



## ECONOMIC IMPLICATIONS OF CLIMATE CHANGE ON RUSSIA

Nowadays it can be easily observed that the ongoing process of climate change has a major influence on Earth's ecosystem, thereby determining many aspects of human activity. For instance, there is an upward temperature trend all over the world that could hinder the global growth by raising operational costs. In fact, the global climate change is likely to have substantial consequences for the world economy disproportionately damaging developing countries.

Global warming is the most precise and commonly accepted term describing the process of climate change. It was initially introduced in 1981 and refers to the observed rise in the average temperature on Earth. As of today, there is no plausible reason for questioning the fact that human influence has been the dominant cause of the observed warming since the mid-20th century. Despite there are various projections concerning the temperature change, most research findings confirm high probability for the average temperature rise by nearly 4.0°C by the end of the 21st century, which would lead to severe consequences.

The effects of climate change differ from country to country depending on both its geographical position, which is fixed, and human activities such as the level of infrastructure development, economic growth rate, and other factors, which are variable. Therefore, it is not surprising that there is a great deal of interest in the climate change studies in Russia. In fact, with a total area of 17.1 million square kilometers covering almost all climatic zones Russia has the most extensive and diverse geography among all countries. Moreover, Russia is a northern country with most of its territory lying in high latitudes. About 60%-65%, or 10.7 million square kilometers, of Russia's area is covered by permafrost, which is 30.6% of the total permafrost of the world. In this light, there are various approaches to evaluate how climate change is going to affect the economy of Russia.

In fact, there are a number of studies that support the idea that the global climate change is actually beneficial for Russia in economic terms. If implemented, the moderate climate change scenario for temperature could provide the Russian GDP growth by 0.8%-2.3% by 2050 and beyond. The proponents of the idea that Russia will benefit from climate change argue the following: due to a warmer climate there will be a

longer vegetation period and increased areas of arable lands, which will lead to thriving agriculture; climate change could lower the costs of extraction of mineral resources in permafrost areas; higher temperatures could lower energy demand, especially during winter. One of the most compelling arguments in favor of the ongoing climate change is the possibility to increase the ship traffic via the so-called Northern Sea Route. At the current rates of the temperature rise, the Northern Sea Route may become navigable all-year-round by 2030s, which would decrease the shipping costs from Russia to Asia and North America.

However, according to the opposite point of view, the current global climate change would produce a detrimental net economic effect on Russia. Recent climate change studies show that climate anomalies are 1.5-2 times more intense in Russia than in the countries with more moderate and warmer climate. The phenomenon is explained by Russia's extreme north location and vast geography. Thus, according to the Federal Service for Hydrometeorology and Environmental Monitoring of Russia, the average temperature in Russia rose by 1.29°C during the 20th century, while the world average increase for the last 150 years is only 0.74°C. This makes Russia more prone to extreme weather conditions than most other countries and increases its economic losses. For instance, according to official statistics, the drought of 2010 in Russia caused economic losses equaling 1.2% of the GDP. Although the temperature rise is mostly favorable for less populated areas of Northern Russia, Siberia and the Far East, it causes economic losses in densely populated southern regions of the country. According to last estimates, over 100 million hectares are affected by desertification. The rise of temperature of the upper ground layer of the permafrost zone is another large economic risk for Russia. The degradation of permafrost due to climate warming will probably cause severe infrastructure damage increasing its maintenance costs. It is worth mentioning that facilities of high economic significance like the Bilibino Nuclear Power Plant located in the Chukotka region and most of the gas and oil pipelines in Siberia and the Far East will need to be moored more firmly in the ground because of the shrinking permafrost.

Unfortunately, there is no official statistics on economic losses caused directly by the

effects of the global climate change. According to estimates, a moderate scenario case may lead to a 0.7%-2.0% decrease of Russia's GDP. However, since current temperature fluctuations often exceed the moderate scenario, a slight shift towards a more pessimistic scenario can actually lead to a 2.5%-4.0% decrease of Russia's GDP by 2050. Apart from that, there are also indirect losses related to productivity decrease, migration, and the loss of biodiversity. Hopefully, many of the negative effects and economic losses from the global climate change depend on the capacity of countries to mitigate the risks through investing in environmentally-friendly technologies, developing alternative energy and eco-friendly infrastructure. In 2017, the International Monetary Fund estimated Russia's capabilities of coping with consequences of global warming at 0.58 out of 1.0. Taking into account the fact that for developing countries this figure is 0.45, while for developed ones it is 0.72, Russia's capabilities to withstand against the consequences of climate change are significantly higher compared to developing economies, but still lower than in developed states.

In conclusion, there are neither complete data nor economic models that would take into account all variables in estimating the effects of climate change on the economic growth. The implications of climate change are still highly unpredictable due to the complexity of the Earth ecosystem in general. The fact that much part of Russia is unsuitable for economic activity due to extreme cold climate conditions makes many people to fall in a temptation of believing that gradual increase of the average temperature is economically beneficial for Russia. However, a deeper analysis of the case reveals many additional risks and pitfalls indicating that actual economic losses caused by climate change would be much more severe than it might seem at the first sight. Nevertheless, the ultimate economic impact of climate change is not solely determined by geography. With proper investments and economic policymaking, Russia might considerably reduce the drivers of global warming and overcome the negative effects of climate change.

## Politics, Foreign Affairs, and Security

- During the meeting of the Council of Heads of State of the Commonwealth of Independent States (CIS) held in Dushanbe, the participants discussed the ways to strengthen the political, socio-economic, and humanitarian ties within the CIS. The Council approved the decision on the chairmanship of Turkmenistan in the CIS in 2019. As a result of the consultations, a package of multilateral documents on deepening cooperation was signed.
- During his visit to Hanoi, Chairman of the Council of Belarus Mikhail Myasnikovich met with Acting President of Vietnam Dang Thi Ngoc Thinh to discuss cooperation opportunities and prospects for boosting relations in trade, economy, science, technology, and other issues of mutual interest.
- During his official visit to Baku, President of Russia Vladimir Putin met with President of Azerbaijan Ilham Aliyev to discuss further steps to strengthen bilateral economic ties. The heads of the two countries attended the 9th Russia-Azerbaijan Interregional Forum aimed at expanding economic and business ties between the partners in various fields, such as tourism, digitalization, humanitarian cooperation, and transport. As a result of the forum, the parties signed 17 intergovernmental agreements.
- During his visit to New Delhi, President of Uzbekistan Shavkat Mirziyoyev met with Prime Minister of India Narendra Modi to discuss bilateral, regional and multilateral issues of mutual interest and reinforce the strategic partnership between the two countries.
- According to the Ministry of Foreign Affairs of Uzbekistan, negotiations of the working groups of the Uzbek and Kyrgyz governmental delegations on the delimitation and demarcation of the state border took place in Kyrgyzstan's Kyzyl-Kiya city. During the meeting, the delegations reviewed the results of field surveys and continued the description of the remaining parts of the joint border.

## Economy, Finance, and Energy

- The United States Commerce Department imposed restrictions against 33 parties affiliated with the Russian government's defense or intelligence sectors, which, from the perspective of Washington, were acting against the national security interests of the U.S. The list includes 12 companies of Russia's military-industrial complex.
- According to Trade Representative of Russia in Kazakhstan Alexander Yakovlev, the bilateral trade turnover between Kazakhstan and Russia may reach \$18 billion by the end of 2018. It is expected that the trade turnover will amount to \$24-24.5 billion by the end of 2020.
- According to the draft federal budget for 2019 and the planned period of 2020-2021 submitted to Russia's State Duma, the budget revenues are planned at 19.969 trillion rubles (\$303 billion) in 2019, 20.219 trillion rubles (\$307 billion) in 2020, and 20.978 trillion rubles (\$319 billion) in 2021. Under the document, the budget expenditures will amount to 18.037 trillion rubles (\$274 billion) in 2019, 18.994 trillion rubles (\$289 billion) in 2020, and 20.026 trillion rubles (\$304 billion) in 2021. As a result, the surplus of Russia's federal budget will be 1.932 trillion rubles (\$29.4 billion) in 2019, 1.22 trillion rubles (\$18.5 billion) in 2020, and 0.95 trillion rubles (\$14 billion) in 2021.
- According to the updated annual economic report of the Asian Development Bank, the forecasted growth of Kazakhstan's economy was raised to 3.7% from 3.2% projected in April 2018. Moreover, the economic growth forecast for 2019 was also increased from 3.5% to 3.9%. The growth forecast for Central Asia for 2018 was also revised upwards by 0.1% to 4.1%.
- According to the Customs Service of Iran, in March-September 2018, the country's non-oil exports reached more than \$23 billion, registering a \$1 billion positive trade balance. Iran's non-oil exports reached \$23.123 billion during the 6-month period, which is a 13% increase compared to the same period last year. During the mentioned period of 2018, Iran's imports equaled \$22.182 billion.
- During the meeting on the socio-economic development of the Turkistan region, President of Kazakhstan Nursultan Nazarbayev proposed establishing an international trade zone called "Central Asia" that should give an impetus to the development of the region's economy. Moreover, it was suggested to work with the Uzbek side on the establishment of a new international checkpoint entitled "Turkistan".
- According to Director General of SOCAR Turkey Energy Zaur Gahramanov, 1 billion cubic meters of gas will be delivered to Turkey via the Trans-Anatolian Pipeline (TANAP) in 2018. Some 400 million cubic meters of gas have already been delivered to Turkey through the pipeline. It was noted that in 2019, 2 billion cubic meters of gas would be supplied to Turkey via TANAP. This figure will increase to 4 billion in 2020, reaching 6 billion in 2021. The construction of the second phase of the project is completed by 97%, and TANAP will be connected to the Trans Adriatic gas pipeline in 2019.

## Society and Culture

- Within the framework of the 73rd session of the UN General Assembly, First Vice Prime Minister of Kyrgyzstan Kubatbek Boronov signed the Global Compact on Achieving Universal Coverage of Health Services by 2030 on behalf of the Government of Kyrgyzstan. Currently, 62 countries, apart from international organizations, are parties to the compact.
- The CIS heads of state decided to award the status of the CIS Capital of Culture to Tajikistan's capital Dushanbe in 2021. The CIS governments have been invited to assist in organizing the events under the relevant interstate program launched in 2011 to promote the dialogue among the CIS countries and consolidate their culture promotion capacities.
- On the sidelines of the 73rd session of the UN General Assembly, Armenian Foreign Minister Zohrab Mnatsakanyan and his Mongol counterpart Damdin Tsogbaatar signed an agreement on the visa free regime between Mongolia and Armenia for their nationals holding diplomatic and service passports.
- The 9th Central Asian Leadership Program (CALP) on Environment and Sustainable Development was launched in Almaty. The seven-day event was co-organized by the OSCE Program Office in Astana in partnership with the Regional Environmental Center for Central Asia, the Government of Norway and the U.S. Agency for International Development.
- Russia's State Duma adopted the bill on the pension reform amended by President Vladimir Putin. According to the new amendments, the age of retirement should be set at 60 for women, not 63, as was initially proposed. For men, the retirement age is set at 65 years. The amendments reduce by three years the length of service that gives the right to early retirement. For men it was reduced to 42 from 45 years as it was originally planned, for women it was reduced to 37 from 40 years. The law also secures the right to early retirement for mothers with many children.