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Article

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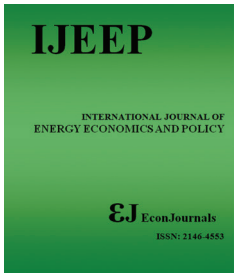

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Energy Security Concept in Russia and South Korea

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ABSTRACT

One of the key problems hindering the strengthening of cooperation between South Korea and the Russian Federation not only in the energy sector, but also in other areas, is a negative impact in a kind of historical memory of previous experience of cooperation, or rather failure in implementation of projects or lack of implementation in general. Many projects in potentially promising areas remain on paper. Projects have never been implemented include modernization and commissioning by a joint Russian-North Korean enterprise with the participation of Russian Railways of the railway section from the Khasan station (Russia) to the port Rajin in order to transit from South Korea and gain access states of the Korean Peninsula to the Trans-Siberian Railway.

Keywords: Energy Sources, South Korea Energy Policy, Resource Saving, Economic Development, Energy Cooperation
JEL Classifications: C30, D12, Q41, Q48

1. INTRODUCTION

The concept of global energy security as important component of national security of any importing state or exporter - and a factor that has a significant impact on its economic and social prosperity is of particular interest to us in terms of explanations of the motivation of states to cooperate in the energy sector.

According to the International Energy Agency, energy security is continuous access to energy resources at affordable prices. Energy security in the long run perspective - this is a timely investment in energy supplies, taking into account meeting the needs for a comprehensive economic sustainable development while in the short term is a focus on the ability of the energy system to respond quickly to sudden changes in supply chains (Chiemchaisri et al., 2012; Gardner et al., 1993).

Energy security includes the following elements:

1. Security of supply is vital for importing countries energy resources and is guaranteed long-term and stable supplies at low prices
2. Security of demand is a concept related to exporting countries interested in stable financial income from sales of own energy at high prices
3. Transit security is in the zone of interests of transit countries and to maximize profits for the provision of its territory for the transport of energy.

Strengthening energy interdependence and globalization of energy spheres that occurred after the 70s years of last century, generally forcing states to solving the issue of both their own energy security problems and regionally and internationally recognize the need to create international, transnational and multinational unions of states, task which would be minimizing the number of threats to global energy security.

Minimization as such includes the following measures: chain energy supplies, diversification of transit routes, security on energy infrastructures, preventing the use of energy in as an instrument of political blackmail, ensuring predictability and stability energy markets (Chiemchaisri et al., 2012; Gardner et al., 1993).

Therefore, for reasons of energy security states, realizing the existing global interdependence in energy sphere, they opt for cooperation in order to minimize negative social and economic effects caused by insufficient energy security.

Russia is also actively promoting international energy cooperation, which indicates her intentions to build long-term cooperation in fuel and energy sector, including with the Republic of South Korea (Chiemchaisri et al., 2012; Gardner et al., 1993).

2. LITERATURE REVIEW

Until the 80s The Republic of Korea was perceived by the Soviet government as North Korea temporary breakaway territory, with which it worked closely, and therefore, there could be no talk of any cooperation between the USSR and the Republic of South Korea in any economic, neither culturally nor in any other plans. Nonetheless, from South Korea attempted to establish economic cooperation with the USSR back in late 70s - early 80s (Moiseev, 2017a; Moiseev, 2017b; Moiseev and Sorokin, 2018).

However, when Gorbachev came to power, the situation changed: he drew attention on the potential for cooperation with the Republic of South Korea: in September 1988, Gorbachev during a speech.

In his speech in Krasnoyarsk, he first mentioned the possibility of establishing economic relations with the Republic of South Korea. In addition, a kind of catalyst for the rapprochement of two states in the second half of the 80s served as the 1988 Olympic Games held in Seoul. Guests from the USSR to Korea then there was most of all other foreign states (Chiemchaisri et al., 2012; Gardner et al., 1993).

Returning from the Olympics, the athletes brought with them various Korean equipment: TVs, copy machines, buses, cars.

Gradually, with the increase in trade between the two countries arose the need to switch to trade directly (Bove and Lunghi, 2006; Cai et al., 2011).

The course towards the establishment and development of direct trade, cultural and technological ties with the Republic of South Korea on a non-governmental basis. It was assumed that such the format of the relationship was a temporary step necessary for the transition to the establishment official diplomatic relations (Bansal et al., 2013).

Given the mutual interest of the parties in strengthening cooperation, in 1988 "Korean Trade Promotion Corporation" (Korean Trade-Investment Promotion Agency) and the USSR Chamber of Commerce and Industry signed memorandum addressing the promotion of trade and system development trade missions of two states. In 1989, trading was opened, representations in the capitals of both parties. Thus, It stood at the origins direct bilateral trade relations, and the legal foundations of trade economic cooperation. With the advent of the legal and organizational framework trade cooperation between the two countries has become fast grow (Mikhaylov et al., 2018; Nyangarika et al., 2018).

Diplomatic relations between the Soviet Union and the Republic of Korea were established September 30, 1990, which became a political guarantee of trade economic, scientific and technical cooperation to strengthen and deepen further interaction (Morris and Barlaz, 2011).

After the collapse of the Soviet Union, the need arose to fix relations legally between the new state - the Russian Federation - and the Republic Korea. During the official visit of the Russian President to Seoul in November 1992.

The agreement was signed between the Republic of Korea and the Russian Federation, according to which the Parties agreed to promote the development of a wide mutually beneficial cooperation in the field of economy, industry, trade, namely in the field of agriculture, forestry, fisheries, energy, mining industry, communications, construction and transport (Moiseev, 2017c; Moiseev and Akhmadeev, 2017).

Thus, at the initial stage the development of cooperation, the potential of cooperation in the energy sector was noted sphere - South Korea expressed its interest in the joint development of natural resources that could potentially increase the share of imports, including energy resources from Russia.

In accordance with the provisions of this agreement, with the aim of a detailed study of cooperation projects and the creation of such, it was decided to create working units of the industry character. As of 2016, along with the Russian-Korean IPC, 11 committees and commissions function, among which the Russian-Korean Committee on Cooperation in the Field of Energy and Mineral Resources (Zubakin et al., 2015).

In the course of the above it was noted that energy cooperation is developing dynamically, and Russian and South Korean companies successfully cooperate in priority areas of cooperation - oil and gas and coal. The committee believes that the areas of electric power, energy efficiency and renewable energy have the potential for closer collaboration (An et al., 2020; An and Dorofeev, 2019).

Regarding direct cooperation, in 2003 measures were taken to establishing cooperation in the oil and gas sector: Gazprom and the Korean company KOGAS signed a cooperation agreement for a period of 5 years, and in 2008 it the agreement was extended for another 5 years. The main activities KOGAS companies are the construction and operation of Liquified Natural Gas (LNG) reception terminals and gas distribution networks, implementation of international gas projects, scientific gas research and development. In 2005, Sakhalin Energy Investment Company Ltd. and KOGAS sign a contract for the supply of 1.5 million tons of LNG to year since the Sakhalin-2 project (Milbrabdt et al., 2014; Morgan and Yang, 2001).

At the intergovernmental level, an agreement "On cooperation in the gas industry" in 2006 in Seoul. This agreement identified Gazprom and KOGAS as authorized organizations involved in the issue of gas supplies to South Korea through the Sakhalin-Khabarovsk- gas transmission system "Vladivostok," the creation

of which is envisaged by the Eastern Gas Program, approved by the Ministry of Industry and Energy in 2007.

In 2016, another agreement was signed between Gazprom and KOGAS on cooperation, providing for the development of partnerships in the field of LNG supplies in South Korea: implementation of joint projects for the production, transportation and regasification of LNG (An et al., 2019a; An et al., 2019b; An et al., 2019c; An et al., 2019d).

3. DATA AND METHODS

Today, the dynamics of development of energy cooperation in the field of LNG supplies from Russia are positive: in 2018, prospects are actively discussed expanding LNG supplies from the Sakhalin-2 project. In addition, in the framework of the IV East Economic Forum, which was from September 11 to September 13, 2018 in Vladivostok. They discussed opportunities for deepening cooperation in the gas sector to the growing demand for LNG from the South Korea.

LNG supplies are steadily growing: in 2017 supply from Sakhalin Energy Investment Company Ltd. amounted to 1.9 million tons, and in the first half of 2018 - already 1.2 million tons.

In the structure of energy consumption of the Republic of South Korea, oil and petroleum products occupy the leading place, and oil demand is constantly growing. In this regard, the Republic of South Korea is located in constant dependence on oil imports, the vast majority of which come from countries of the Middle East.

On For a long time, the share of the Russian Federation in oil imports did not exceed 3-4%. Not less in the framework of the diversification policy of the Republic of South Korea pays more and more attention to Russia as a promising partner in the field of energy cooperation (Dayong et al., 2020).

The beginning of cooperation between South Korea and the Russian Federation in the field of crude oil supplies was laid in September 1999, with the shipment of the first batch of crude oil from about. Sakhalin, the volume of which amounted to 81 thousand tons. Most oil exports come from Sakhalin-1 projects (De Kastri port) and Sakhalin-2 projects (Korsakov port), and the rest accounts for the port of Kozmino - the terminal point of the East Siberia oil pipeline - Pacific Ocean.

4. RESULTS

This area of energy cooperation would not appear possible without the systematic creation of an appropriate transport infrastructure.

Cooperation between the Russian Federation and the Republic of South Korea in this area was made possible thanks to two factors: Increased demand for crude oil and petroleum products in Asia as a whole and in South Korea in in particular, and pursuing a policy of diversification of energy suppliers, initiated by the Korean government.

Thanks to the commissioning of an increasing number of transport projects, oil export volumes were constantly growing (Table 1).

Over the past 10 years (2007-2017), indicators fluctuate on average in between 30 and 50 million barrels per year (Table 2). In 2015, export volumes reached their maximum for the period under review (1999-2017), amounting to 137.8 million. Tons or 51.1 million barrels per year, which was mainly caused by a collapse in prices for energy sources.

Goals of this agreement were the redistribution of oil flows around the world and ensuring balance of supply and demand in the market. The result was a reduction in import from Saudi Arabia to South Korea, as it has become more expensive. Against this background, Russian Urals brand oil, previously not purchased by the state, has become economically more profitable in comparison with brands such as Oman and Upper Zakum (Figures 1-3).

Therefore, we can naturally expect a further reduction in oil supplies from OPEC countries, in particular Saudi Arabia, and accordingly an increase in volume import from Russia.

It is worth noting one of the few joint projects in the field of intelligence energy resources that could greatly strengthen energy cooperation and attract more investment in the Far Eastern region, if it were fully implemented.

In 2006, Rosneft and Korean KCC Consortium, which included the following companies: Korean National Oil Corporation (Korean National Oil Corporation, KNOC), KOGAS, GS-Caltex Corporation, SK Corporation, Daewoo International Corporation, Kumho Petrochemical and Hyundai Corporation); entered into an agreement to establish a joint investment project for exploration of the West Kamchatka shelf.

Table 1: Completed infrastructure projects of oil export to East Asia from Siberia and Far East

Year	Infrastructure project
1999	Sakhalin-2 Project (Seasonal oil development: 6 months a year)
2006	Sakhalin-1 Project
2008	Sakhalin-2 Project (year-round oil production)
2009	Completion of the construction of ESPO-1
2011	Completion of the construction of an oil pipeline under the ESPO
2012	Completion of the construction of ESPO-2 and start of operation

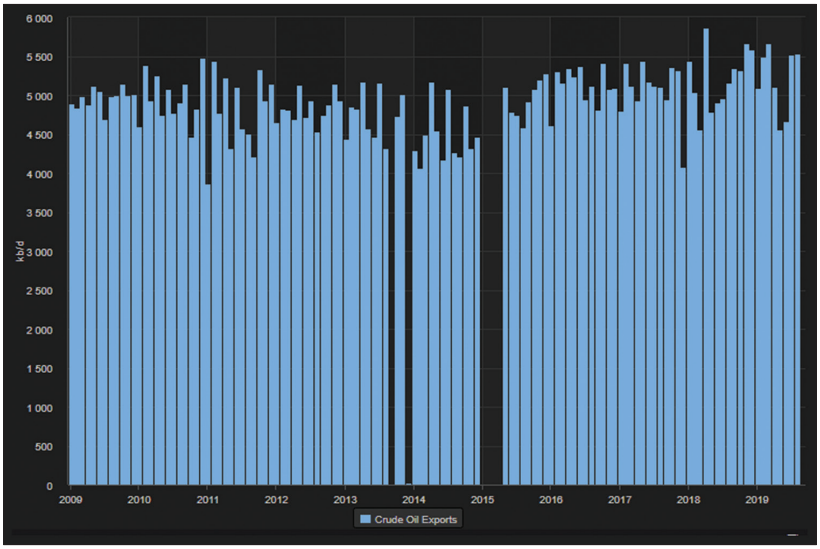
Source: Thomson reuters, ESPO: East Siberia oil pipeline

Table 2: Crude oil exports from the Russian Federation to South Korea

Year	Export of oil
1999	3.7
2000	9.9
2001	18.6
2002	15.05
2003	7.03
2004	8.5
2005	8.3
2006	13.9

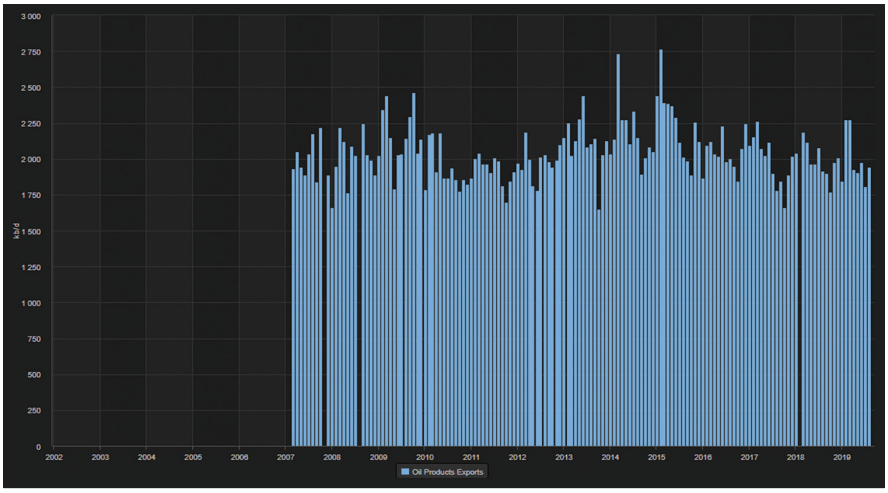
Source: Thomson reuters

Figure 1: Oil export from Russia



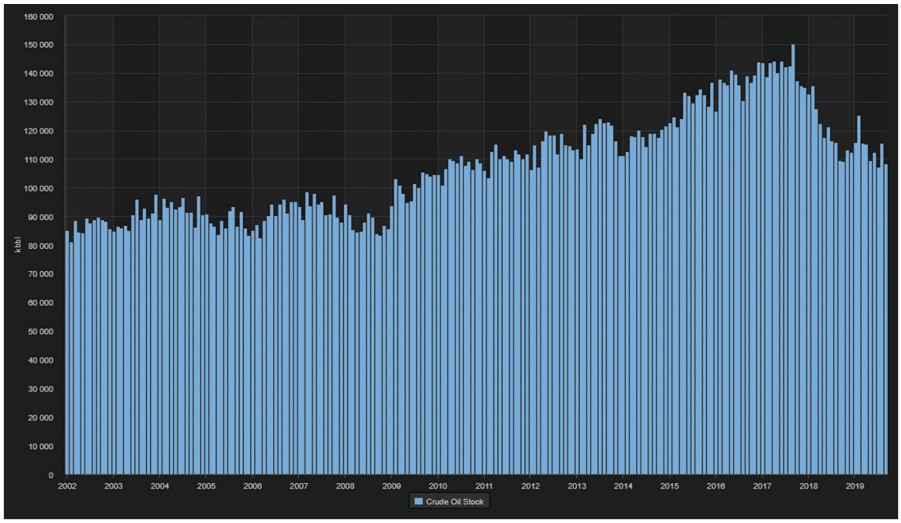
Source: Thomson reuters

Figure 2: Oil products export from Russia



Source: Thomson reuters

Figure 3: Oil stock in South Korea



Source: Thomson reuters

According to this project, 60% of the shares belonged to Rosneft, and the remaining 40% - to the Korean consortium.

5. CONCLUSION

However, the project was soon suspended due to the loss of Rosneft license to develop this shelf section. One reason for suspension license served as non-compliance with certain requirements of the license agreement, in of which there were such as putting off the first drilling during the year exploratory well and violation of the timing of seismic work (Mikhaylov, 2015).

The rights to this section were transferred to Gazprom, which in turn announced willingness to leave the Korean side a stake in the company, but no more. However, negotiations on this issue were not brought to an end, and Gazprom ultimately set about unilaterally developing the shelf section (Chiemchaisri et al., 2012; Gardner et al., 1993).

Thus, the Korean side suffered serious financial losses in the amount of several hundred million dollars, which undoubtedly had a negative impact on cooperation between the Russian Federation and the Republic of South Korea in the field of energy resources and in general. In other words, Russian the party represented by Rosneft and Gazprom proved to be unreliable partners, with which Korean companies, it seems to us, are unlikely to actively seek interact and in projects which they will not invest in the near future (Meynkhard, 2019a; Meynkhard, 2020).

To restore confidence, the Russian side will have to give certain guarantees and reinforce them with actions not only at the level of business, oil, and gas corporations sector, but also at the intergovernmental level. Only then are constructive possible dialogue and partnerships (Mikhaylov, 2019; Mikhaylov et al., 2019).

In general, the development and deepening of energy cooperation between the Russian Federation and South Korea is in the zone of interests of both parties (Meynkhard, 2019b).

Consequently, energy cooperation will expand, and interdependence South Korea and Russia will grow economically, which in turn will be even more to increase the scale of not only fuel and energy, but also in the long-term political and cultural cooperation (Denisova, 2019; Denisova et al., 2019).

Thus, we can talk about the complementary nature state economies, which in turn serves as a fundamental prerequisite development of energy cooperation, the ultimate goal of which is ensuring energy security as one of the main tasks of any state (Mikhaylov, 2018a; Mikhaylov, 2018b; Mikhaylov et al., 2018; Nyangarika et al., 2018).

The foreign policy course focused on development of cooperation in the Asia-Pacific region from the Russian side, and from the South Korean side (Chiemchaisri et al., 2012; Gardner et al., 1993).

All three sources contain overlapping goals and objectives, among which the following: development of the Far East, providing energy state security, diversification of importing states in the case of the Russian Federation and exporters in the case of South Korea and deepening energy cooperation in the Asia-Pacific region (Chiemchaisri et al., 2012; Gardner et al., 1993).

It is creation of joint infrastructure projects and joint projects exploration of energy resources and an increase in LNG supplies from the Russian Federation to the Republic of South Korea. Therefore, from the theoretical and methodological point of view, there are all necessary conditions for deepening and expanding energy cooperation under consideration states (Nyangarika et al., 2019b; Nyangarika et al., 2019a).

Institutionally, agreements and memoranda were signed, necessary for the formation of a regulatory framework for energy cooperation, and various governmental and intergovernmental structures such as the Russian-Korean Intergovernmental Commission and it has composed of the Russian-Korean Energy Cooperation Committee and mineral resources (Lopatin, 2019a; Lopatin, 2019b).

As well as the Committee on Northern Economic Cooperation, personally controlled by the President of the South Korea, in the framework of which consultations and meetings of government and business representatives related to development of joint projects in the energy sector and closely related infrastructure sphere (Chiemchaisri et al., 2012; Gardner et al., 1993).

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