

УДК 339.92

THE PROSPECTS FOR THE DEVELOPMENT OF GREEN ENERGY IN RUSSIAN-JAPANESE RELATIONS

А. Д. Васильева¹

*Самарский национальный исследовательский университет
имени академика С.П. Королева, г. Самара, Российская Федерация*

Научный руководитель: А. Г. Писарева, старший преподаватель
*Самарский национальный исследовательский университет
имени академика С.П. Королева, г. Самара, Российская Федерация*

Ключевые слова: Russian-Japanese relations, Energy sphere, Green Energy, International relations

Within the framework of Russian-Japanese relations, we want to find out what stage of joint development of the energy industry Russia and Japan are at, moreover, what difficulties states have faced on the way to «green» energy. The subject of this research concerns the prospects for the development of energy relations between Japan and Russia from 2019 to February 2022, forms and directions of cooperation in the energy sector.

During the research we have found out that The Far East has a dual position within the framework of the development of Russian-Japanese energy. On the one hand, its underdevelopment and relatively weak infrastructure are among the hindering factors for the development of cooperation. On the other hand, the Far East is promising because of already existing energy projects, the availability of mineral resources as well as rich opportunities for imports to Japan because the territory of Japan does not have a large amount of energy resources and it has also lost significant amounts of nuclear energy (the accident at the Fukushima NPP in March 2011), so Japan is currently heavily dependent on external energy supplies and has increased supplies of natural gas, oil and coal. The features of Japan's low-carbon strategy include greater attention to the beneficial use of carbon emissions as industrial raw materials or synthetic fuels .

Currently, one of the challenges to energy security for the Russian Federation is the change in the structure of demand for energy resources, including the replacement of hydrocarbons with other types of energy: chemical resources, including hydrogen, in connection with the global trend towards decarbonization of the economy. Also the global foreign policy situation and economic sanctions against Russia create certain difficulties. Thus, one of the consequences is Japan's intention to deprive Russia of the status of the most favored nation.

¹ Васильева Анжелика Дмитриевна, студент группы 5203-410305D,
email: TiXteR2002@yandex.ru

Despite the ongoing crisis, we have made a number of proposals based on the available data on the development of Russian-Japanese relations in the energy sector such as investment by countries in «green» bonds and «green energy certificates», using methane or methane-hydrogen mixture in Yamal at its own undelivered industrial facilities and hydroelectric, geothermal and nuclear power plants as a resource for hydrogen production, considering the North Sea route as an alternative (40% more efficient than other Japan shipping routes) and, finally, building the special pipeline construction through the Far East for hydrogen stream.

Based on the data obtained, the following results were summarized. Firstly, companies buying certificates will be able to trade in the market with environmental added value created with the help of renewable energy sources. Secondly, the joint development of infrastructure contributes to lower prices for the transportation of energy resources, which is beneficial to both states. Finally, the states not only exchange experience in the field of hydrogen energy, but also jointly build enterprises capable of producing several types of hydrogen, which in the future may ensure at least a partial transition to green energy in both countries.

The conducted energy analysis indicates the potential interest of cooperation between Russia and Japan in the development of energy sector. However, due to the difficult economic situation in the world caused by COVID-19 and Russia's foreign and domestic policy, the choice is made in favor of renewable energy sources becomes less relevant compared to non-renewable ones due to their high cost and short-term sustainability. So, countries will first need to establish production, transport and distribution channels for non-renewable energy resources (coal, gas, oil), which will help Russia reduce competition in the world market and help Japan reduce the cost of resources and then engage countries in the joint development of green energy, especially, in the field of hydrogen energy development and, finally, solving environmental problems.