



# SCIENTIFIC RESEARCH OF THE SCO COUNTRIES: SYNERGY AND INTEGRATION

上合组织国家的科学研究：协同和一体化

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气候与经济：同一枚硬币的两面

**CLIMATE AND ECONOMY: TWO SIDES OF THE SAME COIN**

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注解。 文章讨论了当前全球气候变化问题，这是目前国际社会讨论最多的问题之一。 文章作者对 20 世纪下半叶和 21 世纪初各种气候变化的文献资料进行了分析，使我们能够识别环境 and 经济性质的问题。 基于气候变化的太阳理论，证实了自然原因导致的全球和区域环境和气候变化问题的相关性。 作者强调了与经济 and 地缘政治表现相关的研究的相关性。

关键词：气候、全球气候、气候变化、生态、太阳辐射、地球轨道参数、经济后果、气候变化的太阳理论、经济学。

**Annotation.** *The article discusses current issues of global climate change, which are currently one of the most discussed problems for the world community. The analysis of literary sources carried out by the authors of the article on various climate changes in the second half of the 20th and early 21st centuries allowed us to identify problems of an environmental and economic nature. The relevance of the problem of global and regional changes in the environment and climate due to natural causes is substantiated, based on the Solar Theory of Climate Change. The authors emphasize the relevance of research related to economic and geopolitical manifestations.*

**Keywords:** *climate, global climate, climate change, ecology, solar radiation, Earth's orbital parameters, economic consequences, solar theory of climate change, economics.*

### **Say a word about the poor climate...**

What role does the human factor play in climate change? How will global warming affect the Russian and world economies? What needs to be done to mitigate the effects of climate change and should it be done?

Our natural tendency to believe anecdotal evidence and reject science makes it extremely difficult for people to make good choices about climate change right now.

The wide variability in global warming scenarios and their consequences is mainly due to the high degree of uncertainty associated with this problem. Even without accounting for uncertainty in technological innovation, climate and environmental policy, many variables in climate change models depend on researchers' assumptions. For example, to determine the volume of future greenhouse gas (GHG) emissions, forecasts of economic and demographic development for the next 100 years are used, which, given their huge time horizon, are very abstract. Views on the relationship between greenhouse gas emissions levels and the climate's response to them can also vary according to assumptions made and new data, which in turn affects the quantitative assessment of the damages caused by global warming. Much remains unclear regarding future climate processes, given their nonlinearity and the likelihood of the existence of critical points of no return [1].

Predicting an economy's response to climate change can also vary depending on the elements considered and the type of model used.

According to calculations for the period of active industrialization from 1959 to 2021, the content of anthropogenic CO<sub>2</sub> (excluding volcanic activity) was no more than 4.1% of the total carbon dioxide content in the atmosphere.

The contribution of anthropogenic CO<sub>2</sub> to warming for the period from 1959 to 2021 is 0.0004 degrees, with a total warming of 0.81 degrees. In connection with the results obtained, the conclusions of the Intergovernmental Panel on Climate Change (hereinafter IPCC) about the leading role of the anthropogenic factor in climate warming do not seem convincing. There can be no talk of any defining anthropogenic warming.

There is no doctrine of global warming; there is a branch of physics called atmospheric physics. The subject of its study is the observed climate changes at different scales (time), the physical description of their mechanisms and the modeling of these changes for the purpose of possible forecasting.

From the Cretaceous to the Eocene, 35-100 million years ago, fairly high temperatures were accompanied by a decrease in carbon dioxide concentration, and 250-320 million years ago, the concentration of carbon dioxide was half that of today, but the temperature was 10°C higher. It is quite obvious that on geological time scales carbon dioxide cannot be considered the main factor in the formation

of the Earth's climate. Moreover, experimental data also show that there is no correlation between changes in carbon dioxide concentrations and surface air temperature on any time scale. The most interesting thing is that the IPCC "experts" simply do not notice these long-established and generally accepted data.

The Earth's climate is subject to long-term changes due to changes in orbit, distance from the Earth to the Sun, precession of rotation and a number of other factors. All this is summarized in the theory of Milankovitch cycles. But this happens on time scales from tens to hundreds of thousands of years, and on such scales these factors are really the main ones; for example, large glaciations are associated with this.

It is important to note that the IPCC does not conduct research, but only critically summarizes publications in the peer-reviewed scientific literature. This is how assessment reports from this organization appear, presenting generalizations of climate research over the past 6–7 years. There is nothing in these reports that has not been published in the peer-reviewed scientific literature.

At Moscow State University named after M.V. Lomonosov, based on calculations of solar radiation with high spatial and temporal resolution and analysis of their results, convincing scientific evidence has been obtained that modern global climate change is determined by natural causes. It is known that the change of seasons is associated with the fact that the Earth's axis of rotation changes its tilt. The angle of inclination is currently decreasing. The consequence of this is an increase in the intensity of transfer (movement) of radiation heat from the equatorial region to the polar regions.

The observed climate warming is associated with this. An increase in carbon dioxide content is not a cause, but a consequence of climate warming. As the temperature of the surface layer of the ocean increases, the solubility of CO<sub>2</sub> in water decreases, and therefore its content in the atmosphere increases. Therefore, the concept of a green energy transition does not have climate implications, but has environmental and mainly economic and political implications. Taking into account the new knowledge gained about the causes of climate change, it follows that it is necessary to revise the existing climate concept, which is beneficial only for the countries of the collective West.

Due to the fact that climate change is associated with natural causes and is not related to human activity, it is useless to fight these changes. They can be adapted in advance based on reliable forecasts based on the real causes of climate change. At the same time, environmental problems associated with pollution of the atmosphere, water and land resources (which are mainly caused by human activity) and not directly related to climate change can and should be solved. Separating climate problems from environmental ones will make it possible to more effectively adapt to some and solve others.

The initiatives of the collective West are directed, first of all, against Russia, which ranks 1st in the world in proven gas reserves, 2nd in coal reserves and 8th in oil reserves. Europe does not have such energy reserves and the collective West insists on transferring our economy to green energy under the flimsy pretext of combating climate change. But the climate changes regardless of people.

The global climate policy framework is currently being shaped by the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Climate Agreement. The goal of the UNFCCC is to “stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.” At the same time, it is not clear what “dangerous anthropogenic impact” is, especially in comparison with temperature fluctuations in the past.

The emergence of new knowledge about the causes of climate change creates opportunities for a technological breakthrough and can ensure Russia’s global priority in the field of climate on the basis developed at Moscow State University named after M.V. Lomonosov solar theory of climate change.

The solar theory of climate change is also a new climate weapon aimed at combating false climate ideas imposed by the West.

### **Carbon windmills**

It is clear that the decarbonizing program promoted by globalists and based on manic “concern” about global warming has completely different goals than warming itself.

The fact that carbon dioxide is not the main climate-forming factor is evidenced by the entire multimillion-year history of the development of life on our planet. For example, 250–320 million years ago, during the Carboniferous period, the concentration of carbon dioxide was half as high as it is now, but the average temperature was 10 °C higher. While 150-200 million years ago the CO<sub>2</sub> content was almost an order of magnitude higher than now - 0.3%, and 400-600 million years ago - even 0.6%, while there was no global warming then, on the contrary, almost the entire planet was covered with ice.

The total mass of carbon dioxide in the earth’s atmosphere today is 3.03 trillion tons (about 0.038% of the total mass of the planet’s atmosphere), of which 550 billion tons are annually dissolved in sea water and converted into living matter as a result of photosynthesis. That is, on average, all atmospheric CO<sub>2</sub> participates in the planetary carbon cycle once every 5–6 years.

About 300 billion tons of carbon dioxide are consumed annually to create organic matter, i.e., about 10% of the amount of CO<sub>2</sub> contained in the atmosphere. Then almost all of this mass of carbon dioxide returns back to the atmosphere and hydrosphere as a result of the oxidation of organisms and their metabolic products that have completed their earthly lives.

It should be noted that the carbon cycle as a result of the creation of organic matter in the earth's biosphere is completely closed.

Of the total mass of organic carbon annually absorbed by plants, only a small part passes into the lithosphere and leaves this cycle.

Studies have shown that for efficient photosynthesis, the current level of carbon dioxide in the earth's atmosphere is 2–3 times lower than optimal. This is, in particular, evidenced by data on CO<sub>2</sub> levels - in commercial greenhouses indicate optimal yield at its value of 0.1–0.12% or more. Based on this, we can conclude: the lack of carbon dioxide in the earth's biosphere from the point of view of all living matter (and not the “globalist man”, who is very limited in biosphere knowledge - one of the trillion species of living organisms) amounts to hundreds of billions, if not trillions of tons.

The increase in atmospheric carbon dioxide concentrations is actually caused less by industry and transport and more by CO<sub>2</sub> being released back from ocean and land sediments thanks to rising average temperatures on the planet (not the other way around). At the same time, it improves crop yields, promotes the growth of forests and grassland plants, as well as fish, crustaceans, mollusks, algae and corals in the ocean.

Therefore, the modern annual the global level of industrial CO<sub>2</sub> emissions (about 30 billion tons per year, i.e. 4-5% of its annual intake from natural sources) will have an impact on the greenhouse effect of a maximum of 1% of the above-mentioned 22% of the impact of carbon dioxide on the climate, or in total – only 0.22% [2].

According to the target scenario of the low-carbon development strategy of Russia, approved by Order No. 3052-r of October 29, 2021, the Russian economy should achieve carbon neutrality by 2060. To achieve this, among other things, the developers propose reducing greenhouse gas emissions by about 1% of GDP in 2022–2030 and to 1.5–2% of GDP in 2031–2050 by preserving and increasing the absorption capacity of forests and other ecosystems. At the same time, the developers themselves do not understand at all how they will increase the absorption capacity of natural carbon dioxide sinks - the Siberian taiga, deciduous forests in different regions, our reservoirs - both internal and external.

The document states that 1,200 million tons of CO<sub>2</sub> equivalents will be neutralized through forests and 900 million tons through improved technology by 2060. The real potential of forest-climate projects (hereinafter referred to as LCP) is significantly lower than what is shown in the Strategy for Low-Carbon Development of the Russian Federation (hereinafter referred to as SNUD), scientists from the Institute of Geography of the Russian Academy of Sciences believe. According to the SNUR, the absorption of greenhouse gases by forests needs to be increased from 535 million tons of CO<sub>2</sub> to 1200 million tons of CO<sub>2</sub> by 2050, i.e.

by 665 million tons due to LCP. At the same time, the authors of this strategy do not specify how they will “force” our forests to absorb carbon more than twice as efficiently as they do now. Scientists at the Institute of Geography of the Russian Academy of Sciences estimate the potential of climate projects at 200 million tons of CO<sub>2</sub> equivalent. Thus, the state’s focus on forest climate projects for the implementation of the green energy transition is ineffective and - this is the main thing - completely incomprehensible. Outlawed anthropogenic CO<sub>2</sub> is completely safe for the biosphere and is not only excessive, but does not even compensate for the carbon deficiency in the earth’s atmosphere. Carbon dioxide is natural, anthropogenic, has never been and cannot be an atmospheric pollutant. Moreover, without it, life on Earth would be impossible.

“Planting one trillion trees is wrong,” expressed her opinion Anastasia Makarieva, Ph.D. physics and mathematics Sciences, Department of Theoretical Physics, St. Petersburg Institute of Nuclear Physics (PNPI) National Research Center “Kurchatov Institute”. Setting a numerical or territorial target “is lying to the people.” Instead, the goal should be to restore ecosystem functionality. Just as mature trees with intact soil store much more carbon than young tree stands, mature native forests are much more effective at regulating water and climate, she said.

Efforts by local communities to protect against floods and droughts by returning land to wetlands and floodplains, restoring native plants starting in wetter areas, and imitating natural succession have the potential—by storing carbon, regulating temperature, and the water cycle—also to mitigate the effects of climate change changes in temperature and water.

#### **Carrot and stick method**

The Paris Agreement calls for keeping “average temperature increases well below 2°C above pre-industrial levels and efforts to limit temperature rise to 1.5°C”. Why? The answer lies on the surface - to develop our own economy and restrain the development of the economies of other countries. Hiding behind the fig leaf of concern for the environment, the EU is systematically engaged in redistributing the market.

If we talk about the fight against CO<sub>2</sub> emissions, talk about saving fuel, and then everyone who makes the most noise about this consumes the most energy. The United States consumes 9 tons of fuel oil equivalents per person per year. Europe is half the size. Russia began to consume 3 tons, although in the Soviet era even the entire Soviet Union spent per capita like Europe - more than 4 tons per person per year. But now we have destroyed our industry, mechanical engineering, many industries that consume energy have decreased significantly - this is a disaster, of course, but energy consumption has decreased. And in the coastal regions of China, 400-500 million Chinese live in terms of energy consumption as in Europe, i.e., in terms of carbon dioxide emissions, another Europe has appeared

on Earth, or three Russias. India and Southeast Asia are growing. But, one way or another, 25% of the Earth's population consumes 90% of energy, i.e., these 25% are responsible for the emission of carbon dioxide into the atmosphere.

While solar energy is not economically justified, but in Germany already a fifth of energy is obtained from renewable sources, primarily the sun and wind - thanks to cross-financing, i.e. they pay much more for electricity to support renewable sources. Only very rich developed countries are capable of this. But at the same time, it is important to emphasize that obtaining energy from wind energy is a very environmentally unfriendly method: there is nothing living in tens of square kilometers around the "windmill". Also, a very serious environmental problem arises when disposing of solar panels, which have a limited service life. With all this, we must not forget that the production of both solar panels and wind generators requires electricity, which must be taken from somewhere.

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#### **Economic consequences of climate change**

The impact of climate change can be measured as economic cost [5]. This is particularly well suited for market impacts, that is, impacts that involve market transactions and directly affect GDP.

Given the specific nature of economic forecasting methods, estimates of the effects of global warming during the 21st century have varied widely. It is important to understand that assessing the impact of climate change on the economy is burdened with very large uncertainties.

Separate initiatives are being promoted to detail the provisions of the Paris Agreement (for example, for the implementation of climate projects under Article 6). Important for the oil and gas industry are initiatives such as the Global Methane Commitment, announced by developed countries led by the US and EU in 2021 and uniting more than 100 countries in an effort to collectively reduce methane emissions by at least 30% by 2030 relative to 2020 (Russia to didn't join him). Methane is the second most important anthropogenic greenhouse gas after carbon dioxide, and the oil and gas industry is among its main sources. It is noteworthy that the Oil and Gas Climate Initiative, organized by the largest oil and gas companies (there are no Russian ones among them), also sets goals for its participants to reduce methane emissions - up to their minimization by 2030.

The most serious consequences for the industry may come from initiatives by developed countries to phase out support and use of fossil fuels.

Suppliers of Russian goods with a large carbon footprint will pay at least €1.1 billion a year to the EU budget when the authorities of European countries begin to fully collect the cross-border "carbon tax" officially proposed by the European



Commission on July 14. For Russia, the carbon tax will actually be equivalent to an additional ad valorem duty of 16% of the value of goods - €1.1 billion from €7 billion (Table 1). You will have to pay the most for iron and steel export from Russia - €655 million, nitrogen fertilizers - €398 million. They have larger supply volumes in tons and high carbon intensity. This follows from RBC's calculations using a methodology confirmed by the Ministry of Economic Development. The Office is responsible for consultations with the EU on the carbon tax. At the same time, everyone somehow "forgot" that the Paris Agreement, the consequence of which is the so-called carbon tax, does not give the countries that signed it the right to introduce any taxes, duties, etc. The introduction of such a tax is a direct violation of trade rules determined by the World Trade Organization (WTO).

**Table 1.**  
*Imports from Russia to the EU potentially subject to carbon tax<sup>1</sup>*

Types of imported products	Number of products, million tons	Amount of potential carbon tax (forecast), € million
Fertilizers	5.07	1066.4
Electricity		196.3
Iron and steel	10.17	3963.7
Aluminum	1.02	1760.9
Cement	0.014	0.8
Total, € bln: 6.99		

Total exports of carbon-intensive products to Europe amount to about \$180 billion per year, and the cross-border tax, according to estimates Boston Consulting Group, - about \$30 per ton of emissions. For Russian exporters, losses will amount to about \$3-5 billion per year. Annual losses of oil exporters can reach \$2.5 billion, metallurgical companies - about \$1 billion. The levy can also hit the profitability of fertilizers [4].

**Table 2.**  
*Amount of carbon tax by country, € million.<sup>2</sup>*

Products Countries	Iron and steel	Fertilizers	Aluminum	Cement	Total
Russia	655.1	397.8	74.8	0.6	1128.3
Türkiye	325.7	65.0		104.2	494.9
Ukraine	315.1	85.0			400.1
Great Britain	209.7	80.4			290.1

<sup>1</sup> Source: RBC calculations. European Commission, Eurostat. Data for 2020

<sup>2</sup> Source: RBC calculations. European Commission, Eurostat

China	163.2	48.9		212.1
South Korea	176.5	4.8	-	181.3
India	163.4	9.9		173.3
Brazil	57.7	0.2	-	57.9
USA	33.7	-		33.7

**Climate impacts of economic change.**

There is a view that economic growth and climate action are incompatible: efforts to combat climate change will inevitably harm economic growth. Therefore, society will have to decide: to continue economic growth and accept increasing climate risks, or to reduce climate risks but accept slower economic growth. And the anthropogenic influence on climate change is not proven.

The principles of climate change economics address two key issues: achieving “better growth” (improving quality of life, ensuring sustainable economic development, and reducing poverty); achieving a “better climate” (reducing GHG emissions). It must be emphasized that one of the principles of sustainable development, introduced in 2004 by former UN Secretary-General Kofi Annan, relates to ecology, but not to climate change. They - climate change - have been drawn to the concept of sustainable development literally by the ear.

Volatility in world prices, driven by market conditions and political instability, makes economic forecasting difficult. All uncertainties in the results of the analysis and forecast of climate change and the resulting possible losses must be compared with the risk posed by the refusal of officials to make changes to the Climate Doctrine of the Russian Federation.

No one has proven and will not be able to prove that an increase in the average global temperature is generally “bad” for humanity; no one has proven and will not be able to prove that an increased content of carbon dioxide in the atmosphere is also “bad” for humanity as a whole.

Forests are a fundamental element defining the Earth’s climate system, driven by winds, they create rain through a “biotic pump”, and they control soil erosion and the health of entire ecosystems. Not only that, but forests actually cool the Earth and are an important element in our current attempt to avoid catastrophic runaway global warming. But we need to understand these mechanisms; otherwise, we remain stuck in the harsh judgment that led, for example, to Bill Gates’ recent declaration that trees are useless for climate control.

Using neural prediction methods to estimate the time course of carbon dioxide emissions has a number of important advantages. Carbon dioxide emissions are influenced by various factors such as economic conditions, technological innovation, climatic conditions and others.

If we evaluate the obtained forecast average annual values of total greenhouse gas emissions (in CO<sub>2</sub> equivalent) in Russia for the period from 2005 to 2036,

including emissions from energy and industrial activities, several conclusions can be drawn.

Total greenhouse gas emissions in Russia show some variability across years. In the first half of the period (from 2005 to 2010), there was a moderate increase in emissions. From 2011 there is a more noticeable increase until 2020, after which emissions remain approximately the same. In 2019 and 2018, greenhouse gas emissions reach their maximum values – 1933.25 and 1919.92 million tons of CO<sub>2</sub> equivalents, respectively. From 2020 to 2023 there has been a slight decline in emissions due to the lingering effects of economic stagnation due to the COVID-19 pandemic, but by 2024 their levels will begin to rise again.

Between 2030 and 2036 a moderate reduction in emissions is projected in Russia.

The CO<sub>2</sub> emissions accounting system proposed by European regulators was created in the interests of Western capital and does not take into account Russia's decarbonizing capabilities, according to Vyacheslav Rozhnov, academician of the Russian Academy of Sciences and director of the A.N. Severtsov Institute of Ecology and Evolution. "For instance, our forests, seas, and chernozem [black soil] have significant carbon absorption capacity. Our unique ecosystems essentially serve as a donor for the entire Eurasian continent, absorbing carbon in volumes that significantly exceed our country's industrial emissions. Therefore, the discussion with European partners should also include the question of compensating Russia for the costs associated with the preservation and development of natural ecosystems," he said. It is not Russia that should pay a carbon tax, but EU countries should pay Russia for the fact that our forests absorb their carbon dioxide

The scenario forecasts proposed by the IPCC lead to uncertainty, since it is not known which of the proposed scenarios will happen in reality.

Neural networks make it possible to make forecasts over various time horizons, from short-term to long-term, and to model complex nonlinear relationships between variables and predict non-obvious trends, which is important for planning effective measures to reduce CO<sub>2</sub> emissions and adapt to climate change.

The average share of greenhouse gas emissions for the period from 2005 to 2036 will be approximately: USA: 22.09%, China: 14.94%, EU: 13.5%, Russia: 3.2%.

The results obtained can be explained by the following factors. The US share of emissions is higher than China's because the US is one of the largest economies in the world with a high level of industrial development and technology using coal and oil to produce energy. China is seeking to increase its share of renewable energy sources. The US has a higher share of industry in its economy than China. Based on a realistic estimate, the US, with its more developed and energy-intensive economy still has higher total emissions.

**Fais ce que dois, advienne, que pourra - Do what you must, and be what will be.**

The government must approve the priorities of both energy and environmental policies. While we introduce new market mechanisms, tariff regulation mechanisms, and environmental standards every year, it is impossible to reliably predict the effect of carbon regulation either in terms of emissions reduction or in terms of socio-economic effects.

A carbon tax should not be seen as a mandatory and fundamental method of climate policy - most countries in the world do without it. Instead of a tax, quota trading systems or softer measures (systems of “white certificates”, targeted agreements, etc.) can be used.

If we talk about reducing emissions in general, and not just greenhouse gases, then in July 2014 N 219-FZ was adopted, according to which enterprises must introduce cost-effective technologies that minimize the generation of waste and emissions, and since December 2014, national standards have been approved “Best available technology.” The BAT reference book is one of the main documents, the purpose of which is to introduce the best available technologies and establish appropriate standards, including those on emissions for a specific industry. Today, there are 51 BAT ITS operating in the country. The entire process of transition to the best available technologies (BAT), according to authorities, will take from 7 to 14 years and will ultimately reduce the environmental impact on the country by 75-80%. Let us emphasize that there will be a reduction in the environmental impact, but not on anything related to climate change.

A carbon tax is not Harry Potter’s magic wand, but rather Ron Weasley’s broken wand, which will not circumvent potential foreign import restrictions on goods with high carbon footprints—energy decarbonizing, even in green countries like Germany, takes decades.

In order to avoid additional burden on business, which will ricochet on the same S (social impact from ESG), it is necessary to adhere to the principle of redistribution of the tax burden (revenue neutrality).

When introducing a carbon tax, the authorities reduce the rates on other taxes so that, on the one hand, the total tax revenue of the budget remains unchanged, and on the other hand, there is no increase in the total tax burden for those enterprises that do everything necessary to reduce greenhouse gas emissions. A similar principle is common in foreign countries: it was implemented in British Columbia and France, and partially in Switzerland and Denmark. The same principle corresponds to the position of the Russian President regarding a moratorium on increasing the fiscal burden. Otherwise, domestic business will not receive an incentive to increase efficiency, but will receive another “quiltrent” that it may no longer be able to bear.

The world's largest investors are increasingly aggressively imposing decarbonizing principles on the banking sector. Financial institutions are trying to balance recognizing the need for green technologies while also investing in oil and gas.

In April 2021, 35 investors from the Institutional Investors Group on Climate Change (IIGCC), including the American Federated Hermes Inc. EOS and Pacific Investment Management Co. have called on the world's largest banks to phase out financing of companies involved in fossil fuel production, redirecting those resources to achieve the goals of the Paris climate agreement. It is quite possible that over time, other IIGCC members will support such an initiative<sup>3</sup>.

The main motivation of funds and other structures promoting various “green” technologies and calling for a rejection of traditional energy, apparently seems rather banal and is related to the desire to earn, said Igor Dodonov, an analyst at Finam Investment Company.

The world's largest investors have benefited enormously from the green turn, which has boosted the sectors of electric vehicles, wind turbines, solar panels, batteries, interconnected energy systems, etc. Let us emphasize again - to produce all of this, electricity is required, which must be taken from somewhere.

For banks and funds that are part of “green” companies and projects as large shareholders, it is undoubtedly beneficial for the “play” to be played as long as possible and preferably without intermissions.

As a result, the world's largest investors, pursuing their goals of capital accumulation, create favorable conditions for financing RES projects and companies that intend to “reduce CO2 emissions” (at the same time, the entire life cycle of “green” RES, its environmental load is not considered unprofitable) . Another question is that the aggressive imposition of “green” technologies has not yet led to a significant increase in the energy security of countries (in some cases, even the opposite), nor has it led to a reduction in the cost of electricity for households and enterprises. At the same time, if the policies of the largest banks do not radically change in the coming years, oil and gas companies will find it increasingly difficult to attract investors, which, in fact, will gradually change the development of the technological structure of the global energy sector.

It is necessary to say a few words about the new “play” of the EU, which is developing a package of documents on the accelerated militarization of the EU economy, and proposes to make the production of ammunition and weapons one of the priority areas of economic development along with green energy. At the same time, as part of the same package of documents, the European Commission

<sup>3</sup> Reference. In total, the IIGCC has 270 members managing assets around the world totaling €35 trillion (as of the end of 2020). This association includes pension funds, organizations developing renewable energy projects, and even church foundations. The IIGCC also includes the world's largest investors, for example, BlackRock, which owns assets worth \$8.7 trillion, or Fidelity International.

(hereinafter EC) will present an initiative to launch the production of artillery ammunition, in which EU institutions and community countries will invest €1.5 billion.

The EC proposes to provide EU countries that invest significant sums in the development of the military industry with exemptions from the budget deficit and public debt levels adopted in the community, which will allow states to more actively attract funds for military construction. Currently, such exemptions can only be granted for green energy or clean production projects.

The most short-term goal of these decisions is to increase the production of 155 mm artillery ammunition, mortar mines, and various types of surface-to-surface and surface-to-air missiles.

Let us recall that Russian suppliers of iron, steel, aluminum, and fertilizers will pay at least €1.1 billion per year in cross-border carbon tax when the authorities of European countries begin to collect it in full. Thus, Russia will pay for the production of weapons that will be supplied to Ukraine and used against our population. Do we need it?

### **Conclusion**

The adoption of a new climate concept based on the solar theory of climate may become the basis for attracting to the side of Russia many supporters of the truth and, above all, from among the countries with reserves of fossil energy resources (Saudi Arabia, Iran, Iraq, Kuwait, UAE, Turkmenistan, Venezuela, etc.).

Reliable forecasting of climate change and associated consequences is necessary for the effective implementation of strategic plans for the country's socio-economic development and is possible only on the basis of knowledge of the real causes of climate change.

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