# ARTICLES

# RENEWABLE ENERGY IN INTERNATIONAL LAW: THE RUSSIAN PERSPECTIVE FOR DEVELOPING A COMMON BRICS APPROACH

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The growing influence of renewable energy in the economy raises concerns about the need for perfecting the relevant international legal regime so as to satisfy all the stakeholders concerned. This article analyzes the relevant legal position of Russia as one of the largest exporters of energy-related products, while focusing on cooperation in this area as the BRICS Energy Prospects. The research reveals a number of findings: Russian Energy Policy has so far cautiously supported the promotion of renewable energy internationally in the context of energy efficiency and energy security; nevertheless, Russia has demonstrated a very restrained approach to the development of legally binding instruments on the matter. The authors conclude that it may be viable to find a reasonable "compromise of compromises" for the evolving international legal regime of renewable energy, and if this were to be accomplished, BRICS could assume a leading international position for the creation of such a regime.

Keywords: renewable energy; international law; energy efficiency; energy security; Energy Strategy; Russia; BRICS; cooperation.

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## Introduction

Protecting the Earth's climate system is one of the "grand challenges of planetary governance." Encouraging the use of renewable energy sources (hereinafter, RES) is an essential feature of a "Green Economy," that is, an economy aimed at "supporting life on Earth"<sup>2</sup>

Oran R. Young, Grand Challenges of Planetary Governance: Global Order in Turbulent Times 16–7 (2021).

As noted, the current economic systems are unable "to guarantee sustainability" – Robert Costanza, Ecological Economics as a Framework for Developing Sustainable National Policies, in Britt Aniansson & Uno Svedin (eds.), Towards an Ecologically Sustainable Economy 45-7 (1990).

through "clean and non-waste technology that makes sustainable development possible."<sup>3</sup>

Transforming the policies of states that are focused on carbon energy to policies that are focused on RES is certainly not the only instrument of modern sustainable development trends. The structure of international environmental law is constantly becoming increasingly comprehensive and its interaction with the national environmental laws of the different states is becoming more effective in terms of achieving "a decent environment."<sup>4</sup>

RES-related issues, being a part of economic or technological development, are part of the political and legal playing field as well. The legal issues pertaining to the energy security of the BRICS member states have not yet been scrutinized, even though a number of scholars have focused their studies on Russia's national energy laws<sup>5</sup> and Russian domestic and foreign energy policies in general<sup>6</sup> along with issues regarding particular sectors of Russia's energy mix.<sup>7</sup> Some emphasis has also been placed on the political, legal and economic assessment of Russia's energy relations with the European Union (EU),<sup>8</sup> particularly on decarbonization,<sup>9</sup> cooperation and

- <sup>4</sup> Patricia W. Birnie & Alan E. Boyle, International Law and the Environment 82–214 (1992).
- <sup>5</sup> Aliaksandr Novikau, What Does Energy Security Mean for Energy-Exporting Countries? A Closer Look at the Russian Energy Security Strategy, 39(1) J. Energy & Natural Resources L. 105 (2021); Mert Bilgin, Energy Security and Russia's Gas Strategy: The Symbiotic Relationship Between the State and Firms, 44(2) Communist & Post-Communist Studies 119 (2011).
- <sup>6</sup> Igor Bashmakov, *The Russian Energy Complex: Inertia Strategy or Efficiency Strategy?*, 50(7) Probs. Econ. Transition 66 (2007); Vladimir Milov et al., *Russia's Energy Policy*, 1992–2005, 47(3) Eurasian Geogr. Econ. 285 (2006); Anatoli Diakov, *Status and Prospects for Russia's Fuel Cycle*, 21(3) Sci. & Global Sec. 167 (2013).
- <sup>7</sup> Evgeny Lisin et al., Analysis of Competitiveness: Energy Sector and the Electricity Market in Russia, 30(1) Economic Research-Ekonomska Istraživanja 1820 (2007).
- <sup>8</sup> Tatiana Romanova, *The Russian Perspective on the Energy Dialogue*, 16(2) J. Contemp. Eur. Stud. 219 (2008).
- <sup>9</sup> Olga Khrushcheva & Tomas Maltby, The Future of EU-Russia Energy Relations in the Context of Decarbonisation, 21(4) Geopolit. 799 (2016).

B. Danh, Towards an Ecologically Sustainable Economy and Strategies for the Future, in Towards an Ecologically Sustainable Economy, supra note 2, at 9. Though the legal rules on the "sustainable development" (or on the "maximum sustainable yield") are already reflected in many international instruments relating, for example, in the management of forests or of marine living resources (see, e.g., Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, Art. 1 (Nov. 7, 2022), available at https://treaties.un.org/ pages/ViewDetails.aspx?src=IND&mtdsg\_no=XXVII-8&chapter=27&clang=\_en; United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Paris, 14 October 1994, Art. 2 (Nov. 7, 2022), available at https://treaties.un.org/doc/ Treaties/1996/12/19961226%2001-46%20PM/Ch\_XXVII\_10p.pdf; United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, Art. 61(3) (Nov. 7, 2022), available at https://treaties. un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg\_no=XXI-6&chapter=21&Temp=mtdsg3&clang=\_ en), the multiplicity of interpretations of such rules makes the very notion of sustainability still ambiguous. However, it is noted that the concept "was popularized" in the famous 1987 Brundtland Report, "Our Common Future," focusing on the interdependence between ecology, economy, and development. According to the 1987 Report, sustainable development includes integrating environmental, economic and social concerns; intergenerational equity; and international justice. This understanding of the notion has now gained "a relative consensus." See William L. Ascher & Natalia Mirovitskaya (eds.), Guide to Sustainable Development and Environmental Policy 74 (2001).

regulatory competitions in the gas industry<sup>10</sup> and also on Russia's energy relations with the former Soviet countries.<sup>11</sup> Additionally, a separate area of scientific research is devoted entirely to assessing energy relations between the Russian Federation and China.<sup>12</sup> However, no comprehensive research has been conducted on Russia's international legal position concerning RES, taking into account the content of the new "Energy Strategy of Russia for the Period up to 2035," approved by Order of the Government of the Russian Federation of 9 June 2020 No. 1523-r<sup>13</sup> and Russia's respective actions in the international arena.

This paper examines, after this introduction, the basic elements of the notion of "renewable energy" in the context of international law (Section 1). The authors then focus on the key provisions of Russian legal documents on the priorities for the development of international dialogue on energy issues in the sector of renewable energy with the participation of Russia (Section 2). The next section (Section 3) provides an analysis of the International Renewable Energy Agency, a global intergovernmental organization whose mission is focused on developing best practices in the RES domain. Section 4 discusses the political and legal framework for cooperation among states in the renewable energy sector within such influential interstate platforms as the BRICS forum. Section 5 provides an overview of Russia's bilateral efforts regarding renewables with the other BRICS member states. The authors specifically outline that cooperation on this subject is carried out through intergovernmental negotiations and joint ventures between Russian and foreign entities engaged in RES projects on the territory of Russia and the BRICS countries. Section 6 summarizes the main components of Russia's international legal policy in the field of renewable energy and proposes the ways in which common approaches to the advancement of RES could be developed within the framework of BRICS as a promising intergovernmental forum for the sharing of best practices in the area. In the next section, the authors present their conclusion.

<sup>&</sup>lt;sup>10</sup> Jaroslaw Ćwiek-Karpowicz, Russia's Gas Sector: In Need of Liberalization in the Context of the Shale Gas Revolution and Energy Relations with the European Union, 18(1) J. East-West Bus. 54 (2012).

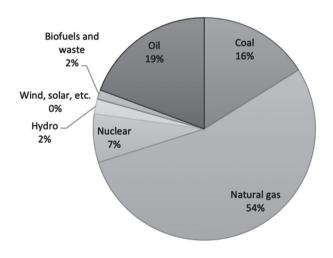
<sup>&</sup>lt;sup>11</sup> Inna Chuvychkina, *Russian Energy Strategy in the European Union, the Former Soviet Union Region, and China*, 68(5) Eur.-Asia Stud. 941 (2016).

<sup>&</sup>lt;sup>12</sup> Bo Xu & William M. Reisinger, Russia's Energy Diplomacy with China: Personalism and Institutionalism in its Policy-Making Process, 32(1) Pac. Rev. 1 (2019); Boris G. Saneev, Energy Cooperation Between Russia and Northeast Asian Countries: Prerequisites, Directions and Problems, 32(1) Global Econ. Rev. 39 (2003).

<sup>&</sup>lt;sup>13</sup> Энергетическая стратегия Российской Федерации на период до 2035 года, утв. распоряжением Правительства Российской Федерации от 9 июня 2020 г. № 1523-р // Министерство энергетики РФ [Energy Strategy of Russia for the Period up to 2035, approved by Order of the Government of the Russian Federation of 9 June 2020 No. 1523-г, Ministry of Energy of the Russian Federation] (Nov. 7, 2022), available at https://minenergo.gov.ru/node/1026.

#### 1. The Notion of Renewable Energy in the Context of International Law

The relevant efforts undertaken by a number of states to use "clean" energy resources are indicative of a global trend. Russia, being an economy based on traditional energy resources such as natural gas, oil and coal (see Figure 1 and Table 1), does not have a long legislative history of regulating the utilization of solar, wind, ocean currents, waves, tides and other undisputable renewable energy resources. Meanwhile, hydropower resources and geothermal energy are not among the newly regulated areas of legal regulation in Russia. That is also applicable to nuclear energy resources and products, which some authors also consider to be among renewable energy resources because they can also be "replenished or regenerated," making them "available for use indefinitely without the threat of exhaustion."<sup>14</sup> However, nuclear energy resources are not generated through natural processes and issues of nuclear safety and security are sensitive concerns in regions in which they are saturated.<sup>15</sup> As for geothermal energy resources, the environmental consequences of installing relevant devices into the earth's crust in order to harness these resources have not yet been comprehensively assessed at this stage of scientific discovery. As a result, nuclear and geothermal energy are still not universally considered environmentally sound, despite being more promising than carbon energy.



#### Figure 1: Russia's Energy Mix – Total Energy Supply (TES) by source (2019)<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Celia Campbell-Mohn (ed.), Environmental Law: From Resources to Recovery 484–85 (1993).

<sup>&</sup>lt;sup>15</sup> Mikhail Lysenko et al., Nuclear Safety and Security in the Arctic: Crafting an Effective Regional Governance System, 13(2022) Arctic Rev. on L. & Pol. 191 (2022) (Nov. 7, 2022), available at https://arcticreview.no/index.php/arctic/article/view/3820.

<sup>&</sup>lt;sup>16</sup> World Energy Balances, IEA (Nov. 7, 2022), available at https://www.iea.org/data-and-statistics/data-product/world-energy-statistics-and-balances.

Energy type (2019)	LT	
Coal	5224255	
Natural gas	17502256	
Nuclear	2294073	
Hydro	700983	
Wind, solar, etc.	10165	
Biofuels and waste	427084	
Oil	6256867	

## Table 1: Russia's Energy Mix – Total Energy Supply (TES) by source, in TJ (2019)<sup>17</sup>

In September 2020, the public limited company British Petroleum announced in its Energy Outlook the forthcoming reorientation of the "global energy system" away from carbon energy to renewable energy sources.<sup>18</sup> According to each of the three proposed scenarios for such a transition, oil demand will decrease by 10%–80% over the next 30 years. On the other hand, according to Rapid Scenario Planning, the share of renewable energy in the global energy mix is expected to increase from 5% in 2018 to 45% in 2050. The International Energy Agency (IEA) also stated in its report "Global Energy Review," released in April 2021 that the share of renewables has increased over the past two years. Given that "renewables have proven largely immune to the pandemic," the IEA predicted that the share of renewables in total electricity generation would increase from 27% in 2019 to 30% in 2021.<sup>19</sup>

When the above-mentioned trends are taken into account, it is clear that there is a need for an improvement in the regulation of relations within any state that is involved in the promotion of the use of RES. At the same time, the interaction of the economies of the different states in the energy sector raises the importance of the international legal regulation of RES. The search for mutually acceptable legal mechanisms in this area is aligned with the different and, at times, opposing interests of the states that have unequal natural resources at their disposal.

The geopolitical situation also has a significant impact on this situation. Thus, in June 2021, the international company Fortescue Future Industries (FFI), registered

<sup>&</sup>lt;sup>17</sup> World Energy Balances, IEA (Nov. 7, 2022), available at https://www.iea.org/data-and-statistics/data-product/world-energy-statistics-and-balances.

<sup>&</sup>lt;sup>18</sup> BP, Energy Outlook: 2020 Edition (2020), at 7 (Nov. 7, 2022) available at https://www.bp.com/content/ dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlook/bp-energyoutlook-2020.pdf.

<sup>&</sup>lt;sup>19</sup> Global Energy Review 2021, IAEA (Nov. 7, 2022), available at https://www.iea.org/reports/globalenergy-review-2021/economic-impacts-of-covid-19.

in Australia, and the Russian Ministry of Energy negotiated the creation of a joint working group to study the possibilities of implementing projects for the production of environmentally friendly hydrogen in Russia.<sup>20</sup> The working group could have included representatives of the Ministry of Industry and Trade of Russia, the Ministry of Transport of Russia and companies from the energy sector. At the same time, the recent events in Ukraine caused the FFI to announce a "loss of interest" in such cooperation for political reasons<sup>21</sup> and, just one month later, sign a Memorandum of Understanding with E.ON (Germany), one of Europe's largest operators of energy networks and energy infrastructure, to achieve the delivery of up to five million tons per year of environmentally friendly renewable hydrogen (GH2) to the European Union by 2030 in order to "reduce its energy dependence on fossil fuels from Russia as quickly as possible."<sup>22</sup> According to the parties to the Memorandum, five million tons per year of renewable hydrogen is equivalent to approximately one third of the heat energy imported by Germany from Russia.

# 2. The Key Instruments of Russian Legal Policy in the Field of Renewable Energy

The key documents reflecting the priorities of Russia's energy policy, both at the national and international levels, are: (a) the Energy Strategy of Russia for the Period up to 2035, approved by Order of the Government of the Russian Federation of 9 June 2020 No. 1523-r<sup>23</sup> (hereinafter, the Energy Strategy) and (b) the Doctrine of the Energy Security of the Russian Federation, approved by Decree of the President of Russia of 13 May 2019 No. 216<sup>24</sup> (hereinafter, the Doctrine). These documents supplement each other. Thus, the Doctrine focuses mainly on ensuring the security

<sup>&</sup>lt;sup>20</sup> Минэнерго России и Fortescue Future Industries создадут рабочую группу по чистому водороду // Министерство энергетики РФ. 3 июня 2021 г. [*Ministry of Energy of Russia and Fortescue Future Industries to Create a Clean Hydrogen Joint Working Group*, Ministry of Energy of the Russian Federation, 3 June 2021] (Nov. 7, 2022), available at https://minenergo.gov.ru/node/20824.

<sup>&</sup>lt;sup>21</sup> Fortescue ends interest in Russian hydrogen sector, Hydrogen Economist, 1 March 2022 (Nov. 7, 2022), available at https://pemedianetwork.com/hydrogen-economist/articles/strategies-trends/2022/ fortescue-ends-interest-in-russian-hydrogen-sector/.

<sup>&</sup>lt;sup>22</sup> Fortescue Future Industries and E.ON partner on journey to become Europe's largest green renewable hydrogen supplier and distributor, Fortescue Metals Group Ltd, 29 March 2022 (Nov. 7, 2022), available at https://www.fmgl.com.au/in-the-news/media-releases/2022/03/29/fortescue-future-industries-and-e.on-partner-on-journey-to-become-europe%27s-largest-green-renewable-hydrogensupplier-and-distributor.

<sup>&</sup>lt;sup>23</sup> Energy Strategy of Russia, *supra* note 13.

<sup>&</sup>lt;sup>24</sup> Доктрина энергетической безопасности Российской Федерации, утв. указом Президента Российской Федерации от 13 мая 2019 г. № 216 // Министерство энергетики РФ [Doctrine of the Energy Security of the Russian Federation, approved by Decree of the President of the Russian Federation of 13 May 2019 No. 216, Ministry of Energy of the Russian Federation] (Nov. 7, 2022), available at https://minenergo.gov.ru/node/14766.

of Russia's fuel and energy complex. In contrast, the Energy Strategy contains a vision of the long-term development of world energy in general and of the Russian fuel and energy complex in particular. Accordingly, the Energy Strategy sets forth the measures necessary to ensure the most advanced and efficient development of Russia's fuel and energy complex, with priority given to the "framework" provisions of the Doctrine regarding energy security.

Both documents focus on the analysis of the main directions and prospects for the development of renewable energy, taking into account the role of Russia as a producer and exporter of predominantly carbon-based energy products.

# 2.1. Energy Strategy of Russia for the Period up to 2035: The Basis of Russia's Position in the Dialogue on Renewable Energy

The Energy Strategy of Russia for the Period up to 2035, adopted in June 2020, replaced the previous Energy Strategy of Russia for the Period up to 2030, which was approved by Decree of the Government of the Russian Federation of 13 November 2009 No. 1715-r.<sup>25</sup> According to the new Energy Strategy of Russia for the Period up to 2035, the environmental energy transformation is defined as "the transition of the energy sector to a new technological basis as a result of the application of technologies that contribute to organizational and technological changes in the management and operation" of power systems. The transition to "environmentally friendly" and "resource-saving" energy has been named among the priorities of Russian state policy. "The use of renewable energy" is also included in this energy transition. At the same time, the Energy Strategy, in contrast to the abovementioned BP's Energy Outlook, is more cautious in the wording that is used to describe the rate of increase in the share of RES in the global energy mix until 2035:

Not only can the development and expansion of breakthrough technologies in the world increase competition, but also significantly change the structure of world flows of goods, technologies and services in the energy sector. At the same time, given the persistence of the energy sector, expressed in the high capital and resource intensity of investment projects and their long-term nature, in the future until 2035, fossil fuels will continue to be the foundation of the global energy mix with a gradual increase in the share of energy based on the use of renewable energy sources in global and national energy mix.

<sup>&</sup>lt;sup>25</sup> Распоряжение Правительства Российской Федерации от 13 ноября 2009 г. № 1715-р «Об утверждении Энергетической стратегии России на период до 2030 года» // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 1715-r of 13 November 2009. On the Energy Strategy of Russia for the Period up to 2030, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https:// www.consultant.ru/document/cons\_doc\_LAW\_94054/.

On the one hand, the Energy Strategy indicates that despite the increase in the share of RES, fossil fuels will remain the dominant form of energy in the global energy sector until 2035. On the other hand, the emphasis on the "gradual" (in Russian – постепенный) growth in the share of RES and the "persistence" (in Russian – инерционность) of the global energy sector is seen as somewhat different from the general trend in Europe since studies conducted by EU analysts demonstrate a much more rapid increase in the share of renewable energy.<sup>26</sup> Moreover, the word "gradually" used in the Russian legal document may be interpreted as suggesting that the "green" direction of the energy policy, although important, is not a priority for Russia.

In other sections of the Energy Strategy, it is indicated that the implementation of Russia's policy priorities presumes "increasing the sustainability and reliability of energy supply to macroregions with maximum, cost-effective use," including "renewable energy sources."<sup>27</sup> At the same time, the Energy Strategy lacks concrete measures that could contribute to the sustainability of energy resources and guidelines for legislators regarding the development of such measures.

As an example of the opposite approach to traditional energy resources, the same section of the Energy Strategy mentions "a significant increase in the extraction and deepening of the processing of all types of energy resources in the Arctic zone of the Russian Federation, Eastern Siberia and the Far East, the development of the production of transportable energy-intensive products, high levels of redistribution and appropriate transport and social infrastructure." In spite of the fact that this provision is also quite generalized, the Energy Strategy sets forth several proposals for its implementation. For example, in order to facilitate the growth of the Russian gas industry, it has been proposed to create specialized centers (hubs) in the Arctic zone of the Russian Federation for the transshipment, storage and trade of liquefied natural gas and the implementation of projects for the construction of terminals in Kamchatka and the city of Murmansk. The concrete goals and objectives and measures to achieve them are similarly formulated in other sectors of Russian non-renewable energy; however, this is not at all the case as far as renewables are concerned.

The only section of the Energy Strategy that provides a detailed description of the objectives and measures related to the use of RES is called "Hydropower and other types of energy based on the use of renewable energy sources." Meanwhile, the majority of the measures provided in this section primarily touch upon hydropower,

See, e.g., European Commission, EU Reference Scenario 2020: Energy, Transport and GHG Emissions – Trends to 2050 (July 2021), at 130 (Nov. 7, 2022), available at https://data.europa.eu/doi/10.2833/35750. "In the short to medium term, the transformation of the energy system is substantial. GHG emissions are projected to reduce by 43.8% in 2030 compared to 1990, and the overall renewables share will reach 33.2% in 2030. The overall renewable energy share thus slightly over-achieves the existing 2030 target, driven mainly by developments in the power sector, followed by transport, and heating and cooling."

<sup>&</sup>lt;sup>27</sup> Energy Strategy of Russia, *supra* note 13.

whose objective is described as "improving the operation efficiency of hydroelectric power plants." Furthermore, another section of the Energy Strategy indicates that the amount of electricity generated through hydroelectric power plants increased by 15.8% during the period from 2008 to 2018; the share of hydroelectric power plants in the structure of generating capacities of the Russian Federation is approximately 20%, and on a global scale, the country has a hydropower potential of approximately 9%. The total capacity of solar power plants in the Unified Energy System of Russia in 2018 reached 0.834 gigawatts (GW), while the total capacity of wind power plants was 0.184 GW (*see* Table 2 below).

	Geothermal	Hydro	Wind	Solar PV
1990	28	165917		
1995	30	176412		
2000	58	165375	2	
2005	410	174604	7	
2010	505	168397	4	
2015	457	169914	148	335
2020	421	214240	1138	1862

## Table 2: Renewable electricity generated in the Russian Federation from 1990–2020, broken down by source (non-combustible) (in GWh)<sup>28</sup>

The document explicitly mentions the objective to increase the "efficiency of energy supply to remote and isolated territories" and lists several measures that can be taken for the implementation of this objective, including the following:

• improvement of national standards related to renewable energy sources, taking into account best practices from around the world;

 support for Russian exporters of equipment and the providers of services involved in the design, construction, operation and maintenance of generating facilities based on renewable energy sources abroad;

• improvement of the mechanisms for stimulating the development of renewable energy in the medium and-long term;

• stimulation of voluntary demand for electricity generated from renewable energy sources.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Renewables Information, IEA (Nov. 7, 2022), available at https://www.iea.org/data-and-statistics/data-product/renewables-information.

The Energy Strategy also identifies the main problems associated with using renewable energy sources in Russia, namely, their low efficiency when compared to other technologies for generating electricity. However, the document does not provide for concrete measures that could be taken to increase such efficiency across the country.

Specific provisions of the Energy Strategy are devoted to the development of international cooperation between Russia and other countries in the energy sector in general and in renewable energy in particular. The goals and objectives of Russia's foreign policy regarding RES and the measures needed to achieve them that are stipulated in the Energy Strategy can be divided into two groups, specifically (a) goals and objectives of foreign policy to increase the efficiency of participation in the global energy agenda and (b) goals and objectives of such a policy in the environmental dimension of the country's fuel and energy complex.

The first category of goals and objectives focuses primarily on promoting the economic interests of Russia in global energy interactions. The measures to achieve these goals include "increasing participation in international activities to ensure sustainable development of global energy, including the United Nationsendorsed goal of ensuring universal access to affordable, reliable, sustainable and modern energy for all"; "participation in international negotiations on energy issues"; "strengthening the legal framework for energy cooperation, consolidating the principle of balancing the interests of exporters, importers and transit countries" of energy carriers; promoting a "favourable image of the Russian energy sector"; and expanding "Russian participation in the work of relevant international organizations."<sup>30</sup> Interestingly, none of the above measures presumes a prior promotion of RES by Russia or the country's active participation in negotiations regarding international agreements relating to RES.

According to the Energy Strategy, the indicator of the efficiency of participation in the global energy agenda is expected to move up from its current position of 42<sup>nd</sup> place in the World Energy Trilemma Index<sup>31</sup> in 2018 to a position between 20<sup>th</sup> and 30<sup>th</sup> place by 2035. It should be noted that this index is calculated based on 32 categories, none of which are directly related to RES. Nevertheless, the significance of some of these categories may be influenced by the implementation of the state's renewable energy policy. For example, the policy that aims to increase the share of RES may affect the energy security dimension (energy mix and reducing demand for imports) and the environmental sustainability dimension (by reducing carbon dioxide

<sup>&</sup>lt;sup>30</sup> Renewables Information, IEA (Nov. 7, 2022), available at https://www.iea.org/data-and-statistics/data-product/renewables-information.

<sup>&</sup>lt;sup>31</sup> The World Energy Trilemma Index has been prepared annually since 2010 by the World Energy Council. It presents a comparative ranking of 128 countries' energy systems. It provides an assessment of a country's energy system performance, reflecting balance and robustness in the three Trilemma dimensions, namely Energy Security, Energy Equity and Environmental Sustainability of Energy Systems.

emissions). If such a policy contributes to higher electricity prices, this may affect the "Equitable access to energy (physical and financial accessibility)" dimension. External factors such as technological change (e.g. changes in renewable energy technologies) can also have an impact and are not directly measured by the Index.<sup>32</sup>

This direction of Russia's international cooperation entails the country's participation in energy projects (both interstate and "diagonal," i.e. those implying the participation of private entities) on a wide range of issues that are not necessarily directly related to RES. General energy issues (including sustainable development in the energy field) are regularly discussed by Russia within the framework of the International Energy Forum.<sup>33</sup> As for particular areas of energy cooperation, one could invoke Russia's participation in the UNECE (United Nations Economic Commission of Europe) project titled "Sustainable hydrogen production in the UNECE region and its role in the development of a hydrogen ecosystem and export potential" that was approved in October 2021 by the UNECE Executive Committee. The project is financially supported by a voluntary contribution made by Russia to the UNECE.<sup>34</sup> The declared budget of the project is US\$241,000. The main task is to study the potential of hydrogen as one of the key elements of the low-carbon energy system of the UNECE region in the future.<sup>35</sup>

Another direction of Russia's international cooperation is described as its participation in the development of international environmental law applicable to the regulation of intergovernmental relations in the energy sector, its harmonization with the national environmental legislation of the country, as well as the fulfillment of Russia's international obligations to reduce greenhouse gas emissions.

To conclude, the Energy Strategy does not specifically mention the "promotion of RES" as one of the components of Russia's participation in international energy dialogues. On the one hand, the topic of RES is covered by some of the areas of

<sup>&</sup>lt;sup>32</sup> World Energy Council, World Energy Trilemma Index 2020, in partnership with Oliver Wyman (2020), at 60 (Oct. 7, 2021) (Nov. 7, 2022), available at https://www.worldenergy.org/assets/downloads/World\_ Energy\_Trilemma\_Index\_2020\_-\_REPORT.pdf.

<sup>&</sup>lt;sup>33</sup> IEF16 Ministerial, 10–12 April 2018, New Delhi, India, International Energy Forum (IEF) (Nov. 7, 2022), available at https://www.ief.org/events/ief16-ministerial.

<sup>&</sup>lt;sup>34</sup> UNECE webinar: How to jumpstart hydrogen production and export potential of CIS countries?, 8 December 2021, UNECE (Nov. 7, 2022), available at https://unece.org/sustainable-energy/events/unece-webinar-how-jumpstart-hydrogen-production-and-export-potential-cis.

<sup>&</sup>lt;sup>35</sup> Россия окажет содействие развитию устойчивой водородной энергетики в регионе EЭК ООН // Постоянное представительство Российской Федерации при Отделении ООН и других международных организациях в Женеве. 18 октября 2021 г. [*Russia Will Assist the Development of Sustainable Hydrogen Energy in the UNECE Region*, Permanent Mission of the Russian Federation to the United Nations Office in Geneva, 18 October 2021] (Nov. 7, 2022), available at https://geneva.mid.ru/glavnaa/-/asset\_publisher/4QbYFW4eSXTx/ content/rossia-okazet-sodejstvie-razvitiu-ustojcivoj-vodorodnoj-energetiki-v-regione-eek-oon?inheri tRedirect=false&redirect=https%3A%2F%2Fgeneva.mid.ru%3A443%2Fglavnaa%3Fp\_p\_id%3D101\_ INSTANCE\_4QbYFW4eSXTx%26p\_p\_lifecycle%3D0%26p\_p\_state%3Dnormal%26p\_p\_mode%3D view%26p\_p\_col\_id%3D\_118\_INSTANCE\_n3jA6XOjABmS\_column-1%26p\_p\_col\_count%3D3.

international cooperation that are mentioned in the Energy Strategy. On the other hand, Russia's silence with regards to the position on international legal regulation of RES can be explained by the country's interest in maintaining its status as one of the largest exporters of traditional carbon-based energy products in the context of the aforementioned "green" trends in the world energy markets, which Russia is forced to address. For example, the Energy Strategy names the "international campaign against the use of coal under the pretext of implementing the environmental agenda" among the Russian coal industry's main problems and risk factors. Thus, the foregoing leads one to the conclusion that the Energy Strategy reflects Russia's aim to maintain, as much as possible, a wait-and-see attitude towards international legal support for renewables while, at the same time, Russia intends to participate in discussions on this issue when and to the extent that its economic interests may be affected.

# 2.2. The Doctrine of the Energy Security of the Russian Federation: RES Qualifies as a Challenge to Energy Security

The foundations of Russia's state policy in the energy sector, as noted, shall be implemented within the framework of the Doctrine of the Energy Security of Russia, which was approved by Decree of the President of Russia of 13 May 2019. According to the Doctrine, "the energy security system is part of the national security system."<sup>36</sup> This document defines critical concepts related to energy security, systematizes threats, challenges and risks and outlines the tasks, subjects and mechanisms of ensuring energy security. Despite being criticized for specific gaps, the Doctrine, nonetheless, is characterized as a conceptual basis for "further practical steps in the field of legal regulation of energy and national security."<sup>37</sup>

As stated above, the Energy Strategy identifies innovative technologies (including those based on RES) as one of the priorities of the national energy policy. At the same time, it is noteworthy that the concept of "energy transition" is considered one of the "challenges" to Russia's energy security in the 2019 Doctrine. Thus, according to Clause 8 of the document, an increase in the share of renewable energy in the global fuel and energy mix is named among the "external economic challenges" to the country's energy security.<sup>38</sup> Furthermore, according to Clause 9 of the 2019 Doctrine, the "building up of international efforts to implement climate policy and accelerate the transition to a green economy" is a "foreign policy challenge" is stated to be "the development and expansion of breakthrough technologies in the energy sector,

<sup>&</sup>lt;sup>36</sup> Doctrine of the Energy Security of the Russian Federation, *supra* note 24, cl. 33.

<sup>&</sup>lt;sup>37</sup> Жаворонкова Н.Г., Шпаковский Ю.Г. Пробелы в новой Доктрине энергетической безопасности России // Юрист. 2020. № 9. С. 43–50 [Natalia G. Zhavoronkova & Yuri G. Shpakovsky, *Gaps in the New* Doctrine of Russia's Energy Security, 9 Lawyer 43 (2020)]; see also Novikau 2021.

<sup>&</sup>lt;sup>38</sup> Doctrine of the Energy Security of the Russian Federation, *supra* note 24.

including technologies for the use of renewable energy." With this in mind, the 2019 Doctrine defines the term "challenge to energy security" as "a combination of conditions and factors that create new incentives for the development of world energy or new directions for its development but can also lead to a threat to energy security."<sup>39</sup>

In contrast to such a complicated assessment of the term "challenge," the term "threat" is defined as "a combination of conditions and factors that create the possibility of damage to the energy sector of the Russian Federation." That is to say, according to Russia, "challenges" are associated with such trends in the global energy market, which provide opportunities for the development of its energy sector, but under certain conditions can become a threat to its energy security. Clause 20 of the Doctrine sets forth, for example, that the current state of the applicable legal framework restrains the introduction of innovative technologies. To prevent the transformation of this challenge into a "threat," Clause 29 of the Doctrine (which is among the goals to ensure Russia's technological independence) indicates the need for the creation and development of innovative technologies in the energy sector, including the use of renewable energy.

# 2.3. Overview of Renewable Energy Incentives in Russia's National Legislation and Policy

Russia's national legal stance with regards to RES appears to be quite complex and comprises several legal and political acts establishing different directions of state support and regulation. The purpose of this brief outline of this stance is primarily to illustrate better the reasoning behind the conclusion reached in Section 2.1 above, namely, that it is not the highest priority for Russia to actively promote the emergence of a new RES international legal regime.

Historically, Russia's path towards renewable energy started in 1892, when its first hydroelectric power plant was built in the Altai region of Siberia. The plant featured four wooden turbines, each of which had a capacity of 45 kilowatts. In 1931, the most powerful (100 kilowatts in capacity) wind generator was built in the USSR (Union of Soviet Socialist Republics), whereas in 1966, the first power station using geothermal energy was commissioned.<sup>40</sup> However, until the last two decades, the country lacked state programs to support renewable energy.<sup>41</sup>

<sup>&</sup>lt;sup>39</sup> Doctrine of the Energy Security of the Russian Federation, *supra* note 24.

<sup>&</sup>lt;sup>40</sup> Маренин К. На Камчатке модернизуют самую старую геотермальную станцию // Российская газета. 28 августа 2014 г. [Kirill Marenin, *The Oldest Geothermal Station in Kamchatka to be Modernized*, Rossiyskaya Gazeta, 28 August 2014] (Nov. 7, 2022), available at https://rg.ru/2014/08/28/regdfo/stanciya.html.

<sup>&</sup>lt;sup>41</sup> Alexey Lossan, *Russia and China Join Forces to Develop Green Energy*, G20 Magazine (September 2016) (Nov. 7, 2022), available at https://digital.thecatcompanyinc.com/g20magazine/september-2016/ green-energy/.

Currently, in Russia, the foundations of RES support and the activity of RESgenerating entities in the electric energy market are outlined in Federal Law No. 35-FZ on electric energy of 26 March 2003 (hereinafter, the Law on Electricity).

By-laws of the Russian Government establish targets for the development of renewable energy in the domestic market of Russia as well as the procedure for the competitive selection of generating facilities for obtaining state subsidies. The general principles of state support in this area (furthered by several specific by-laws<sup>42</sup>) are established in the document titled "Main Directions of the State Policy Aimed at Increasing Energy Efficiency of the Electric Power Industry Based on the Use of Renewable Energy Sources for the Period up to 2035" (hereinafter, the Main Directions), approved by Decree of the Government of the Russian Federation on 8 January 2009.<sup>43</sup> The Main Directions also provide that the amount of production and consumption of electric energy using RES will reach 4.5% by 2024 of the country's total production and consumption of electric energy (and at least 6% by 2035). This target is far more modest in comparison, for example, with the objectives of the EU, namely, to achieve a share of at least 32% of energy from renewable sources in the Union's gross final consumption of energy by 2030.<sup>44</sup>

The primary support mechanism for renewable energy in Russia is the auction system.<sup>45</sup> The first part of the RES development program, to be realized in 2014–2024,

<sup>&</sup>lt;sup>12</sup> See, inter alia, Постановление Правительства Российской Федерации от 3 июня 2008 г. № 426 «О квалификации генерирующего объекта, функционирующего на основе использования возобновляемых источников энергии»; Постановление Правительства Российской Федерации от 17 октября 2009 г. № 823 «О схемах и программах перспективного развития электроэнергетики»; Постановление Правительства Российской Федерации от 17 февраля 2014 г. № 117 «О некоторых вопросах, связанных с сертификацией объемов электрической энергии, производимой на функционирующих на основе использования возобновляемых источников энергии квалифицированных генерирующих объектах» // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 426 of 3 June 2008. On the Qualification of a Generating Facility Operating on the Basis of the Use of Renewable Energy Sources; Decree of the Government of the Russian Federation No. 823 of 17 October 2009. On Schemes and Programs for the Long-Term Development of the Electric Power Industry; Decree of the Government of the Russian Federation No. 117 of 17 February 2014. On Some Issues Related to the Certification of Volumes of Electrical Energy Produced at Qualified Generating Facilities Operating on the Basis of the Use of Renewable Energy Sourcees, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru.

<sup>&</sup>lt;sup>43</sup> Распоряжение Правительства Российской Федерации от 8 января 2009 г. № 1-р «Об основных направлениях государственной политики в сфере повышения энергетической эффективности электроэнергетики на основе использования возобновляемых источников энергии на период до 2035 года» // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 1-r of 8 January 2009. On the Main Directions of the State Policy Aimed at Increasing Energy Efficiency of the Electric Power Industry Based on the Use of Renewable Energy Sources for the Period up to 2035, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru/document/ cons\_doc\_LAW\_83805/.

<sup>&</sup>lt;sup>44</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), EUR-Lex (Nov. 7, 2022), available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018L2001.

<sup>&</sup>lt;sup>45</sup> Tatiana Lanshina, Research of Current Economic Policy Instruments in the Field of Renewable Energy in Russia and in the World, SSRN (2020) (Nov. 7, 2022), available at https://ssrn.com/abstract=3695065.

according to the Main Directions, has as its foundation a capacity-based approach to renewable electricity support. In the majority of other countries, support for RES electricity is usually linked to the electricity output (production) of renewable energy generating facilities (expressed in MWh) (e.g. through feed-in tariffs, premiums, green certificates or tendering schemes).<sup>46</sup> In contrast, the Russian capacity scheme, in its first stage, has been linked to a capacity supply agreement (i.e. the availability of power plants to produce electricity), expressed in MW or MW per month. Under this mechanism, annual auctions have been held to implement projects for the construction of solar, wind and small hydropower plants. The investor offering the lowest capital expenditures is typically declared the winner (thus, the competitive system came to be called CAPEX, i.e. capital expenditure-based).<sup>47</sup> These agreements have allowed investors to secure a return on their investment in RES projects through guaranteed capacity payments (12% annually) payable over a term of 15 years owing to increased payments made by wholesale consumers.<sup>48</sup> However, the said system of competitive selection of investors has not proven optimal for the RES market. Indeed, it did not promote increasing the efficiency of the equipment or searching for new sources of financing and potential markets. Moreover, investors were not interested in localization of the equipment in Russia. The cross-subsidization did not stimulate RES investors to search for alternative means to reduce the cost of the energy that was produced.<sup>49</sup> Despite the fact that the auction prices have fallen twice from 2014 to 2019,<sup>50</sup> it was decided to introduce an LCOE-based<sup>51</sup> auction system for state support of RES for the period of 2024–2035.<sup>52</sup> Under the new rules, the amount of payment for

<sup>&</sup>lt;sup>46</sup> IRENA, REmap 2030: Renewable Energy Prospects for the Russian Federation, Working Paper (2017) (Nov. 7, 2022), available at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Apr/IRE-NA\_REmap\_Russia\_paper\_2017.pdf.

<sup>&</sup>lt;sup>47</sup> Lanshina, *supra* note 45, at 46.

<sup>&</sup>lt;sup>48</sup> Объем господдержки развития ВИЭ-генерации в России до 2035 года составит 350 млрд рублей // TACC. 22 марта 2021 г. [*The Volume of State Support for the Development of Renewable Energy Generation in Russia until 2035 Will Amount to 350 Billion Rubles*, TASS, 22 March 2021] (Nov. 7, 2022), available at https://tass.ru/ekonomika/10967461.

<sup>&</sup>lt;sup>49</sup> Тукалин Г. Сверхприбыль инвесторов ВИЭ может оказаться убедительнее доводов энергопотребителей // Новая газета. 8 апреля 2019 г. [Gleb Tukalin, Super Profits of Renewable Energy Investors May Be More Convincing than the Arguments of Energy Consumers, Novaya Gazeta, 8 April 2019] (Nov. 7, 2022), available at https://www.ng.ru/economics/2019-04-08/5\_7551\_energy.html.

<sup>&</sup>lt;sup>50</sup> Дешево-зелено: Цена «зеленой» электроэнергии в РФ сблизилась со стоимостью традиционной // Коммерсантъ. 5 октября 2021 г. [Cheap Green: The Price of "Green" Electricity in the Russian Federation Approached the Cost of Traditional One, Kommersant, 5 October 2021] (Nov. 7, 2022), available at https://www.kommersant.ru/doc/5009075.

<sup>&</sup>lt;sup>51</sup> Levelised Cost of Electricity (LCOE): The constant unit cost of electricity per kWh of a payment stream that has the same present value as the total cost of building and operating a power plant over its useful life, including a return on equity.

<sup>&</sup>lt;sup>52</sup> Cheap Green, supra note 50.

electricity or the rate of return on invested capital will directly depend on the volume of electricity generation. The capacity price becomes variable and is determined by monthly indicators. It will be recalculated and adjusted periodically depending on the efficiency of each power plant. The auctions based on the new system that were organized in September 2021, have already proven to be efficient. Thus, the winning entities offered 65,000 rubles (RUB) per kilowatt (kW) of installed power in the wind energy sector, which was already twice as low as the initial minimum cost.53 It could be assumed that the newly implemented state system of funding the projects in question will lead to a smoother development of RES generation facilities. Nevertheless, while the focus has been on developing measures and limiting such state support only to eligible generation facilities, the potential of other mechanisms remains unexplored and thus underestimated. This is especially true when it comes to the tax incentives available for the use of renewable energy sources by production plants. There are only three such mechanisms established in the Russian Tax Code. The first one is a so-called "investment tax credit" (ITC).<sup>54</sup> The essence of the Russian ITC is to provide the gualifying taxpayer who uses energy-efficient technologies (including those based on using RES)<sup>55</sup> with a deferral to pay corporate income tax as well as certain regional and local taxes. Therefore, fundamentally, it is a loan of a tax amount, whereas, for example, in the United States (as well as in some other countries), the term "credit" (reduction in the amount of the final tax sum) is the opposite of the term "deduction" (reduction of the tax base).<sup>56</sup> The loan amount may cover up to 100% of the cost of investments in energy-efficient facilities (including RES). Meanwhile, it implies the accrual of specified interest and is granted under an agreement with a tax authority. To further complicate matters, granting ITC is not an obligation of a tax authority, which presents a significant administrative impediment to potential investors.<sup>57</sup> Finally, private citizens in Russia cannot use

<sup>&</sup>lt;sup>53</sup> Процесс, который инициировала Европа, к счастью, необратим // Коммерсантъ. 22 декабря 2020 г. [*The Process Initiated by Europe Is, Fortunately, Irreversible,* Kommersant, 22 December 2020] (Nov. 7, 2022), available at https://www.kommersant.ru/doc/4617319.

<sup>&</sup>lt;sup>54</sup> Налоговый кодекс Российской Федерации (часть первая) от 31 июля 1998 г. № 146-ФЗ // СПС «КонсультантПлюс» [Тах Code of the Russian Federation (Part One) of 31 July 1998 No. 146-FZ, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru/document/cons\_doc\_LAW\_19671/.

<sup>&</sup>lt;sup>55</sup> Постановление Правительства Российской Федерации от 17 июня 2015 г. № 600 «Об утверждении перечня объектов и технологий, которые относятся к объектам и технологиям высокой энергетической эффективности» // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 600 of 17 June 2015. On Approval of the List of Objects and Technologies that Relate to Objects and Technologies of High Energy Efficiency, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru/document/cons\_doc\_LAW\_181403/.

<sup>&</sup>lt;sup>56</sup> Energy Incentives for Individuals: Residential Property Updated Questions and Answers, IRS (Nov. 7, 2022), available at https://www.irs.gov/newsroom/energy-incentives-for-individuals-residentialproperty-updated-questions-and-answers.

<sup>&</sup>lt;sup>57</sup> Tax Code of the Russian Federation, *supra* note 54.

this mechanism. In fact, this deprives the Russian Government of a prospective way to raise the popularity of installing RES technologies in everyday life, such as generating electricity at home.

Other tax incentives for installing RES technologies include accelerated depreciation of energy-efficient property (including RES), which is not used frequently due to the higher depreciation rates that are applicable when using other kinds of equipment. Finally, the Tax Code of Russia provides for corporate property tax relief on the properties of entities owning facilities with a high energy efficiency class (including those using RES).<sup>58</sup> However, in Russia, there is no law providing for energy efficiency classes for commercial buildings. Therefore, the said benefit has been a *nudum jus* since its introduction in the Tax Code in 2011, this fact having been negatively assessed by the Russian Constitutional Court (which only rarely criticizes Russian laws it finds compatible with the Russian Constitution).<sup>59</sup>

In light of the foregoing, the efforts of the Russian Government and regions to increase the popularity of electric vehicles (EVs) appear to be somewhat controversial. Thus, in Moscow, the capital of Russia, it is permitted to park EVs free of charge at the paid parking lots.<sup>60</sup> Furthermore, legal entities may include the cost of charging EVs in their corporate tax expenses (thereby reducing the tax base and, consequently, the tax amount).<sup>61</sup> In August 2021, the Russian Government approved a policy, referred to as a "Concept" for the development of production and use of electric transport in the Russian Federation until 2030.<sup>62</sup> It is planned to prepare a base for

<sup>&</sup>lt;sup>58</sup> Налоговый кодекс Российской Федерации (часть вторая) от 5 августа 2000 г. № 117-ФЗ // СПС «КонсультантПлюс» [Tax Code of the Russian Federation (Part Two) of 5 August of 2000 No. 117-FZ, SPS "ConsultantPlus"], Art. 381, cl. 21 (Nov. 7, 2022), available at https://www.consultant.ru/document/ cons\_doc\_LAW\_28165/.

<sup>&</sup>lt;sup>59</sup> Определение Конституционного Суда Российской Федерации от 2 июля 2019 г. № 1831-О «Об отказе в принятии к рассмотрению жалобы общества с ограниченной ответственностью «Северный Автовокзал» на нарушение конституционных прав и свобод пунктом 21 статьи 381 Налогового кодекса Российской Федерации» // СПС «Гарант» [Decree of the Constitutional Court of the Russian Federation No. 1831-O of 2 July 2019. On the Refusal to Accept for Consideration the Complaint of the Limited Liability Company "Northern Bus Station" for Violation of Constitutional Rights and Freedoms by Clause 21 of Article 381 of the Tax Code of the Russian Federation, SPS "Garant"] (Nov. 7, 2022), available at https://base.garant.ru/72298836/.

<sup>&</sup>lt;sup>60</sup> Постановление Правительства Москвы от 17 мая 2013 г. № 289-ПП «Об организации платных городских парковок в городе Москве» // СПС «КонсультантПлюс» [Decree of the Government of Moscow No. 289-PP of 17 May 2013. On the Organization of Paid Urban Parking in the City of Moscow, SPS "ConsultantPlus"] (Nov. 7, 2022), available at http://www.consultant.ru/cons/cgi/online.cgi ?req=doc;base=MLAW;n=181677;dst=100038#7qtDDJTglmqlwfhs.

<sup>&</sup>lt;sup>61</sup> Письмо Минфина России от 31 мая 2021 г. № 03-03-06/3/42061 // Время бухгалтера [Letter of the Ministry of Finance No. 03-03-06/3/42061 of 31 May 2021, Accountant Time] (Nov. 7, 2022), available at https://www.v2b.ru/documents/pismo-minfina-rossii-ot-31-05-2021-03-06-3-42061/.

<sup>&</sup>lt;sup>62</sup> Распоряжение Правительства Российской Федерации от 23 августа 2021 г. № 2290-р «Об утверждении Концепции по развитию производства и использования электрического автомобильного транспорта в Российской Федерации на период до 2030 года» (вместе с «Планом мероприятий

the mass production of EVs and, by 2024, to produce at least 25,000 EVs. By 2030, the country should be producing at least 10% of EVs from the total volume of all vehicles produced at the next stage. The government plans to develop the EV market with the help of demand support programs: preferential leasing and lending will be introduced for EV owners, as well as transport tax benefits. Additionally, Russians will receive a 25% discount when buying Russian-produced EVs.

Indeed, EVs can be an effective means to reduce a country's carbon footprint. However, it is noted that

optimizing the power structure, upgrading battery technology, and improving the recycling efficiency are of great significance for the large-scale promotion of EVs, closed-loop production of batteries, and sustainable development of the resources, environment, and economics.<sup>63</sup>

Without these factors, talking about reducing carbon footprints is, in principle, meaningless. Therefore, along with the development of the EV industry, the state needs to make efforts to ensure that their production, as well as the electricity they consume, is "green." At the same time, neither the Concept itself nor the current regional legislation of the city of Moscow mentions this vital relationship.

It can be concluded that the Russian legislation promoting the use of RES by legal entities and individuals is in the process of formation. However, the political and legal ramifications of doing this have not yet been explored fully. The described state of domestic policy and legislation regarding RES logically explains that the active promotion of renewables as a new international legal regime does not fully meet the interests of Russia at the moment, as reflected in its Energy Strategy.

## 3. Russia and the International Renewable Energy Agency: Cooperation in 2015–2021

The International Renewable Energy Agency (IRENA) is a leading global intergovernmental agency that serves as the primary platform for assisting countries in their transitions to the use of all forms of renewable energy. According to the

<sup>(«</sup>дорожной картой») по развитию производства и использования электрического автомобильного транспорта в Российской Федерации на период до 2030 года») // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 2290-r of 23 August 2021. On Approval of the Concept for the Development of Production and Use of Electric Motor Transport in the Russian Federation for the Period up to 2030 (together with the "Action Plan ('Road Map') for the Development of Production and Use of Electric Road Transport in the Russian Federation for the Period up to 2030"), SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru/document/ cons\_doc\_LAW\_393496/.

<sup>&</sup>lt;sup>63</sup> Xiaoning Xia & Pengwei Li, A Review of the Life Cycle Assessment of Electric Vehicles: Considering the Influence of Batteries, 814 Sci. the Total Env't 152870 (2022).

Statute of the International Renewable Energy Agency (hereinafter, the Statute), its purpose is to promote widespread and increased adoption and the sustainable use of all forms of renewable energy (Art. II of the Statute).<sup>64</sup> The organization's main function is to analyze, monitor and systematize current renewable energy practices of states, and such activities are carried out "without obligations on Members' policies" (Art. IV of the Statute).

The Russian Federation became a member of IRENA on 22 July 2015, which gave it access to IRENA's scientific developments in "best practices" in renewable energy.<sup>65</sup> In 2016, Russia was selected to be one of the 21 members of the IRENA Council (an executive body that meets at least twice a year and manages the agency's current activities, and prepares the annual IRENA Assembly) for 2017–2018.

One of the significant outcomes of the Russian Federation within IRENA was the preparation of the Global Report on RES 2030 (REmap 2030) and the roadmap "RE 2030 – Renewable Energy Prospects for the Russian Federation" in 2017. The REmap 2030, based on the then draft of the Energy Strategy of Russia for the period up to 2035,<sup>66</sup> outlines the priority directions for the development of renewable energy and assesses the required volume of investments (approximately US\$15 billion per year between 2010 and 2030):

Based on consultation with the Russian government and relevant stakeholders, this report identifies four main drivers which Russia could consider to accelerate the uptake of renewables in its energy mix, to be exact, economic activity and job creation; science and technology development; energy supply to isolated areas; and improving the quality of the environment. Under REmap – the case that considers the accelerated deployment of renewable energy in the Russian energy mix – the share of total renewable energy increases to 11.3% of TFEC by 2030.<sup>67</sup>

Currently, there is no information available regarding any relevant joint projects between Russia and IRENA. Given that similar projects have already been launched,

<sup>67</sup> IRENA, supra note 46.

<sup>&</sup>lt;sup>64</sup> IRENA, Statute of the International Renewable Energy Agency (IRENA), IRENA/FC/Statute, 26 January 2009 (Nov. 7, 2022), available at https://www.irena.org/-/media/Files/IRENA/Agency/About-IRENA/ Statute/IRENA\_FC\_Statute\_signed\_in\_Bonn\_26\_01\_2009\_incl\_declaration\_on\_further\_authentic\_ versions.ashx?la=en&hash=FAB3B5AE51B8082B04A7BBB5BDE978065EF67D96&hash=FAB3B5AE51 B8082B04A7BBB5BDE978065EF67D96. As of 2022, 168 states are IRENA members.

<sup>&</sup>lt;sup>65</sup> Liliana N. Proskuryakova & Georgy V. Ermolenko, The Future of Russia's Renewable Energy Sector: Trends, Scenarios and Policies, 143 Renew. Energy 1670 (2019).

<sup>&</sup>lt;sup>66</sup> Minenergo (Ministry of Energy of the Russian Federation), *Draft Energy Strategy of the Russian Federation for the Period up to 2035* (2017).

such as, for example, with the Republic of Belarus,<sup>68</sup> and the states of Central America (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama<sup>69</sup>), this might indicate that Russia is not yet ready to discuss the prospects for national legislative regulation of RES at the global level.

## 4. BRICS as a Platform for Negotiations on Reasonable Prospects for the Development of Renewable Energy

BRICS, an interstate association (comprised of the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and, since December 2010, the Republic of South Africa), held its first full-scale summit on 16 June 2009, in Yekaterinburg, Russia. The final Joint Statement recorded the aim of the alliance countries to promote "an incremental, proactive, pragmatic, open and transparent dialogue and cooperation," which serves not only the "common interests of emerging market economies and developing countries but also to build a harmonious world of lasting peace and common prosperity."<sup>70</sup> Its Action Plan names "ensuring Russian contribution to the development of the BRICS Energy Research Platform" as one of the priority areas of cooperation.<sup>71</sup> It is the only international forum highlighted in the Action Plan as a separate item.

Within the BRICS association, Russia's energy policy is currently realized in two directions, namely:

1. Promotion of research cooperation in the energy field through joint research with the BRICS member states under the direction of the BRICS Energy Research Platform (hereinafter, the Platform),<sup>72</sup> which was created at the initiative of Russia on 11 November 2019;<sup>73</sup> and

<sup>&</sup>lt;sup>68</sup> IRENA, Renewables Readiness Assessment: The Republic of Belarus (July 2021) (Nov. 7, 2022), available at https://www.irena.org/publications/2021/Jul/Renewables-Readiness-Assessment-Belarus.

<sup>&</sup>lt;sup>69</sup> IRENA, Clean Energy Corridor of Central America (CECCA) Strategy (2015) (Nov. 7, 2022), available at https://www.irena.org/-/media/Files/IRENA/Clean-Energy-Corridors/CECCA-Strategy-Document-Final--22-9-2015.pdf.

<sup>&</sup>lt;sup>70</sup> Joint Statement of the BRIC Countries' Leaders, Yekaterinburg, Russia, 16 June 2009 (Nov. 7, 2022), available at https://brics-ysf.org/sites/default/files/2nd\_Summit.pdf.

<sup>&</sup>lt;sup>71</sup> Распоряжение Правительства Российской Федерации от 1 июня 2021 г. № 1447-р «Об утверждении Плана мероприятий по реализации Энергетической стратегии Российской Федерации на период до 2035 года» // СПС «КонсультантПлюс» [Order of the Government of the Russian Federation No. 1447-r of 6 January 2021. On Approval of the Action Plan for the Implementation of the Energy Strategy of the Russian Federation for the Period up to 2035, SPS "ConsultantPlus"] (Nov. 7, 2022), available at https://www.consultant.ru/document/cons\_doc\_LAW\_386439/.

<sup>&</sup>lt;sup>72</sup> Terms of Reference of the BRICS Energy Research Cooperation Platform, Brasilia, Brazil, 14 November 2019, China Daily, 15 November 2019 (Nov. 7, 2022), available at https://www.chinadaily.com. cn/a/201911/15/WS5dce10cfa310cf3e3557796e.html.

<sup>&</sup>lt;sup>73</sup> Communique for BRICS Energy Ministers Meeting to Be Held at Brasilia, Brazil on 11 November 2019 (Nov. 7, 2022), available at http://www.brics.utoronto.ca/docs/191111-energy.pdf.

2. Realization of projects in the field of renewable energy.

The first direction outlines the assurance of sustainable energy development through cooperation in energy research, technology, policy and innovation as well as dialogue on energy issues in order to ensure universal access to affordable, reliable, sustainable and modern energy for all, in addition to strengthening the energy security of the BRICS countries and providing a stronger voice for BRICS in the global energy agenda. At the same time, renewable energy is indicated among the priority topics that are the object of research within the Platform's framework. In 2020, joint studies were published (the BRICS Energy Report 2020<sup>74</sup> and the BRICS Energy Technology Report 2020<sup>75</sup>), which separately investigated the issue of renewable energy being supported in member states.

As for the second direction of the energy policy of the Russian Federation, which is being implemented in cooperation with the BRICS member states, several renewable energy projects in Russia are being carried out with the support of the BRICS New Development Bank (hereinafter, the BRICS NDB). Thus, in Karelia, the Nord-Hydro project is being carried out to construct two small hydroelectric generation plants, "Beloporozhskaya HPP-1" and "Beloporozhskaya HPP-2."<sup>76</sup> The total cost of the project is estimated at approximately US\$161.9 million. The amount of financing provided by the NDB to two international banks (the Eurasian Development Bank and the International Investment Bank) for refinancing the project is US\$100 million. The project's equity investors are the Russian Direct Investment Fund and the Chinese partner, China State Energy Engineering Corp. Ltd. (Sinomec).<sup>77</sup> The second project, implemented with the participation of BRICS NDB funding, aims to facilitate investment in the production of RES from 2019 to 2023, as a result of which carbon dioxide emissions are expected to be reduced by about 200,000 tons annually. For the project, the BRICS NDB allocated a credit line to the Eurasian Development Bank of US\$300 million (with a total project cost of US\$415 million).78

The legal basis for BRICS energy cooperation is supported by both intergovernmental and private law arrangements.

<sup>&</sup>lt;sup>74</sup> BRICS Energy Research Cooperation Platform, *BRICS Energy Report* (2020) (Nov. 7, 2022), available at https://eng.brics-russia2020.ru/images/114/89/1148985.pdf.

<sup>&</sup>lt;sup>75</sup> BRICS Energy Research Cooperation Platform, *BRICS Energy Technology Report* (2020), at 1–6 (Nov. 7, 2022), available at https://eng.brics-russia2020.ru/images/114/89/1148990.pdf.

<sup>&</sup>lt;sup>76</sup> Two Loans to EDB and IIB for Nord-Hydro, New Development Bank (Nov. 7, 2022), available at https:// www.ndb.int/project/edbiibrussia/.

<sup>&</sup>lt;sup>77</sup> Новые МГЭС в Карелии принесут около 12 млрд рублей налоговых отчислений // TACC. 27 марта 2019 г. [*New SHPPs in Karelia Will Bring About 12 Billion Rubles in Tax Deductions*, TASS, 27 March 2019] (Nov. 7, 2022), available at https://tass.ru/ekonomika/6264496.

<sup>&</sup>lt;sup>78</sup> Development of Renewable Energy Sector in Russia Project, New Development Bank (Nov. 7, 2022), available at https://www.ndb.int/project/russia-development-renewable-energy-sector-russiaproject/.

## 5. Bilateral Cooperation Between Russia and the Other BRICS Countries on RES Issues

Apart from the described international initiatives within the framework of selected intergovernmental institutions, Russia's activities on RES issues on a bilateral basis are also worth noting.

#### 5.1. Russia and China

Since 2014, there has been a trend of continually strengthening ties between Russian and Chinese corporations in terms of the development of renewable energy; the parties conclude cooperation agreements and develop and implement investment projects on a mutually beneficial basis.

The procurements, which are organized in accordance with the Main Directions and were analyzed in Section 2.3, primarily attracted investors from China. For instance, Solar Systems, a subsidiary of the Chinese company Amur Sirius, announced that it intends to invest up to US\$1 billion in Russian solar energy projects. The Chinese investors plan to build three power plants, each producing 175 MW. Moreover, Russia's largest corporations are eager to build commercial ties in terms of RES with major Chinese companies. Thus, in 2014, RusHydro, Russia's largest hydroelectric power plant operator, and Power Construction Corporation of China Limited (Ltd.) (PowerChina) signed an agreement providing for the creation of a joint venture (JV) with the distribution of shares between RusHydro and PowerChina in a ratio of 51% to 49% that is aimed at joint construction of pumped storage power plants (PSPP) in Russia.<sup>79</sup> Furthermore, in 2016, the Russian company Rusnano JSC came to an agreement on creating a wind energy investment fund with the Chinese company Zhongrong Trust International Co. Ltd. (Zhongrong), one of the largest financial institutions in the Asia-Pacific region with a proven track record in financing large-scale innovative projects. Initially, the planned budget for the project was US\$500 million. The two companies planned to carry out investments in Russia (at a rate of not less than 70%), China and other countries.<sup>80</sup>

On the international law level, a Russia-China bilateral intergovernmental commission on RES carries out its activities as one of the four bilateral commissions on energy matters. According to the Joint Communiqué of the 26<sup>th</sup> Regular Meeting between the Heads of Government of the People's Republic of China and the Russian Federation signed on 30 November 2021, the countries agreed to support the

<sup>&</sup>lt;sup>79</sup> Rushydro signed an agreement with Power China on the joint construction of pumped storage plants, Rushydro (Nov. 7, 2022), available at https://eng.rushydro.ru/press/news/95543.html&cd=2&hl=en &ct=clnk&gl=gr&client=safari.

<sup>&</sup>lt;sup>80</sup> Russian Rusnano, Chinese Zhongrong set up \$500 mln investment fund, TASS, 19 January 2016 (Nov. 7, 2022), available at https://tass.com/economy/850525?utm\_source=google.com&utm\_ medium=organic&utm\_campaign=google.com&utm\_referrer=google.com.

interaction of economic entities of both countries in the area of RES,<sup>81</sup> the importance of which was discussed a day before at the annual Russian-Chinese Energy Business Forum.<sup>82</sup>

## 5.2. Russia and Brazil

The potential for cooperation between Russia and Brazil regarding renewable energy has not been widely covered due to the collaboration still being in its early stages of development. Thus, some researchers have suggested that "clean" hydrogen projects might "establish an important axis for integration and energy cooperation" among BRICS countries, including the respective interaction between Russia and Brazil.<sup>83</sup> Indeed, such ideas appear to be grounded in the long-standing history of strategic partnership between the two countries, as evidenced by the respective Partnership Agreement between the Russian Federation and the Federative Republic of Brazil of 2000, which is aimed at expanding trade and economic cooperation in a variety of areas, including energy and environment<sup>84</sup> and the respective Action Plan 2010.<sup>85</sup>

In 2012, the two countries signed an agreement titled "Action Plan for the Strategic Partnership between the Russian Federation and the Federative Republic of Brazil: Next Steps."<sup>66</sup> This document determined specific areas of interaction as well as the protocols to be followed by the representatives of the two countries

<sup>&</sup>lt;sup>81</sup> Li Keqiang and Russian Prime Minister Mikhail Mishustin Co-chair the 26<sup>th</sup> Regular Meeting with Han Zheng's Presence, Ministry of Foreign Affairs of the People's Republic of China, 30 November 2021 (Nov. 7, 2022), available at https://www.fmprc.gov.cn/eng/zxxx\_662805/202112/t20211201\_10460667.html.

<sup>&</sup>lt;sup>82</sup> III Russia-China Energy Business Forum brings together more than 300 representatives of major companies, Rosneft, 29 November 2021 (Nov. 7, 2022), available at https://www.rosneft.com/press/today/ item/208597/.

<sup>&</sup>lt;sup>83</sup> Luciano Losekann & Amanda Tavares, Potential for Cooperation in the Dissemination of Renewable Energy and Natural Gas Among BRICS Countries, 74 Pol'y Res. Brief, International Policy Centre for Inclusive Growth 1 (2021) (Nov. 7, 2022), available at https://ipcig.org/sites/default/files/pub/en/PRB74\_ Potential\_for\_cooperation.pdf.

<sup>&</sup>lt;sup>84</sup> Договор о партнерских отношениях между Российской Федерацией и Федеративной Республикой Бразилией от 22 июня 2002 г. // Электронный фонд актуальных правовых и нормативнотехнических документов [Partnership Agreement Between the Russian Federation and the Federative Republic of Brazil of 22 June 2000, Electronic Fund of Current Legal and Regulatory Documents], Arts. 8 & 9 (Nov. 7, 2022), available at https://docs.cntd.ru/document/901812576.

<sup>&</sup>lt;sup>85</sup> Plano De Ação Da Parceria Estratégica Entre A República Federativa Do Brasil E A Federação Da Rússia [Action Plan of the Strategic Partnership Between the Federative Republic of Brazil and the Russian Federation], DefesaNet, 14 May 2010 (Nov. 7, 2022), available at https://www.defesanet.com.br/ br\_ru/noticia/9613/Brasil----Russia----Plano-de--Acao-da--Parceria-Estrategica/.

<sup>&</sup>lt;sup>86</sup> Atos assinados por ocasião da visita da Presidenta da República à Federação da Rússia – Moscou, 13 a 14 de dezembro de 2012 [Act Signed on the Occasion of the Visit of the President of the Republic to the Russian Federation – Moscow, 13–14 December 2012], Portal Gov.br, 14 December 2012 (Nov. 7, 2022), available at https://www.gov.br/mre/pt-br/canais\_atendimento/imprensa/notas-a-imprensa/ atos-assinados-por-ocasiao-da-visita-da-presidenta-da-republica-a-federacao-da-russia-moscou-13a-14-de-dezembro-de-2012.

when interacting within these areas. In particular, in Article VI of the document, it was highlighted that the countries shall "identify specific opportunities for cooperation in the area of renewable energy sources (including the production of second-generation biofuels)."<sup>87</sup> The recent Joint Statement issued by the President of the Federative Republic of Brazil, Jair Bolsonaro and the President of the Russian Federation, Vladimir Putin as of 16 February 2022<sup>88</sup> expressed the corresponding idea emphasized the notion that this particular area of bilateral integration should be addressed. Similar approaches were demonstrated at the ministerial level between the two countries in October 2021.<sup>89</sup>

Despite the challenging geopolitical situation surrounding Ukraine, bilateral interaction between the two countries in the area of energy appears to remain quite prominent, especially when taking into account the relatively reserved stance of Brazil on the current Ukrainian crisis. Instead of assessing which of the Ukrainian Presidents – Yanukovich or Zelenskiy – legitimately represents Ukraine today, Brazil appears to be focusing reasonably on promoting its own interests rather than introducing sanctions against Russia and Belorussia, which could pose significant risks for the Brazilian economy.<sup>90</sup>

### 5.3. Russia and India

The future of Russia-India interaction regarding renewables has been a popular subject of research in recent years. It is widely argued<sup>91</sup> that such a partnership between Russia and India, a country with strong RES potential,<sup>92</sup> could take on

<sup>&</sup>lt;sup>87</sup> Act Signed on the Occasion of the Visit, *supra* note 86.

<sup>&</sup>lt;sup>88</sup> Joint Statement by President of the Russian Federation Vladimir Putin and President of the Federative Republic of Brazil Jair Bolsonaro, President of Russia, 16 February 2022 (Nov. 7, 2022), available at http://en.kremlin.ru/supplement/5774.

<sup>&</sup>lt;sup>89</sup> Максим Решетников обсудил с министром энергетики Бразилии развитие торгового и инвестиционного сотрудничества // TACC. 14 октября 2021 г. [*Maxim Reshetnikov Discussed with the Minister* of Energy of Brazil the Development of Trade and Investment Cooperation, TASS, 14 October 2021] (Nov. 7, 2022), available at https://www.economy.gov.ru/material/news/maksim\_reshetnikov\_obsudil\_s\_ministrom\_energetiki\_brazilii\_razvitie\_torgovogo\_i\_investicionnogo\_sotrudnichestva.html.

<sup>&</sup>lt;sup>90</sup> Bolsonaro sobre guerra na Ucrânia: "Meu partido é o Brasil" [Bolsonaro on War in Ukraine: "My Party Is Brazil"], Correio Braziliense, 12 April 2022 (Nov. 7, 2022), available at https://www.correiobraziliense.com.br/politica/2022/04/5000048-bolsonaro-sobre-guerra-na-ucrania-meu-partido-e-o-brasil.html.

<sup>&</sup>lt;sup>91</sup> See, e.g., Vasily Shikin & Amit Bhandari, Russia – India Energy Cooperation: Trade, Joint Projects, and New Areas, Policy Brief No. 13, Russian International Affairs Council (October 2017), at 8 (Nov. 7, 2022), available at https://www.gatewayhouse.in/wp-content/uploads/2017/10/GH-RIAC\_Russia---India-Energy-Paper\_Web\_2017.pdf; Dr. Junuguru Srinivas, India and Russia Energy Cooperation, The Diplomatist, 14 December 2019 (Nov. 7, 2022), available at https://diplomatist.com/2019/12/14/india-andrussia-energy-cooperation/.

<sup>&</sup>lt;sup>22</sup> In efforts to transition to green energy, India has recently achieved a significant milestone by completing the countrywide installation of 100 gigawatts of total installed renewable energy capacity,

a "complementary" nature, given the countries' already existing ties in the energy domain (mainly nuclear energy and oil investments).<sup>33</sup>

Indeed, the economic incentive of such a favorable exchange might lie in India providing Russia with know-how on wind power.<sup>94</sup> In contrast, having increased the share of RES in its domestic energy mix, Russia could export more gas to India. Such diversification of energy cooperation could benefit both parties, and certain practical steps, although merely on a private-player level, have already taken place in this direction. Thus, as of 2021, the Russian State Corporation, "Rosatom," has been exploring opportunities to participate in India's wind energy markets using its Joint Stock Company, "RIR" (formerly the Public Joint Stock Company, "OTEK"). In addition, its subsidiary in Hungary, Ganz EEM, lists India among the countries where their small hydropower plants are supplied.<sup>95</sup>

On the other hand, the official bilateral cooperation between the countries in the RES domain largely remains *terra incognita*. Among such sporadic initiatives, one could name the Memorandum of Understanding signed on 24 December 2016, between the Solar Energy Corporation of India and the Russian Energy Agency to set up large-scale solar photovoltaic (PV) projects in India between the years 2016 and 2022.

Under the terms of the Agreement, initially, a 500-MW pilot solar PV project should have been developed.<sup>96</sup> The parties also agreed to formulate a roadmap for the further development of the projects and procure an intergovernmental agreement between Russia and India to be concluded six months after signing the memorandum. Nevertheless, no other steps to implement the memorandum have

<sup>95</sup> Ganz Engineering & Energetics – General Information, Power Technology (Nov. 7, 2022), available at https://www.power-technology.com/contractors/operations/ganz/.

excluding large hydro. It now aims to hit its 175 GW renewable energy target by December 2022. If achieved, that would be close to half of India's current total installed power capacity. *See* Dmitriy Frolovskiy, *Energy Cooperation as the Backbone of India-Russia Ties*, The Hindu, 28 October 2021 (Nov. 7, 2022), available at https://www.thehindu.com/opinion/op-ed/energy-cooperation-as-the-backbone-of-india-russia-ties/article37200740.ece.

<sup>&</sup>lt;sup>93</sup> Russian companies have been involved in the construction of six nuclear reactors in the Kudankulam nuclear power project in Tamil Nadu. Of these, Unit 1 and Unit 2 have been operating at total capacity. Unit 3 is still under construction. Previously, Russian President Vladimir Putin claimed that Russia is ready to build a dozen reactors in India over the next 20 years. A few years ago, Rosneft invested US\$12.9 billion in India's second-largest private oil refiner, Essar Oil, renamed Nayara Energy, marking it as one of the most significant foreign investments in years.

<sup>&</sup>lt;sup>94</sup> For example, India is the world's fourth-largest wind energy generation capacity on its manufacturing base. See Year-End Review 2022 – Ministry of New and Renewable Energy, Government of India, 18 December 2016 (Dec. 20, 2022), available at https://pib.gov.in/PressReleasePage.aspx?PRID=1885147.

<sup>&</sup>lt;sup>96</sup> Memorandum of Understanding Between Solar Energy Corporation of India and Russian Energy Agency Regarding Construction of Solar Power Plants in the Republic of India, 24 December 2016 (Nov. 7, 2022), available at https://mnre.gov.in/img/documents/uploads/a64dab7ac89347cdae2098e22cc0e754.PDF.

been taken so far. The signature of the memorandum thus unveiled the potential area of energy cooperation between the two countries; however, the initiative appeared premature for it to be formalized at the treaty level.

## 5.4. Russia and South Africa

Issues of renewable energy and energy efficiency have officially been on the agenda in bilateral interactions between Russia and South Africa since the conclusion of the Agreement between the Government of the Russian Federation and the Government of the Republic of South Africa on cooperation in the field of energy dated 26 March 2013.<sup>97</sup> As stated in the preamble, the mutual interest here consisted in establishing an inextricable link between the economic development and energy security of both states with "the availability, accessibility and efficient use of fuel and energy resources, taking into account the requirements of security and environmental protection."<sup>98</sup> Article 2(d) of the 2013 Agreement imposed a positive obligation on the states to "develop cooperation in accordance with their national legislation" in the "area of renewable energy." The treaty also outlined several ways of ensuring such interaction, namely, encouraging the exchange of information in the areas of clean technologies and energy, energy efficiency and renewable energy among state universities, technology centers, design bureaus, industrial enterprises and other government organizations (Art. 3 of the 2013 Agreement). The priority here was given to the existing national legislation of the parties, which, according to the 2013 Agreement, should be observed during its implementation. This is an important consideration since, even though the 2013 Agreement imposed obligations on the states to cooperate, it did not call for any changes to be made in each of these countries' national laws in order to facilitate such cooperation. Meanwhile, at that stage of the development of such a sensitive domain of international dialogue as RES, which has always posed a "challenge" to Russia's energy security, the wording used in the 2013 Agreement demonstrates both countries' "cautious" approach to the international law dimension of RES.

Indeed, the need for such an approach was clearly demonstrated in the negotiations between the states regarding nuclear power, which led to public protests that were ultimately declared unconstitutional by the South African Western Cape

<sup>&</sup>lt;sup>97</sup> Соглашение между Правительством Российской Федерации и Правительством Южно-Африканской Республики о сотрудничестве в сфере энергетики от 26 марта 2013 г. // Официальное опубликование правовых актов [Agreement Between the Government of the Russian Federation and the Government of the Republic of South Africa on Cooperation in the Field of Energy of 26 March 2013, Official Publication of Legal Acts] (Nov. 7, 2022), available at http://publication.pravo.gov.ru/Document/View/0001201805140038.

<sup>&</sup>lt;sup>98</sup> Anastasia E. Vinokurova, International Legal Framework for Energy Cooperation Between the Russian Federation and the Republic of South Africa, 6(2) Econ. L. Soc'y 47 (2021) (Nov. 7, 2022), available at https://epo.rea.ru/jour/article/view/400?locale=en\_US.

High Court in April 2017.<sup>99</sup> Though touching upon another area of cooperation, this decision clearly illustrated the need to prioritize national policies over international considerations when dealing with energy issues.

Nevertheless, despite this fact, the actual cooperation between the two countries under the existing legal mechanisms appears promising, especially considering South Africa's current political course, which has renewable energy as its focus.<sup>100</sup> Thus, there is evidence that the projects receiving joint financing from the Russian Foundation for Basic Research and the National Science Foundation of South Africa include those that are focused on renewable energy.<sup>101</sup>

Private entities also appear to be quite actively involved. For example, in January 2018, Rosatom and the South African government signed an agreement to construct small hydropower plants in Mpumalanga to power rural regions of the country. Each mini hydropower plant is expected to power 250 to 400 houses.<sup>102</sup>

Considering all of the above, the RES interaction between Russia and South Africa may continue within the BRICS framework. It is possible to find mutually acceptable solutions without the strict need to rush into any binding instruments. The stalled nuclear deal taught the key lesson that energy cooperation should develop in strict accordance with both countries' priorities rather than in reconciliation of them.

## 6. Summary of Potential BRICS Common Legal Policies Regarding Renewable Energy

In the context of the above, it is possible to highlight the following political and legal incentives for Russia's participation in the development of international law in the field of renewable energy within the BRICS platform:

1. Russia, as well as the other BRICS countries, sees the promotion and encouragement of RES as an essential part of the inevitable energy transition. Accordingly, their documents on energy policy express a generally positive attitude towards the expansion of international cooperation regarding RES and the development of applicable international legal rules. The result of this position will most certainly be

<sup>&</sup>lt;sup>99</sup> Earthlife Africa Johannesburg and Another v. Minister of Energy and Others (19529/2015) [2017] ZAW-CHC 50; [2017] 3 All SA 187 (WCC); 2017 (5) SA 227 (WCC) (26 April 2017) (Nov. 7, 2022), available at http://www.saflii.org/za/cases/ZAWCHC/2017/50.pdf.

<sup>&</sup>lt;sup>100</sup> Department of Energy, State of Renewable Energy in South Africa (September 2015) (Nov. 7, 2022), available at https://www.energy.gov.za/files/media/Pub/State-of-Renewable-Energy-in-South-Africa.pdf.

<sup>&</sup>lt;sup>101</sup> SCO and BRICS: Russia – South Africa: Prospects for Cooperation, World Trade Center Moscow, 19 May 2021 (Nov. 7, 2022), available at https://en.wtcmoscow.ru/news/sco-and-brics-russia-south-africaprospects-for-cooperation/.

<sup>&</sup>lt;sup>102</sup> ROSATOM signs contract for small scale hydro facility in the Republic of South Africa, ROSATOM, 29 January 2018 (Nov. 7, 2022), available at https://rusatom-energy.com/media/rosatom-news/rosatomsigns-contract-for-small-scale-hydro-facility-in-the-republic-of-south-africa/.

the active participation of member countries in negotiations, international research and drafting international documents on relevant topics within the framework of regional international organizations and forums, particularly BRICS.

2. At the same time, Russia considers the promotion of RES to be one of the challenges to its energy security. Based on Russia's position, the relevant international laws should strictly follow the existing legal framework rather than stem from the rules introduced within particular regional intergovernmental organizations. Moreover, this development should be based on the mutual advantage of the interested states and the observance of the principle of non-interference in domestic affairs. The development of technologies using RES as well as an increase in the share of RES in the global energy mix is assessed by Russia as an undoubtedly positive trend, and the use of "green" technologies is viewed as one of the ways to create a sustainable world economy. However, in some cases, excessive emphasis on the introduction of RES is regarded as a way to manipulate the international political agenda and or to promote the interests of western companies that are already successful in "green" technologies. That will most likely be regarded by Russia as "unfair economic competition" that is supported by governmental instruments. Therefore, despite the stated aim mentioned in the Russian Energy Strategy to reorient and modernize the economy, any initiatives concerning RES will be subject to an in-depth analysis by Russia for compliance with its international rights and obligations. This is also true for the other BRICS countries, especially South Africa, which also calls for emphasizing the prevalence of national laws and policies above international energy negotiations.

3. The BRICS countries additionally see the promotion and encouragement of RES as an independent element of "sustainable energy." However, this political and legal track is not a high-priority task of Russia's international legal cooperation. The primary efforts of Russia in the international arena are aimed at fulfilling its obligations and exercising its rights under the existing international treaties. In the same context, Russia participates in international discussions and international organizations and conducts joint research. At present, Russia does not expedite discussions on the promotion of RES into a universal international agreement or the development of recommendations for harmonizing national legislation on the matter. This could be explained by the fact that Russia's national laws on RES development are only just being formed, along with the mechanisms for efficient state support of the respective projects. Therefore, this process needs careful analysis considering that Russia has had no experience in developing the respective legislation and implementing such policies throughout its history. Several authors have criticized the outlined "cautious approach" in international environmental law-making. In particular, Professor S. Bruce notes that despite the abundance of "soft law" norms, which in general have shaped the basis for the principle of sustainable development in the field of RES, the absence of universally binding rules on this issue is both "striking and unsustainable."<sup>103</sup>

<sup>&</sup>lt;sup>103</sup> Stuart Bruce, International Law and Renewable Energy: Facilitating Sustainable Energy for All?, 14(1) Melbourne J. Int'l L. 11 (2013) (Nov. 7, 2022), available at https://ssrn.com/abstract=2327090.

According to S. Bruce, the primary option for developing the regime of RES should be the setting of an aim by states to conclude a relevant international convention, which may be preceded by a comprehensive declaration reflecting the priorities for the development of RES.<sup>104</sup> Nevertheless, when moving towards such a universal harmonization of the legal regime of renewable energy sources, it is advisable to consider the principle of international law of non-interference in the internal affairs of states as well as the sovereignty of states over natural resources. There is much work that remains to be done in the days ahead in order to strike a balance between imposing international obligations on states to bring their national legislation in line with the new environmental standards being developed and the mentioned international legal principles.<sup>105</sup> It should be noted that a similar stance is also true for the other BRICS countries, which do not rush into creating common, binding regional or bilateral approaches for cooperation in the RES domain or place the RES interaction at the center of the negotiations. Rather, the BRICS countries appear to be watching how the private players are cooperating in this sector within the boundaries of the laws and regulations currently in place. Nonetheless, the results of such cooperation could further be used to develop common approaches to the regulation of this domain as well as to highlight the best practices.

In this context, the priorities of Russia's international legal policy concerning renewable energy, including the emphasis on the evolutionary development of broadly accepted approaches to the regulation of international cooperation in the field of RES based on international law, may be seen as adequate. In fact, there is hardly any alternative to developing an international legal regime for RES that is based on a balance of the economic, environmental and other interests of all the states concerned. On the other hand, it is easy to forecast that such an international legal regime will develop accompanied by increasing environmental restrictions for traditional energy products.

#### Conclusion

The growing influence of renewable energy in the global energy mix inevitably raises the question of developing a special international legal regime for RES, considering the different economic interests and common needs of all the interested parties. This topic has a clearly evident political connotation. Therefore, international efforts aimed at shaping its legal content are primarily limited to developing "soft law" provisions. The latter is aimed in general at encouraging international cooperation in scientific research, technological development and improving the respective domestic legislation. So far, there is no universal harmonized cooperation model

<sup>&</sup>lt;sup>104</sup> Bruce 2013, at 30–35.

<sup>&</sup>lt;sup>105</sup> Imam Mulyana, *The Development of International Law in the Field of Renewable Energy*, 2(1) Hasanuddin L. Rev. 57 (2016).

in this area of energy and no universal international legal regime of RES that might be considered to be responsive to the common interests of all the members of the international community. Consequently, particular international projects (scitechnical, economic and legal ones, the latter of which involves the systematization of "best practices" in the regulation of RES) are dealt with individually.

In this regard, the analysis of the international legal position of Russia (as one of the BRICS countries) on the issues of RES, as well as the assessment of its contribution to the formation of the international legal regime for renewable energy, has more than merely historical and statistical significance. The same can be said about analyzing Russia's principal national political and legal documents on renewable energy issues.

Of even greater practical interest are the future relevant energy policy actions of major energy exporters and importers. The materials reviewed for this paper indicate that, while cautiously expressing the need to strengthen international cooperation in the field of "green" energy, Russia indicates at the same time that such cooperation can be better developed on a "step-by-step" basis and strictly within the framework of the applicable international economic laws (not just environmental laws), including the principle of sustainable development. Moreover, the legally binding treaties currently in effect and that mention RES as an area of cooperation with the participation of Russia, particularly the 2013 Agreement with South Africa, also mention the need to observe the existing national legislation when developing any international ties in this domain.

According to this legal position, the promotion of RES should not negatively affect the basic economic interests of all the states concerned, including those with huge scientific, financial and technological potential as well as those with very limited potential. Such a legal strategy might seem acceptable to the other member states of the BRICS alliance. The basic components of a legal regime of RES, which might be developing within BRICS, must benefit all the interested participants of the current international energy dialogue, representing a so-called "compromise of compromises" with the main aim of not interfering with the BRICS countries' domestic affairs and national energy priorities.

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