The Green Deal of the European Union: Russia's Interests

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Abstract. This article analyzes different perspectives on the EU's Green Deal Strategy for achieving carbon neutrality by 2050, adopted in 2019 and further developed in 2021. The purpose of this article is to concretize Russia's position in relation to this strategy and determine the directions of scientific research in this area. The work uses the method of comparative analysis of information obtained from open sources: websites, written documents, scientific reviews, reports and articles. The results of the study show that when making decisions, Russia must proceed from its own interests aimed at increasing the energy resources use efficiency and modernizing the national economy.

Keywords: EU, Russia, Green Deal, decarbonization, resource efficiency, climate policy

Introduction

The European Green Deal is a system of measures within the framework of a single European Union policy adopted in 2019. In essence, it is a long-term strategy for economic development, which aims to achieve carbon neutrality by 2050 and decoupling¹. By 2030, the EU plans to reduce greenhouse gas emissions by at least 55%. To implement this course, the EU has set the task of increasing the efficiency of resource use and moving towards a circular economy, restoring biodiversity, as well as reducing environmental pollution. In the next decade, the Green Deal will have the greatest impact on coal imports, and after 2030 - oil and gas. The expected reduction in coal imports by 2030 in the EU will amount to 71–77%, oil - by 23–25%, natural gas - by 13–19% compared to 2015. After 2030, it is planned to almost completely abandon the use of coal and more significantly reduce the import of oil and gas into the EU: by 78–79% and 58–67%, respectively, compared to 2015².

¹Decoupling (decoupling) is a strategy for moving towards an environmentally sustainable economy that allows you to achieve an increase in the growth of human well-being without an increase in resource consumption and negative impact on the environment.

²Natalia Piskulova. Green Deal: Risks and Opportunities for the EU and Russia. https://russiancouncil.ru/analytics-and-comments/analytics/zelenaya-sdelka-riski-i-vozmozhnosti-dlya-es-i-rossii/

As practice shows, the traditional system based on achieving growth through depletion of natural capital and an insignificant role of the environmental component is aimed at obtaining relatively short-term results and, in the future, is not able to withstand cyclical changes in the economy. Moreover, all the consequences of economic activity and natural disasters are very difficult to overcome, and most of them will go to future generations. In this regard, a completely new approach is needed that intelligently combines the tools of the traditional economy and is able to determine alternative ways of development without harm to the environment. Overall, achieving these goals will enable the EU to create a modern, resource efficient and competitive economy.

Prerequisites for the development of the EU Green Deal

According to the results of modern research, the anthropogenic impact on climate change has now become threatening. In the last decade, the average temperature on Earth was 1.09 degrees higher than in the second half of the 19th century, and humanity is directly responsible for the increase in the average temperature by 1.07 degrees, while only 0.02 degrees falls on the natural causes of its rise. Moreover, there is a significant rise in the level of the world ocean, which occurs three times faster than at the beginning of the 20th century. In the framework of the Paris Climate Agreement, adopted in 2015, the participating countries committed themselves to not allowing temperatures to rise by more than 2 degrees by 2100 from the level of the second half of the 19th century and to try to keep it within 1.5 degrees.

The latest climate change report (Climate Change 2021) shows that this goal can only be achieved if we start reducing emissions now. Of the five scenarios presented in the report, the most optimistic one assumes that the temperature rise will stop after 2050, in the worst scenario - by this year the appearance of ice in Arctic waters in September will become extremely rare and by 2100 the water level will rise by almost one meter. If the average temperature exceeds the values of the beginning of the 20th century by 1.5 degrees, the frequency of temperature anomalies compared to the pre-industrial era may increase from 2.8 to 4.1 times, and these changes will occur 4.1 times more often³.

Another proof of the need to take urgent measures to eliminate the negative consequences of human impact on the environment is the dynamics of the Annual Greenhouse Gas Index (AGGI), calculated by the National Oceanic and Atmospheric Administration (NOAA), which

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³ Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In

shows that from 1990 to 2019, the radiative forcing of long-lived greenhouse gases increased by 45%, where 80% due to CO_2^4 .

Climate change has a direct impact on the Russian economy. First of all, the negative consequences of the rapid rise in temperatures will affect the people health and life, including the increased frequency of natural hazards and pollution of water and food; will cause a steady migration of people from the regions neighboring Russia due to a drop in living standards and climatic cataclysms, a decrease in food security and, as a result, desertification of lands in the main agricultural regions of Russia and crop yields; accelerate the degradation of natural ecosystems by reducing biodiversity; will cause the destruction of buildings and structures due to changes in temperature fluctuations, an increase in the level of groundwater, etc., and will also lead to an acceleration in the pipelines wear that are not designed for climate warming; will increase the risks of the stability of the transport infrastructure, disrupting the smooth operation of temporary winter roads; will increase the volatility of heat and electricity consumption⁵. Russia, as a member of the G20, is responsible not only for the fate of its citizens, but also for humanity as a whole. This is the fact that for Russia, as well as for the EU, the image component of climate policy is also important, as it affects the perception of the Russian economy both inside the country and outside. For Russia, as a maritime power and a country with numerous waterways and vast forest zones, the key environmental problems are the issues of water pollution of rivers, seas, oceans, air and deforestation. According to conservative estimates, 25% of the infrastructure of Russia's northern cities could be destroyed by 2050^6 .

However, for all the importance of these problems climate policy in Russia has not been given due attention for a long time. So, according to the FOMnibus Survey on October 19-20, 2019, no more than a fifth of the population of our country was concerned about solving problems related to climate change. This is evidenced by another fact: 46% of Russians did not hear anything about the emotional speech, environmental defender Greta Thunberg, a Swedish schoolgirl at the UN climate summit ⁷.

This position of society was formed not without the government participation, which for a long time was wary of both climate policies under the Paris agreements and the EU green strategy (The European Green Deal), preferring to focus on national interests, the priority of

pp.41-44.

⁴WMO GREENHOUSE GAS. BULLETIN. No. 16. 23. November 2020. P.2. https://library.wmo.int/doc_num.php?explnum_id=10437

⁵Global Climate Threat and the Russian Economy: In Search of a Special Path. May 2020. Energy Center of the Moscow School of Management SKOLKOVO. https://energy.skolkovo.ru/downloads/documents/SEneC/Research/SKOLKOVO_EneC_Climate_Primer_RU.pdf

⁶Global Decarbonization: Evolution of Oil and Gas Companies' Approaches. "Oil and Gas Vertical". No. 6. 2021. URL: https://www.ey.com/en_ru/oil-gas/global-decarbonization-evolution-of-oil-and-gas-companies-approaches.

⁷FOMnibus poll 19–20 October. DOMINANTS || week # 42 || 24.10.2019 URL: https://media.fom.ru/fom-bd/d42ek2019.pdf

which is to maintain stable volumes of energy exports, which in some years consists more than 50% of budget revenues. In addition, Russian scientists have proven that by the end of the 2030s Russia will observe a slow increase in greenhouse gas emissions from the combustion of fossil fuels and their size will remain at the level of no more than 75% of the 1990 level⁸. Moreover, it has been proven that at present the greenhouse gases (CH4 and CO2) from the Russian territory contribute to the slowdown of global warming, and this effect will increase in the first half of the 21st century, however, by the end of the century, the absorbing capacity of our terrestrial ecosystems will decrease, and emissions CH4 will increase⁹.

Controversial assessments of the Green Deal

The EU and Russia explain differently the reasons for the Green Deal. According to European regulators, the implementation of the green course, firstly, will help to activate climate policy in countries that do not make sufficient efforts in this direction. The introduction of a cross-border carbon tax, first in a soft version (imposing a tax on commodity producers), and then in a hard one (imposing a tax on consumers), could prevent production from shifting to countries with less stringent carbon emission standards. Second, the deal will reduce the EU's dependence on raw materials imports, improve supply security and resource efficiency, and reduce emissions. Let us clarify that European dependence on Russian gas in 2019 and the first half of 2020, calculated as its share in EU imports, was 44.7% and 39.3%, respectively, while the share of oil was 28% and 26.4%. Third, the alignment of two goals - achieving carbon neutrality and government assistance to business and society - will allow the EU to effectively restore an economy that has significantly sagged as a result of the COVID-19. Finally, the implementation of the deal will support the growth rate of environmental goods and services, which in 2017 amounted to 287 billion dollars, or 2.2% of the EU-27 GDP¹⁰.

According to most Russian experts, the new "green course" is aimed primarily at strengthening the EU's competitive position in world commodity markets through the development of new high-tech industries and the technologies sale, as well as political considerations to reduce dependence on raw materials imports. If it is levied taking into account

⁸Forecast of energy development in the world and Russia 2019 / ed. A.A. Makarova, T.A. Mitrova, V.A. Kulagina; ERI RAS – Moscow School of Management SKOLKOVO - Moscow, 2019.

⁹Denisov, S.N., Eliseev, A.V. & Mokhov, I.I. Contribution of Natural and Anthropogenic Emissions of CO2 and CH4 to the Atmosphere from the Territory of Russia to Global Climate Changes in the Twenty-first Century. Dokl. Earth Sc. 488, 1066–1071 (2019). https://doi.org/10.1134/S1028334X19090010

¹⁰Natalia Piskulova. Green Deal: Risks and Opportunities for the EU and Russia.

ttps://russiancouncil.ru/analytics-and-comments/analytics/zelenaya-sdelka-riski-i-vozmozhnosti-dlya-es-i-rossii/

the share of the foreign trade component of carbon-intensive products, Russian exporters will be non-competitive as a result of the introduction of a cross-border carbon tax¹¹.

Russia currently ranks 4th in the world in terms of greenhouse gas emissions. However, according to Russian experts, the assessment of Russia's contribution to environmental pollution and, consequently, its potential participation in the decarbonization process cannot be based only on these data. If we take into account the cumulative CO2 emissions for 1751–2017, it turns out that the EU-28 accounts for 22% of global emissions (second place after the United States - 25%), and Russia only 6%¹².

At the same time, Russia has significant potential to reduce greenhouse gas emissions through the development of energy efficient technologies for the energy transportation and consumption, as well as through higher absorption of CO2 in the forestry sector. This potential will reach 550 million tons of CO2-eq. by 2030, and given the expansion of climate initiatives in various sectors of the economy, it could be significantly higher. However, to accelerate decarbonization processes within the framework of the current market model and in the conditions of post-like recovery in Russia, it is unprofitable. The observed increase in commodity prices, which take place within the framework of the fifth "super cycle" over the last century also does not contribute to the introduction of more stringent measures under the Green Agenda¹³.

New EU initiatives published on July 14, 2021 (European Green Deal: Commission proposes transformation of the EU economy and society to meet climate ambitions)¹⁴, known as the Fit for 55 plan¹⁵, also drew critical responses from Russian scientists and politicians.

The object of the study was primarily the contradictions that are generated by the inconsistency of some previously adopted and new regulatory norms both at the EU level and in relation to the trading partners of the member states, including the WTO and Paris Agreement participants. For example, there is a mismatch between the goals of maximizing productivity under the EU's common agricultural policy and the involvement of more land for carbon storage¹⁶, as well as duplication of proposed border carbon levy mechanisms and the European emissions trading system. Other Russian experts point out that the lack of dialogue between the European regulator and EU partners on the problems of spreading European practice to third

 13 Global decarbonization: the evolution of the approaches of oil and gas companies $/\!/$ Oil and Gas Vertical. No. 6, 2021.

¹¹Konstantin Sukhoverkhov: EU Green Deal - a Threat for Russia? https://raspp.ru/press_about/zelyenaya-sdelka-es-ugroza-dlya-rossii/

¹² Ibidem

¹⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0550

¹⁵Note. The number 55 represents a reduction in greenhouse gas emissions of at least 55% by 2030 from 1990 levels

¹⁶Konstantin Sukhoverkhov. Green Deal "EU - a threat to Russia? December 11, 2020. https://russiancouncil.ru/analytics-and-comments/columns/europeanpolicy/zelyenaya-sdelka-es-ugroza-dlya-rossii/

countries (some of which already use their own emission regulation instruments) creates a regulatory instrument that goes beyond the EU's jurisdiction and can generate a large number of new conflicts¹⁷. There are allegations that, in line with the new course of the EU, there is a de facto redistribution of the world energy market under the guise of environmental concerns¹⁸.

In addition to the identified contradictions, the Green Deal carries a number of risks, the main of which are the following: high cost of its implementation; creating unfavorable conditions for a number of manufacturers; higher prices for consumers; the likelihood of a response from other countries; energy security risks; ineffectiveness of the mechanism of cross-border carbon charges in terms of its introduction and the lack of similar regulation in other countries. To implement the "Green course", the European Commission assumes the allocation of additional annual investments by 2030 in the amount of 260 billion euros. "Sustainable" investments can amount to at least 1 trillion euros, excluding 750 billion euros from the Next Generation EU fund for the recovery of the European economy after COVID-19. It is natural to ask: how the EU countries intend to recoup such large financial investments¹⁹.

It should be noted that the EU associates energy security risks not only with the hydrocarbons import, but also with the growing dependence on foreign supplies of minerals and metals for the solar cells, wind turbines, lithium ion batteries, fuel cells and electric vehicles that do not have substitutes. Every three years, the EU updates its 2011 list of raw materials, which includes about 30 different critical articles. The most pressing problem for the EU, as well as for many other importing countries, is the purchase of rare earth metals from China, which is the largest supplier of the most important raw materials to the EU.

At the same time, the most powerful counterargument against the EU's energy transition policy is the current conjuncture of the energy market, which is characterized by an anomalous (from the point of view of the previously existing reverse trend) excess of natural gas prices over oil prices in Europe and Asia and high gas and oil markets volatility. This situation creates preconditions for reorientation from clean "blue fuel" to oil, oil products and coal and shows the inability of most OPEC countries to increase oil production and compensate for the existing supply and demand imbalance²⁰. So, in September 2021, spot Brent prices in the European oil market increased by almost \$10 per barrel - from \$72.4 per barrel to \$83.8 per barrel. Fourmonth gas futures prices on the NYMEX increased from \$4.8 million BTU to \$6.0 million

¹⁷Edge ejection. Kommersant newspaper 07/14/2021. https://www.kommersant.ru/doc/4900332

¹⁸Lizan I.Yu. DECARBONIZATION. How the EAEU Adapts to the European Carbon Neutrality Policy, Sonar 2050, p.14.

¹⁹Vladislav Belov: Russia - European Union: All Quiet on the Western Economic Front? URL: https://mezhdunarodniki.com/portalmn/news/inline/d90bb0e4-86a8-4d7a-b391-b5acfc12518b

²⁰ https://www.eia.gov/dnav/pet/hist/RBRTED.htm

BTU²¹. The prices of the Dutch gas hub TTF rose by October 6 to a maximum of \$1937 per 1000 cub. m. and the futures contracts prices doubled²².

It turned out that the refusal from carbon consumption and the transition to renewable energy sources, carefully planned by the EU regulators, is proceeding under conditions of high uncertainty regarding: the further demand, necessary additional investments in the new fields developments and the mechanism for linking Gazprom's contracts to spot prices, which was adopted by the EU under pressure from a Polish company PGNiG. The current situation in the world energy market will provide additional revenues to the Russian budget from oil and gas exports. According to experts' forecasts, the gas price in the next 2 years will be about \$1,000 per 1000 cub. m²³, which is many times higher than all previously made forecasts²⁴. Compared to current levels, futures prices will halve by April 2022²⁵. Oil prices may rise from \$80 per barrel up to \$200 per barrel, that are option prices for 2022.

Russia's interests

However, most researchers acknowledge that new EU initiatives in the area of climate policy and energy transition, which include: tightening the existing system of emissions trading and a cross-border carbon tax; increased use of renewable energy sources and the rapid development of low-emission vehicles; improving energy efficiency indicators; bringing tax policy in line with the goals of the European Green Deal, as well as measures to prevent carbon leakage and the development of the New Social Climate Fund, etc. - became a complex challenge for the Russian economy and required urgent measures to respond to the possible consequences of accelerating the Green Deal implementation. First of all, concern was caused by the introduction in 2023 of a cross-border carbon tax, which, according to the head of the Russian Union of Industrialists and Entrepreneurs Alexander Shokhin, may lead to additional costs for Russian raw materials importers to the EU in the amount of € 1-2 billion per year²⁶, that is comparable to payments for Russian gas transit through the territory of Ukraine.

At the same time, these adaption measures to European innovations can vary significantly depending on the chosen long-term strategy for the development of the national fuel and energy

²¹ https://www.eia.gov/dnav/ng/NG_PRI_FUT_S1_D.htm

²² https://www.barchart.com/futures/quotes/TGJ22/overview

²³Abzalov said that the EU had enriched Russia by \$ 50 billion with a shot in the foot. https://glas.ru/foreign/357107-abzalov-zayavil-chto-polsha-podbila-evropu-vystrelit-sebe-v-nogu-i-neozhidanno-obogatila-rossiyu-un10104/?utm source=yxnews&utm medium=desktop

²⁴Razumnova L.L., Migaleva T.E. On the issue of price competition between the United States and Russia on the European gas market // Science and the art of management / Bulletin of the Institute of Economics, Management and Law of the Russian State University for the Humanities. 2021. No. 1. P. 92–100.

²⁵https://www.barchart.com/futures/quotes/TGV21

²⁶The head of the Russian Union of Industrialists and Entrepreneurs estimated the costs of importers of EU products from Russia at € 2 billion per year. September 5, 2021. https://wto.ru/news/glava-rspp-otsenil-izderzhki-importeroves-produktsii-iz-rossii-v-2-mlrd-v-god/

complex and the pace of climate policy. Accordingly, Russia's contribution to the development of the global climate agenda and decarbonization processes can vary significantly. Thus, an independent forecast made in 2019 by the Institute for Energy Research of the Russian Academy of Sciences jointly with the Energy Center of the Moscow School of Management SKOLKOVO shows that in the case of a conservative scenario, while maintaining the current energy policy, the speed of development and technology transfer, the energy intensity of Russia's GDP by 2040 compared to 2015 may decrease by 0.037 toe /1000 dollars - from 0.171 toe /1000 dollars to 0.134 toe /1000 dollars (at the rate of 2017), and the share of renewable energy sources in the electric power industry will decrease from 17% to 15%. With the accelerated development and technologies transfer the energy intensity of GDP will decrease to 0.101 toe /1000 dollars, and the share of Renweables will grow to 21%. The share of the fuel and energy complex in the country's budget may decrease from 26.4% to 20.0% and to 15.4%, respectively. At the same time, in both scenarios, the volume of liquid hydrocarbons exports from Russia will decline, while natural gas will grow, but with varying degrees of intensity²⁷. It should be borne in mind that the world nuclear power plant capacity can increase by about 50% at the expense of developing countries²⁸.

Today, Russia is implementing its own climate agenda: in his April message to the Federal Assembly, President V. Putin set the task of ensuring the accumulated net emission of greenhouse gases in the next 30 years in an amount less than that of the European Union. In response to this instruction, the Ministry of Economic Development and Trade developed a draft national strategy for low-carbon development, the baseline scenario of which assumes the fulfillment of this task, although, unlike the European Union, Russia does not set itself the goal of achieving carbon neutrality by 2050.

Earlier, Putin, following the ratification of the Paris Climate Agreement in 2019, instructed the government to achieve a 30% reduction in greenhouse gas emissions by 2030 compared to the 1990 level. In July of this year, Russia adopted a federal law on limiting greenhouse gas emissions, which should come into force from the beginning of 2022. The law obliges companies whose activities are accompanied by significant greenhouse gas emissions to submit national emission reports. In addition, the draft law provides a legal basis for the implementation of climate projects and the potential creation of a carbon market.

Russian big business has already begun to adapt its strategies to the European "green course" in a number of areas: negotiations are underway with the EU to clarify the details of the

²⁷Forecast of energy development in the world and Russia 2019 / ed. A.A. Makarova, T.A. Mitrova, V.A. Kulagina; ERI RAS – Moscow School of Management SKOLKOVO - Moscow, 2019. P. 12, 164. ²⁸Ibid. P.71.

upcoming tax and methods for accounting for greenhouse gas emissions; business restructuring with the aim of separating non-environmentally friendly enterprises; environmental projects are being developed; production facilities are being modernized and the production of new products is being mastered²⁹. So, the company Lukoil plans in 2020-2030s reduce the EII Solomon Refinery Energy Intensity Index by an average of 13% compared to 2018 and reduce CO2 emissions by an average of 10% ³⁰. The company is setting the most ambitious decarbonisation targets - to achieve zero emissions by 2050³¹.

Since 2014, at the initiative of the World Wildlife Fund (WWF) of Russia and the analytical and consulting group in the field of the fuel and energy complex "KREON", as well as with the participation of the "National Rating Agency", a project has been implemented to compile an environmental rating of oil and gas companies in Russia based on the openness of environmental information of oil and gas companies, OGCs (Environmental Transparency Rating of Oil and Gas Companies, ETROGC), which allows you to obtain objective information on the level of environmental responsibility of OGCs and the scale of the impact of their activities on the environment. In 2020, the first lines of the rating were taken by Zarubezhneft, Surgutneftegas, LUKOIL, Sakhalin Energy (Sakhalin-2) and Exxon NL (Sakhalin-1)³².

Russian OGCs occupy different positions in a similar international CDP Rating (Carbon Disclosure Project, CDP), which has been compiled for twenty years and ranks companies in the world from the highest, the most open companies in Group A in terms of completeness of information on environmental responsibility (Gazprom), to low - group F (Surgutneftegaz)³³, as evidenced by the data in Table 1. As the comparative analysis of the two ratings shows, their results do not always match.

Table 1. Rating of Russian OGCs by CDP and ETROGC index

Oil and gas companies	CDP 2020 ³⁴	ETROGC 2020
		0 (1 7010)
Gazprom	В	8 (1,5210)
Rosneft	C	9 (1,5025)
Tatneft	D	6 (1,6870)
Lukoil	C	3 (1,7521)
Surgutneftegaz	F	2 (1,7635)

²⁹Lizan I.Yu. DECARBONIZATION. How the EAEU is adapting to the European policy of carbon neutrality. SONAR 2050, p. 22.

³⁰PJSC Lukoil Sustainability Report 2020. https://csr2020.lukoil.ru/climate-change/strategy

³¹Main trends in the development of the global liquid hydrocarbons market until 2035 / Oil LUKOIL, 2019. https://lukoil.ru/Business/Futuremarkettrends

³²Note. A total of 18 Russian oil and gas companies were included in the 2019 sample. Environmental Transparency Rating of Oil and Gas Companies.P.6.

³³Note. The rating measures the completeness of information disclosure, awareness and management of environmental risks, best practices related to environmental leadership, including the setting of ambitious and significant goals.

³⁴CDP Disclosure insight action. https://www.cdp.net/en/companies/companies-scores

Novatek - 12 (1,3130)

Source: compiled from CDP Disclosure insight action https://www.cdp.net/en/companies/companies-scores and Oil and Gas Companies Environmental Disclosure Rating 2020 https://www.gazprom.ru/nature/environmental-ratings/

The number of companies disclosing information within the CDP rating in 2003-2020 increased by more than 40 times - from 228 to 9617. Companies disclosing information represent more than 50% of the world market capitalization³⁵.

In 2020, Greenpeace presented the Green Deal for Russia program, based on proposals from more than 150 public organizations and environmentally responsible business associations. Experts from the Higher School of Economics, Moscow State University, RANEPA, Skolkovo and others took part in its development. The program offers concrete steps to mitigate climate and environmental crises and Russia's transition to low-carbon development and climate-friendly policies. A survey of representatives of the authorities of all constituent entities of the Russian Federation, conducted by Greenpeace in 2021, made it possible to compile a rating of the regions of the Russian Federation based on an analysis of their low-carbon initiatives and showed that many of them use breakthrough solutions as part of the decarbonization policy. The leading positions in the rating were taken by the Sakhalin Region, Khabarovsk Territory, Leningrad Region, Moscow, the Udmurt Republic, Belgorod and Tomsk Regions. The Sakhalin Region is going to bring gasification up to 100%. Ruslan Edelgeriev, Adviser to the President on Climate Issues, said that the ambitious regional project will be supported at the national level³⁶. Regional green policy measures include energy production with green hydrogen; support for the use of recyclable goods for regional and municipal needs; heating buildings with geothermal heat pumps (based on heat); gradual replacement of the city bus fleet with electric buses; implementation of projects for the use of heat pumps, reduction of waste generation, for the abandonment of disposable plastic bags; training of specialists in the field of renewable energy in universities, etc.³⁷

In general, the European experience of a systematic approach to improving energy efficiency in various sectors of the economy and resource conservation deserves a deep study and use in Russian practice, to which a large number of Russian and European studies are devoted³⁸.

³⁵CDP Disclosure insight action. URL: https://www.cdp.net/en/companies/companies-scores

³⁶Environmental Transparency Rating of Oil and Gas Companies 2020. P.3.

³⁷The rating of the openness of Russian regions to the Green Deal. https://greenpeace.ru/wpcontent/uploads/2021/08/Reiting regionov.pdf

³⁸See Ludmila Lvovna RAZUMNOVA, Galina Victorovna PODBIRALINA and Tatiana Evgenievna MIGALEVA. Application of the European Union Experience for the Russian Legislation Formation in the Housing Renovation and Integrated Development of Territories. 36th IBIMA Conference: Spain Sustainable Economic Development and Advancing Education Excellence in the era of Global Pandemic. 4-5 November 2020, Granada, P.11625-11630.

Conclusions

It seems that the key issue on the agenda both for Russia and for many other countries - producers and consumers of raw materials is to determine what should become the main decision - making criterion in the framework of the energy transition policy: the task of decarbonization and the achievement of carbon neutrality independently or the preservation of inter-fuel competition without government interference (moderation of emission requirements), which will allow hydrocarbon resources to retain their certain share of the global energy balance. The second alternative is supported by the latest long-term forecasts, indicating the expected growth in the supply of oil and other liquid hydrocarbons from both OPEC and other non-OPEC regions until 2050 under any scenarios, driven mainly by demand growth in Asia. According to forecasts, liquid fuel and renewable energy will reach parity as sources for energy production³⁹.

At the same time, discussions about the hidden goals of new European initiatives and unfair competition will not help Russian business to overcome existing global threats and carry out consistent modernization of the fuel and energy complex or diversify the national economy. In addition to the problems associated with the high economy dependence on external shocks, Russia needs to solve such problems as increasing the energy efficiency of the national economy, in fuel and energy industries in particular, energy poverty of consumers, rational use of natural resources, environmental protection and climate adaptation. Besides the fact that Russia will receive temporary additional revenues from energy exports, it will have to contain the growing inflationary pressures due to both the inflow of these foreign earnings and the global increase in food prices.

In this context, the scientific and practical research relevance aimed at forming sound recommendations is in the following areas: choosing the optimal trajectory for low-carbon development, taking into account the combination of interests of Russian business and society as a whole; creation of a transparent state climate monitoring system to study the consequences of climate change and form an effective policy for climate adaptation and mitigation; development of reasonable targets for climate protection and reduction of greenhouse gas emissions in line with the global trend towards achieving carbon neutrality by the most developed countries by 2050; creating conditions for the development and implementation of the latest technologies for building circular economy elements; introduction of international climate reporting standards and creation of training programs in this area; revision by the Energy Strategy of Russia for the period up to 2030, the Strategy for the Development of the Electricity Distribution Grid Complex

³⁹The International Energy Outlook 2021. U.S. Energy Information Administration's (EIA) https://www.eia.gov/outlooks/ieo/introduction/sub-topic-01.php

of the Russian Federation, existing national projects and other program documents taking into account new targets, including the development of carbon-free exports; government assistance to the development of civil initiatives and social movements against the climate threat; building an effective carbon dialogue between Russia and the EU with the involvement of all stakeholders - business, government and society.

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