



# REOPENING THE OLD CHAPTER IN BILATERAL RELATIONS: RUSSIAN-TURKISH COOPERATION IN CLIMATE CHANGE

\*CORRESPONDENCE

Ulviyye Sanili Aydin

✉ [ulviyye.aydin@deu.edu.tr](mailto:ulviyye.aydin@deu.edu.tr)

<https://orcid.org/0000-0001-8874-5194>

Shams ABDULLAYEVA

St. Petersburg University, St. Petersburg, Russia

Ulviyye SANILI AYDIN\*

Dokuz Eylul University, Izmir, Turkiye

TYPE

Perspective

SPECIALTY SECTION

This article was submitted to the Special Issue of the International Journal of Humanities and Social Development Research

RECEIVED: 11 October, 2024

ACCEPTED: 07 November, 2024

PUBLISHED: 25 November, 2024

CITATION

Abdullayeva, Sh., Aydin, S.U., (2024). Reopening the old chapter in bilateral relations: Russian-Turkish Cooperation in Climate Change. Special Issue on "Global Strategy for sustainable development: Innovation, modelling, and alliances. *International Journal of Humanities and Social Development Research*. DOI:10.30546/BAKUCOP29.2024.1.085



Copyright: IJHSDR@ 2024 by the authors.  
Baku, Azerbaijan.

This article is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

## Abstract

Although there have been many ups and downs between Turkiye and Russia, it can be argued that stability and cooperation have dominated the relations between two countries in the post-Cold War period. Since the 2000s, there have been significant developments in the nature of the relations between Turkiye and Russia towards multidimensional and diversified cooperation, which are mainly focused on energy issues before. The tensions that have occurred between the two countries from time to time have been overcome within the framework of mutual dialogue, not preventing the positive course of the relations, and the cooperation continued to cover different areas.

Considering that two historic neighbors in the Eurasian region - Turkiye and Russia - are also two important actors of the international system and the issues on climate change became more visible on international level, this study examines the cooperation on environment and climate change, which is considered a relatively new area in terms of Turkish-Russian relations. The research results show that in spite of that energy trade is one of the determinative issues of Turkish-Russian relations, the fossil resources – trade – environmental problems and climate change nexus have remained in the background of relations between the two parties. The cooperation between two countries in this area has been limited with the Black Sea for a long time. While the Akkuyu Nuclear Power Plant has opened a new chapter, it has been determined that negotiations between the parties have become active recently within the scope of the UN Climate Change Conference (COP) and international regulations in the light of the increasing impacts of the climate change.

**Keywords:** Turkiye, Russia, energy, climate change, cooperation, environment

## Introduction

Parallel to global developments, it is observed that the scope of relations between countries has also changed. Problems encountered due to environmental pollution and climate change necessitate cooperation between states. It is certain that such problems, which are sometimes unpredictable, can be overcome with relatively less damage through initiatives between countries in the same region. This is also true for Turkiye and Russia.

Diplomatic relations between Russia and Turkiye have been established on June 2, 1920. More than 60 fundamental documents regulating interaction in various spheres of bilateral relations are in force between the countries.

The Treaty on the Basis of Relations between the Russian Federation and the Republic of Turkiye of June 3, 1993, No. 5099-1 (Kodeks Rossii, 1993) can be considered as a fundamental document in Russian-Turkish relations towards ecology. Article 11 notes that "the parties will develop, on a long-term basis, wide-ranging cooperation in the field of ecology," and states that in order to secure sources of financing for these projects, the parties will create favorable legal, economic, financial and commercial conditions.

The list of publications can be downloaded on the following website: <https://www.ijhshr.com/>

It would be appropriate to mention The Agreement between the Government of the Russian Federation and the Government of the Republic of Türkiye on Sea Transport dated on 2010 (The Ministry of Foreign Affairs of the Russian Federation, 2014), which states in Article 11 that “The vessels of each Party shall take all necessary measures to prevent environmental damage on the territory of the State of the other Party in accordance with the relevant international rules and the legislation of the State of the other Party”.

Traditionally, cooperation between the two countries on the environment and climate change has been limited to activities in the Black Sea basin. The Akkuyu Nuclear Power Plant has added a new dimension to Turkish-Russian relations in the field of energy cooperation that has long relied on fossil resource trade. This study examines the climate change and environmental issues in relations between the two countries. The first part of the study focuses on the cooperation between the two historical neighbors in the Black Sea basin. Another part of the study analyzes the cooperation within the framework of the Akkuyu Nuclear Power Plant, Türkiye’s first nuclear power plant. The third part evaluates the initiatives taken by two countries in this field in recent years.

## Environmental Security of the Black Sea Region

In order to address security issues in the Black Sea, as well as environmental issues: taking joint measures to prevent and reduce pollution of the Black Sea marine environment, as well as its protection and preservation, on April 21, 1992 in Bucharest (Romania), representatives of Bulgaria, Georgia, Romania, Russia, Türkiye and Ukraine signed an international convention - the Convention on the Protection of the Black Sea from Pollution (The Commission on the Protection of the Black Sea Against Pollution, 2024), which entered into force in 1994. Additionally, it also includes the official documents as: Odessa Declaration (1993), Sofia Declaration (2002), Bucharest Declaration (2007), Sofia Declaration (2009), two strategic plans: Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (1996), Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea (2009).

Specific measures are reflected in the following protocols ((The Commission on the Protection of the Black Sea Against Pollution, 2024): Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities; Protocol on Cooperation In Combating Pollution Of The Black Sea Marine Environment By Oil And Other Harmful Substances In Emergency Situations; Protocol on the Protection of the Black Sea Marine Environment from Pollution by Dumping.

In 2002, the Parties to the Convention signed The Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution, including the “List of Species of Importance for the Black Sea”. The Parties to the Convention agreed to take all necessary measures to prevent, reduce and combat pollution of the marine environment of the Black Sea (The Commission on the Protection of the Black Sea Against Pollution, 2024). The Convention covers:

- Pollution from ships;
- Pollution caused by dumping (deliberate disposal of wastes or other materials from ships or aircraft, or from ships and aircraft themselves);
- Pollution from land-based sources;

- Pollution caused by or associated with activities on the continental shelf, including exploration and exploitation of natural resources on the continental shelf;
- Pollution from oil and other hazardous substances in emergency situations;
- Pollution from or through the atmosphere;
- Pollution from transboundary movement of hazardous wastes;
- Pollution from any source by hazardous substances and materials listed in the Annex to the Convention (Articles VI-XIV).

The Convention provides for cooperation in scientific research aimed at developing ways and means of assessing the nature and extent of pollution and its impact on the ecological system in the water column and sediments, identifying polluted areas, studying and assessing hazards and developing measures for their elimination; in particular, alternative methods of treatment, disposal, elimination or utilization of harmful substances. The Parties also agree to develop monitoring programs covering all sources of pollution, as well as to establish a pollution monitoring system for the Black Sea (Art. XV).

To achieve the objectives of the Convention, the Parties establish a Commission for the Protection of the Black Sea Marine Environment from Pollution, consisting of representatives of all States Parties and meeting at least once a year, and a Secretariat to support the Commission. The Convention defines the functions of the Commission and the procedure for convening meetings of the Parties (Articles XVII-XIX).

The ways to ensure security in the Black Sea region include joint activities between Türkiye and Russia, which were carried out at the regional level through the Blackseafor and Black Sea Harmony missions until 2015 (Rogov, 2019). One of the purposes of the Blackseafor’s environmental mission is to combat environmental pollution. Since 2006, the Russian Navy began to participate in the Black Sea Harmony exercises, which were organized by Türkiye. The regular exercises within the framework of the Blackseafor maintain the high readiness of the sides as a valuable asset for deployment in humanitarian or environmental emergencies in the region, enhancing the countries’ ability to coordinate and act promptly to tackle such predicaments (Ulusoy, 2001).

## New Agenda: Akkuyu Nuclear Power Plant

Akkuyu Nuclear Power Plant (NPP) is the first nuclear power plant in the Republic of Türkiye, which is currently the largest nuclear construction site in the world, which will provide electricity to more than 10 regions of Türkiye and more than 12 million consumers, including civil and industrial infrastructure facilities (Akkuyu Nukleer A.S., 2024). Within the framework of the project, all works are carried out in accordance with the intergovernmental agreement in cooperation with the Ministry of Energy and Natural Resources of the Republic of Türkiye, the Nuclear Regulatory Agency (NDK) and other specialized agencies of the Republic of Türkiye (Akkuyu Nukleer A.S., 2024a).

It is worth considering the fact that (Abdullayeva & Sanili Aydin, 2023) the commissioning of NPPs can replace annual emissions of 17 million tons of carbon dioxide from coal and gas generation, which has a positive impact on climate change not only in the country itself, but also in the region and the world. NPPs also produce electricity on average

20% cheaper than thermal power plants, and the reactor has a lifetime of 60 years with the possibility of extending it for another 20 years. It is also a plus that fresh fuel does not pose a radiation hazard, as many critics feared a repeat of the Fukushima story, since the NPP is located in a seismically active zone. According to the Akkuyu NPP project website, “the alpha radiation from both uranium isotopes found in the fuel, as well as the weak beta and gamma radiation from their short-lived daughter nuclides, are almost completely absorbed in the fuel element cladding, eliminating environmental impact. In addition, before being used at NPPs, uranium pellets undergo special treatment to reduce radiation hazards and improve their properties as fuel”.

To ensure reliable protection of NPPs, active - systems operating on the electrical or mechanical basis of the reactor and designed to prevent or limit damage to nuclear fuel, fuel element cladding, equipment and pipelines containing radioactive products, which in case of an emergency limit the spread of released radioactive substances and radiation beyond the limits established by the project and their release into the environment; and passive safety systems, based on the design of the reactor, operate in 24/7 mode.

According to the Agreement between the Government of the Republic of Türkiye and the Government of the Russian Federation on cooperation in the field of construction and operation of the Akkuyu NPP in the Republic of Türkiye in 2010, decontamination and safe management of radioactive waste from the NPP is envisaged (Articles 3, 12) (Akkuyu A.S., 2024 b).

According to Rosatom CEO Alexei Likhachev (Vedmosti, 2024), the fuel was brought to the nuclear power plant in 2023, and the plant should enter commercial operation in 2025. Rosatom is also one of the main contenders for the construction of Türkiye's second nuclear power plant in the Turkish region of Sinop. The nuclear power plant is a new experience for Türkiye. In this sense, the environmental safety of the facility is provided in cooperation with Russian experts, which may develop relations between the two countries in the future.

## New Topics on the Old Agenda

As mentioned in the previous sections of the study, environmental and climate issues are relatively new issues in terms of Turkish-Russian relations. Environmental issues between Türkiye and Russia have been addressed mostly within the scope of the protection of the Black Sea water basin as two riparian countries.

The accident that occurred at the Chernobyl Nuclear Power Plant in northern Ukraine on April 26, 1986 and the nuclear fallout that resulted from this accident affected many countries, including Türkiye. The USSR did not make any statements about the accident in the first days. As a result of the increase in radiation levels detected in the two days following the accident, the entire world became aware of the Chernobyl accident. It showed that solving problems such as environmental pollution resulting from the Chernobyl accident requires national efforts as well as international cooperation and active participation at bilateral, regional and multilateral levels (Kilic, 2017). The accident has happened a short time before the collapse of the Soviet Union, which also enforced to focus on the unexpected environmental issues between Türkiye and Russia.

Although one of the main issues in relations between the two countries is fossil energy resources, the environment and climate change issues have not been prominently discussed for many

years. It is obvious that the climate change policies of the countries contradict their commercial policies (Sakal, 2023: 145), especially when it comes to trade in fossil energy resources. In this sense, it is understandable that the fossil resources-climate change nexus has remained in the background in relations between Türkiye and Russia as Türkiye is the among first five oil and natural gas export markets of Russia. On the other hand, Russia is a major emitter of greenhouse gases (contributing to 4.5% of GHG emissions), and a leading global supplier of fossil fuels. Russia is vulnerable to the impacts of climate change from extreme events such as increase in the frequency and duration of droughts, extreme precipitation, floods, forest fire, degradation of permafrost in the northern region heat-waves, flash floods, coastal flooding, and increased erosion (World Bank Group, 2021a). Russia is ranked 63rd in 2024 Climate Change Performance Index (CCPI) – down four places and remaining among the very low performers. It receives a very low in all four CCPI index categories: GHG Emissions, Renewable Energy, Energy Use, and Climate Policy (CCPI, 2024a). Similarly, Türkiye is vulnerable to the impacts of climate change from extreme weather events and increase in temperature. These have consequences on the country's terrestrial, marine and freshwater ecosystems and increases the overall strain on the environment (World Bank Group, 2021b).

Türkiye drops nine ranks in 2024 CCPI to 56th, making it is a very low-performing country. The country receives a medium ranking in the Renewable Energy category, low in GHG Emissions and Energy Use, and very low in Climate Policy. Türkiye still heavily depends on fossil fuels for energy (CCPI, 2024b). In the light of this data, the climate change, as well as EU institutions and environmental protection regulations, have been determining in the long-term transformation of bilateral energy relations between Türkiye and Russia (Sakal, 2023).

In recent years, especially, forest fires, have made closer cooperation between the two countries on climate change inevitable. In fact, Russia and Türkiye are one the first countries, who provides support for each other in extinguishing the forest fires. In the Russian Federation, two firefighting helicopters allocated from the Ministry of Environment and Forestry were transferred to the Russian Federation on August 8, 2010 under the coordination of the Prime Ministry Disaster and Emergency Management Presidency regarding the forest and peat fires that lasted for weeks and affected some settlements, especially Moscow, with toxic smoke clouds. They participated in firefighting activities in the Ryazan region. In addition, upon the request of the Russian authorities, the Prime Ministry Disaster and Emergency Management Presidency sent 350 “backpack fire extinguishers” to the Russian Federation (Ministry of Foreign Affairs of Republic of Türkiye, 2010).

On March 15, 2024, Abidat Magomedova, Deputy Director of the Department of International Cooperation and Climate Change of the Ministry of Nature of Russia and Mohammed Levent Akici, Advisor to the Ministry of Environment, Urban Development and Climate Change of the Republic of Türkiye at the Embassy of the Republic of Türkiye in Russia discussed the environmental protection policy of Russia and Türkiye, as well as the prospects of cooperation between the two countries in the field of waste management, biodiversity conservation, protected areas management, joint study of Antarctica (Ministry of Natural Resources and Environment of the RF, 2024). The parties agreed to exchange concrete proposals on cooperation in the near future, and also supported the decision to develop a legal framework for joint work. Priority attention is planned to be given to the sphere of production and consumption waste management.

On April 11, 2024, Russia and Türkiye agreed to cooperate in waste management regulation: According to the mentioned agreement, the countries will exchange experience in waste management and engage in joint eco-education. This decision was made during a meeting between representatives of the Russian Environmental Operator (REO) and Mohammed Levent Akıcı, Counselor of the Ministry of Environment, Urban Development and Climate Change of the Republic of Türkiye at the Embassy in the Russian Federation (Russian Environmental Operator, 2024).

The meeting also saw the signing of a framework cooperation agreement with the operator of Türkiye's Zero Waste project aimed at supporting environmental projects. The participants also agreed to support eco-education and international congress and exhibition activities to raise awareness of the world community about the challenges in building a circular economy.

On June 6, 2024, during the XXVII St. Petersburg International Economic Forum (SPIEF), Russia and Türkiye signed an agreement on the creation of a textile recycling system (Russian Environmental Operator, 2024). The agreement was signed by Denis Butsayev, General Director of the Russian Environmental Operator (REO), and Abduljelil Sherifoglu, the founder of the Turkish company AJ International Group, which recovers and recycles used clothing and has collection and recycling centers in Türkiye, Saudi Arabia, the United Arab Emirates, Qatar, South Korea and other countries. The agreement provides for the creation and development of a system of collection, utilization of textile waste and textile recycling in Russian cities, in particular:

- The cooperation between REO and the Turkish company is aimed at improving the system of textile waste management, reducing the disposal of such waste and improving the environmental situation in Russia. Within the framework of the agreement, it is planned to launch a project implying the establishment of a textile waste utilization facility and an entire system for the collection of used textile products and textile waste recycling in the territory of the Russian Federation. The textile waste utilization facility is planned to be established in Moscow or the Moscow region.

- At the moment, AJ International Group has already started installing its boxes for accepting clothes from the population in cities near Moscow.

According to expert estimates, Russia generates more than 2 million tons of textile waste per year: an average urban resident throws away 15-17 kg per year, and no more than 1% of this volume of textile waste is recycled (Vedmosti, 2023). In order to reduce textile waste generation in the country, old clothes and used home textiles should be kept in circulation as much as possible, which this agreement will contribute to.

## Conclusion & Prospects

Both Türkiye and Russia are developing countries. Russia is one of the BRICS countries. Türkiye has already applied for the BRICS membership. Energy resources are the main input of the economic development, which is vital for carrying out economic activities. Russia itself is already one of the world's major oil and natural gas producers. Traditionally, Russia orients towards low-cost natural gas power generation. However, although renewable energy sources are not considered as an alternative development option, Russia has started to invest in this field since the 2010s as a result

of the obligations that have been undertaken due to increasing climate change and environmental problems.

Türkiye is an energy dependent country. It is investing in the renewable energy sector to reduce its energy dependency. However, this is an expensive and time-consuming process. In this sense, cooperation in the field of environmental issues and climate change has a lesser place in Turkish-Russian relations compared to other issues. The economic infrastructure of both countries has been shaped by fossil energy resources. Therefore, it is unrealistic to expect these countries to make rapid progress in the energy transformation in a short time. However, as mentioned, Türkiye and Russia, as two important actors of the global and regional economy and countries with large populations, are increasingly feeling the effects of climate change. Considering the fossil energy trade between the two countries, Türkiye and Russia need to develop and implement a more comprehensive and results-oriented action plan on climate change. Climate change is not an area that any country can combat alone. In this sense, it is predicted that mutual cooperation will produce more concrete results.

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## Author contributions

The authors confirm being the sole contributor of this work and have approved it for publication.

## Peer-review

Externally peer-reviewed.

## Acknowledgments

The Guest Editors would like to acknowledge all the authors of the manuscripts and the blind reviewers of those articles who helped making this Special Issue a stronger contribution to policy.

## Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.



## References and notes:

- Abdullayeva, S. & Sanili Aydin, U. (2023). Russian-Turkish Cooperation in Nuclear Energy: The Akkuyu NPP Construction Project, 360° with youth 9th international student congress proceedings book, pp. 311-315, <https://genclerle360.mcbu.edu.tr/wp-content/uploads/sites/11/2024/01/MCBU-IIBF-Ogrenci-Kongresi-Bildiri-Kitabi.pdf> (17.10.2024)
- Akkuyu Nukleer A.S. (2024). O proekte, <https://akkuyu.com/ru/about/info> (21.09.2024)
- Akkuyu Nukleer A.S. (2024a). Fakti, <https://akkuyu.com/ru/facts> (21.09.2024)
- Akkuyu Nukleer A.S. (2024b). Agreement between the Government of the Republic of Turkey and the Government of the Russian Federation on cooperation in the field of construction and operation of the Akkuyu nuclear power plant in the Republic of Turkey (in Russian), <https://akkuyu.com/upload/iga-ru.pdf> (21.09.2024)
- Climate Change Performance Index (2024a). Turkey, <https://ccpi.org/country/tur/> (21.10.2024)
- Climate Change Performance Index (2024a). Russian Federation, <https://ccpi.org/country/rus/> (21.10.2024)
- Kilic, N. (2017). Cevre ve Dis Politika Iliskisi: Cernobil Kazasi ve Turk Dis Politikasina Yansimalari. IGU Sosyal Bilimler Dergisi, 4(1), pp.151-179.
- Kodeks Rossii (1993). Contract on the Basis of Relations between the Russian Federation and the Republic of Turkey (in Russian), <https://docs.cntd.ru/document/901926138> (21.10.2024)
- Ministry of Foreign Affairs of Republic of Turkiye (2010). No: 184, 17 Agustos 2010, Rusya Federasyonu'ndaki Yangin Sondurme Faaliyetlerine Ulkemizce Yapilan Katkilar Hk., [https://www.mfa.gov.tr/no\\_-184\\_-16-agustos-2010\\_-rusya-federasyonu\\_ndaki-yangin-sondurme-faaliyetlerine-ulkemizce-yapilan-katkilar-hk\\_.tr.mfa](https://www.mfa.gov.tr/no_-184_-16-agustos-2010_-rusya-federasyonu_ndaki-yangin-sondurme-faaliyetlerine-ulkemizce-yapilan-katkilar-hk_.tr.mfa) (17.10.2024)
- Press Service of The Ministry of Natural Resources and Environment of the Russian Federation (2023). Russia and Turkiye agreed to develop cooperation in the environmental sphere: waste, biodiversity, Antarctica (in Russian), [https://www.mnr.gov.ru/press/news/rossiya\\_i\\_turtsiya\\_dogovorilis\\_o\\_razvitii\\_sotrudnichestva\\_v\\_prirodookhrannoy\\_sfere\\_otkhody bioraznoo/](https://www.mnr.gov.ru/press/news/rossiya_i_turtsiya_dogovorilis_o_razvitii_sotrudnichestva_v_prirodookhrannoy_sfere_otkhody bioraznoo/) (17.10.2024)
- Rogov, I. I. (2019). Russian-Turkish relations in retrospect: geopolitics and energy, In: Rogov, I. I. & Faraponova, T.K. State and municipal administration. Academic notes, № 3, pp. 212-217, DOI 10.22394/2079-1690-2019-1-3-212-217
- Russian Environmental Operator (2023). Russia and Turkey to start cooperation in waste management regulation, <https://reo.ru/tpost/7vvsII09n1-rossiya-i-turtsiya-nachnut-vzaimodeistvo> (17.10.2024)
- Sakal, H. B. (2023). The Changing Nature of the Natural Gas Trade between Russia and Turkey: The Role of Climate Change and the EU Institutions. Uluslararası Iliskiler Dergisi, 20(79), pp.143-164, DOI: <https://doi.org/10.33458/uidergisi.1319288>
- The Commission on the Protection of the Black Sea Against Pollution (2024). Convention on the Protection of the Black Sea from Pollution (in English), <http://www.blacksea-commission.org/Official%20Documents/The%20Convention/Full%20Text/> (30.10.2024)
- The Commission on the Protection of the Black Sea Against Pollution (2024). Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities (in English), <http://www.blacksea-commission.org/Downloads/ConventionProtocols.pdf> (20.10.2024)
- The Commission on the Protection of the Black Sea Against Pollution (2024). The Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution, [http://www.blacksea-commission.org/\\_convention-protocols-biodiversity.asp](http://www.blacksea-commission.org/_convention-protocols-biodiversity.asp) (18.10.2024)
- The Ministry of Foreign Affairs of the Russian Federation (2014). The Agreement between the Government of the Russian Federation and the Government of the Republic of Turkey on Sea Transport (in Russian), [https://www.mid.ru/ru/foreign\\_policy/international\\_contracts/international\\_contracts/2\\_contract/45048/](https://www.mid.ru/ru/foreign_policy/international_contracts/international_contracts/2_contract/45048/) (30.10.2024)
- Ulusoy, H. (2001). A new formation in the Black Sea: Blackseafor, Perceptions: Journal of International Affairs, December 2001-February 2002, Volume 6:4, <https://dergipark.org.tr/tr/pub/perception/issue/49016/625293> (21.09.2024)
- Vedmosti (2023). Experts discussed the problem of textile waste utilization in Russia, <https://www.vedomosti.ru/ecology/esg/articles/2023/11/14/1005753-do-40-staroi-odezhdi-dolzno-popadat-v-sekond-hendi-schitayut-eksperti> (21.10.2024)
- Vedomosti (2024). Likhachev: Rosatom will build a second NPP in Turkey, <https://www.vedomosti.ru/business/news/2024/02/28/1022740-lihachev-rosatom-postroit> (21.10.2024)
- World Bank Group (2021a). Climate Change Knowledge Portal for Development Practitioners and Policy Makers – Country – Russian Federation, <https://climateknowledgeportal.worldbank.org/country/russian-federation> (21.10.2024)
- World Bank Group (2021b). Climate Change Knowledge Portal for Development Practitioners and Policy Makers – Country – Russian Federation, <https://climateknowledgeportal.worldbank.org/country/turkiye> (21.10.2024)