Eurasian
Development Bank

Global Green Agenda in the Eurasian Region.

Eurasian Region on the Global Green Agenda

KEY CONCLUSIONS

ANALYTICAL REPORT '23

Global Green Agenda in the Eurasian Region. Eurasian Region on the Global Green Agenda

Green Transformation Is a Global Long-Term Trend

$1.1tn Total investment in the global energy transition in 2022

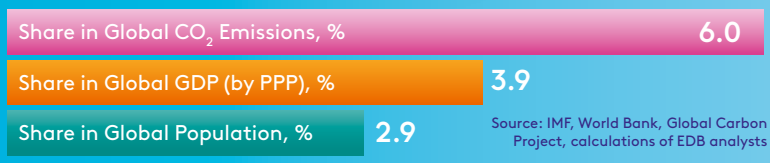
$4–6tn Annual investment required to complete the transition to low-carbon global economy

Opportunities for the economies of the Eurasian region

- Modernise industrial production facilities, infrastructure sectors
- Raise ESG finance from development institutions
- Improve competitiveness of goods and services in external markets

The Eurasian Region Contributes More to CO_2 Emissions than to the Global Economy

Eurasian region, consolidated indicators, 2021 (EAEU, Tajikistan, Uzbekistan):



Source: IMF, World Bank, Global Carbon Project, calculations of EDB analysts

9.9 tonnes/person Average population-weighted volume of CO_2 emissions in the Eurasian region (globally: 4.7 tonnes/person)

from $10bn to $6.5tn

Estimated cost of achieving carbon neutrality per country in the region

Pain Points of the Eurasian Region and Decarbonisation Opportunities

Energy

Increase hydro, nuclear, solar generation

Transport

Develop railway transport and low-carbon urban mobility

Industry

Improve energy efficiency

Urban Environment

Construct green buildings and infrastructure facilities

Amount of ESG Finance Grows Both Globally and in the Eurasian Region

5% ESG finance in the global bond market

more than 50% Climate finance in MDB portfolios in 2025–2030

more than $4.9bn Total issuance of ESG bonds in the Eurasian region

The Concept of the Eurasian Green Agenda

1. Unlocking the region's renewable energy and electrified transport potential
2. Establishing sectoral low-carbon development programmes
3. Creating a common carbon regulation incl. consistent methods used to monitor and register CO_2 emissions
4. Promoting government support incl. regulatory and tax exemptions for green bonds
5. Developing common regulatory standards for green finance
6. Coordinating the approaches within the international platforms

EDB Contribution to Sustainable Development of the Eurasian Region

- Collaborates with international organisations on climate issues
- Focuses on the expansion of green finance in the EDB member states
- Intends to include more green projects in its portfolio, raising their share from 12% to 25% by 2026
- Assesses investment projects for exposure to environmental and social risks
- Uses the EDB Technical Assistance Fund to reinforce and reaffirm sustainability components of the investment projects

Eurasian Development Bank

Vinokurov, E. (Editor), Albrecht, C., Klochkova, E., Malakhov, A., Pereboev, V., Zaboev, A. (2023) *Global Green Agenda in the Eurasian Region*. *Eurasian Region on the Global Green Agenda*. Reports and Working Papers 23/2. Almaty: Eurasian Development Bank.

Climate change brings about devastating consequences for the entire globe and is irreversible, so the green economy focuses on reducing greenhouse gas emissions and achieving carbon neutrality by 2050. Countries will only transition to the green economy smoothly if they use green and climate finance for projects generating positive environmental impacts, mitigating, and adapting to climate change. New national and international policies and incentives will identify priority investment targets, build investor demand and trust, and encourage initiators to launch green projects. This will promote the green finance market. If countries work together to coordinate low-carbon development activities, they will avoid excessive regulatory costs and internal trade barriers, deepen regional co-operation following the green economy, and improve the competitiveness of regional producers. In this Report, the authors attempt to gain insight into the current state and future prospects of the green agenda in the Eurasian region. It focuses on climate change issues and international development institutions' role in promoting a low-carbon future.

Keywords: green economy, climate, SDGs, ESG, green finance, green projects, green taxonomy, international trade, co-operation, Eurasian region, EAEU, Central Asia, Greater Eurasian Partnership.

JEL: Q01, Q54, Q56, O13, F15, F18, R11.

The electronic version of this Report is available on the Eurasian Development Bank website at https://eabr.org/en/analytics/special-reports/

Nikolai Podguzov
Chairman of the
Management Board,
Eurasian Development Bank

Introductory Remarks by Nikolai Podguzov

The world is moving towards green, low-carbon development, and it is important for our countries, organisations, and people to understand how our participation or non-participation will affect that movement. The countries of the Eurasian region can only reach sustainable social and economic development if they intend to mitigate adverse environmental impacts, prevent climate change, and adapt to its consequences. That will determine the competitiveness of their economies and businesses, as well as the wealth and well-being of their populations.

This report, prepared by the EDB, reviews the current state of low-carbon development in Eurasia, and suggests ways to support further green transformation of the EAEU+ region. The report concludes that if countries, international development institutions, private businesses, and the civil society are serious about the green agenda, then they need to work together.

The issue of climate investments is on the top of the green agenda, particularly for low- and middle-income countries, small economies, and countries most vulnerable to climate change, i.e., the majority of Eurasian countries. For example, sustainable transport infrastructure projects and wind, solar, and geothermal energy projects in Central Asia are often financed with grants and soft loans, because such projects have long investment cycles and are very capital-intensive, while some countries lack financial resources. Multilateral development banks can arrange syndicated loans, provide technical assistance, share the expertise required for feasibility studies, and offer risk guarantees. That is why countries should consider involving these banks in such projects. In 2021, major MDBs provided more than $81.7 billion of climate finance, of which $50.6 billion, or 62%, was channelled to low- and middle-income countries.

Investments alone, however, are not enough; regulation is equally important. Green taxonomies and emissions quota trading schemes in some countries will encourage green finance and cut greenhouse gas emissions; adopting a model green project taxonomy for the entire EAEU region will also help. Eurasia's emerging sustainable finance market needs more incentives to support both investors and businesses, including capital relief and tax benefits.

The EDB is eager to lead by example and advise on competencies to drive a green finance syndication for sustainable development in the Eurasian region, while following its own ESG strategy. The EDB is co-financing hydro, solar, and wind power station projects. It has already invested more than $700 million in green projects in the region, and intends to continue, focusing on green energy and energy efficiency. We hope for fruitful collaboration with the other international development institutions and the governments of the EDB member states. I have high expectations for such multilateral co-operation because it will resolve the region's long-standing environmental and climate problems, including those of the water and energy complex, industry, and the transport sector.

Summary

Global Green Agenda in the Eurasian Region

The green transformation is a long-term global trend shaping the social and economic development prospects for the whole world, including the countries of the Eurasian region (the EAEU member states, Tajikistan, and Uzbekistan). The green agenda intends to help adapt to climate change and decarbonise the economy by reducing greenhouse gas emissions and achieving carbon neutrality. **Neglecting climate challenges and initiatives comes at a price:** it drives up the cost of infrastructure adaptation projects, causes a decline in the international competitiveness of goods and services, and brings down the population's living standards. **The green agenda prioritises the technical and technological refurbishment** of Industry, Energy, and Transport. It improves energy efficiency, increases the competitiveness of goods and services, creates new sectors of the economy and new jobs.

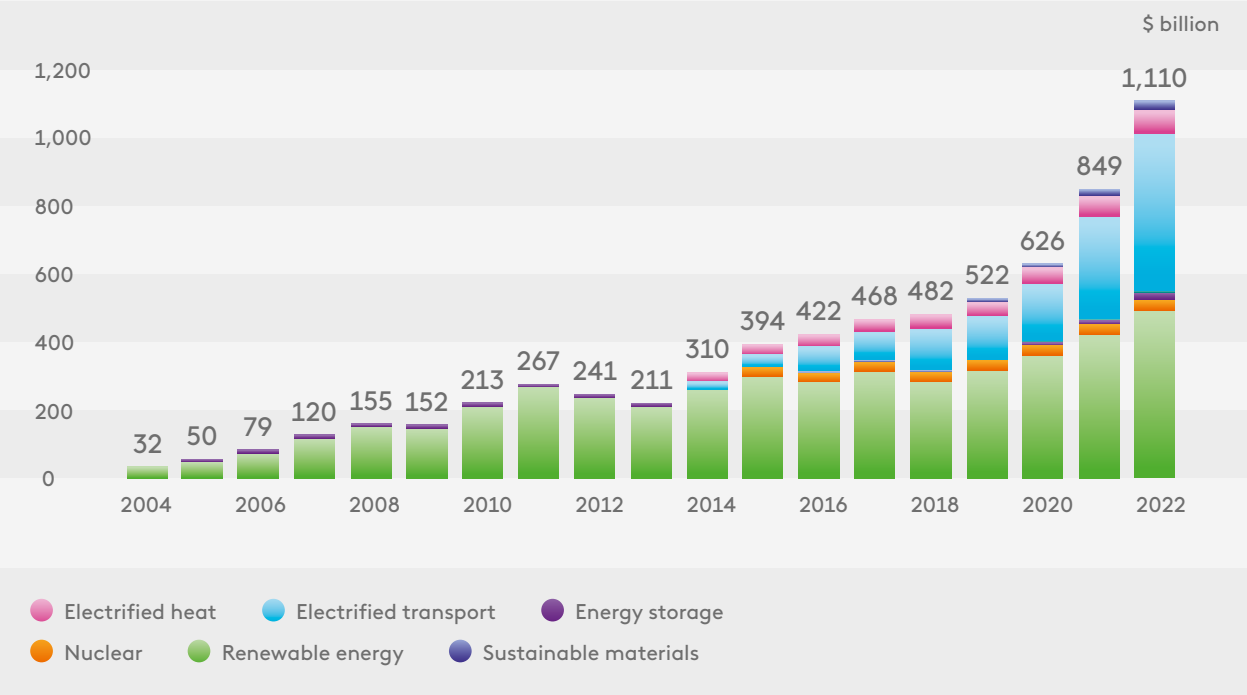
The green agenda is universal. The UN and other international organisations promote it as one of the key tools to ensure attainment of the Sustainable Development Goals (SDGs) and compliance with the Framework Convention on Climate Change, the Paris Agreement, and other initiatives. Individual countries set out their own green agendas, along with regions, cities, companies, banks, development institutions, business associations, and foundations. This modifies consumer preferences and behavioural patterns.

Ambitious climate goals will require global capital flows to be redirected from less critical items on the agenda. Projects with beneficial environmental and climatic impacts drive the transition to the green economy, spurred by green finance mechanisms.

Investments in the global energy transition exceeded $1 trillion in 2022, and became, for the first time ever, equal to fossil fuel production costs. Renewable energy sources and electric transport attracted the largest investment capital (see Figure A).

Green projects, environmentally friendly technologies, and digital solutions to decarbonise and protect the environment are very capital-intensive. The 27th Conference of the Parties

↓ Figure A. Investments in Energy Transition and Climate Technology

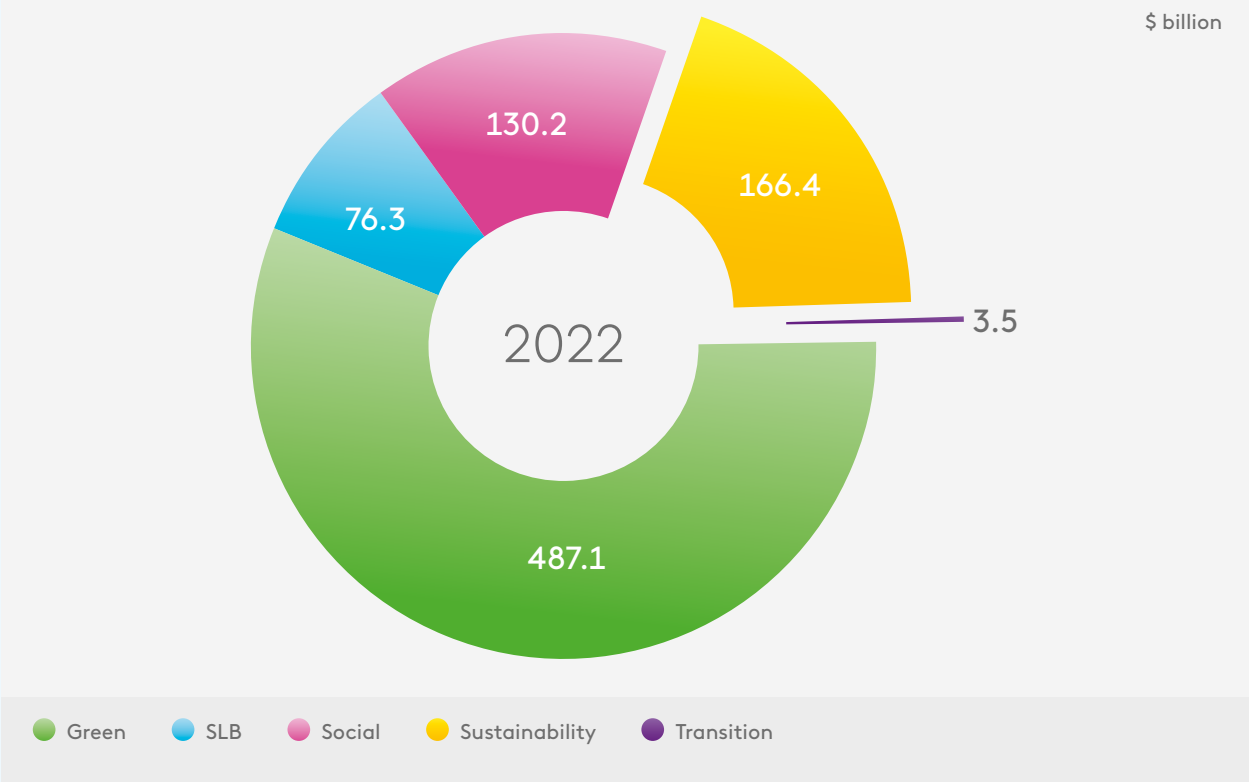


Source: BloombergNEF

of the UN Framework Convention on Climate Change resolved that it will take about $4 trillion of investment in RES per year until 2030 to achieve net zero emissions by 2050, and that the global transition to a low-carbon economy will require a massive capital inflow of at least $4–6 trillion per year. **Climate-related investment is particularly relevant for average- and below-average income countries.**

The ESG finance accounts for about 5% of the global bond market, with the green segment comprising more than half of all ESG bonds (see Figure B). Demand for green debt instruments exceeds supply. That is why some markets have adopted a "greenium" ("green discount"). **The ESG finance has excellent expansion prospects in the Eurasian region.**

↓ Figure B. ESG Bonds: Green, Social, Sustainability (GSS+)



Source: Climate Bonds Initiative.

Regions have had extensive experience with the green agenda. Examples include interstate mechanisms deployed in the EU and ASEAN member states to accelerate decarbonisation and facilitate green growth within those two macroregions over the medium and long term. The European Green Deal is the most sweeping regional green transformation programme. Adopted in 2019, it is intended to make Europe carbon neutral by 2025, in particular, to mobilise massive investments in new technologies, increase the cost of carbon dioxide emissions, provide additional support to vulnerable populations and carbon-intensive regions, and introduce regulations to prevent "emission leakages" (cross-border carbon tax).

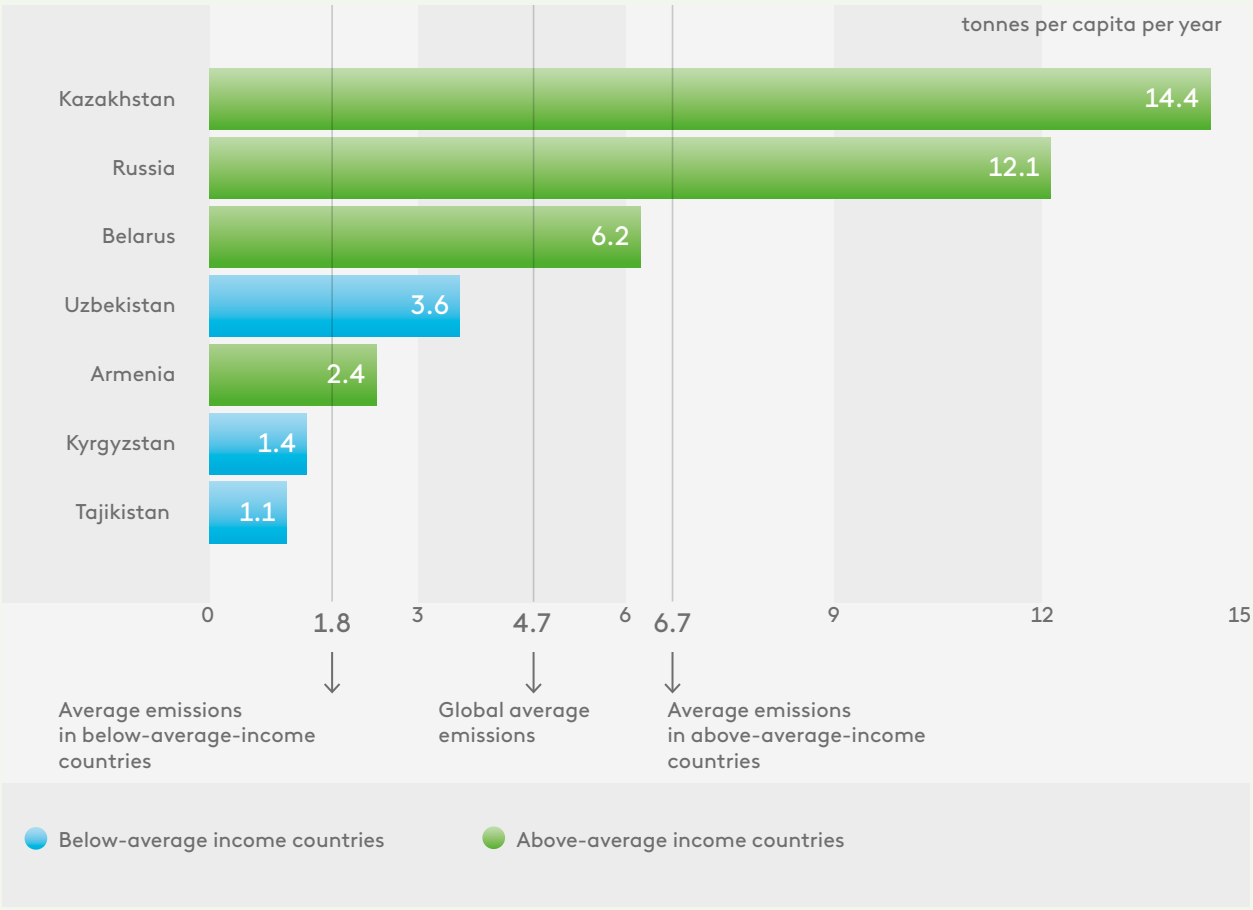
Multilateral development banks (MDBs) will become increasingly relevant for the green agenda. In 2021, MDBs provided more than $81.7 billion of climate finance, of which $50.6 billion or 62% was channelled to low- and middle-income countries for climate mitigation and adaptation.

Aside from financing, the MDBs also help develop climate projects and assess climate risks and opportunities. Green infrastructure projects produce significant environmental and social impacts but often generate minimal yields and expose private investors to higher risks. The MDBs can mitigate risks or offer guarantees for their reduction to encourage private investment in green projects. **Climate finance projects are expected to continue dominating MDB portfolios.** The ADB and the AIIB are going to allocate at least 75% and 50% of their total financing to climate-related projects by 2030 and 2025, respectively.

Eurasian Region in the Global Green Agenda

The Eurasian region contributes more to global carbon dioxide emissions than to the global economy. Its countries accounted for 6% of global emissions in 2021, while their combined shares of the world's GDP and population were 3.9% and 2.9%, respectively. The situation differs from country to country. Russia is a net emitter of carbon dioxide. Its share in total global emissions is 4.7% due to the largest energy and industrial production sectors in the region. It is followed by Kazakhstan with 0.7% of the global emissions due to massive coal power generation. Those countries also have high per capita carbon dioxide emissions per year (see Figure C): 14.4 tonnes in Kazakhstan and 12.1 tonnes in Russia. Kyrgyzstan and Tajikistan have the lowest per capita emissions (1.4 tonnes and 1.1 tonnes, respectively) due to their high share of hydro power generation. In 2021, the average population-weighted volume of carbon dioxide emissions was 9.9 tonnes per capita per year in the region. It is much higher than the global average (4.7 tonnes per capita per year).

↓ Figure C. Carbon Dioxide Emissions in the Eurasian Region, 2021

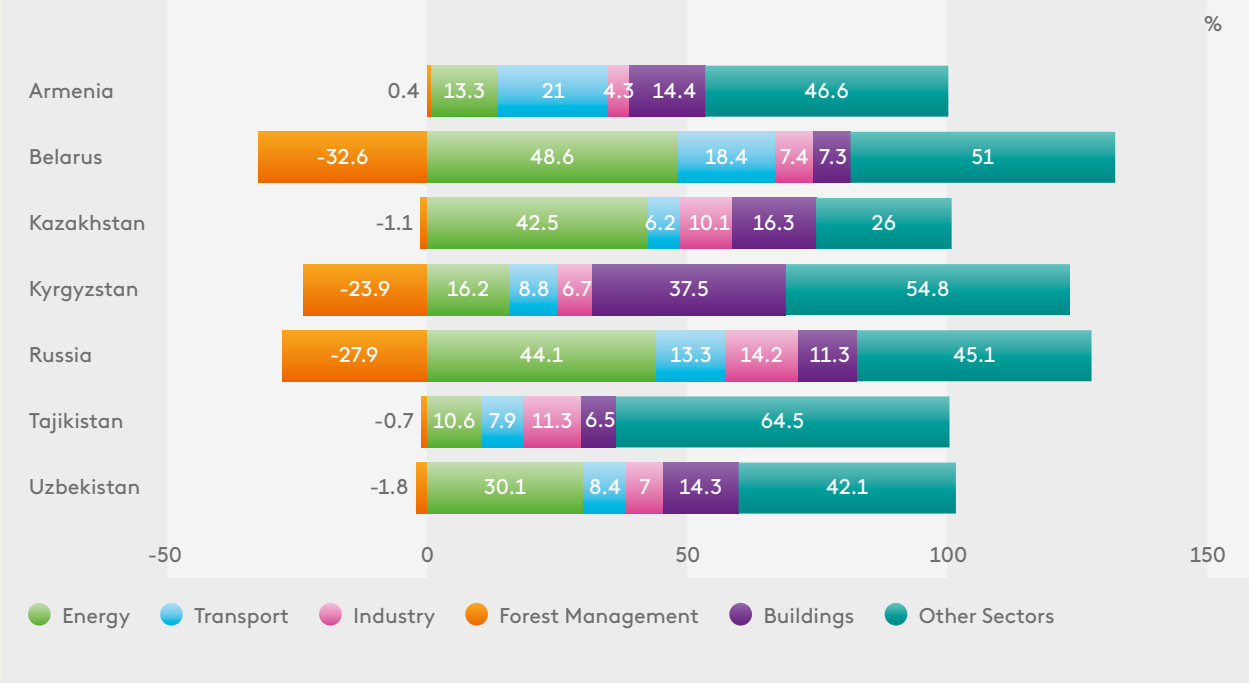


Sources: Global Carbon Project 2021, calculations of EDB analysts

Energy, Agriculture, Industry, Transport, and Buildings produce the most greenhouse gas emissions in the countries of the region. In 2019, electricity and heat generation accounted for 42.5% of total greenhouse gas emissions, and even higher in Belarus (48.6%) and Russia (44.1%) (see Figure D). Agriculture remains a major polluter in several countries of the region: 40.4% of total emissions in Kyrgyzstan, 37.3% in Tajikistan, and 30.7% in Belarus. Transport-related emissions are significant in Armenia (21%) and Belarus (18.4%). Kyrgyzstan and Kazakhstan largely produce emissions associated with operating buildings and consuming electricity generated by coal-fired power stations (37.5% and 16.3%, respectively). In Russia, fugitive emissions account for 28.2% of total emissions due to its extensive extractive industry.

Climate change and the related social and economic transformation expose the countries of the Eurasian region to certain risks (see Figure E). Physical risks are directly linked to climate change. They cause more frequent droughts, floods, landslides, soil erosion, and other hazardous natural phenomena, consequently damaging the economy. Transition risks are related

↓ Figure D. Breakdown of Greenhouse Gas Emissions



Sources: CAIT Climate Data Explorer, calculations of EDB analysts

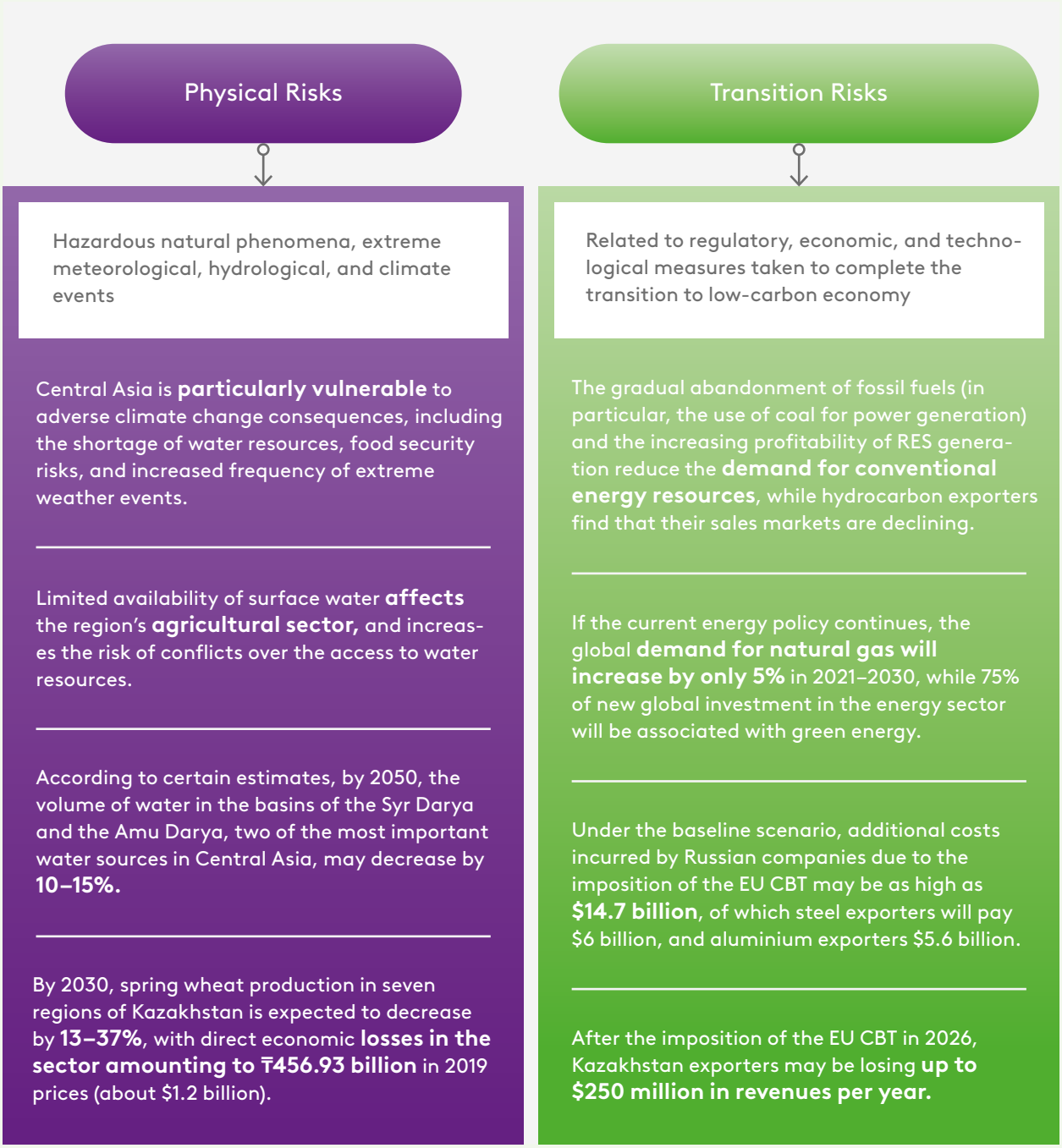
to regulatory changes in global markets. They encourage the transition to a low-carbon economy, but also raise additional costs for the businesses and consumers in the Eurasian countries due to low investment in the decarbonisation of their national economies. **Transition and physical climate risks go hand in hand over the long term.** Intensive economy decarbonisation means higher transition risks and lower potential physical risks. Conversely, a delayed transition to a low-carbon economy can magnify future physical risks, increase the frequency of natural disasters, melt permafrost rock, raise global sea levels, and cause other climate changes — even despite the reduction of greenhouse gas emissions.

The Eurasian countries adopted Emissions Reduction and Climate Change Adaptation Action Plans[1]. The region plans to achieve carbon neutrality by 2060 in Kazakhstan (estimated cost: $665 billion) and Russia (estimated cost: up to ₽480 trillion, or about $6.5 trillion), and by 2050 in Kyrgyzstan (estimated cost: about $10 billion). Armenia plans to commit to achieve carbon neutrality by 2050, while Uzbekistan intends to achieving carbon neutrality in the energy sector by 2050. **In addition, the EAEU member states are developing and introducing national low-carbon concepts, programmes, and strategies.** In 2021, Russia adopted the *Strategy for Social and Economic Development of the Russian Federation with Low Greenhouse Gas Emission Levels until 2050*. In 2023, Kazakhstan approved the *Strategy for the Attainment of Carbon Neutrality until 2060*.

The national carbon unit/credit markets expand and thus reduce greenhouse gas emissions. So far, Kazakhstan has the most advanced carbon unit exchange trading system in the region; it was launched in 2013, and carbon credits are traded there at an average price of $1 per tonne. The quota trading system in Kazakhstan covers more than 220 industrial enterprises with total annual emissions of more than 20 kt CO_2e. Russia piloted a similar system in Sakhalin Region. Subject to international best practices, the EAEU member states **should work together to create national carbon unit markets and potentially merge them into a common regional market.** Likewise, they could develop a **pan-Eurasian system** for carbon units/credits and cross-border carbon taxation. A Eurasian **carbon tax** will incentivise the industry sector to decarbonise faster, especially because the trading partners will be tightening climate policies. This will reduce greenhouse gas emissions. A national or regional carbon tax cannot discriminate against any EAEU country, for example, by creating trade barriers, and it should be adequate enough to allow channelling additional resources to green projects.

[1] Nationally Defined Contributions (NDCs) adopted under the Paris Agreement on Climate Change.

↓ Figure E. Climate Risks of the Countries of the Eurasian Region

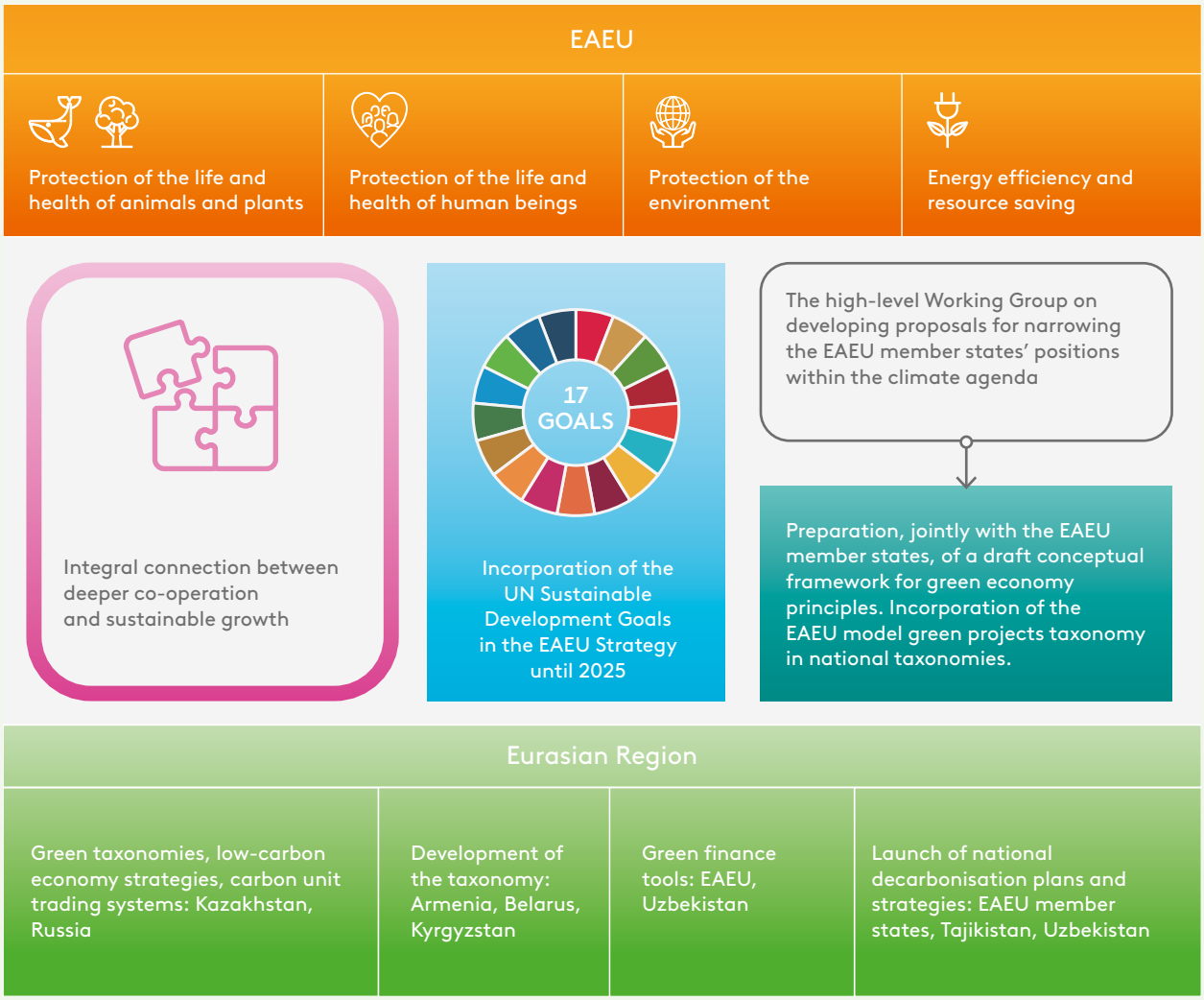


Source: EDB

The EAEU member states **have to tackle green taxonomies**, a very important challenge, and they are in the pipeline (see Figure F). Kazakhstan and Russia have already adopted such taxonomies. Kyrgyzstan and Belarus are devising a sustainable development project taxonomy and a green finance taxonomy, respectively. The **EAEU model taxonomy created in 2023** will make it considerably easier to design national green taxonomies. This will **accelerate and harmonise the green transformation within the Eurasian Economic Union.**

Countries may transition differently to the green economy, driven by the sectoral structure of emissions and investments in the green transformation. For example, Kyrgyzstan, Russia, and Tajikistan have abundant water and energy resources, so they might move towards hydropower engineering in their green transformation. Armenia and Uzbekistan can source their green transformation of the economy from solar power engineering. Electrification of railways, in particular, within the Eurasian Transport Network, will reduce the carbon footprint of the entire region, especially in container shipping, and may well advance green mobility.

↓ Figure F. Green Agenda Issues and Approaches in the EAEU



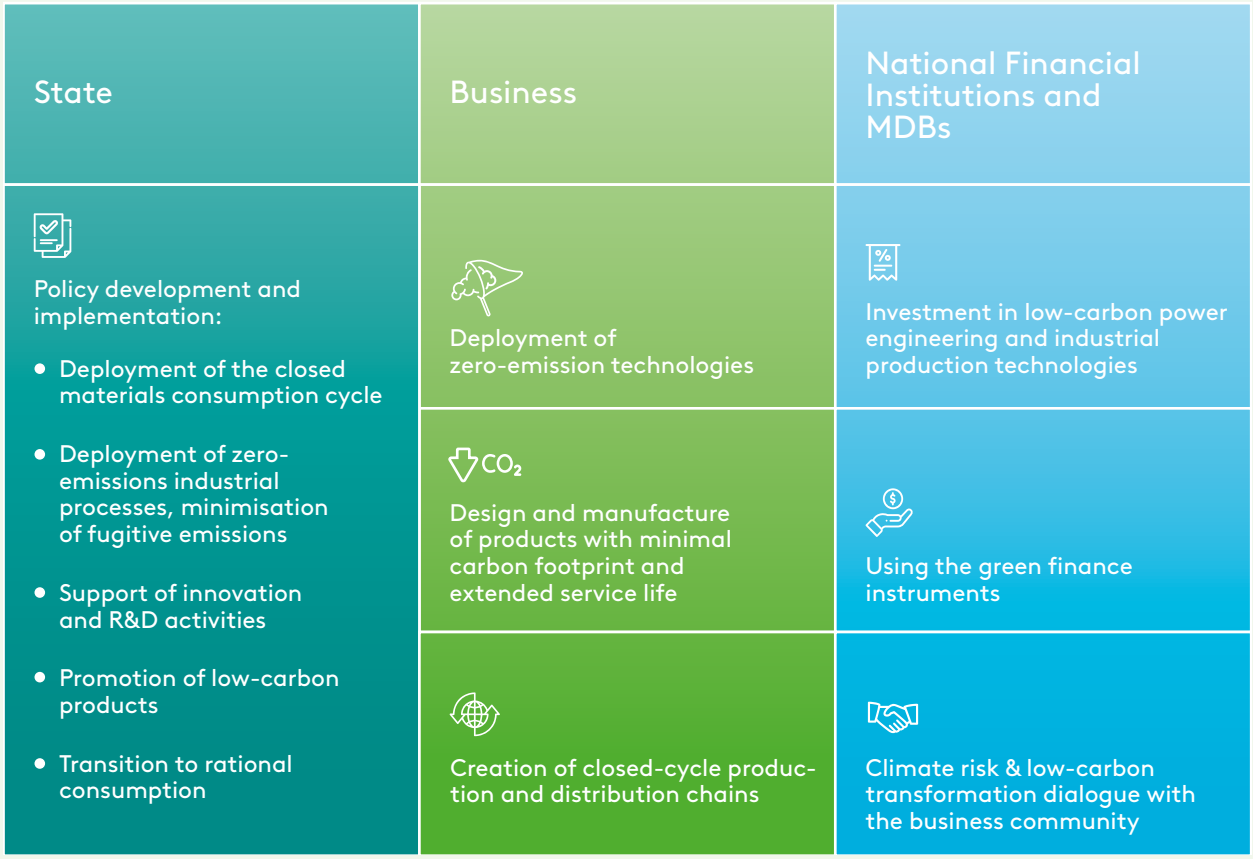
Source: EDB

Nuclear power engineering is a vital energy transition driver in the countries of the region. This industry is included in the green project taxonomy in Russia, the EAEU model taxonomy, and has been globally recognised as green (for example, see the EU taxonomy) despite of all the related controversies. New nuclear power units are in the pipeline in Armenia and Belarus. Uzbekistan is getting ready to build its first nuclear power station.

Ambitious climate goals can only be achieved once coal is no longer used as a fuel. Coal generation still largely contributes to total greenhouse gas emissions, and accounts for up to 80% of total capacity in some countries of the region. Coal combustion is the main source of greenhouse gas emissions in Kazakhstan (65.4%). Countries also need to make sure that individual households use alternative sources of energy.

Decarbonisation of Energy and Transport is a priority for the countries of the region. In their climate efforts, they are supposed to concentrate on RES, primarily hydropower generation, and energy-efficient technologies. Improvement of energy efficiency is key to reducing carbon intensity, and is part of the Industry, Agriculture, Residential Construction, etc. green strategy (see Figure G). In addition, the countries of the region are embracing electric transport and the development of related infrastructure. There are also plans to increase the electric vehicle pool to 100 thousand by 2030 in Armenia, and by 2025 in Belarus. Russia may reach 1.4 million domestic and foreign electric vehicles by 2030.

↓ Figure G. Green Agenda Issues and Approaches in the EAEU



Source: EDB.

The ESG finance market in the Eurasian region is relatively small, but it is rapidly evolving: in 2022, ESG bonds issuance totalled over $4.9 billion. For example, Ameriabank CJSC, an Armenian bank, sold two green bond issues for €42 million in 2020 and about $14.4 million in 2022. In 2022, Belarus debuted the issue of sovereign green bonds for about $70 million. Kazakhstan issued $536 million worth of ESG bonds in 2020–2022. Kyrgyzstan estimates its ESG bonds issuance at $330 thousand. Meanwhile, Russia issued ESG bonds totalling about $3.3 billion at Moscow Exchange. In 2021, Uzbekistan issued $870 million worth of government bonds to finance the SDGs.

The laws of the countries of the Eurasian region do not benefit or incentivise the issuers of ESG debt instruments or their investors. Regional market players will welcome certain support measures, for example, subsidised coupon payments on green bonds / subsidised interest payments on green loans, tax benefits for investors, reduced risk weights for green bondholders, lower reserve requirements.

The MDBs will have to coordinate their policies to attract investment capital to the region. Beside the Eurasian Development Bank (EDB), other major MDBs operate in the Eurasian region, including the World Bank, the European Bank for Reconstruction and Development, the Asian Development Bank, the Asian Infrastructure Investment Bank, the Islamic Development Bank, etc. In 2021, Central Asia countries received only 4% of the total climate finance provided to low- and middle-income countries.

To promote the regional green agenda, the EDB (see Box A) **and other MDBs** may help **develop, introduce, and improve sustainable finance and ESG standards**, include more sustainable development projects in their portfolios, **expand the carbon unit market**, and **share best ESG research and sustainable finance practices.**

Box A.
The EDB facilitates sustainable development of the Eurasian countries

- collaborates with the EEC, the UNDP, and other international organisations on climate issues;
- focuses on the expansion of green finance in its member states in line with its 2026 Strategy;
- intends to include more green projects in its portfolio, raising their share from 12% to 25% by 2026 (for example, by investing at least $400 million in the Central Asia water and energy complex), and increases RES financing to $1 billion by 2024;
- assesses investment projects for environmental and social risks, including Eurasian megaprojects, such as the Eurasian Transport Network, the Eurasian Distribution Network, etc.;
- uses the EDB Technical Assistance Fund to reinforce and reaffirm sustainable development elements in the Bank's investment projects.

The countries of the Eurasian region could share their views on climate-related issues at international climate regulation forums, but only if they work together to forecast climate risks, adapt, and apply international GHG assessment practices and standards. This will avoid excessive regulatory costs and internal trade barriers, deepen regional co-operation in accordance with the green economy principles, and improve the competitiveness of regional producers. The countries can collaborate accordingly to develop the concept of the **Eurasian Green Agenda**, an action programme within the EAEU and the Greater Eurasian Partnership.[2] It will cover the following work streams:

(1) make the most of the natural advantages that the Eurasian countries have in hydro, nuclear, and solar power generation, railway electrification, intensive afforestation, etc.; collaborate and co-operate accordingly to benefit in the long term;

(2) create a common carbon regulation system within the EAEU, i.e., make sure that the countries have consistent greenhouse gas emissions monitoring and recording methodologies, national taxonomies, green project methodologies and related technical regulations; establish a common carbon unit registration and circulation system; impose an internal carbon tax, and further create a common greenhouse gas emissions trading scheme;

(3) provide government support and encourage the green transformation of individual enterprises in various economic sectors; attract investments in green projects, including through MDB-financed projects;

(4) develop industry-specific Eurasian low-carbon development programmes (Energy, Transport, Industry, Agriculture, Urban Development); make sure common markets for energy resources and transport services within the EAEU comply with climate commitments; expand industrial green technology co-operation, etc.;

(5) develop common regulatory standards in sustainable finance (GSS+), in particular, harmonise national regulatory frameworks and offer regulatory and tax incentives and interest rate (coupon rate) subsidies, thus stimulating investor appetite for green bonds, subject

[2] The Greater Eurasian Partnership is understood as a network of free trade and economic cooperation agreements between the EAEU and other countries/associations.

to MDB expertise, EU and ASEAN experience, the EAEU model taxonomy, and ESG national and international practices;

(6) coordinate the approaches of the countries within the international platforms and voluntary climate commitments.

The proposed **Eurasian Green Agenda framework action programme** could coordinate the realization of the green agenda, covering regions, countries, and the entire continent (through the Greater Eurasian Partnership). This would **promote the Eurasian region on the global green agenda.**