — an entity that owns generation facilities
- Certificate Registry — a database on the platform that records the full lifecycle of “Yashil Energiya” certificates and their use
- Participant — a local or foreign legal entity or individual entrepreneur (other than the Emitent) that holds trading accounts in the platform registry, trades certificates, and uses them
- Operator — an international organization (Evident / I-REC Services BV) that supports the Emitent and ensures the operation of the platform

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Challenges in Carbon Market Readiness and Investment Opportunities

Key Challenges

- Institutional capacity – limited expertise, weak cross-sector coordination
- Data management systems – gap in monitoring, and lack of reporting, and verification (MRV) infrastructure
- Market readiness – early-stage development of carbon pricing and trading mechanisms

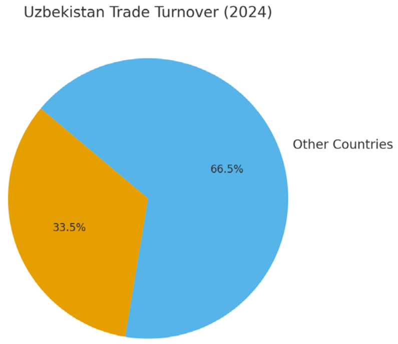
Opportunities

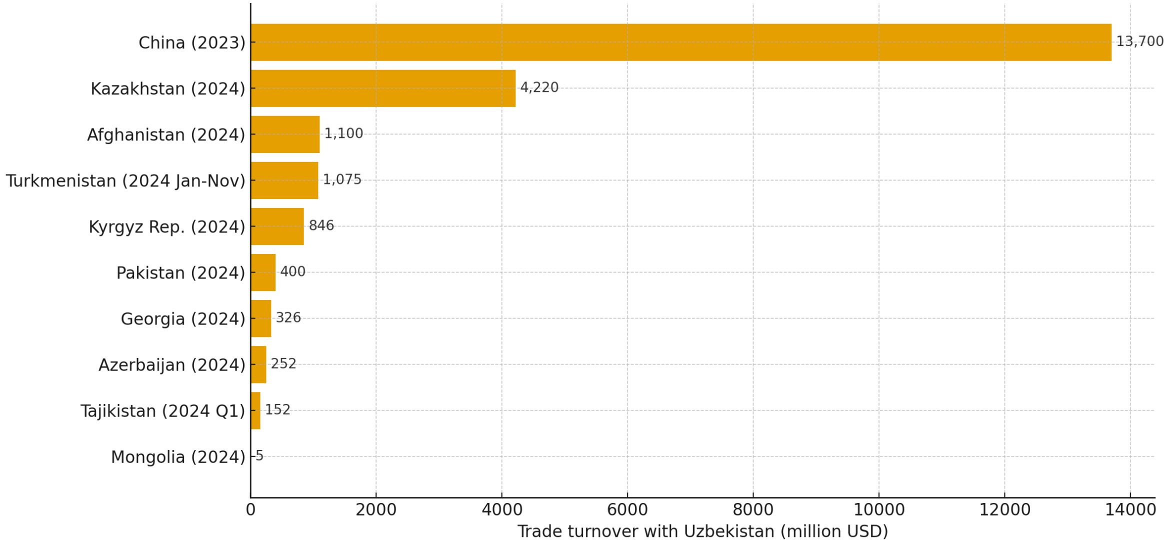
- Private sector engagement – mobilizing local businesses for green investment
- Foreign investment – attracting international capital to support low-carbon and green projects
- Technology transfer – leveraging global innovations in renewable energy, digital MRV systems, and sustainable practices

Expectations for CAREC Cooperation

- Knowledge exchange – sharing best practices on carbon pricing, ETS design, and MRV systems
- Cross-border carbon trading – exploring opportunities for a regional carbon market or linked mechanisms
- Investment mobilization – attracting international finance for renewable energy and green infrastructure
- Technology transfer – promoting digital MRV solutions, renewable energy technologies, and low-carbon innovations

- Sum of trade volumes with CAREC countries $22.08 billion
- Total Uzbekistan trade in 2024 = $65.9 billion
- Share of trade with CAREC countries 33.5%





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Thank you!

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