

Prospects for Decarbonization and Sustainable Development Goals in the New Context in Russia

Georgy Safonov

PhD, Economist

Principal Scientist, Head of Sustainable Markets and Society Unit, European Forest Institute

Russia, renowned for its vast natural resources, expansive territory, substantial human capital, and extensive international connections, has historically held a noteworthy position in the global economy. However, since February 2022, the nation has been undergoing significant socio-economic shifts spurred by Western sanctions and allied actions, including business boycotts, investor withdrawals, and other punitive measures. The new development context leads to concerning trends, such as the militarization of the economy, a redirection of state financing away from civilian sectors, technological degradation, a growing shortage of labor, mounting inflation expectations, among others. The policies aimed at sustainable development, decarbonization, energy efficiency improvement, and switch to green technologies have been mostly ineffective in last decades. Though climate change mitigation measures have the potential to deliver significant social, economic, and environmental benefits, they may not be achievable in the foreseeable future in Russia.

Key words: Planning Policy, Environment and Development, Sustainability, Climate, Global Warming

JEL classification codes: O210, Q56, Q540

1. Recent trends of socio-economic development

Russia holds a notable position in the global economy, ranking as the 11th-largest economy by nominal GDP, the 6th-largest by purchasing power parity (PPP) according to the International Monetary Fund (IMF). The country's expansive geography plays a crucial role in shaping its economic landscape, as the nation holds a significant portion of the world's natural resources. Widely regarded as an energy superpower, Russia boasts the world's largest natural gas reserves, the second-largest coal reserves, the eighth-largest oil reserves, and the largest oil shale reserves in Europe. Its prominence in the energy sector is further emphasized by its position as the leading producer and exporter of natural gas, oil, and coal.

After February 2022, Russia has encountered severe sanctions and boycotts from Western nations and their allies, which affected the socio-economic situation in the country. In November 2022, reports surfaced indicating that Russia had officially entered a recession. This conclusion stemmed from data released by the Federal State Statistics Service (Rosstat), which revealed a consecutive decline in the national GDP for the second quarter in a row. IMF reported that after high (5.6%) growth of GDP in 2021, it dropped down by 2.1% in 2022 and is expected to grow slowly at the rate about 1% in 2024-2028 (Table 1).

Generally, the following trends in economic development have been revealed in the last two years:

- Fundamental restructuring of the economy, stronger focus on military sectors, expansion of state budget spending on military, police, and related activities. With an estimated 40% of the federal state budget earmarked for these purposes between 2024 and 2026¹, it reflects a pronounced emphasis on defense and security.
- The implementation of extensive and unparalleled sanctions, including secondary measures, targeting Russia has significantly impacted various aspects such as exports and imports of specific goods, financial transactions, access to capital, transportation, and more. Additionally, there has been a notable withdrawal of foreign entities from Russia, including prominent players in the energy, oil and gas sectors, and service industries.
- The "turn from the West to the East" involving a strategic redirection of exports from traditional Western (notably European) markets to Eastern countries, particularly China, India, and Turkey. This shift encompasses various commodities, including oil, gas, coal, metals, timber, and other natural resources. It requires costly and urgent solutions in transportation, logistics, insurance, financing, findings new markets and partners, etc.
- The demographic situation has been worsening, characterized by a pronounced trend of declining total population, aging demographics, losses incurred in the conflict in Ukraine, and significant emigration from Russia, among other factors.
- The labor force in Russia is experiencing a dramatic

¹Russian Federal Law #540 of 27.11.2023.

decline, with the unemployment rate reaching historically low levels. There is a shortage of workers, as recent estimates suggest that the economy needs approximately 4.8 million more people, which accounts for over 6% of the total labor force. The “military” sectors are competing with “civil” sectors for labor by increasing salaries.

- Inflation in Russia is notably high, with the official inflation rate reaching 7.42% in 2023², while the food inflation, in particular, is estimated to be much above 10%. High inflation expectations are exacerbating the situation, prompting an increase in the basic credit rate set by the Central Bank, which reached 16% by the end of 2023. Consequently, this elevated rate is making access to loans nearly unattainable for commercial companies, while the state owned and controlled companies have access to the federal budget spendings.
- There has been a notable deterioration in capital assets, particularly evident in infrastructure such as heat and water networks, electricity grids, and transportation systems. Amortization of assets has reached alarming levels, with rates as high as 70-90 percent and even more in certain sectors

and provinces³. Consequently, this trend is contributing to a growing number of accidents and failures in these critical infrastructure networks.

- Technological degradation is becoming increasingly pronounced due to limited access to new technologies. Sanctions have restricted direct supplies of equipment, materials, and services, impeding the adoption of advanced technological solutions and inhibiting technological progress.
- Energy efficiency improvement programs have halted in many Russian regions due to insufficient financial support and low priority from the government. Similarly, renewable energy programs face similar challenges. As a result, fossil fuels continue to dominate the energy balance in the country and energy intensity of GDP has been rising.

Under such circumstances, there are significant risks to the further socio-economic development and environmental sustainability. The UN Sustainable Development Goals (SDGs), to which Russia committed in 2015, along with the Paris Agreement under UNFCCC, necessitate comprehensive monitoring and policy-making across numerous socio-economic development aspects.

Table1 Indicators of economic development in Russia.

Indicator	Scale	2021	2022	2023 (f)	2024 (f)	2025 (f)	2028 (f)
GDP growth rate	%, y/y	5,6	-2,1	2,2	1,1	1,0	1,0
GDP, current prices	Billion USD	1837	2244	1862	1904	1928	1987
GDP, PPP, international dollars	Billion USD	4552	4770	5056	5226	5382	5853
GDP per capita, current prices	USD	12618	15646	13006	13324	13520	14046

Source: International Monetary Fund, World Economic Outlook Database, October 2023. Actual data for 2021-2022, IMF forecasts for 2023-2028.

2. SDGs in Russia

Russia has agreed on implementing actions related to 17 SDGs and reporting on over 240 sustainability targets by 2030. However, not all these targets are currently being addressed by the Russian government. According to Rosstat, only half of these targets are included in the list of national indicators for further work⁴. This suggests that while there is a commitment to the UN SDGs, there may be challenges or limitations in fully addressing and reporting on all of them.

Over the past decade, the Russian government has introduced several initiatives aimed at enhancing socio-economic and environmental performance, with the goal of improving the implementation of SDGs. Since 2014, the federal program “Protection of the Environment”⁵ has been in effect with the primary objective of reducing emissions of hazardous pollutants that affect human health and the environment by twofold, as well as the remediation of the most dangerous sites of accumulated pollution and the ecological improvement of water bodies. One of the key priorities of the environmental policy was determined as

²The Ministry of Economy, Review of prices in 2023 : https://www.economy.gov.ru/material/file/5fc270b66b293af3e9e329590decfaa/o_tekushchey_cenovoy_situacii_12_yanvarya_2024_goda.pdf

³Rosstat (2024), Capital assets [Osnovnye fondy]. <https://rosstat.gov.ru/folder/11189#>

⁴Rosstat, SDGs protal: <https://eng.rosstat.gov.ru/sdg>

⁵The Governmental Decree #326 on adoption of the state programme of the Russian Federation “On protection of the Environment”, 15 April 2014 (with revisions and additions as of 25 November 2023).

development of the circular economy.

In 2019, the national project "Ecology" was initiated with the objective of achieving strategic environmental goals by 2024⁶. This project encompasses various federal sub-projects, including "Clean country", "Integrated Municipal Waste Management System", "Infrastructure for Managing Hazardous Waste Classes I and II", "Clean air", "Biodiversity Conservation and Ecotourism Development", "Forest Conservation", "Protection of Unique Water Bodies", "Comprehensive Environmental Quality Monitoring" and others.

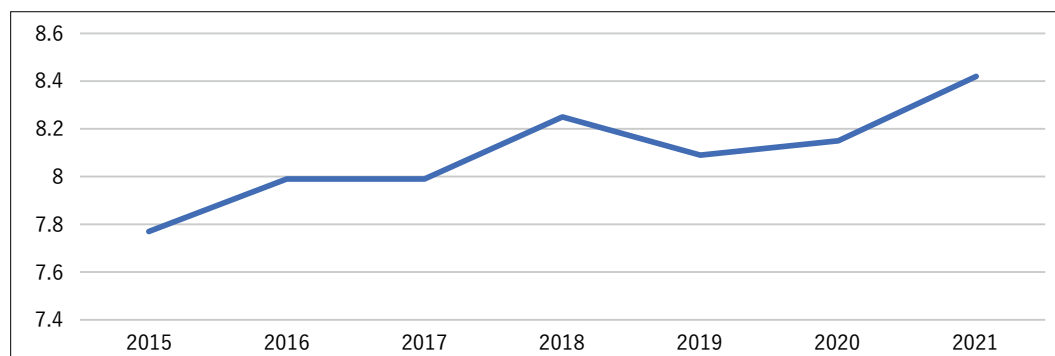
In August 2020, the first national plan for adaptation to climate change was adopted for the period 2020-2022⁷. This document outlined federal and subnational measures for socio-economic development aimed at reducing the vulnerability of the population, economy, and natural objects to the impacts of climate change, as well as leveraging favorable opportunities presented by these changes. In March 2023, the government approved the second adaptation plan, extending until 2025.

Some achievements regarding SDGs have been observed in Russia. According to Rosstat, between 2015 and 2021, the

country reduced the carbon intensity of energy use from 80.9 to 75.1 gCO₂/MJ. Additionally, the share of renewable energy sources increased from 7.0% to 8.8%. CO₂ emissions per unit of value added declined from 1.36 to 1.28 gCO₂/USD. Furthermore, the annual average concentration of PM10 in the atmosphere of urban areas decreased from 9.49 to 8.88 mg/cubic meter.

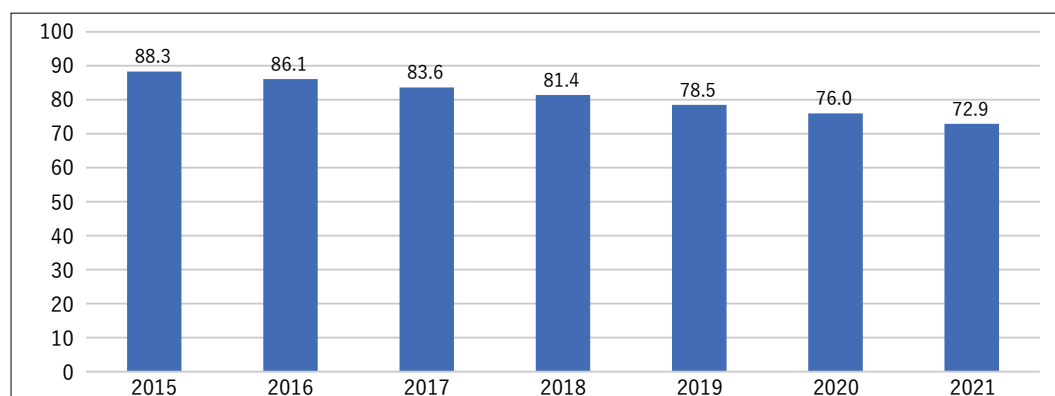
At the same time, some SDG indications demonstrated worsening trends during this period. The use of fresh water, compared with available water reserves, increased by 4%⁸. The energy intensity of GDP rose by 8.4%⁹, suggesting a higher energy consumption relative to economic output (Figure 1). Proportion of population with primary reliance on clean fuels and technologies for cooking decreased by 17%, which means rising human health risks from air pollution (Figure 2). CO₂ emissions per capita increased by 11% from 2015 to 2022¹⁰, indicating a rise in individual carbon footprints. The fossil fuel subsidies per unit of GDP increased and reached 420 billion USD in 2022¹¹ (third in the world after China and USA), indicating a greater reliance on subsidies for fossil fuel industries relative to economic output.

Figure1 Energy intensity of GDP in Russia, TES/GDP (MJ per 2017 USD PPP).



Source: IEA (2022), World Energy Balances. Energy intensity (SDG 7.3.1) database.

Figure2 Proportion of population with primary reliance on clean fuels and technologies for cooking in Russia, total (%).



Source: WHO (2024) <https://www.who.int/data/gho/data/themes/air-pollution/household-air-pollution#>

⁶Ministry of Natural Resources and Environment of Russia, Passport of the national project "Ecology", 21.10.2023.

⁷The Governmental Decree #3183-r on adoption of the national plan of the first stage of measures on adaptation to climate change, 25 December 2019.

⁸Rosstat (2024), SDGs indicators.

⁹IEA (2022), World Energy Balances.

¹⁰European Commission (2024), Emissions Database for Global Atmospheric Research.

¹¹IMF Working Papers (2023), IMF Fossil Fuel Subsidies: 2023 Update.

However, since 2022 many official statistics in Russia are not published, e.g. foreign trade figures, energy data, and pollution. Furthermore, some of the reported data, such as the industrial production, consumption and exports, inflation rate, and others, are viewed with skepticism, casting doubt on their accuracy and reliability. This situation has created challenges in assessing the impacts of socio-economic policies and strategies implemented by the Russian government in relation to SDGs.

3. The low carbon development policy

Historically, Russia played an important role in formation of the international climate change mitigation policy. In early 1970s Soviet academician Mikhail Budyko presented a new theory of global warming and forecasted dangerous impacts of climate change, which became a starting point for global scientific research of the fundamental drivers of the increase of CO₂ concentration in the atmosphere in 1970-1980s, actively supported by USSR, USA, European countries, Japan, and others. The findings of these studies led to establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988, issue of the IPCC First Assessment Report in 1990, and adoption of the UN Convention on Climate Change (UNFCCC) in 1992.

Historically, Russia has played a significant role in shaping international climate change mitigation policies. In the early 1970s, Soviet academician Mikhail Budyko introduced a modern theory on global warming and forecasted the potentially hazardous impacts of climate change. This theory served as a catalyst for extensive global scientific research into the fundamental drivers behind the rise in atmospheric CO₂ concentrations during the 1970s and 1980s. This research received active support from the USSR, USA, European nations, Japan, and others countries. The insights gained from these studies ultimately led to the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988, the

publication of the IPCC's First Assessment Report in 1990, and the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992.

Russia made significant contributions to the development of the Kyoto Protocol to the UNFCCC in 1997 and its entry into force in 2005. This landmark agreement introduced novel approaches to coordinating international efforts to combat climate change, including the establishment of emission quotas for Annex B Parties, the creation of the first global carbon market, and the implementation of carbon offset projects, among others. However, Russia's commitment under the Kyoto Protocol was non-ambitious, with a target of maintaining emissions at 100% of 1990 levels during the 2008-2012 commitment period, while actual emissions had already decreased by over 50% by the end of the 1990s. Russia's participation in the "Kyoto" flexibility mechanisms was also relatively modest. Furthermore, the country opted not to undertake any quantitative commitments on emission control beyond 2012 (the second commitment period under the Protocol).

In the Paris Agreement, adopted in 2015, Russia committed to "a reduction in greenhouse gas emissions by 2030 to 70 percent relative to the 1990 level"¹². However, this target implies that emissions could potentially increase by over 40% above the 2015 level by 2030. Despite declaring intentions to decrease emissions, Russia has not shown any success in doing so in the post-2015 period. According to the latest national GHG inventory, from 2015 to 2021, emissions increased across all sectors, including fuel combustion (+2%), fugitive methane emissions (+20.5%), industries (+13.8%), agriculture (+9.7%), and waste (+13.8%), totaling a 6.1% rise, while carbon sequestration in the land use, land-use change, and forestry (LULUCF) sector decreased by 13.1% during the same period. Consequently, the overall net emissions increased by 13.8%, highlighting a significant challenge in meeting emission reduction targets (Table 2).

Table 2 GHG emissions in Russia, 2015-2021 (MtCO₂e/year)

Emission source	2015	2016	2017	2018	2019	2020	2021	Change from 2015 (%)
Energy-fuel combustion	1420	1414	1435	1472	1451	1377	1449	+2,0
Energy-fugitive emissions	191	192	202	217	232	217	230	+20,5
Industrial processes	228	228	243	252	246	254	260	+13,8
Agriculture	111	114	115	115	116	119	121	+9,7
Land use, land-use change and forestry (LULUCF)	-583	-615	-603	-577	-551	-558	-507	-13,1
Waste	83	85	88	89	91	94	97	+15,9
Total emissions (without LULUCF)	2033	2034	2083	2145	2137	2061	2157	+6,1
Total emissions (with LULUCF)	1450	1419	1480	1568	1586	1504	1650	+13,8

Source: UNFCCC, Russian Federation. 2023 National Inventory Report (NIR). <https://unfccc.int/documents/631719>

¹²Nationally determined contribution (NDC) of the Russian Federation as part of the implementation of the Paris Agreement of December 12, 2015. https://unfccc.int/sites/default/files/NDC/2022-06/NDC_RF_eng.pdf

Such a trend towards rising carbon emissions may appear contradictory given recent policies and initiatives aimed at enhancing energy efficiency, technological modernization, and the gradual expansion of renewable energy utilization. President D. Medvedev set a goal in 2008 to reduce the energy intensity of GDP by 40% by 2020 compared to 2007 levels¹³. In December 2010, the State program on energy saving and energy efficiency improvement by 2020 was introduced, targeting an annual reduction of GHG emissions by 409 MtCO₂e by 2021¹⁴. However, in 2013 the program underwent a revision and was rebranded as "Energy Efficiency and Development of the Energy Sector,"¹⁵ signaling a notable shift away from energy efficiency objectives. The provincial energy-saving initiatives were drastically overhauled, with much of the funding diverted towards alternative goals. Eventually, the Ministry of Energy reported that the program's objectives were not met, with energy intensity only decreasing by approximately 15% by 2020. The ambitious objectives were deferred to the longer-term future: a new State program with the same title was adopted in 2023, aiming to achieve a 35% reduction in the energy intensity of GDP by 2035 compared to 2019 levels¹⁶. Many experts harbor serious doubts regarding the feasibility of achieving the new goals within the current circumstances in Russia.

Another significant strategic initiative of the late 2000s involved the expansion of renewable energy sources (RES). In 2009, the government adopted a document outlining targets for the use of new renewable energy sources by 2020, aiming to reach 4.5% of total electricity production in Russia¹⁷. However, according to the Russian Renewable Energy Development Association, the share of renewable energy sources (excluding large hydro) in total electricity generation only reached 1.1% in 2023¹⁸. Once again, the most ambitious target was set for the longer term: by 2040,

RES should constitute 10% of the energy balance, as announced by Deputy Prime Minister A. Novak in June 2021¹⁹.

In October 2021, President V. Putin declared the target of achieving carbon neutrality in Russia not later than by 2060²⁰. At the same time, the government adopted the Strategy for socio-economic development of the Russian Federation with low emissions of greenhouse gases up to 2050²¹. This Strategy outlines policies and measures aimed at "reducing GHG emissions to 70% of 1990 levels by 2030, along with directions and actions for low-carbon development by 2050". The priority of Strategy implementation is defined as "reducing net emissions of GHGs between 2021 and 2050 below the level of accumulated emissions in the EU over the same period".

The Strategy considers two scenarios (Table 3):

1. "The Inertial Scenario," where net emissions are projected to rise by 25% above 2019 levels by 2050.
2. "The Targeted (Intensive) Scenario," aiming for a net emission reduction of 60% below 2019 levels by 2050.

The first scenario essentially represents a business-as-usual trajectory, characterized by the absence of robust decarbonization measures, responses to the strengthening of global carbon regulation, and ambitious national climate goals. The second scenario anticipates a relatively modest reduction of GHG emissions by 14% below 2019 levels by 2050, suggesting that a fundamental transformation of the economy towards deep decarbonization and green business models is not anticipated. At the same time the government expects a significant increase in carbon sequestration in Russia by more than 2.2 times by 2050 compared to 2019 levels. Achieving such an outcome appears highly improbable without radical changes in forest policy and practices related to forest and land use management.

Table 3 Strategic indicators of GHG emissions and sequestrations by scenarios, MtCO₂e/year

Indicator	2019	2030	2050
The Inertial Scenario			
GHG emissions	2119	2253	2521
Carbon sequestration	-535	-535	-535
Net-emissions	1584	1718	1986
The Targeted (Intensive) Scenario			
GHG emissions	2119	2212	1830
Carbon sequestration	-535	-539	-1200
Net-emissions	1584	1673	630

Source: The Strategy of Socio-Economic Development of the Russian Federation with Low Greenhouse Gas Emissions until 2050, 29 October 2021.

¹³The Presidential Decree #889, 4 June 2008.

¹⁵The Governmental Decree #512-r, 3 April 2013.

¹⁷The Governmental Decree #1-r, 8 January 2009.

¹⁹<https://tass.ru/ekonomika/11787295> [as of 20.02.2024]

²¹The Governmental Decree #3052-r on adoption of the Strategy of Socio-Economic Development of the Russian Federation with Low Greenhouse Gas Emissions until 2050, 29 October 2021.

¹⁴The Governmental Decree #2446-r, 29 December 2010.

¹⁶The Governmental Decree #1473, 19 September 2023.

¹⁸<https://rreda.ru/industry/statistics/> [as of 20.02.2024]

²⁰UN news: <https://news.un.org/ru/story/2021/10/1411842> [as of 20.02.2024]

The Strategy offers a macro-vision and background for the establishment of a national system of carbon regulation. This includes protocols for reporting GHG emissions by businesses, experiments with carbon pricing, offset projects and emission trading. The Sakhalin experiment on emission quotas and carbon units trading is an example in this regard²². This Far Eastern province of Russia has set a goal of achieving carbon neutrality by 2025, primarily through the reduction of energy and transport emissions and by increasing carbon sequestration through forest management. This regional initiative is viewed as an experiment at the federal level, aiming to test legislation, institutional setups, mechanisms for monitoring, reporting, and verification, as well as the establishment of a registry for carbon offset projects and the issuance and trading of carbon credits.

Among other topics, the Russian government has explored new opportunities in global energy markets, particularly in the production and export of hydrogen. Some estimates suggest that global demand for hydrogen could reach 170 million tons by 2050, and Russia aimed to position itself as a major supplier, potentially accounting for up to 20% of exports. In August 2021, the Concept of hydrogen energy development was adopted with the aim of diversifying energy exports, reducing the carbon footprint of exported industrial products, attracting investments in the hydrogen sector, and expanding hydrogen transport²³. Later in October 2021, the government and Gazprom signed an agreement on hydrogen energy to accelerate the development of hydrogen production technologies using natural gas and implement pilot projects in Russia. In the Sakhalin experiment, hydrogen is also a focal point, with objectives to produce it, integrate it into transport systems, and explore its potential for exports.

On the international level, Russia is leveraging the Paris Agreement to foster cooperation in climate change mitigation efforts, including some very pragmatic and business driven interests, such as promotion of Rosatom's nuclear power technologies, Gazprom's "grey hydrogen" solutions, Rusal's "low carbon aluminum" and others. However, cooperation with the EU, USA, and other countries that have imposed sanctions on Russia may not be feasible in the near and mid-term future. Consequently, Russia is making efforts to promote cooperation (e.g. ideas about joint carbon markets, green financing schemes, etc.) through international platforms such as BRICS, the Shanghai Cooperation Organization, the Eurasian Union, and others.

4. Potential synergies of decarbonization and sustainability goals

Various research groups have conducted long-term projections of GHG emissions in Russia and analyzed the impacts of different decarbonization policies and measures²⁴. The conclusions drawn have varied significantly, ranging from projections of a dramatic rise in emissions with decarbonization options deemed unattainable, to scenarios where emissions stabilize at current levels, and even to possibilities of deep decarbonization utilizing the country's vast potential in green energy, environmentally friendly production, and ecosystems. Despite the political target being set for Russia to achieve carbon neutrality by 2060, there remains no scientific or public consensus on the feasibility of this goal.

In recent decades, the risks of pollution for human health, as a metrics of hazardousness of industrial, transport, energy and other sectors' impacts on the environment, have been significant in Russia. Historically, air pollution led to additional mortality of 30.7 cases per 100,000 people and additional morbidity of 22.4 cases per 1000 people in 2000²⁵. According to recent estimates by the World Health Organization (WHO), the death rate attributable to ambient and household air pollution is 127 cases per 100,000 population²⁶. While methodologies for calculating these risks may vary, the overall estimate underscores the considerable impact of air pollution on public health in Russia.

Active decarbonization measures have the potential to yield significant co-benefits for both the socio-economic system and the environment in Russia. Assessments of these co-benefits, particularly those associated with the reduction of air pollution and the mitigation of human health risks, indicate that over 40,000 premature deaths could be avoided through the substitution of coal with clean energy sources in Russia²⁷. Numerous investment projects initiated in Russia under Article 6 of the Kyoto Protocol have demonstrated that GHG emission reductions and increases in carbon sequestration often generate co-benefits, which can contribute to supporting sustainable development in the country.

The recent estimates of distributional impacts of deep decarbonization in Russia highlight several important aspects²⁸:

- By 2060, the share of non-oil and gas revenues in the consolidated state budget is projected to drop by four times.

²²Safonov G. (2021) Climate Darling or Potemkin Village? Russia's Carbon-Neutral Experiment in Sakhalin. <https://www.csis.org/analysis/climate-darling-or-potemkin-village-russias-carbon-neutral-experiment-sakhalin> [as of 20.02.2024]

²³The Governmental Decree #2162-r, 5 August 2021.

²⁴Bashmakov, I.A., Myshak, A.D. Comparison of greenhouse gas emission forecasts in Russia's energy sector for 2010–2060. *Stud. Russ. Econ. Dev.* 25, 37–49 (2014). <https://doi.org/10.1134/S1075700714010031>; Safonov G., Potashnikov V., Lugovoy O. et al. The low carbon development options for Russia. *Climatic Change* 162, 1929–1945 (2020). <https://doi.org/10.1007/s10584-020-02780-9>

²⁵Bobylev S., Sidorenko V., Safonov G. et al. Macroeconomic assessment of environment related human health damage cost for Russia. Moscow, Institute of World Bank/ Environmental Defense Fund, 2002.

²⁶WHO (2024), The Global Health Observatory database. SDG Indicator 3.9.1.

²⁷Climate change: the view from Russia, ed. V. Danilov-Danilian, Moscow, TEIS, 2003.

²⁸Bashmakov I., Distributional effects of measures on decarbonization of Russian economy. Moscow, CENEF-21, October 2023.

- Niche markets for Russian products will shrink substantially as demand for low- and zero-carbon products expands globally.
- Reduction of coal consumption will affect labor markets and may lead to unemployment in coal regions such as Kuzbass if effective just transition measures are not implemented.
- Investments and revenues will be redistributed in favor of low-carbon and renewable energy sectors, attracting more labor resources.
- The EU's Carbon Border Adjustment Mechanism (CBAM) and similar schemes could bring additional revenues (with active domestic policy) or losses (with a passive stance) but are unlikely to have significant impacts on Russian export sectors.

- The balance of employment between the "green economy" and oil and gas sectors will become more equal, leading to a more just distribution of incomes.

Evidently, the effective implementation of deep decarbonization policies and measures has the potential to generate numerous environmental, social, and economic benefits, thereby supporting sustainable development in Russia. Leveraging its vast natural resources, expansive territory, robust infrastructure, ample financial resources, and skilled labor, Russia could pave the way for long-term sustainability and potentially enhance its exports of "green" products to other countries. However, achieving Sustainable Development Goals in the country is exceedingly challenging amidst the current political circumstances.