STATE OF SUSTAINABLE FINANCE IN CENTRAL ASIA

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Chairman of the GIP Regional Office in Central Asia

Central Asia stands at a pivotal moment in its development trajectory. As countries in the region seek to diversify their economies, attract investment, and improve living standards for their citizens, the importance of sustainable finance cannot be overstated. For effective implementation, it is imperative to align the entire financial system with sustainable development, involving the national financial regulators and all market participants. In fact, Green Investment Principles (GIP) can be instrumental in supporting the financial sector transition to a greener path.

This report aims to contribute to a deeper understanding of the role that finance can play in advancing sustainability goals in Central Asia and offers recommendations for policymakers, regulators, financial institutions, and other stakeholders to accelerate progress towards a more sustainable future.

How capital is allocated to support this effort is a priority, and as central bankers, regulators, and financial institutions, we have a responsibility to direct investments to activities that promote sustainable development. It is my hope that this report will serve as a catalyst for dialogue, collaboration, and action towards building a more sustainable and prosperous Central Asia.

I commend the authors for their dedication and expertise in compiling this valuable resource.

Daniyar Kelbetov

Chairman of the Board of Directors
AIFC Green Finance Centre

The development of sustainable finance is an integral part of the strategic objectives of the Astana International Financial Centre. AIFC Green Finance Centre is one of the main drivers for the development of an enabling environment for green and broader sustainable finance in Kazakhstan and Central Asia.

With the active participation of the Centre, the regulatory framework for green financing in Kazakhstan was established, which resulted in the issuance of debut green bonds in the region in 2020. The Centre advises governments on the development of standards and businesses on sustainable finance instruments in the countries of the region.

Central Asian countries require enormous amounts of capital to achieve the sustainable development, the Paris Agreement and carbon neutrality goals. In this regard, the use of innovative financial instruments and the development of local sustainable finance markets are critical.

In this report, we sought to review the current state of sustainable finance in the countries of the region and propose possible ways for its further growth. We hope that this report will be a valuable resource for all interested parties.

We are deeply grateful to everyone who contributed to this report.

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In this report, the Central Asian region is defined according to the UN classification, which includes Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan[1].

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In the event of any discrepancies in the Kazakh and Russian translations with the text in English language, the latter takes precedence. We reserve the right to modify or update this report at any time without prior notice.

The data used in this report was collected between February and May 2024.

[1] UN. Classification and definition of regions

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AIFC	Astana International Financial Centre
AIX	Astana International Exchange
ARDFM	Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market
BCC	Bank Center Credit
BIS	Bank for International Settlements
COP	Conference of the Parties to the Implementation of the UN Framework Convention on Climate Change
DBK	Development Bank of Kazakhstan
EAEU	Eurasian Economic Union
EBRD	European Bank for Reconstruction and Development
EDB	Eurasian Development Bank
EIB	European Investment Bank
ESG	Environmental, Social, Governance
FAO	The Food and Agriculture Organisation of the United Nations
GCF	Green Climate Fund
GDP	Gross domestic product
GEF	Global Environment Facility
GEFF	Green Economy Financing Facility
GGGI	Global Green Growth Institute
GHG	Greenhouse gases
GIP	Green Investment Principles
IMF	International Monetary Fund
IFC	International Finance Corporation
IsDB	Islamic Development Bank
KASE	Kazakhstan Stock Exchange
MDBs	Multilateral development banks
NDCs	Nationally Determined Contributions
NGFS	Network for Greening the Financial System
OECD	Organisation for Economic Co-operation and Development
SBFN	Sustainable Finance and Banking Network
SDG	Sustainable Development Goals
SSE Initiative	Sustainable Stock Exchanges Initiative
UN	United Nations
UNDP	UN Development Programme
UNFCCC	UN Framework Convention on Climate Change
WB	The World Bank

CONTENT

EXECUTIVE SUMMARY

Although Central Asian countries contribute just over 1% to global greenhouse gas emissions, they are among the most vulnerable to climate change. The major adverse effects include the shrinking of glaciers and reduced surface water flow, which pose significant threats to the regional economies, especially for agriculture sector which is essential for both economic stability and food security in Central Asia.

Central Asian countries are a part of the global effort to address climate change. By committing to international agreements to reduce GHG emissions, they have aligned themselves with the global climate agenda. At the national level, they are implementing carbon neutrality strategies and plans for transitioning to a "green" economy. However, achieving these goals demands tremendous financial resources, which could strain government budgets in the region. Therefore, it is essential to attract funding for climate change initiatives and other green and sustainable projects.

The adoption of innovative sustainability-focused financial instruments, such as green bonds, social bonds, sustainability bonds and others, is gaining momentum globally, forming sustainable finance markets. To fully leverage the potential of these instruments and build sustainable finance markets, countries need to establish clear, transparent, and standardised regulatory frameworks along with supportive financial sector infrastructure.

Among Central Asian countries, Kazakhstan has made significant progress in developing its local sustainable finance market. As the first country in the region to adopt green finance standards, Kazakhstan has seen over twenty issuances in the sustainable finance segment.

Meanwhile, in Uzbekistan the government is a proactive user of debt instruments for sustainable development, becoming the first in the region to issue both sovereign bonds for SDGs and sovereign green bonds in recent years. Kyrgyzstan and Tajikistan have also entered the market with their first corporate green bonds. Turkmenistan lacks publicly available information on sustainable bonds issuances. However, the region's entire sustainable finance market has already exceeded 2 billion USD.

Currently, emerging countries compete fiercely for investment, especially in sustainable projects. To ensure that Central Asia's green transformation does not become a burden on national budgets, countries must make every effort to further develop sustainable finance markets and implement all available measures that could increase the region's attractiveness for international investment in sustainable projects.

This report proposes concrete steps to further develop and bridge the gaps in sustainable finance markets of Central Asia, which are built around the following priority areas:

1) **Standardise.** Policymakers along with investment exchanges in the region should strive for effective development and implementation of local standards for thematic financing that are compatible and aligned with internationally accepted benchmarks, focused not only on mitigation, but adaptation, transition, and social criteria as well. The same actors should strive for aligned guidelines for ESG disclosure that would meet investor requirements.
2) **Assess.** Policymakers along with data providers (investment exchanges for capital market, regulators for banking sector) should close the gap for reliable regional statistics on sustainable finance which should be high-quality, granular, and timely. The data must be accessible to a broad set of stakeholders.
3) **Capacity.** Regulators, investment exchanges and financial institutions should consider building educational resources both for retail consumers and corporate sector while regulators should also focus on capacity building targeting the banking sector as well.
4) **Encourage.** Policymakers should come up with incentives for banks, retail consumers of financial services, and project developers to develop new products (green loans, ESG-bonds, etc).

5) **Prioritise.** Financial institutions should consider developing climate strategies including potential carbon neutrality goals, setting ambitious green finance targets, identifying potential niches and develop targeted products devoting adequate amounts of financial resources to sustainable finance products.

I. CLIMATE CHANGE IN CENTRAL ASIA

"2023 has shown all too clearly that climate change is here. Record temperatures are scorching the land and heating the sea, as extreme weather causes havoc around the globe. While we know this is just the beginning, the global response is falling far short. Meanwhile, halfway to the 2030 deadline for the Sustainable Development Goals (SDGs), the world is woefully off-track".

António Guterres
UN Secretary-General

CONTRIBUTION OF THE REGION TO GLOBAL CLIMATE CHANGE AND CONSEQUENCES FOR THE REGION

The Central Asian region is among the most vulnerable to climate change. According to the IMF, temperatures in the region have risen by 1.5 degrees Celsius over the last three decades, which is double of the global average[2]. The primary adverse consequences in the region are glacier retreat and reduced surface water flow. Over the last 50-60 years, climate change has reduced the surface area of Central Asian glaciers by 30%[3]. Glaciers are critical to the lives of habitants of Central Asia because they are sources for the region's biggest rivers. Their melting supplies flow to rivers, which are used to irrigate agricultural lands. As the amount of ice in the mountains reduces, river water levels may fall, resulting in agricultural water deficiency. The region is already experiencing water scarcity, degradation in the quality of productive soils, and a dramatic increase in desertification. According to the FAO, it is expected that Central Asian countries will face high or extremely high levels of water deficiency by 2040.

Furthermore, the melting of glaciers causes such natural disasters as floods and landslides, which have become increasingly often and severe. Climate change's negative effects in the region will worsen, causing an increase in socioeconomic challenges relating to Central Asia's energy, land, and water resource management. Without coordinated efforts to address climate challenges, the repercussions of climate change will cost Central Asian countries 1.3% of GDP per year, crop yields will be reduced by 30%, and water levels in the Amu Darya and Syr Darya rivers will fall by 15% by 2050[4].

The UN recognises climate change as "one of the most pressing challenges of our time." In 2007, the UN Intergovernmental Panel on Climate Change issued a report linking global warming to human activities. In this regard, combating climate change is one of the most pressing concerns on the global agenda today. The World Meteorological Organisation has officially confirmed that 2023 was the warmest year on record, with temperatures surpassing the 1.5 degrees over pre-industrial levels established by the Paris Agreement.

The Paris Agreement was adopted in 2015 within the UNFCCC to tackle climate change and its negative

[2] Climate Centre. IMF: Without adaptation Mideast and Central Asia face crippling losses from climate change

[3] ADB. In numbers: climate change in Central Asia

[4] WB. Climate Change in Europe and Central Asia

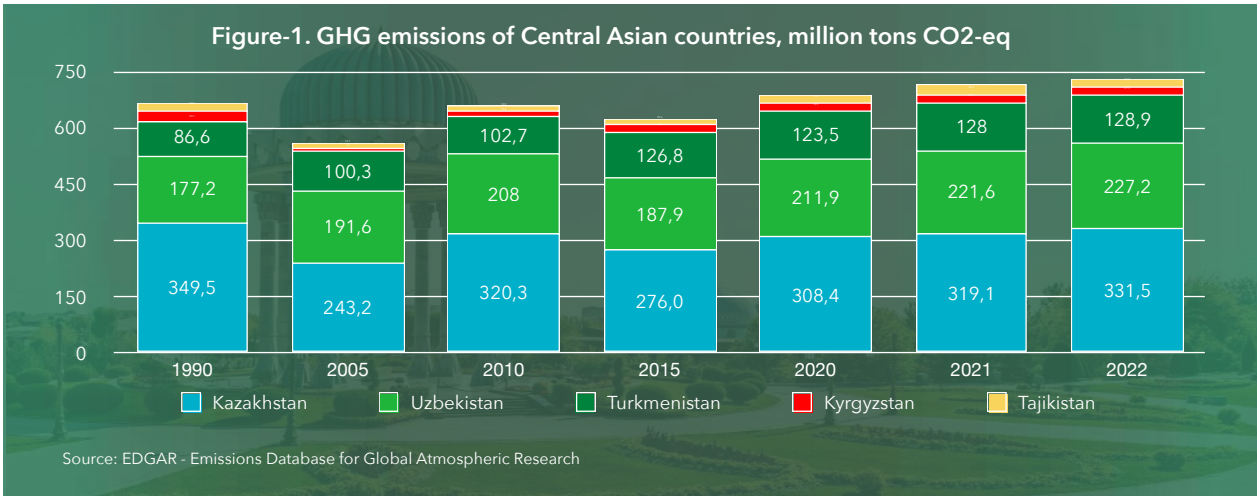
consequences. All of the region's countries have ratified the Paris Agreement aiming to actively participate in the global effort against climate change and enact suitable measures accordingly. The Paris Agreement intends to drastically cut global GHG emissions and limit global temperature rise to 2 degrees Celsius this century, with the goal of further limiting it to 1.5 degrees.

GHG are the primary driver of climate change. According to the Emissions Database for Global Atmospheric Research (EDGAR), Central Asian countries' total share in global GHG emissions in 2022 was 1.36%, with **Kazakhstan** accounting for 0.62%, **Uzbekistan** for 0.42%, Turkmenistan for 0.24%, **Kyrgyzstan** and **Tajikistan** for 0.04% each.

The combined emissions of Central Asian countries for the period 1990–2022 increased from 669.4 million tons of CO2-eq to 732.4 million tons of CO2-eq. In comparison to 1990 levels, **Kazakhstan** and **Kyrgyzstan** saw a slight decrease in emissions, while **Tajikistan's** remained relatively stable. Conversely, **Turkmenistan** and **Uzbekistan** experienced notable increases in GHG emissions over the specified timeframe (see Fig. 1).

All countries in the region exceed the world average GHG emissions per unit of GDP (0.38 t CO2-eq/1thousand$/year), which indicates the relatively high carbon intensity of the region's economies.

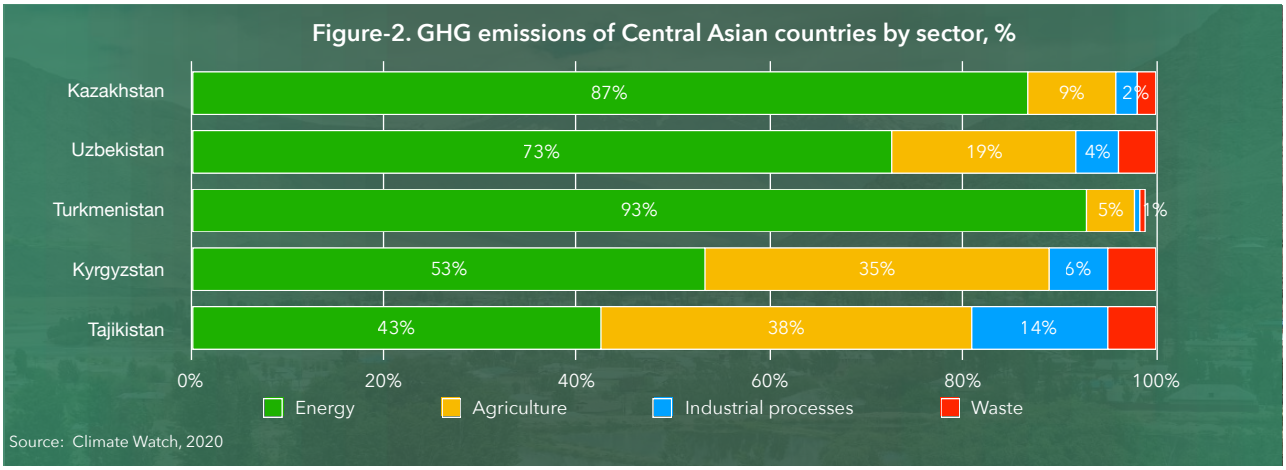
Figure-1. GHG emissions of Central Asian countries, million tons CO2-eq



Turkmenistan holds the highest emissions figure (1.3 tCO2e/1thousand$/year), primarily due to electricity generation primarily from natural gas. Following closely is **Kazakhstan** (0.64tCO2e/1thousand$/year), largely relying on coal for electricity production. Today, fossil fuels account for 95% of the total energy supply in the five Central Asian countries, and despite the vast potential of renewable energy sources, installed solar and wind power capacity currently averages less than 5% of the total capacity[5]. Due to the high share of fossil fuels in electricity production, energy is the sector responsible for the largest amount of GHG emissions in Central Asian countries (see Fig. 2).

At the same time, in terms of GHG emissions per capita, only **Turkmenistan** and **Kazakhstan** (20.8 tCO2eq/year and 17.3 tCO2eq/year, respectively) exceed the world average (6.7 tCO2eq/year). While Uzbekistan is approximately at the level of the world average (6.6 tCO2-eq/year). In **Kyrgyzstan** and **Tajikistan**, this indicator is lower than the world average (3.4 and 2.3 tCO2-eq/year, respectively); the main sources of electricity in these countries are hydroelectric power stations. Countries with larger economies like **Kazakhstan, Uzbekistan** and **Turkmenistan** have higher energy needs. These countries also have low energy efficiency in various sectors of the economy, for example in the residential sector,

[5] UNECE. Central Asia would need a massive shift rather than a massive increase in investment to reach net zero by 2050, according to the UN



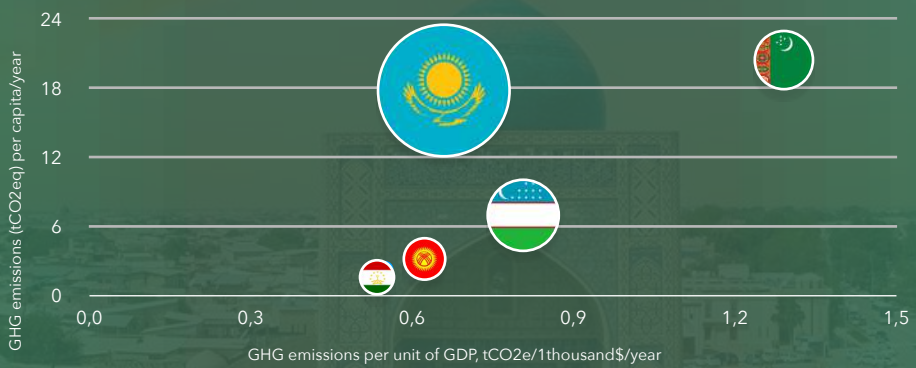
and are among the top 100 countries in the world for carbon dioxide emissions from heavy industry[6].

Nevertheless, despite its considerably larger GDP, **Kazakhstan** exhibits slightly higher GHG emissions per unit of GDP compared to **Kyrgyzstan** and **Tajikistan**. However, it notably surpasses them –by five and seven times, respectively–in terms of GHG emissions per capita. Turkmenistan stands out as the regional leader in GHG emissions relative to both population and GDP (see Fig. 3).

INTERNATIONAL COMMITMENTS AND STRATEGIC DOCUMENTS OF CENTRAL ASIAN COUNTRIES RELATED TO CLIMATE CHANGE

Parties to the Paris Agreement pledge to take part in the reduction of global GHG emissions. Central Asian countries, among other parties to the Paris Agreement, are adopting NDCs, which is a country's action plan to reduce GHG emissions and adapt to climate change. The NDCs of the countries of Central Asia provide unconditional and conditional targets for reducing GHG emissions in the range from

Figure-3. GHG emissions indicators relative to GDP of Central Asian countries (size of figures = GDP of countries, billion USD)



	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
GHG emissions (tCO2eq) per capita/year	17,33	3,40	2,32	20,80	6,67
GHG emissions per unit of GDP, tCO2e/ 1thousand$/year	0,65	0,62	0,55	1,28	0,79
Size of the economy, billion USD	225,5	11,5	10,5	56,5	80,4

Source: World Bank Open Data, EDGAR

[6] UN ESCAP. Subregional cooperation to enhance climate action in Asia and the Pacific for sustainable development

15–16% to 50% by 2030 compared to the base year (see Tab. 1).

The "Special Report on Global Warming of 1.5°C" by the Intergovernmental Panel on Climate Change of the UNFCCC states that "to meet global emissions trajectories without exceeding or limited exceeding the 1.5°C target, global net anthropogenic CO2 emissions should fall by about 45% from 2010 levels by 2030 and reach net zero emissions, or carbon neutrality, by around 2050."

The Paris Agreement defines carbon neutrality as achieving zero carbon dioxide emissions with the goal of limiting global warming to 2°C (aiming for 1.5°C) by achieving a balance between anthropogenic emissions from sources and GHG emission removals by sinks in the second half of this century. 137 countries, including some of Central Asian ones, have announced ambitions to achieve carbon neutrality by "around mid-century. (see Tab. 2).

However, while carbon dioxide (CO2) is the most well-known greenhouse gas, it is not the only one that causes climate change. Methane (CH4) is the second major human greenhouse gas after carbon dioxide, accounting for approximately 20% of total global GHG emissions. Despite its smaller concentration in the atmosphere, methane has a far stronger greenhouse impact than carbon dioxide, hence lowering methane emissions has the potential to significantly reduce global warming. Within the global movement for the fight against climate change, more than 150 countries have signed up to the Global Methane Pledge, a voluntary pact to cut methane emissions by at least 30% by 2030[7]. All Central Asian countries are parties to this agreement. By joining this global initiative, countries gain access to technology and finance to reduce methane emissions.

"Today, reaching carbon neutrality by mid-century (2050-2060) is a pressing issue for all countries. Every UN country must commit to lowering emissions and achieving carbon neutrality".

António Guterres,
UN Secretary-General

Table-1. Targets of Central Asian countries to reduce GHG emissions

	Ratification of the Paris Agreement (year)	Unconditional goal [Conditional goal]	Level upon achievement of the unconditional goal by 2030	Current level (2022)
Kazakhstan	2016	by 2030, reduce by 15% [25%] from the 1990 level	297,1 [262,1] million tCO2-eq	331,5 million tCO2-eq
Kyrgyzstan	2019	reduce by 16.63% [36.61%] by 2025 and by 15.97% [43.62%] by 2030 compared to the business as usual scenario (2017 level)	16,8 [11,3] million tCO2-eq	21,9 million tCO2-eq
Tajikistan	2016-2017	by 2030, GHG emissions should not exceed 60%-70% [50-60%] from the 1990 level	No more than 13,3-15,6 [11,1-13,3] million tCO2-eq	22,8 million tCO2-eq
Turkmenistan	2016-2017	by 2030, reduce by 20% from the 2010 level	82,16 million tCO2-eq	128,9 million tCO2-eq
Uzbekistan	2018	by 2030, reduce GHG emissions per unit of GDP by 35% from the 2010 level	0.9 tCO2-eq/$1,000/y	0.8 t CO2-eq/ $1,000//y

Source: Government Decree "On approval of the updated NDCs of the Republic of Kazakhstan to the global response to climate change; UNDP. The Kyrgyz Republic's NDCs to the Paris Agreement has been adopted; Updated version of the NDCs of the Republic of Tajikistan; UNDP. How can Uzbekistan fulfill its national obligations under the Paris Agreement? newscentralasia.net. OGT 2023: Turkmenistan consistently fulfills its obligations under the UNFCCC. GHG emissions data calculated by the authors based on EDGAR data

[7] Global Methane Initiative (GME)

Table-2. Central Asian countries' goals to achieve carbon neutrality

	Carbon neutrality target year	Main approaches to achieving carbon neutrality
Kazakhstan	2060	Shift to a carbon-neutral system, dominated by alternative and renewable energy sources, and using carbon capture and storage, gas to be used as an intermediate fuel.
Kyrgyzstan	2050	Through implementation of renewable energy projects, including construction of hydropower plants. Kyrgyzstan currently utilises only 13% of its total potential of 142.5 billion kilowatt-hours of electricity.
Tajikistan	[not announced]	
Turkmenistan	[not announced]	
Uzbekistan	2060	Through the development of solar power plants and wind farms, for which the country has significant potential. In addition, by 2030, a nuclear power plant with a capacity of 2.4 GW should begin operating in the country.

Sources: Strategy for achieving carbon neutrality of the Republic of Kazakhstan by 2060
24 KG. By 2050, Kyrgyzstan plans to achieve carbon neutrality
WB. Uzbekistan Country Climate and Development Report

The adoption of international obligations in the field of climate change requires the integration of relevant goals and objectives into national strategic documents, the adoption of regulations in the field of combating climate change and further measures for their implementation (see Tab. 3).

These strategic documents cascade the national priorities of countries for the sustainable use of natural resources, increasing energy efficiency, developing renewable energy sources and improving the management of water and land resources.

At the same time, a number of countries have endorsed programmes or plans for the implementation of green economy strategies as separate documents for time periods (Kazakhstan, Kyrgyzstan), or included plans as addendum in the strategic documents themselves (Uzbekistan).

Table-3. Key documents of Central Asian countries on the transition to a "green" economy and renewable energy sources

	Name of the document	Main measures and target indicators
 Kazakhstan	Concept for the transition of the Republic of Kazakhstan to a "green economy"	Main goals: • increase efficiency of resource use (water, land, biological, etc.) and their management; • modernisation of existing and construction of new infrastructure; • improvement of public well-being and environmental quality through cost-effective ways to alleviate environmental pressures; • improvement of national security, including water security. The goal was set to achieve the share of renewable energy sources and alternative types of energy in the country's energy balance - up to 10% by 2030, with later increase to 15%.
	Action plan for the implementation of the Concept	Measures in the field of water resources, agriculture, energy efficiency, reduction of CO2 emissions in the electricity sector, air pollution, waste recycling, ecosystem conservation and the formation of an environmental culture.
 Kyrgyzstan	Concept "Kyrgyzstan is a country of green economy"	Seven priority sectors have been identified: green energy, green agriculture, green industry, sustainable tourism, low-emission transport, waste management, green cities.
	Green economy development programme in the Kyrgyz Republic for 2019–2023 *(Programme for 2024-2028 is under development)*	Measures to improve energy efficiency, increase the share of renewable energy sources in total electricity generation to 10% by 2040, develop sustainable finance, including creation of a legal environment for sustainable finance, practical implementation of sustainable finance in the banking and microfinance sectors, as well as creation of "green" financial corporation.
 Tajikistan	Green economy development strategy for 2023–2037	Measures to implement institutional reforms, effectively use natural capital, attract investment, introduce modern and innovative technologies and strengthen international cooperation in green economy. Apart from increasing hydropower generation, the government also plans to increase the share of solar energy and reduce power distribution losses.
 Turkmenistan	National strategy of Turkmenistan on climate change	Measures for energy efficiency and energy saving, rational use of natural gas and petroleum products, as well as increasing the use of alternative energy sources. To a large extent, these measures are planned to cover housing and communal services and transport, as well as leaks in oil and gas pipelines.
 Uzbekistan	Strategy for the transition to a "green" economy for 2019 – 2030	Increase the energy efficiency of basic sectors of the economy, diversify energy consumption and develop the use of renewable energy sources, adapt to and mitigate the effects of climate change, increase the efficiency of natural resources utilisation, develop financial and non-financial mechanisms to support the green economy. The following outcomes are expected from the Strategy: • increase of the generation capacity of renewable energy sources to 15 GW and bringing their share in the total volume of electrical power generation to more than 30%; • increase of energy efficiency in industry by at least 20%; • reduction of energy intensity per unit of GDP by 30%, including through expansion of renewable energy sources.

II. ROLE OF THE FINANCIAL SECTOR IN DRIVING THE CLIMATE AGENDA

The financial sector plays a vital role in advancing sustainable development and responsible business practices. By funding sustainable development projects, it not only drives progress towards sustainability but also has the responsibility to motivate businesses to address ESG risks and adopt sustainable business models. Investors are becoming increasingly aware that factoring in ESG considerations can help them develop more sustainable and long-term investment portfolios. According to an EY study, 97% of investors consider ESG factors when making investment decisions[8]. Investors are increasingly demanding that companies conduct business in a sustainable manner, and financial regulatory authorities are implementing regulations requiring the disclosure of ESG information and integration of ESG risks into financial institutions' activities. In Central Asia, financial regulatory authorities and institutions, especially banks, are aligning with international trends by adopting ESG principles in their banking and investment practices.

KAZAKHSTAN

In 2021, the Government of the Republic of Kazakhstan adopted a National Green Taxonomy developed by the AIFC Green Finance Centre and the International Green Technologies and Investment Projects Center. The document sets out the key criteria and types of eligible green projects for financing through green bonds and loans. A draft social taxonomy of Kazakhstan is currently being reviewed by government agencies for further adoption.

Definitions of green financing instruments were also included in the Environmental Code. The procedure for the issuance, verification and reporting of sustainable bonds is set forth in the Law on the Securities Market of Kazakhstan. The ARDFM established a list of types of organisations authorised to conduct an external review of such instruments.

ARDFM became a member of the SBFN in 2021 and the NGFS in 2023. Kazakhstan's current position in the SBFN progress matrix is “developing” (the highest for Central Asia).

In July 2022, the Government of Kazakhstan approved the Concept of Investment Policy of the Republic of Kazakhstan until 2026. This policy recommends that Kazakhstani institutional investors within the quasi-public sector reassess their investment strategies and revise their investment declarations to mandate a specific allocation to "green" bonds as a distinct investment category.

In September 2022, the Government approved a Concept for the Development of the Financial Sector until 2030, outlining key targeted actions for integrating ESG principles within the financial sector.

In March 2023, the ARDFM adopted a Roadmap for implementation of ESG principles in Kazakhstan’s financial market. Under this roadmap, voluntary ESG disclosure by financial organisations began in 2023, with mandatory disclosure becoming part of their published annual reports starting in 2024. The ARDFM also developed the Guidelines for Environmental and Social Risk Management in Financial Institutions (ESRM), and a guidance on calculating GHG emissions for financial institutions and assessing the carbon footprint of bank loan portfolios.

KASE requires listed companies to provide ESG information in their annual reports. The Astana International Exchange (AIX) published Guidelines on ESG reporting for companies listed on the AIX in June 2022 for voluntary use, with a move to a “comply or explain” basis in later years.

A number of Kazakhstani banks have already started integrating ESG principles into their operations and producing reports on sustainable development. Halyk Bank and Jusan Bank were named the best financial companies in the ESG Disclosure Rating by PWC at the end of 2022. These banks publish annual sustainability reports as standalone publications. Other banks disclose

[8] EY. How ESG creates long-term value

ESG information in their annual reports. In 2022, based on the results of the annual Best Bank Awards for Kazakhstan 2022, experts from the international financial publication Asiamoney recognised Halyk Bank as the best for ESG. In 2023, the DBK was one of the first in the country to obtain an ESG rating from Sustainable Fitch. DBK is the country's most active issuer of sustainable financing instruments among local banks, such as green bonds, the proceeds of which are used to fund green projects. Halyk Bank and BCC offer green loans for the purchase of electric automobiles at reduced rates. BCC provides preferential loans for other green projects, including renewable energy projects, energy efficiency projects and others through the EBRD credit line under the GEFF. Meanwhile, while issuing loans for green projects, Kazakhstani banks may employ the subsidies from Damu Entrepreneurship Development Fund to offset a portion of the interest rate on green loans.

KYRGYZSTAN

In December 2021, the Board of the National Bank of the Kyrgyz Republic approved the Main Directions for the Development of the Banking System for 2022-2025, as well as the development of the microfinance sector, where identified the adoption of sustainable finance principles (green finance) as a key priority. In September 2023, the Supervisory Committee of the National Bank of Kyrgyzstan approved Guidelines for identifying, monitoring, and disclosing financial risks associated with sustainable finance factors (ESG risks). The purpose of these recommendations is to provide guidance for identifying, measuring, managing, controlling, and disclosing environmental, social, and governance factors (ESG risks) in the activities of commercial banks, non-banking financial institutions and other legal entities supervised by the National Bank that apply the principles of sustainable financing.

In May of 2023, the Kyrgyz Stock Exchange issued Guidelines for Compiling and Publishing Reports on ESG criteria. According to information on the exchange's website, companies that must adhere to the Kyrgyz Republic's Corporate Governance Code on a "comply or explain" basis are required to use these Guidelines when preparing and releasing their ESG reports. For all other companies, following these Guidelines is voluntary. Additionally, the Kyrgyz Stock Exchange established listing criteria for sustainable finance instruments, requirements for verifiers, and a list of verifiers that meet the standards of the exchange.

Kyrgyz banks are embracing sustainable finance practices by offering eco-friendly loan products such as "green" loans tailored for purchasing electric vehicles. For instance, Doscredobank OJSC provides loans and installment plans for acquiring electric, hybrid, or gas-powered vehicles, while Aiyl Bank OJSC pioneered leasing options for electric vehicle purchases in the country.

Kyrgyzstan, represented by the Union of Banks of Kyrgyzstan, joined SBFN in 2018. The current position of Kyrgyzstan in the SBFN progress matrix is "formulating".

TAJIKISTAN

Bank Eskhata OJSC is the first bank in Tajikistan to implement an ESG policy and identify priority SDGs for implementation. First Microfinance Bank CJSC aims to implement ESG principles and gradually shift to green financing in 2024. Bank Arvand CJSC is also integrating ESG principles into its activities.

The popularity of green automobile loans is evident in Tajikistan's banking sector, as well as other Central Asian countries. Amonatbank State Savings Bank, Arvand Bank CJSC, and Commerzbank of Tajikistan OJSC are among the banks offering these loans, with Amonatbank alone providing 84 such loans in 2023. In addition to green auto loans, Bank Eskhata OJSC, Spitamen Bank CJSC, and First Microfinance Bank CJSC provide green financing for various green projects. Other banks are also in the process of introducing similar "green" products.

UZBEKISTAN

In 2022, Uzpromstroybank was recognised by experts from the international financial publication Asiamoney as the leading bank in Uzbekistan for ESG practices, winning the prestigious title of "Best ESG Bank in Uzbekistan." The bank's collaboration with the IFC and the EBRD on transformation, green banking development, and ESG implementation was particularly notable. In 2021, the bank earned the AIFC award in the category of "Best Green Bank in the Central Asian Region" for its work in green banking development.

In Uzbekistan, the banking sector is distinguished by its activity in "green" consumer lending for renewable energy projects. For example, banks such as JSCB "Ipoteka Bank", JSCB "ASIA ALLIANCE BANK", JSC Xalq banki and JSC "National Bank for Foreign Economic Activity of the Republic of Uzbekistan" offer consumer loans to individuals for acquiring renewable energy equipment.

In general, within the Central Asian financial sector, Kazakh and Kyrgyz financial regulators and stock exchanges are leading the way in implementing ESG regulatory standards. Meanwhile, banks in Uzbekistan and Tajikistan are particularly active in providing specialised green products, such as green loans for purchasing electric vehicles and renewable energy equipment. This increased activity can be attributed to the strong demand for these technologies from both the local population and businesses.

III. CLIMATE FINANCE NEEDS OF CENTRAL ASIAN COUNTRIES

COUNTRIES' FINANCIAL NEEDS TO ADDRESS CLIMATE CHANGE

Central Asian countries will need enormous amounts of financing to fulfill their climate obligations and shift towards a low-carbon economy.

Given the region's significant and mostly untapped potential for renewable energy production, particularly hydro, wind, and solar energy, transitioning to a net-zero emissions scenario by 2050 would require a minimal increase in overall energy investment of 2.15% for 30 years, totalling 1.437 trillion USD, compared to business-as-usual scenario[9].

According to the WB estimates, investments in Central Asia's energy system would reach around 20 billion USD by 2030, including solar, wind, and hydropower projects, as well as modernisation of national and regional grids to increase interconnectivity of networks.

In terms of individual countries' financial needs, the Strategy of Achieving Carbon Neutrality of Kazakhstan by 2060 estimates net investment in technologies that contribute to low-carbon development and carbon neutrality at 610 billion USD, with direct public investment accounting for a small share (3.8%) of all investments. Over half of the required investments, 386.3 billion USD, are existing and circulating investments in the economy that will be redirected from commodities sectors to greener industries; the remainder, or 223.7 billion USD, are new investment resources.

The total anticipated cost of implementing mitigation and adaptation measures to meet Kyrgyzstan's climate change goals is 10 billion USD, which will be funded by the country's own resources, the private sector, international donors, and state budget money, with international financial support accounting for 63% of the expenses. This is a huge expenditure for a lower-middle-income country prone to recurrent natural disasters[10].

Uzbekistan will need 94 billion USD in funding to become carbon neutral[11]. According to the Ministry of Finance of the Republic of Uzbekistan, the annual investment requirements for decarbonising Uzbekistan's electric power industry until 2030 are projected to be 4 billion USD per year, or 4.8% of GDP[12].

According to the Green Economy Development Strategy in the Republic of Tajikistan for 2023-2027, the total amount of funds required for the implementation of the Strategy is 21.6 billion somoni (~ 2 billion USD), including 12,818.4 million somoni (~1 billion USD) from allocated funds from development partners and 8,730.8 million somoni (~ 800 million USD) from private sector investments; the rest is planned to be financed from the state budget. Foreign and domestic investments play a key role in funding the Strategy. To that purpose, when the Strategy is implemented, the state will promote initiatives of foreign and domestic investors investing in the principles of the "green" economy.

In the pursuit of carbon neutrality and the transition to a sustainable economy, Central Asian nations may encounter significant financial challenges. These costs vary considerably, with estimates ranging from nearly 20% of GDP for Tajikistan to approximately 300% for Kazakhstan. These figures underscore the substantial investments required to overhaul energy systems, adopt renewable sources, and implement environmentally friendly policies (see Tab. 4).

[9] UNECE. Central Asia would need a massive shift rather than a massive increase in investment to reach net zero by 2050, according to the UN

[10] UNFCCC. Updated Nationally Determined Contribution of the Kyrgyz Republic, 2021

[11] RBC Trends.Green, social, responsible: ESG in Central Asia. Review No. 2

[12] WB. Policy Dialogues - Green Growth and Climate Change in the Republic of Uzbekistan

Table-4. Climate finance needs of Central Asian countries

	Required financing, billion USD	Country's GDP, billion USD, 2022 (according to the WB data)	Ratio to GDP, %
Kazakhstan	610	225,5	270%
Kyrgyzstan	10	11,5	87%
Tajikistan	2	10,5	19%
Turkeminstan	-	56,5	-
Uzbekistan	94	80,4	117%

Source: UNFCCC. Updated Nationally Determined Contribution of the Kyrgyz Republic, 2021; RBC Trends.Green, social, responsible: ESG in Central Asia. Review No. 2; Strategy for achieving carbon neutrality of the Republic of Kazakhstan by 2060; Strategy for the development of a "green" economy in the Republic of Tajikistan for 2023-2027; World Bank Open Data

CLIMATE BUDGET TAGGING

It is important to highlight the public investment that is part of the overall cost of achieving carbon neutrality. Given that the budget document is the central policy document of government and plays an important role in determining how resources are allocated to achieve national goals, it is appropriate that priorities related to the environment and climate change are considered as part of the budget process. Green budgeting offers a range of tools and techniques for governments looking to incorporate a green perspective into the budget process.

One of the central tools in this process is the green/climate budget tagging. This tool involves evaluating each individual budget measure and assigning it a "label" based on whether it is helpful or harmful to achieving green and/or climate goals. This exercise is important in the context of the issuance of sovereign green bonds and further expenditure tracking.

In the region, work on pilot marking of the state budget is currently being carried out by the Ministry of Finance of the Kyrgyz Republic together with a number of ministries with the support of the WB; this work is also being carried out in Kazakhstan with the support of UNDP.

Meanwhile, the Cabinet of Ministers of the Republic of Uzbekistan, by resolution No. 257 "On measures to introduce mechanisms for displaying (labeling) the compliance of State budget expenditures with the National SDGs and their impact on climate change" dated 05/01/2024, approved the Concept of displaying (labeling) the compliance of State budget expenditures for national sustainable development goals and their impact on climate change. The concept provides:

- classification of budget expenditures for compliance with national SDGs and their impact on climate change;
- purpose, object and scope of classification of expenses;
- mechanisms for identifying and classifying expenses;
- identifying climate change mitigation and adaptation measures to classify costs;
- announcement of the results of classification of expenses.

It is expected that the Ministry of Economy and Finance of the Republic of Uzbekistan will maintain this classification. After the introduction of programme budgeting in the long term, the classification of expenses by climate aspect will be carried out by line ministries and departments.

The massive amount of funds needed to finance climate change mitigation and adaptation strategies in developing countries requires the mobilisation of funds from international financial sources. At the UNFCCC's COP15 in Copenhagen in 2009, developed countries pledged to raise 100 billion USD per year by 2020 for climate action in developing countries. The aim was established at COP16 in Cancun, confirmed in COP21 in Paris, and extended until 2025. Under the

terms of the Paris Agreement, "Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation" (Article 9.1). At the same time,"Developed country Parties should continue to play a leading role in mobilising climate finance from a wide range of sources, instruments and channels, noting the significant role of public funds" (Article 9.3).

At the request of developed countries, since 2015 the OECD has been assessing progress towards developed countries' goal of providing and mobilising 100 billion USD of climate finance annually for climate action in developing countries, in line with the UNFCCC. According to OECD methodology, climate-related development finance provided and mobilised to developing countries can be divided into four components:

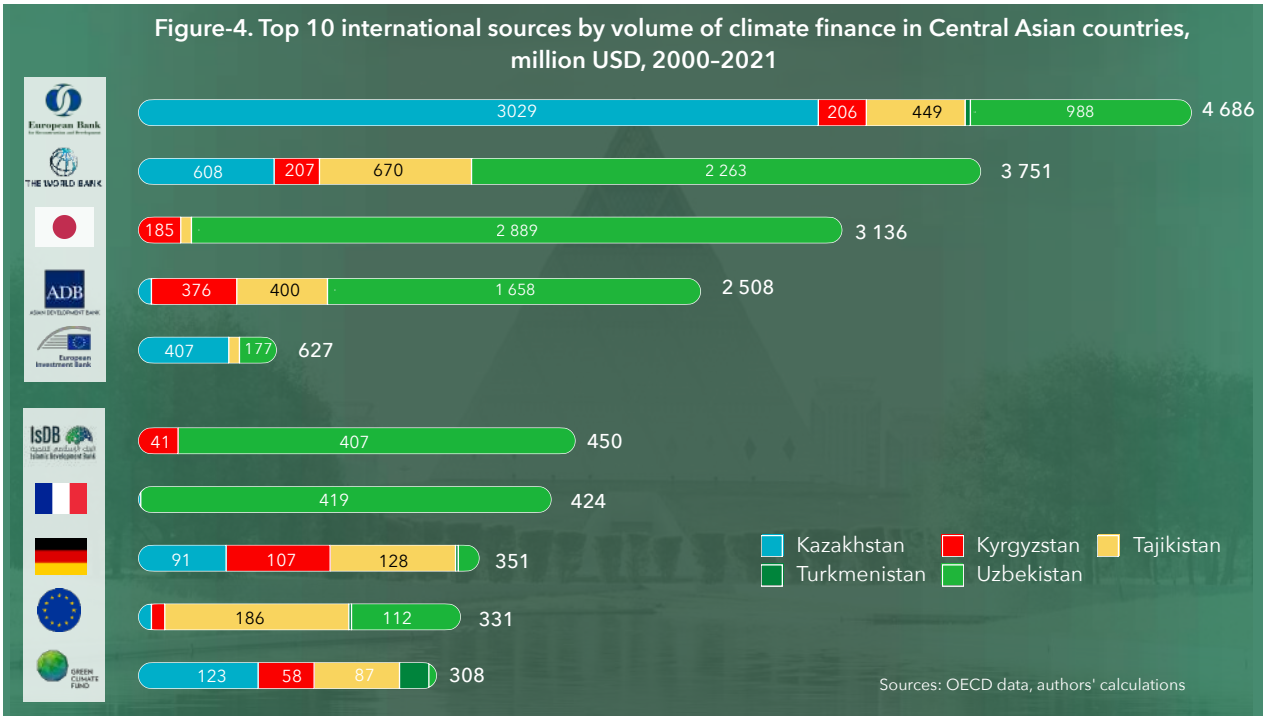
- Bilateral public climate finance provided by developed country institutions, in particular bilateral relief agencies and development banks;
- Multilateral public climate finance provided by multilateral development banks and multilateral climate funds attributed to developed countries;
- Officially supported climate-related export loans provided by official export credit agencies of developed countries;
- Private finance mobilised through bilateral and multilateral public climate finance held by developed countries.

Information about international climate finance flows in this report uses data on climate-related development finance reported to the OECD Development Assistance Committee (DAC) Creditor Reporting System (CRS). According to this data, over the period 2001–2021, Central Asian countries have collectively received more than 17 billion USD in international climate finance.

INTERNATIONAL CLIMATE FINANCE IN CENTRAL ASIA

MDBs play a key role in financing climate projects in developing countries, including Central Asian ones: top 5 MDBs include EBRD, WB, ADB, EIB and IsDB. The leaders in providing bilateral climate finance to Central Asian countries are Japan, France, and Germany. Among international climate funds, the largest amount of funding is provided by the GCF (see Fig. 4).

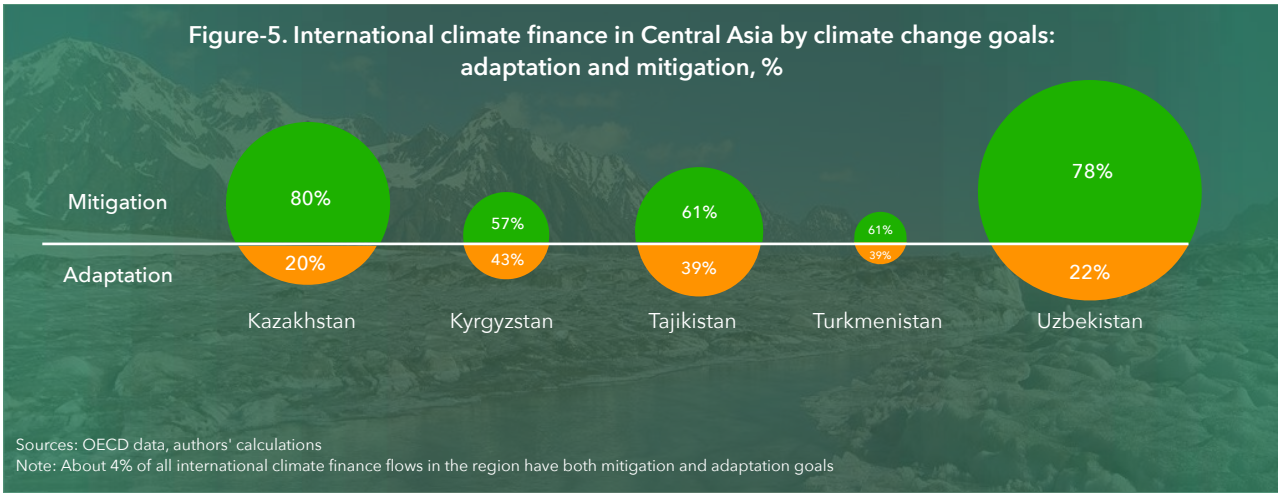
Figure-4. Top 10 international sources by volume of climate finance in Central Asian countries, million USD, 2000–2021



In Central Asian countries, climate funding aimed at mitigating climate change greatly outnumbers financing for adaptation to climate change, which is consistent with worldwide trends, accounting for around 70% of total climate finance (see Fig. 5).

Mitigation is offsetting climate change through the process of preventing/reducing greenhouse gas emissions and their absorption. Adaptation is the process of adjusting to the current or projected climate and its impacts.

Figure-5. International climate finance in Central Asia by climate change goals: adaptation and mitigation, %

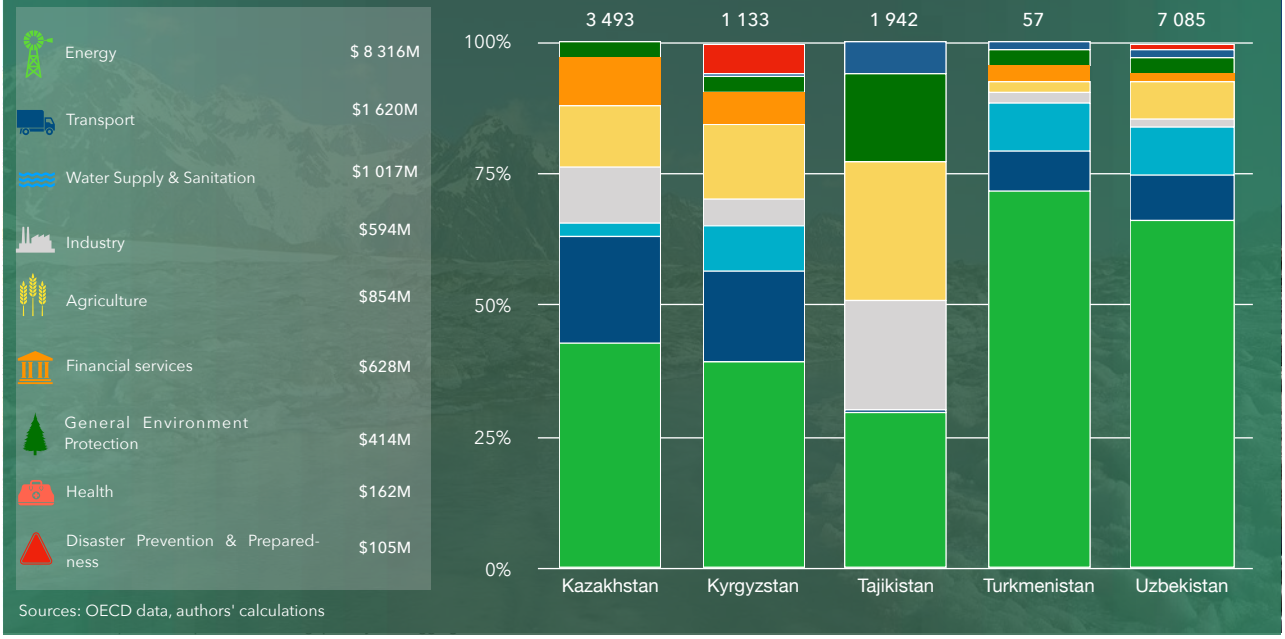


Sources: OECD data, authors' calculations
Note: About 4% of all international climate finance flows in the region have both mitigation and adaptation goals

One of the key issues in obtaining climate finance, both for adaptation and mitigation, is successfully demonstrating the project's investment attractiveness. The nature of the financial instruments used partially exacerbates this issue. Nearly 94% of global climate funding is in the form of debt or equity financing, in which the investor expects a financial return, as opposed to grants, which are often non-repayable[13]. It is typically more difficult to secure funding for adaption programmes on this basis.

In Central Asian countries, financing for mitigation efforts is mostly directed at reducing GHG emissions through transitioning to renewable energy sources. The energy sector receives the largest share of international climate finance in all countries of the region. (see Fig. 6).

Figure-6. Key economic sectors targeted for international climate finance in Central Asian countries, million USD, 2000–2021



Sources: OECD data, authors' calculations

The structure of climate finance instruments varies significantly between Central Asian countries. Kazakhstan and Uzbekistan have a considerable proportion of debt financing (94.5% and 97%), owing to the high presence of MDBs, which primarily provide debt financing in collaboration with local commercial partners. At the same time, grants are the most common forms of climate finance in Tajikistan and Turkmenistan (see Tab.5).

Multilateral climate funds are an important source of sustainable funding for developing countries. They were established on the basis of international agreements mandated to finance the transition to green, inclusive, and climate-resilient economies in developing countries. The funds' visions and missions are similar and complementary in their support for developing countries in implementing the UNFCCC and the Paris Agreement.

Table-5. International climate finance in Central Asia by type of financial instrument, 2000–2021

	Total funding, million USD	Share of debt instruments	Share of grants	Equity and shares in collective investment vehicles
Kazakhstan	4481	94,5%	3,5%	2%
Kyrgyzstan	1358,1	55%	45%	-
Tajikistan	2355	37%	63%	-
Turkmenistan	88,2	21%	79%	-
Uzbekistan	9182	97%	3%	-
TOTAL	17464,3	85,1%	14,8%	0,1%

Sources: OECD data, authors' calculations

Developing countries must have access to them in order to finance mitigation, adaptation, or transition through a range of financing options. They play a vital role in delivering the 100 billion USD promised by developed countries to developing ones each year.

The largest amount of funding in Central Asia among funds comes from the GCF, which operates through a network of more than 200 accredited organisations and implementing partners that work directly with developing countries to design and implement projects. The Fund supports mitigation efforts aimed at reducing emissions associated with transportation, energy, forestry and land use, as well as buildings and industry. It also supports adaptation efforts to improve resilience related to healthcare, food and water security, infrastructure and ecosystems.

Meanwhile, in order to build capacity in developing countries, the GCF implements a Readiness programme, through which it supports developing country initiatives aimed at strengthening their institutional capacity, governance mechanisms, through which it supports developing country initiatives aimed at strengthening their institutional capacity, governance mechanisms, and planning for the implementation of a transformative long-term programme of action to combat with climate change.

Today, GCF financing in Central Asian countries is implemented mainly through partnerships with MDBs. According to the latest data on the GCF website, the total amount of allocated funding for Central Asian countries is 468 million USD (see Tab. 6). To access funding, organisations must undergo an accreditation process designed to assess whether they are able to manage finances effectively. To date, in Central Asia, only one national institution has been accredited by the GCF - the Community Development and Investment Agency of Kyrgyzstan (ARIS) received direct access to GCF funds in March 2024.

Table-6. GCF financing in Central Asian countries

	Number of projects	Total GCF funding, million USD	Approved support for Readiness, USD million	Readiness support disbursed, USD million
Kazakhstan	3	173	4,3	1,5
Kyrgyzstan	4	73,8	4,3	3,5
Tajikistan	6	91	5,1	3,0
Turkmenistan	-	-	3	2,4
Uzbekistan	5	130,2	2,2	2,0
TOTAL	18	468	18,9	12,4

Source: GCF website www.greenclimate.fund

IV. SUSTAINABLE FINANCE MARKETS OF THE COUNTRIES IN THE REGION

Combating and adapting to climate change, including implementing green initiatives and low-carbon technologies to prevent climate change and protect the environment, require a significant investment of capital. Despite the active participation of international climate funds and multilateral development banks in financing climate projects in the region, the need for financing green transformation and decarbonisation of economies remains high. There is significant potential for governments and local businesses to raise funds in international debt markets by utilising novel financial tools for sustainable development. Issuing green bonds, the proceeds of which are allocated to support climate and environmental projects—is an effective and increasingly popular option to meet declared low-carbon development targets. In addition to green bonds, sustainable finance instruments like social bonds, sustainability bonds and sustainability-linked bonds have grown in prominence over the last decade.

According to the World Bank (based on Bloomberg statistics), the worldwide market for sustainable bonds (such as green, social, sustainability, and sustainability-linked bonds) is rapidly expanding, reaching a total volume of 4.6 trillion USD by the end of 2023.

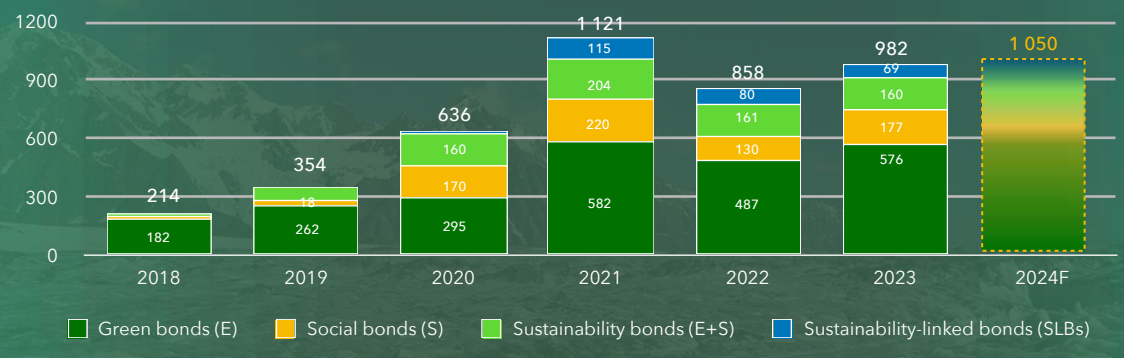
Green bonds accounted for 2.9 trillion USD, or around 64% of the total. Supranational international organisations, as well as United States, France and China, are the leading issuers of sustainable bonds.

Environmental Finance estimates that the global volume of sustainable bond issuance amounted to 982 billion USD in 2023. In terms of instrument type, green bonds dominated, accounting for 59% of the total, followed by social bonds (18%), sustainability bonds (16%), and sustainability-linked bonds (7%) (See Fig. 7).

S&P Global Ratings forecasts that green, social, sustainability and sustainability-linked bonds issuance could reach 1.05 trillion USD in 2024. Green bonds are projected to continue dominating sustainable finance markets, driven by increasing demand for green projects worldwide. Issuers from middle- and low-income countries are also expected to boost their exposure to thematic bond issuances, given their significant unmet funding needs.

For governments and corporations to successfully issue sustainable finance instruments, it is essential to develop local sustainable finance markets. It will require aligning national financial infrastructure with international best practices, creating a supportive ecosystem. Key actions also include adopting standards and regulations,

Figure-7. Global sustainable bonds issuance (billion USD) in 2018-2023 and forecast for 2024



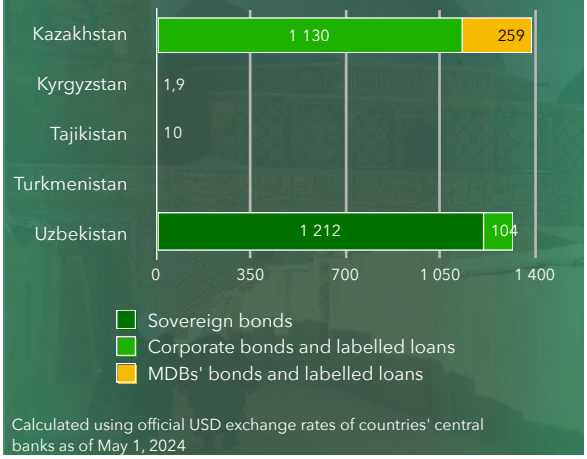
Source: S&P Global Ratings, Environmental Finance

implementing incentive and support mechanisms, and enhancing the capacity of market participants.

Central Asian countries are a part of global trends in sustainable development, and building local markets for sustainable finance is gaining traction in the region. According to the available data collected, the Central Asian sustainable finance market is estimated to be worth over 2.7 billion USD (See Fig. 8), including:

- **Kazakhstan:** 1 389 million USD (registered-green bonds, social bonds, sustainability bonds, sustainability-linked bonds and green loans of corporate sector issuers and MDBs labelled in accordance with international standards);
- **Uzbekistan:** 1 316 million USD (sovereign SDG bonds, sovereign green bonds, corporate green bonds issued by Uzpromstroybank and SAIPRO GROUP LLC);
- **Tajikistan:** 10 million USD (green bonds issued by the Bank Eskhata OJSC);
- **Kyrgyzstan:** 1.9 million USD (green bonds issued by Doscredobank OJSC and gender bonds issued by Bank of Asia CJSC).

Figure-8. Volume of Central Asian sustainable finance markets, million USD (as of May 2024)



Calculated using official USD exchange rates of countries' central banks as of May 1, 2024

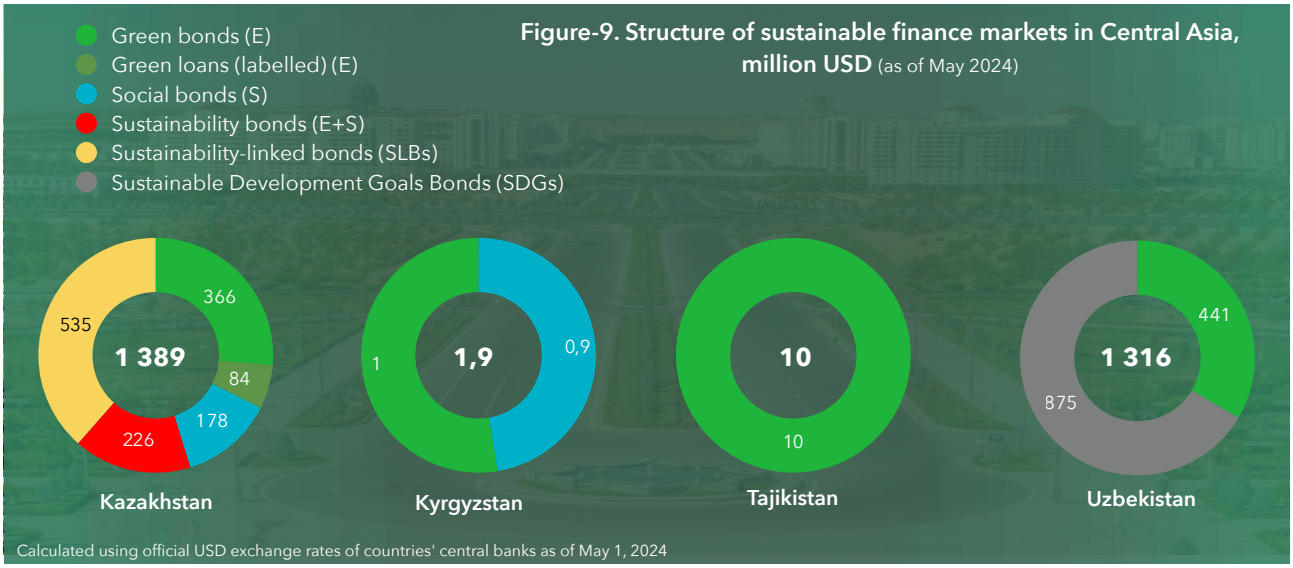
Within the region, Kazakhstan is the only country with data on loans that are labeled according to the international standards for green loans, specifically the Green Loan Principles (GLP) set by the Loan Market Association (LMA) and the Loan Syndications and Trading Association (LSTA). However, in Kazakhstan and other countries in the region, both international and local banks are issuing loans to finance projects, costs, and assets that positively impact the environment. These loans can be conditionally referred to as "green" loans.

For example, the EBRD, through the GEFF Programme, provides credit lines to local financial institutions for on-lending to individuals and small and medium-sized businesses. These funds are used to invest in climate change mitigation and adaptation projects in line with the EBRD's The Green Economy Transition programme, a comprehensive strategy to reduce GHG emissions and improve energy efficiency. According to information on the GEFF website, among the countries in the region, the programme operates in Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan. According to information on the EBRD website, the total amount of the project portfolio within the pilot phase of the GEFF in the region amounted to 170 million USD: in Kazakhstan in 2020-2023 projects worth 30 million USD were financed, in Kyrgyzstan in 2012-2022 - projects worth 55 million USD, in Tajikistan in 2019-2023 – 25 million USD, in Uzbekistan in 2019-2022 – 60 million USD. The next phases of the GEFF implementation have been approved, with a total funding volume of approximately $340 million. The allocation is as follows: up to $150 million for Kazakhstan, $90 million for Uzbekistan, up to $50 million for Kyrgyzstan, and $50 million for Tajikistan.

Overall, excluding unlabeled green loans, sustainable finance markets in Central Asia are dominated by sustainable bonds (see Fig. 9).

KAZAKHSTAN

Among the countries of Central Asia, Kazakhstan has made the most progress in developing the local corporate sustainable finance market. The key was the establishment of the AIFC in Kazakhstan in 2016, as well as the recognition of green finance development as one of the goals in building the AIFC as the region's primary financial centre. To advance green



finance, the AIFC Green Finance Centre was established within the AIFC. The Green Finance Centre's thorough effort in developing a regulatory and methodological framework for issuing green financial instruments resulted in the debut issuance of green bonds for Kazakhstan and Central Asia on the AIX in 2020.

One of the primary objectives of the AIFC Green Finance Centre is to develop recommendations and a regulatory framework for the operation of the sustainable finance market in Kazakhstan and other countries in the region. The Centre has worked to build a regulatory framework for Kazakhstan's green finance system, and the following green finance documents have been developed:

- Concept for the implementation and development of instruments and principles of green finance, in which for the first time a review of the green finance system in Kazakhstan was carried out, barriers were considered and recommendations for further development were presented, and the central coordinating role of the AIFC in the development of the system was outlined (2017);
- Green Bonds Rules on the AIX (2018);

In addition, the AIFC Green Finance Centre proposed consolidation of the "green finance" concept in the new Environmental Code and the Entrepreneur Code of the Republic of Kazakhstan, with the goal of harmonising the conceptual framework and stimulating the green finance market in Kazakhstan, as well as developing a standard for green projects and incentive measures:

- "Classification (taxonomy) of "green" projects to be financed through "green" bonds and "green" loans" (approved by Decree of the Government of the Republic of Kazakhstan No. 996 of December 31, 2021) or, in other words, the National Green Taxonomy of Kazakhstan;
- Measures for economic incentives for green bonds and loans, such as subsidies for coupon and interest rates, as well as a mechanism for guaranteeing green bonds (approved by Decree of the Government of the Republic of Kazakhstan No. 43 dated February 2, 2022; operator – Damu Entrepreneurship Development Fund).

The green taxonomy is a standardised framework for classifying types of economic activities, projects, and assets with the goal of increasing the efficiency of natural resources use, lowering the level of negative environmental impacts, boosting energy efficiency and savings, and addressing climate change through mitigation and adaptation efforts. The adoption of the National Green Taxonomy has spurred increased interest among market participants in sustainable finance instruments and projects focused on transitioning to low-carbon development.

In March 2024, initiated by the AIFC Green Finance Centre, the Green Taxonomy of the Republic of Kazakhstan was amended, incorporating priorities from the recently adopted Strategy of Achieving Carbon Neutrality of Kazakhstan by 2060.

As a result of the work done by the AIFC Green Finance Centre, Kazakhstan has established a legislative and regulatory framework for its green finance market. The AIFC, with its legal status, expertise, and strategic geographical location, is well-positioned to become a regional green finance hub, contributing to the growth of the green finance sector in Central Asia and Eastern Europe.

To further advance the technical criteria for ESG financing, the AIFC Green Finance Centre has developed a draft National Social Taxonomy. This taxonomy serves as a classifier for social projects, facilitating the issuance of social bonds and the attraction of social loans. Similar to the Green Taxonomy, the Social Taxonomy aims to become a foundational document in the realm of social finance and the development of sustainable projects. It provides a clear "framework of reference" for capital market participants, detailing prioritised socially-oriented activities, as well as criteria and thresholds for selecting social projects.

The proposed methodological tool aims to address the complexity of measuring social aspects when using financial instruments such as social bonds and loans by participants in the socially responsible investment market, specifically the lack of clear definitions and classifications. The Social Taxonomy is likely to be adopted this year.

In 2023, Kazakhstan announced the release of a new sustainable financial instrument - namely the first Sustainability-linked bonds (SLBs) in Central Asia, which will be issued by Almaty Power Plants JSC (APP) in the amount of up to 236, 8 billion tenge on the AIX. The relevant agreement between APP and the EDB was signed on November 30, 2023, at the AIFC.

In addition to the EDB, the main investor, other development institutions and second-tier banks may become potential investors in the project. The inaugural issuance of APP's SLBs is being carried out with support from the AIFC Green Finance Centre. The Centre has provided consulting services and an independent assessment to ensure the bonds' compliance with sustainable finance principles.

Over a short period of existence since 2020, the sustainable finance market in Kazakhstan reached 1 389 million USD (taking into account all registered issuances), about 80% of this volume was reviewed by the AIFC Green Finance Centre.

Additionally, Kazakhstani issuers have been placing sustainable bonds on foreign markets. In April 2024, DBK issued Sustainability Eurobonds worth 100 billion tenge (~ 226 million USD) with a 3-year tenor on the Vienna Stock Exchange (also listed on KASE). This marks the first issuance of sustainability eurobonds by a non-sovereign issuer from the CIS in local currency.

KYRGYZSTAN

Debut sustainable bonds, specifically, gender bonds, in Kyrgyzstan were issued in November 2022. Bank of Asia became the first bank to offer gender bonds to help women entrepreneurs grow their businesses, improve their well-being, achieve gender equality, and empower women. 3-year bonds worth 82 million soms (~ 0.9 million USD) were listed on the Kyrgyz Stock Exchange. The issue's partners included the AIFC Green Finance Centre, UN Women in the Kyrgyz Republic, the Kyrgyz Institute for Economic Policy Research, the Kyrgyz Stock Exchange CJSC, and Senti Financial Company LLC.

Source: Press release of Bank of Asia CJSC

In November 2022, the AIFC Green Finance Centre, in collaboration with Kyrgyzstan's Ministry of Natural Resources, Environment, and Technical Supervision, developed and presented a draft taxonomy of sustainable finance for the Kyrgyz Republic. This taxonomy classifies green and social projects with the aim of accelerating the growth of Kyrgyzstan's sustainable finance market. The development of a national sustainable taxonomy has since been handed over to the Ministry of Economy and Commerce, which initially plans to release only a green taxonomy.

First green bonds in Kyrgyzstan were issued by Doscredobank OJSC in June 2023 with the support of the AIFC Green Finance Centre. Green bonds worth 85 million soms (~ 1 million USD) were placed on the Kyrgyz Stock Exchange for 3 years. The attracted investments are intended to support green initiatives such as the construction of buildings and premises from environmentally friendly materials utilising "green" and energy-efficient technologies; environmentally friendly transportation; and the installation of electric vehicle chargers, among others.

TAJIKISTAN

The Green Economy Development Strategy for 2023-2037 aims to attract green finance from global markets by enhancing expertise in green bond markets, training specialists for global and regional green bond participation, improving green bond legislation, and establishing a clear mechanism for investment attraction that aligns with "green" economy objectives.

Under the Ministry of Finance of the Republic of Tajikistan, there is a Centre for the Implementation of "Green" Projects, which is engaged in maintaining and financing projects aimed at sustainable development and environmental protection, and is also responsible for the coordination and implementation of projects related to renewable energy, improving water supply, and rural development and other aspects that contribute to environmental sustainability.

Bank Eskhata OJSC, a major commercial bank in Tajikistan, initiated a collaborative effort with the IFC to establish and apply "green" financing principles. This partnership led to the issuance of Tajikistan's inaugural green bonds worth 10 million USD in February 2024[14]. These bonds mark a significant milestone in promoting sustainable development and tackling climate change in the country. The funds raised from this issuance will empower the bank to assist small and medium-sized enterprises in Tajikistan with their green project initiatives.

Source: Press release of Bank Eskhata OJSC

As for the sovereign issue on the topic of sustainable development, the Republic of Tajikistan's Ministry of Finance plans to issue sovereign green bonds in 2024 and place them in 2025 as part of the project "Programme for improving the business environment taking into account climate change and increasing green employment opportunities."

[14] Bank Eskhata. First issue of green bonds in the Republic of Tajikistan

UZBEKISTAN

Unlike in neighbouring countries, in Uzbekistan the government dominates the domestic market for sustainable finance. Uzbekistan is the first country in Central Asia, the CIS, and one of the world's first to issue sovereign bonds for the SDGs. In 2021, Uzbekistan issued 235 million USD in bonds to fund measures to achieve the SDGs[15], which include construction of an light rail and underground metro in Tashkent, the construction and reconstruction of hospitals, schools, kindergartens, drinking water supply and sewerage facilities, irrigation systems, and a childhood vaccination programme.

In August 2023, Uzpromstroybank issued "green" Eurobonds worth 100 million USD. The investor was the Asian Infrastructure Investment Bank. IFC, the German Institute for Development Finance, and the Austrian Development Bank also participated in the placement of 5-year bonds.[16].

In October 2023, with the support of UNDP Uzbekistan issued its first sovereign green Eurobonds denominated in local currency totalling 4.25 trillion soms (~ 337 million USD), with the yield decreased due to considerable investor demand. Uzbekistan's Ministry of Economy and Finance stated that the proceeds from green bonds will be used to fund green projects such as the implementation of water-saving technologies, the development of railway and metro transportation, the organisation of sanitary cleaning and maintaining cleanliness in populated areas, and the establishment of protective forest plantations against wind erosion and siltation of water bodies.

Source: Press release of UNDP Uzbekistan

On October 25, 2023, in accordance with the Action Plan for the Transition to a Green Economy and Ensuring Green Growth in the Republic of Uzbekistan until 2030 (approved by Government Decree No. 436 dated December 2, 2022), the National Green Taxonomy for green activity classification was developed and approved. The document defines activity categories and assess compliance criteria for green projects that will be financed through green bonds and loans. The taxonomy is currently in pilot mode and will be fully operational by the end of 2024.

In December 2023, the AIFC Green Finance Centre, in collaboration with the Direct Investment Fund of the Republic of Uzbekistan, actively contributed to the issuance of SAIPRO GROUP LLC's first corporate green bonds in the amount of USD 4 m. SAIPRO GROUP green bonds were placed with Uzbekistan's commercial banks and development funds. The bond proceeds will be used to finance a project aimed at incorporating environmentally friendly technologies into the construction of the Green Hills Resort.

In May 2024, the Ministry of Finance of the Republic of Uzbekistan carried out a second issue of sovereign SDG bonds in the amount of 600 million euros (~640 million USD) for a period of 3 years[17].

[15] Uzbekistan's First SDG Bond Allocation and Impact Report

[16] Spot.uz. «Uzpromstroybank placed "green" Eurobonds for $100 million

[17] Ministry of Economy and Finance of the Republic of Uzbekistan. For the first time, the Republic of Uzbekistan has placed sovereign international bonds in 3 currencies

GIP REGIONAL OFFICE IN CENTRAL ASIA

In May 2021, the international Green Investment Principles (GIP) initiative for the Belt and Road began its work in Central Asia. Current GIP signatories in the region who have taken a course towards actively implementing the principles of green investment include Doscredobank OJSC (Kyrgyzstan), Damu Entrepreneurship Development Fund, DBK (Kazakhstan), EDB (as an observer).

The Green Investment Principles was launched jointly by China Green Finance Committee and City of London Corporation in November 2018, in collaboration with 5 international organisations. The GIP aims to create an international network to improve environmental risk management and mobilise private capital for sustainability within the framework of Belt and Road investments.

GIP consists of seven guiding principles at three levels: strategic, operational and innovation. It calls on signatories to ensure sustainable corporate governance, take concrete measures to minimise environmental risks and encourage the innovation of green finance instruments. It endeavors to build the capacity in signatories, providing tools for implementing the principles and access to green projects available for investment in the Belt and Road region.

The membership of GIP is diversely growing. As of the drafting of this report, it has 49 signatories from 17 countries and regions, with the assets held or under management totaling at 42 trillion USD, including some of the largest banks in developed economies such as the UK, France, Germany and Japan, and developing ones such as China, Thailand, Mongolia and Kazakhstan.

Setting expectations for the entire GIP community, its medium-term strategic planning, Vision 2026-30, includes ambitious indicators as follows:

- 80% of signatories to have started environmental and climate disclosure, aligned with national or international frameworks, such as the TCFD or ISSB by 2026;
- 100% of signatories to conduct environmental risk assessment by 2026;
- 100% of signatories to assess biodiversity or nature-related risks by 2030;
- 100% of signatories to disclosing Scope 3 emissions, including financed emissions by 2030;
- 100% of signatories to formulate carbon neutrality/transition plans by 2030.

The regional office in Central Asia, along with work carried out with signatories, provides support to members of the initiative to build capacity, and also provides a platform for dialogue (for example, Kyrgyzstan Green Investment Forum in 2022).

V. PROSPECTS FOR FURTHER DEVELOPMENT OF SUSTAINABLE FINANCE IN THE REGION

This report was prepared in response to widespread international calls to develop climate finance in developing countries, the implementation of Article 2.1(c) of the Paris Agreement to align financial flows towards low-emission and climate-resilient development, and implementation of SDGs in Central Asian countries by 2030.

Filling the financing gap required for transition to carbon-neutral development in Central Asia may become even more difficult due to competing demands to contain energy prices, support economic growth, and preserve jobs in the face of rising climate change costs, to which Central Asian countries are extremely vulnerable.

In this context, it is crucial to provide the conditions for mobilising financial resources and attracting the investments required to close the financing gap.

Based on our research findings and proposals from interviewed stakeholders, we have provided recommendations to address the issues associated with creating conditions for the development of sustainable finance instruments in Central Asian countries. The purpose is to mitigate the possibly negative consequences of elements that influence the region's sustainable finance market development.

Given the different levels of development of sustainable finance markets, but similar gaps (missing standards, tools and measures), the countries of Central Asia can be offered both general and country-specific recommendations for further development of this segment (see Tab. 7), which are built around the following priority areas:

1) **Standardise.** Policy makers along with investment exchanges in the region should strive for effective development and implementation of local standards for thematic financing that are compatible and aligned with internationally accepted benchmarks, focused not only on mitigation, but adaptation, transition, and social criteria as well. The same actors should strive for aligned guidelines for ESG disclosure that would meet investor requirements.
2) **Assess.** Policymakers along with data providers (investment exchanges for capital market, regulators for banking sector) should close the gap for reliable regional statistics on sustainable finance which should be high-quality, granular, and timely. The data must be accessible to a broad set of stakeholders.
3) **Capacity.** Regulators, investment exchanges and financial institutions should consider building educational resources both for retail consumers and corporate sector while regulators should also focus on capacity building targeting banking sector as well.
4) **Encourage.** Policymakers should come up with incentives for banks, retails consumers of financial services, and project developers to develop new products (green loans, ESG-bonds, etc).
5) **Prioritise.** Financial institutions should consider developing climate strategies with potential carbon neutrality goals, setting ambitious green finance targets, identifying potential niches and develop targeted products devoting adequate amounts of financial resources to sustainable finance products.

Table-7. Recommendations for Central Asian countries on developing sustainable finance market*

						
A. SUPERVISION AND REGULATION						
1	Adopt a taxonomy of green (sustainable) finance		▲	▲	▲	
2	Adopt transition finance standards		▲	▲	▲	▲
3	Adopt guidelines for thematic bonds (definitions, verification process)			▲	▲	▲
4	Create thematic segments on exchange platforms			▲	▲	▲
5	Introduce sustainable finance reporting		▲	▲	▲	▲
6	ESG disclosure as a requirement for listed companies			▲	▲	▲
7	Research and analytics on sustainable finance		▲	▲	▲	▲
B. FISCAL POLICY						
8	Introduce incentives and support measures for initiators of sustainable projects		▲	▲	▲	▲
9	Issue sovereign green bonds	▲	▲	▲	▲	
10	Issue sovereign green sukuk	▲	▲	▲	▲	▲
C. PRUDENTIAL REGULATION						
11	Green capital and reserve requirements	▲	▲	▲	▲	▲
12	Climate stress testing			▲	▲	▲
D. BUILDINGS AND GREEN CITIES						
13	Green mortgage schemes		▲	▲	▲	
14	Issue municipal green bonds	▲	▲	▲	▲	▲
E. DEVELOPMENT OF SUSTAINABLE FINANCE MECHANISMS						
15	Launch green crowdfunding platforms	▲	▲	▲	▲	▲
16	Accreditation of local financial institutions with the GCF	▲		▲	▲	▲
17	Establish national and/or regional sustainable financing vehicles	▲	▲	▲	▲	▲

**Note: These recommendations are prepared on the basis of collected and available information on the presence and absence of certain policies, standards, instruments, etc. in the field of sustainable finance in the countries of Central Asia at the time of preparation of the report.*

A. SUPERVISION AND REGULATION

RECOMMENDATION #1: ADOPT A TAXONOMY OF GREEN (SUSTAINABLE) FINANCE

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN

A taxonomy of green (sustainable) projects as a classification is needed to provide a common understanding and approach to the identification, development and financing of green (sustainable) projects, as well as to increase investor confidence and prevent "greenwashing" - a situation where projects without environmental benefits are presented as "green." The taxonomy also provides a framework for disclosure and reporting, as well as for the use of economic incentives such as interest rate subsidies and guarantees.

When developing national taxonomies of green finance, current and potential members of the Eurasian Economic Union are recommended to take the Model Taxonomy of Green Projects of the EAEU as a basis. This taxonomy was developed in close cooperation with the AIFC Green Finance Centre and approved in December 2022 by the High-Level Working Group of the Eurasian Economic Commission as a part of the EAEU climate agenda. The model taxonomy of green projects of the EAEU reveals the criteria for green projects of the EAEU countries, the purpose of which is to stimulate and bring together the approaches of the EAEU countries within the framework of the systemic development of green financing instruments in the EAEU space. The prepared criteria for green projects became one of the first criteria formed for the integration association, which can serve as the basis for the development or updating national taxonomies, as well as a potential tool for the development of cross-border projects. For these purposes, the Green Finance Centre also participated in the preparation of requirements for a verification system for financial instruments, which could potentially be issued with reference to the EAEU Model Taxonomy.

RECOMMENDATION #2: ADOPT TRANSITION FINANCE STANDARDS

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

The transition to clean energy in the short and medium term is not always possible due to various factors, especially in hard-to-abate sectors. Despite this, it is still necessary to incentivise businesses that are trying to reduce their negative impact on the environment, for example by reducing GHG emissions. To achieve this, it is recommended to adopt standards in the field of transition finance. This can be done by including them in existing or developing sustainable finance standards, or through the adoption of separate standards. The adoption of transition finance standards will provide clear criteria for attracting financing for projects that do not fall under the criteria of green projects, but will reduce the negative impact on the environment.

For example, in Kazakhstan, in March 2024, amendments were adopted to the Green Taxonomy, taking into account the priorities of the adopted Strategy of Achieving Carbon Neutrality of Kazakhstan by 2060, which defined the role of gas and nuclear energy, as well as international practice, namely, the transition category of projects "Transitional Energy" was introduced until 2035, which included:

- production of electricity and heat from gas and replacement of fuel;
- production of equipment for nuclear energy;
- construction and operation of nuclear power plants;

with appropriate threshold criteria based on international best practice. Switching from thermal coal to natural gas will significantly reduce GHG emissions in the energy sector. Because natural gas is a cleaner fuel with a higher energy content, burning it produces fewer emissions of almost all types of air pollutants and produces half as much carbon dioxide as burning coal to produce the same amount of energy.

Nuclear energy, unlike power plants operating on hydrocarbon raw materials, does not produce carbon dioxide emissions into the atmosphere. In fact, emissions per GWh from nuclear power plants are

approximately 273 times lower than from coal power plants. In this regard, in Kazakhstan, such projects may be eligible for transition finance, subject to the established taxonomy criteria. In Kazakhstan, further development of the concept of transition finance is planned with the development of international standards in other sectors.

In 2022, the G20 Working Group on Sustainable Finance presented 22 principles for transition finance. A high-level framework is a good start, but it may not take into account country-specific differences in energy mix, industrial emissions patterns, economic and technological capabilities, and political and institutional capacity. In this regard, when developing standards and policies for financing the "transition" period, countries should rely on long-term plans for decarbonisation of the economy with a clear time frame, taking into account the above aspects.

In February 2024, Japan issued the world's first 11 billion USD climate transition bond. 55.5% of bond proceeds support research and development (R&D) initiatives aligned with Japan's efforts to limit temperature rise to 1.5°C in areas ranging from renewable energy sources to hydrogen in steelmaking; 44.5% is earmarked for subsidies for activities ranging from battery production to energy efficiency measures in buildings[18]. This issuance marks an important milestone in the development of sustainable finance in the world.

RECOMMENDATION #3: ADOPT GUIDELINES FOR THEMATIC BONDS (DEFINITIONS, VERIFICATION PROCESS)

COUNTRY: TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Supervisory authorities can establish guidelines and recommendations for thematic instruments (green, social, sustainability and sustainability-linked bonds). This can help standardise the local market, which reduces due diligence costs for investors and promotes transparency efforts.

Aligning local guidelines with ICMA and the Climate Bonds standard will ensure consistency with international markets and local issuances meeting investor expectations. The guidelines could help jumpstart the development of local green bond markets. For example, the 2015 Guidelines of the People's Bank of China on the issuance of green bonds in the interbank bond market were accompanied by the first edition of the Green Project Catalogue and led to the rapid scaling of Chinese green bond issuances.

The AIX adopted the Green Bonds Rules in 2019, allowing for the first issue of green bonds in 2020, and later expanded the range of instruments to a full range of ESG bonds.

In Kazakhstan's national legislation, definitions of green finance instruments were first enshrined in the Environmental Code in 2021, and subsequently amendments were made to the Securities Market Law to define all types of thematic bonds, as well as their features, including external review aspects. The list of types of organisations that can provide an external assessment of thematic instruments is approved by the Resolution of the ARDFM Board "On identifying organisations to conduct assessment and analysis regarding the use and allocation of proceeds from green, social bonds, sustainability bonds and sustainability-linked bonds, and their compliance with the objectives stated by the bond framework and (or) the terms of the bond issue (verification)" No. 76 of October 20, 2022.

In August 2022, changes were made to the Securities Listing Rules of the Kyrgyz Stock Exchange to define sustainable development bonds (ESG bonds), requirements for organisations that carry out an independent assessment of projects to be financed through the issuance of ESG bonds. It should be noted that in November of the same year, the first thematic (gender) bonds of Kyrgyzstan were issued on the Kyrgyz Stock Exchange.

A number of developing countries have adopted the practice of minimal regulation of verifiers to stimulate the development of the local market for services based on the experience of China; at a later stage of market development, it is possible to introduce ac-

[18] ESG News. Japan issues world's first $11 billion climate transition bond

creditation of such organisations by a specialised body.

RECOMMENDATION #4: CREATE THEMATIC SEGMENTS ON EXCHANGE PLATFORMS

COUNTRY: TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Regulators can work with stock exchanges to create green/sustainable segments to increase the visibility of sustainable finance instruments. Listing requirements in specified segments also provide investors with certainty about the issue by reducing due diligence requirements. According to the Sustainable Stock Exchanges Initiative (SSE), 41% of SSE member exchanges have ESG segments, including stock exchanges in Kazakhstan and Kyrgyzstan.

In particular, in 2023, changes were made to the Securities Listing Rules of the Kyrgyz Stock Exchange to determine special requirements for bonds of the specified segment.

In addition, it is recommended to focus on diversifying the investment product line as an additional direction for the development of the sustainable finance market. This approach aims to strengthen market competitiveness, including the introduction of innovative financial instruments and a variety of investment strategies. Such innovative instruments include Green IPO/Green Equity. Such tools can be used to reduce the cost of raising capital by achieving the "greenium", and can improve access to a wider investment base, including ESG-focused investor groups and institutional investors. A green IPO provides the opportunity to be included in sustainability-focused indices and rankings, enhancing branding and visibility in the ESG arena.

The main criterion for a company to qualify for Green Equity status is that more than 50% of its income and investments must be derived from activities considered green. Alternatively, green transition status can be obtained for companies seeking to make a green transition and who have a significant proportion of their investments allocated to green activities. By achieving this status, companies can also increase their chances of raising capital on more favorable terms and gain access to a segment of investors and funds focused on ESG principles. To confirm the green status of these financial products, it is also recommended to obtain an independent assessment/verification similar to green bonds and loans.

RECOMMENDATION #5: INTRODUCE SUSTAINABLE FINANCE REPORTING

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Financial regulators in the countries of the region are already taking measures to introduce ESG principles into the activities of financial institutions, in particular, introducing voluntary and mandatory ESG reporting for banks. As part of this work, it is necessary to note the importance of introducing green loans accounting by banks. Collecting data on the volume of green loans from banks will contribute to a better assessment of the total volume of green investments and the development of measures to stimulate green projects. In general, the requirement for financial institutions to report with sustainability considerations, in particular, on "green" loans, is well-established in global regulatory practice. Mandatory disclosure of the share of green or low-carbon assets by financial institutions has been legislatively introduced in a number of countries (EU countries, China, Georgia, Mongolia and many others). In Kazakhstan, in accordance with the approved ARDFM Guidelines for ESG Disclosure for Banks and Other Financial Institutions (hereinafter referred to as the Guidelines for ESG Disclosure)[19], the list of key performance indicators for ESG disclosure by banks and financial institutions includes such indicators as:

- The volume of green loans issued in the reporting year, including as a percentage of the total volume of loans issued;
- The total amount of green loans in the current portfolio, including as a percentage of the total

[19] Approved by order of the Chairman of the ARDFM dated April 28, 2023 No. 291. From 2024, disclosures in accordance with these guidelines will become mandatory for financial organisations of the country

portfolio; share of overdue green loans in total green loans.

It is important to note that amendments to the resolution of the National Bank of the Republic of Kazakhstan in December 2023 on bank reporting forms[20] introduced a "Sustainability Project Attribute" into the corresponding reporting forms for banks, in particular a value under code ESG001 "Green loans". This value must be indicated in the Report on Provisions and Risk Assessment", starting from January 2024 for all loans that comply with the Classification (taxonomy) of "green" projects financed through "green" bonds and "green" loans approved by Decree of the Government of the Republic of Kazakhstan dated December 31, 2021 No. 996.

The challenge of obtaining comprehensive, accurate, and up-to-date statistics on the sustainable finance market in the region persists. International data providers like Environmental Finance and Bloomberg often lack complete information on Central Asian markets. Therefore, it is crucial to enhance national statistics collection and share this data with international databases.

RECOMMENDATION #6: ESG DISCLOSURE AS A REQUIREMENT FOR LISTED COMPANIES

COUNTRY: TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Stock exchange listing requirements ensure that investors are properly informed before making an investment. The regulator, as well as the stock market itself, can ensure that listing requirements include ESG reporting.

According to SSE data, 31% of exchanges have ESG reporting as a listing requirement. Among these platforms are Kazakhstan's KASE and the Kyrgyz Stock Exchange. In particular, according to the rules of the Kyrgyz Stock Exchange, these requirements apply to issuers of sustainable bonds of categories A and B.

Other emerging markets with similar listing requirements include the stock exchanges of Malaysia, Morocco, Turkey and the UAE. At the AIX, the rules for ESG disclosure operate on a voluntary basis.

RECOMMENDATION #7: RESEARCH AND ANALYTICS ON SUSTAINABLE FINANCE

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Research and analysis can play an important role in the development of sustainable finance, for example, research carried out by the G20 Working Group on Sustainable Finance has provided the basis for many concepts, including the concept of transition finance. In this regard, institutionalization in the field of sustainable finance is an important aspect for market development. Research can also play an important role in the development of national standards; for example, thanks to the efforts of the AIFC Green Finance Centre in Kazakhstan and VEB.RF in Russia, national taxonomies of these countries have been adopted.

By promoting research and implementation of policies proposed by national development institutions in the area of sustainable finance, regulators and governments in general can signal to market participants the importance of climate change issues and encourage further actions beyond those promoted by specific policies.

These institutions can also become catalysts or platforms for increasing market potential. Often, the accumulated expertise can be implemented through the support of regulators, exchanges, banks and other market participants to build their capacity.

[20] Resolution of the National Bank of the Republic of Kazakhstan dated December 28, 2018 No. 313 "On approval of the list, forms, deadlines and Rules for reporting on loans and contingent liabilities by second-tier banks, branches of non-resident banks of the Republic of Kazakhstan, joint-stock company "Development Bank of Kazakhstan" and organisations carrying out certain types of banking operations"

B. FISCAL POLICY

RECOMMENDATION #8: INTRODUCE INCENTIVES AND SUPPORT MEASURES FOR INITIATORS OF SUSTAINABLE PROJECTS

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

The introduction of a system of incentives and support measures for potential issuers contributes to more active issuance of bonds and loans to finance sustainable development projects. An example of those is the subsidised interest rates on green loans and the coupon rates on green bonds introduced in Kazakhstan. At the same time, these incentives should take into account the additional transaction costs inherent in sustainable financial instruments and create more attractive conditions for raising money for sustainable projects compared to projects in other sectors of the economy.

In Kazakhstan, further improvement of the incentive system is necessary, namely an increase in the size of the existing subsidies for the interest rate on green loans and the coupon rate for green bonds. Today, the existing subsidy scheme does not differ from the subsidy scheme in other priority sectors of the country's economy. The issuance of green financial instruments (bonds and loans) is associated with additional transaction costs, which includes verification/ obtaining an external assessment conclusion on the project's compliance with international standards on green bonds/loans.

Another example of incentive measures is the Malaysia Green Technology and Climate Change Corporation (MGTC) GTFS programme, a programme designed to help Malaysian SMEs access financing at a lower rate. GTFS provides an interest rate discount of 1.5% and 60% government guarantee for green projects.

In addition, it is important to stimulate the development of green and sustainable products and services to form a full chain of projects. In particular, in light of the large share of public procurement in GDP, it seems reasonable to introduce green and/or sustainable public procurement. According to OECD, pre-COVID, public procurement accounted for 12% of the GDP in OECD countries and almost 30% in developing countries, accounting for more than 30% of total government spending[21]. The share of public procurement in Kazakhstan's GDP, for example, is 6.6%, which is relatively lower compared to the average in OECD countries; at the same time, they account for 43% of the government's total budgetary expenditure.

In 2023, the World Bank launched a 12-month project "Implementing Green Public Procurement (GPP) in Europe and Central Asia (ECA)." The project's goal is to promote GPP practices in the ECA region, especially in terms of climate action. The project is focused on four countries in the region: Albania, Azerbaijan, Kazakhstan and Uzbekistan. Project outputs include a set of framework tools to guide GPP implementation in the region, training activities tailored to specific contexts and needs, and market readiness studies in priority sectors.

RECOMMENDATION #9: ISSUE SOVEREIGN GREEN BONDS

COUNTRY: KAZAKHSTAN, KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN

The general and main recommendation for most countries in the region is to issue sovereign green bonds to stimulate local markets in order to finance projects contributing to the state's goals of transitioning to a green economy and achieving carbon neutrality. This mechanism aims to actively attract investors whose mandate includes responsible investment.

The case of Uzbekistan is illustrative and can serve as an example for governments of other Central Asian countries that need to attract external financing to achieve low-carbon economic development goals. Issuing sovereign green bonds has the following advantages:

[21] International Training Centre. 10 Surprising Facts on Public Procurement

• *By entering the sustainable bond market, governments are sending a strong message of sustainability intent to the private sector and investors. The issuance of sustainability-themed sovereign instruments can act as a catalyst for domestic market development by attracting additional sources of investment and encouraging more issuers to use capital markets to finance assets, projects and expenditures that contribute to a sustainable future. The size of sovereign issuances also makes it possible to create liquidity to attract regional players to the market.*

• *Government bond issuances help raise private funds to finance government programmes focused on SDGs (including carbon neutrality issues), grow the local market for ESG instruments, add transparency to the process and positive reputational effects. According to BIS, the first issuance of sovereign green bonds tends to tighten standards for overall green bond issuance in a country. In some countries, after such an issue, there tends to be an increase not only in the annual corporate issuances, but also in the share of corporate issuances that received an external review (in the format of a second party opinion), thereby positively influencing the dynamics of market development. This trend is evident in both advanced and emerging market economies*[22].

• *Statistically, issuing sovereign and municipal ESG bonds can help attract financing on more favorable terms. According to CBI, India, a dynamic economy (second among G20 countries in terms of GDP growth in 2022), is the sixth largest issuer of ESG bonds in the Asia-Pacific region, and issued its debut sovereign green bond in January 2023 in local currency with a greenium*, demonstrating high demand from domestic investors.*

**For reference: Greenium is a lower borrowing cost that issuers often achieve when issuing ESG-labeled bonds (i.e. green, social and other ESG bonds) compared to other conventional bonds. A Barclays analysis of hundreds of green bonds and their vanilla equivalents shows green bond yields are 0.05 percentage points lower, making borrowing costs cheaper for green bond issuers.*

RECOMMENDATION #10: ISSUE SOVEREIGN GREEN SUKUK

ALL CENTRAL ASIAN COUNTRIES

For all countries in the region, the symbiosis of green and Islamic financing represents great potential, since the majority of the region's population professes Islam, which demonstrates high potential for development, for example, of such an instrument as green sukuk, which combines the principles of Islamic and ESG financing. In addition, in light of the current privatization policy, Uzbekistan can integrate these tools into the privatization strategies of state assets. This approach aims to achieve sustainable and socially responsible development, focusing on environmental factors, social responsibility and corporate risk management.

C. PRUDENTIAL REGULATION

RECOMMENDATION #11: GREEN CAPITAL AND RESERVE REQUIREMENTS

ALL CENTRAL ASIAN COUNTRIES

In order to encourage the banking sector to issue loans for sustainable projects, central banks in the region are recommended to consider the possibility of easing macroprudential regulation, namely, central banks can reduce risk weights and reserve requirements, for example on green loans. This will provide an incentive for commercial banks to issue more green loans. For example, the Central Bank of Hungary has reduced reserve requirements for green loans. Hungarian banks are entitled to significantly reduced capital requirements for loans used for the purchase and construction of energy efficient real estate. This also applies to loans related to solar power plants, sustainable agriculture and electric vehicles.

It is important to note that this measure requires high-quality data and is only possible in markets with a sufficiently large pool of green debt.

[22] BIS Quarterly Review, September 2022. Sovereigns and sustainable bonds: challenges and new options

Financial institutions also need to consider developing climate strategies with potential carbon neutrality targets in line with national goals, setting ambitious green finance targets, identifying potential niches and developing targeted products, allocating sufficient financial resources to sustainable financial products.

These actions catalyse further market development and certainly require encouragement from regulators, which in turn will increase the pool of green debt on the market.

RECOMMENDATION #12: CLIMATE STRESS TESTING

COUNTRY: TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

Climate stress testing (conducted in a top-down approach by regulators or bottom-up approach by individual financial institutions) is an important tool for identifying sources of economic vulnerability to climate risks. It could also encourage financial institutions to take action to improve climate resilience and could form the basis for targeted monetary and prudential policies.

Regulators can use the NGFS scenarios to develop national scenarios and stress tests. These six scenarios provide different 30-year projections of climate change mitigation policies and physical climate risks.

The European Central Bank carried out one of the most comprehensive climate stress tests using NGFS scenarios in 2022, which assessed the physical and transition risks facing the Eurosystem balance sheet[23]. The results showed that both types of climate risks have a significant impact on the risk profile of the Eurosystem balance sheet.

Climate stress testing of banks is planned in Kazakhstan in accordance with the ARDFM Roadmap for the implementation of ESG principles in the regulation of the financial market of Kazakhstan in 2024 (top-down approach).

According to the Resolution of the Supervisory Committee of the National Bank of the Kyrgyz Republic No. 37/1 dated September 28, 2023, Recommendations for identifying, monitoring and disclosing financial risks associated with sustainable finance factors (ESG risks) were adopted, in which banks are recommended to assess ESG risks using scenario analysis and/or stress testing over a longer time horizon (bottom-up approach).

D. BUILDINGS AND GREEN CITIES

RECOMMENDATION #13: GREEN MORTGAGE SCHEMES

COUNTRY: KYRGYZSTAN, TAJIKISTAN, TURKMENISTAN

Banks can be encouraged to provide green mortgages through preferential green capital treatment and reserve requirements (see section B). It should be noted that there is a high potential for reducing the carbon intensity of economies through the introduction of more energy efficient housing. 37% of global CO2 emissions come from buildings[24]. However, in the urban context of Central Asia, buildings account for up to 80% of emissions (of city-wide collective emissions from the buildings, transport, and waste sectors)[25], making their decarbonisation critical to accelerating the achievement of carbon neutrality.

In Kazakhstan, Otbasy Bank launched Kazakhstan's first green mortgage in early 2023 to accelerate the development of the green buildings market. At the first stage, the bank allocated 10 billion tenge (~22.5 million USD) for this product, aimed at individuals wishing to purchase primary housing; by the end of last year, the amount increased to 14 billion tenge (~31.5 million USD). With a down payment of at least 20%, the maximum loan amount is 35 million tenge (~78,000 USD). This loan programme can only be

[23] European Central Bank. Results of the 2022 climate risk stress test of the Eurosystem balance sheet

[24] UNEP. Beyond foundations.Mainstreaming sustainable solutions to cut emissions from the buildings sector

[25] citiesclimatefinance.org. Scaling up project preparation and finance for net zero carbon buildings in Kazakhstan and Uzbekistan

used to purchase real estate that meets the OMIR national green standard and other widely accepted standards such as GOST R, BREEAM and LEED[26].

Green mortgages are also provided by Uzpromstroybank in Uzbekistan (to improve the energy efficiency of housing by at least 20% per unit of living space). At the same time, the loan amount for the purchase of a house is up to 328 million soums (~25,900 USD), for home renovation up to 80 million soums (~6,300 USD) with a loan term of 20 and 10 years, respectively.

RECOMMENDATION #14: ISSUE MUNICIPAL GREEN BONDS

ALL CENTRAL ASIAN COUNTRIES

Similar to sovereign green bonds, municipal bonds can serve as an additional tool to raise financing for green projects, but at the level of cities, counties, etc. Such bonds are used by city authorities to obtain funds for projects to develop environmentally friendly transport, green building, improve energy efficiency, develop water treatment facilities, as well as to refinance and "green" existing projects.

It is worth mentioning that significant legislative work in this area has been done in Kazakhstan. According to Article 209 of the Budget Code, the Akimat of Almaty (municipality) has the right to issue government securities to finance "green" projects (introduced by Law of the Republic of Kazakhstan No. 182-VII ZRK dated January 1, 2023). However, there have been no issuances applying this amendment yet.

As an example of municipal issuances in the CIS region, in May 2021, the Moscow government placed green bonds on the Moscow Exchange for 70 billion rubles. According to the results of the open auction, demand exceeded supply by 1.2 times. These bonds were offered to individuals only. The funds raised are used to finance a project to replace diesel buses with electric buses, which helps reduce emissions of pollutants and greenhouse gases from transport.

Thus, the issue of municipal green bonds makes it possible to diversify the financial resources of cities and invest in projects whose significance is determined by local demand. In addition, the growing share of this type of securities is determined by the possibility of involving the local population in solving local environmental problems and financing local environmental projects.

E. DEVELOPMENT OF SUSTAINABLE FINANCE MECHANISMS

RECOMMENDATION #15: LAUNCH GREEN CROWDFUNDING PLATFORMS

ALL CENTRAL ASIAN COUNTRIES

Green crowdfunding is an innovative and complementary financing tool for green projects, especially green energy projects, which has been gaining popularity around the world in recent years. Crowdfunding provides an opportunity for citizens to integrate concerns about the environment and climate change into their investment portfolios. This is a great way for retail investors to diversify their portfolio and do their part in the fight against climate change.

For example, since its creation in 2010, the Dutch platform Windcentrale has raised more than 14.3 million euros, making the platform the largest one in the field of renewable energy sources[27]. The money invested is used to purchase windmills, which in turn generates energy credits that the investor can use to cover their monthly energy bills. Such platforms can especially help attract financing for small-scale renewable energy projects. Donors are also looking at this innovative technology-enabled financing solution to better understand its role in closing the financing gap in the off-grid energy sector. A number of donors are already supporting this segment by providing loan guarantees and funding platform costs and investor outreach initiatives.

[26] Otbasy Bank. Зеленая ипотека (Green mortgage)

[27] Habitatpoint. Green Crowdfunding Platforms

RECOMMENDATION #16: ACCREDITATION OF LOCAL FINANCIAL INSTITUTIONS WITH THE GREEN CLIMATE FUND (GCF)

COUNTRY: KAZAKHSTAN, TAJIKISTAN, TURKMENISTAN, UZBEKISTAN

To expand access to international climate finance, countries in the region need to step up efforts to accredit at least one local financial institution to the Green Climate Fund. As previously noted, at present the main partners of the GCF in the countries of Central Asia are international development banks. Today, only one of the national financial institutions of the Central Asian countries (ARIS, Kyrgyzstan) is accredited with the GCF. Mongolia, for example, has 2 national institutions accredited by the GCF as direct access entity.

RECOMMENDATION #17: ESTABLISH NATIONAL AND/OR REGIONAL SUSTAINABLE FINANCING VEHICLES

ALL CENTRAL ASIAN COUNTRIES

An additional significant step and tool for mobilising international funding for sustainable projects in the countries of the region could be the creation of specialised national/regional green (climate) financing mechanisms. Central Asian countries are already considering various vehicles to raise green finance, including the creation of specialised financing vehicles such as green investment funds and green banks. A regulatory environment is being created for their functioning.

In Kazakhstan, the jurisdiction of the AIFC has introduced regulation for the creation of ESG funds, within which at least 70% of the fund's net assets must be invested in accordance with an investment strategy that complies with ESG principles.

In Kyrgyzstan, discussions on the creation of national mechanisms for financing green and climate projects are ongoing. The Ministry of Economy and Trade and the Union of Banks of Kyrgyzstan in 2021, with technical support from PAGE and expert support from GGGI, began developing the National Financing Vechicle (NFV) to stimulate financing for sustainable green development. After a visit to Mongolia in June 2022, organised by the Mongolian office of GGGI with the support of UNDP, in order to study the experience of creating the Mongolian Green Financial Corporation, it was planned to create an interdepartmental working group under the Ministry of Economy and Trade of the Kyrgyz Republic with the participation of representatives of the Union of Banks and other stakeholders.

In Tajikistan, in accordance with the action plan of the National Bank of Tajikistan regarding the implementation of the Decree of the Government of the Republic of Tajikistan "On the Green Economy Development Strategy for 2023–2037", it is envisaged to create specialised public and private financial organisations aimed at financing "green" projects, namely, it is proposed to create a Green Investment Fund with foreign capital participation.

The countries of Central Asia are seeking to join efforts to combat climate change and attract green investments and are announcing the need for joint measures at various platforms. The Presidents of Kazakhstan and Uzbekistan at COP27 and COP28 put forward various regional initiatives on joint measures in the field of climate change, including the creation of a regional Council on Climate Change Adaptation, holding a Regional Climate Summit under the auspices of the UN in 2026 in Kazakhstan. The President of Uzbekistan, speaking at the "Belt and Road" forum in October 2023, proposed developing a common programme for the "green" transformation of economic sectors for the countries of Central Asia and the Silk Road, as well as establishing a Green Financing Fund for the development of a low-carbon economy.

At COP28, the countries of the region came up with a common regional position on the most pressing global climate issues, adhering to the joint approach of "Five countries - one region - one voice".

Given the enormous amount of green investment required in the context of the interdependence of water and energy systems, as well as the challenges in transforming energy-intensive economies, the next step in the development of green finance in the region would be to discuss the idea of creating a

regional green finance vehicle. A regional financing vehicle provides greater opportunities to access international climate funds and pools of public, private and bilateral funding sources and can serve as a regional focal point for international investors and has the potential to attract more international attention through a broader offering of environmental and climate projects. For example, the mechanism could be created in the form of a Regional Climate Fund or a fund of funds for Central Asian countries. The fund could be created in partnership with international climate funds (GCF, GEF, Adaptation Fund and others), institutional investors, donors (including governments), international financial institutions and multilateral development banks. This fund can provide direct financing to non-financial organisations/ projects (energy companies, renewable energy companies or projects, small companies providing renewable energy and energy efficiency services and supplies, etc.) that are in line with Member States' country goals for the transition to a green economy and carbon neutrality, as well as for green projects that meet the technical criteria of Member States' national green taxonomies. Further deliberations on the creation of a regional fund requires obtaining support at the state level of the participating countries, as well as local and international financial institutions and multilateral development banks, which could become potential participants in the fund.

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