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ENERGY SECURITY AS A PARADIGM OF CONTEMPORARY GEOPOLITICS

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Abstract: *Why did energy and the narrative surrounding energy security take on almost manic dimensions in everyday life, so much so that this segment has become one of the most important vectors of the politics of every state and its ,,rulers''?*

This burning problem of today is the consequence, on the one hand, of the depletion of proven reserves of natural energy sources, and on the other hand, of the constant increase in the consumption of fuel and various types of energy in all segments of society. The energy picture of the modern world has noticeably become more complicated, both economically and politically. New powerful players with their own ambitions and long-term strategies have appeared in the energy markets. The fragile balance of power and interests in relations between energy exporting and importing countries, transnational energy companies and national states with strategic reserves of energy, energy producers and consumers is constantly changing...

Key words: *energy, energy security, geopolitics, resources*

1. INTRODUCTION

There are no easy or simple decisions, but we will have to act as soon as possible, otherwise we will face a disaster. The money that we will have to invest in our energy sector in the next 10, 15 or 20 years is between 16 and 33 billion euros.

President R. Serbia, Aleksandar Vucic (Vucic, 2022).

In recent years, with the increasing pressure of sanctions on Russia in various fields of activity, including the energy sector, the number of publications on various aspects of ensuring energy security has increased significantly. At the same time, the term "energy security" itself is often given too broad a meaning, including consideration of financial, foreign economic, environmental policy issues, etc.

Energy security, as a concept, appeared for the first time in the US National Security Strategy of Engagement and Expansion from 1996, within which a new chapter was dedicated to this area (A National Security Strategy of Engagement and Enlargement, 1996). After which this issue was inevitably described in all subsequent national strategies. After the mentioned American approach, the issue of energy security spread to the global level, which extended the general concept of security to the field of energy, which today occupies an indispensable part

of the consideration of national security formats, with an exceptional impact on the general security of any country.

Observing and studying the actions of the state as a subject of international relations in the sphere of economy and energy within it, we can clearly see that the race for resources, and especially for energy, has become increasingly dominant and that in the near future only the strongest and most proactive players will remain in it. The current crisis taking place in one of the most complicated hubs of the world, Ukraine, has fundamentally shaken not only Europe, but the entire world. The "turning of the taps" from energy sources by the countries with the richest natural resources has fully triggered the "butterfly effect", and the consequences of the swing of its wings have been felt by every individual, community, region... The struggle for survival in the energy sphere is ongoing and she is crueler than ever...

2. WHAT IS ENERGY SECURITY TODAY?

In our country, the aforementioned change was first registered in the National Security Strategy in 2009, when it was recognized that security from the predominantly military sphere was extended to other areas, primarily economic, energy, social and environmental, including the security of the individual and society as a whole (National Security Strategy of the Republic of Serbia, 2009). In this context, our strategy then recognizes that "the ever-increasing definition of energy resources threatens the stability of individual countries and entire regions, as well as global security", while the geostrategic position of Southeast Europe, through which energy communication routes pass, connecting the developed countries of Europe with the regions of the Caucasus, the Caspian Basin, the Middle East and the Mediterranean, significantly and directly affects the state of security of the countries of the European continent (National Security Strategy of the Republic of Serbia, 2009).

Vincent Cable is among the first to define the place and role of energy within economic security (Cable, 1995). Namely, in 1995, he recognized economic security in the sense of the state's ability to unhindered acquire and produce resources that are necessary for the state's defense capabilities. There, in addition to trade in weapons and military equipment, he specifically described strategic minerals (cobalt, chromium, platinum, manganese), energy sources (oil and gas), food products, advanced technologies, etc. In addition, economic security can also be viewed through mechanisms of strategic economic influence such as sanctions and energy supply restrictions. A typical example of such a policy was found in the Middle East in the 80s of the last century, where the Gulf states, above all Saudi Arabia, used their dominant position within the Organization of Oil Producers (OPEC)[1] in order to influence American and other global and regional actors' policies. Namely, energy security became an international security problem as early as 1973, when the Arab oil embargo and the global oil shock occurred. The drastic increase in oil prices on the world market, caused by the Gulf War, dramatic indicators of global warming and depletion of non-renewable energy sources, as well as increasingly frequent crises due to the shortage of oil and gas, included the issue of energy security at the top of national security priorities (Bajagic, 2012). On the other hand, the suspension of Russian gas deliveries to Ukraine and Belarus in 2006 and 2007 can be taken as an example from recent history, while it is worth mentioning perhaps the most radical example in the last 15 years, when US Senator Richard Lugar[2] at one time even proposed the expansion of Article 5 of the Washington Treaty in the sense that the suspension of energy supplies against a NATO member state is also treated as an attack on the Alliance (Radoman, 2007).

[1] Organization of the Petroleum Exporting Countries - OPEC.

[2] Richard Green Lugar (Richard Green Lugar) was a senator of Indiana in the period from 1977 to 2013.

Furthermore, Susan Rice recognized poverty as the main economic threat to security, i.e. the weakening of state power (Rice, 2010), while the second one is the energy deficit, because without sufficient energy, states can experience economic, political and social collapse, and the absence of a reliable supply directly affects both external defense and the maintenance of a stable internal political and security environment. Hence the appearance of the classic definition of energy security, which refers to the availability of sufficient energy at acceptable prices. Daniel Yergin believes that security of supply, stability of delivery, availability at the most favorable prices, as well as physical security of gas and oil pipelines, are the default conditions for the security of most energy-dependent countries (Yergin, 2006). According to the aforementioned author, energy security includes the protection of the entire chain of energy production and supply, as well as the infrastructure used for these purposes. Yergin's theory has been extended by Jonathan Elkind, who considers four key elements in this area: (1) availability of energy sources and services, (2) protection of services from interruptions, (3) affordable and low-cost energy sources, and (4) environmental sustainability (Pascual & Elkind, 2010).

According to the Energy Strategy of the Russian Federation (RF) from 2003, "energy security is the state of protection of the country, its citizens, society, the state and the economy by the safe supply of the necessary amounts of fuel and energy", i.e. "full and safe provision of energy resources to the population and the economy at affordable prices and, at the same time, stimulating energy savings, reducing risks and eliminating threats to the country's energy reserves" (Bajagic, 2012).

Furthermore, Slobodan Simic defines energy security as a state in which an international entity or community, i.e. all its citizens, have access to sufficient amounts of energy at a reasonable price on the world market and without challenges, risks and threats that would lead to interruptions in the supply of energy and energy (Simic, 2017).

In the Republic of Serbia, the previously mentioned energy security provisions have been accepted, which is seen as a basic priority for the development of the country, achieving national and economic security, through maximizing independence from the import of energy sources and energy, with sufficient amounts of energy sources and energy, and in accordance with future energy needs (Ministry of Mining and Energy of the Republic of Serbia, 2022). However, our country considers separately the sub-term energy security, within which the necessity of a continuous supply of energy sources in various forms and in sufficient quantities, and at an acceptable price, is considered (Ministry of Mining and Energy of the Republic of Serbia, 2022).

3. EUROPE AND THE STRUGGLE FOR ENERGY SECURITY

No matter how you look at the relationship between geopolitics and energy security, it is important to note that the geopolitics of a country and its energy security are closely related (Bajagic, 2012). It can be explained in the following way - energy is a strategically important resource of every country, which is why they strive to gain control over its production, transportation, sale and consumption.

The energy crisis in Europe from the second half of 2021 has shown all the limitations of the West in its attempt to diversify energy supplies and reduce partial or complete dependence on oil and gas imports from the Russian Federation. Although numerous activities were previously undertaken in this direction, with the construction of the "Southern Gas Corridor" capital project and the opening of new terminals for the regasification of liquefied petroleum gas, the countries in the south, southeast and east of the continent still maintain a high

percentage of Russian gas imports. which increases the potential for instrumentalization of the described situation by the Kremlin in terms of obtaining certain political concessions.[3]

In this context, the energy crisis showed that all European countries, except the Russian Federation and Norway, are to some extent dependent on the import of Russian gas. Moreover, in 2020 alone, the EU spent about 15 billion euros for the procurement of energy sources, while this amount increased to over 24 billion by the end of 2021. The same trend continued during 2022, where the war in Ukraine further intensified the energy crisis due to the reduction or complete interruption of supplies from the Russian Federation, the inability of Norwegian capacities to replace Russian gas and the insufficient export capacities of the USA, Africa and the Persian Gulf. Moreover, the events in Ukraine showed three key things: (1) that renewable energy sources, which the EU, led by Germany, insists on, they are not a reliable substitute for classic energy sources; (2) that political crises and especially the escalation of conflicts on the territory of Europe directly negatively affect the energy stability of all countries of the Old Continent; and perhaps one of the most important, (3) that the storage capacities even in the most developed European countries proved to be insufficient in cases of significant supply restrictions.

Until the beginning of the war in Ukraine, the Russian Federation was the leading supplier of energy for the European market. Unlike oil, which is mostly transported by sea, most of the gas is delivered via the pipeline network, which makes the mentioned system completely susceptible to market and political manipulations. Apart from oil and gas, RF is also one of the most important exporters of electricity, but this process is mainly oriented towards neighboring countries (post-Soviet space).

Moreover, while Europe, under the pressure of the USA, planned to diversify the supply of Russian energy products, the Russian Federation diversified its export routes towards Southeast and South Asia (if we consider the network of gas and oil pipelines towards the Indo-Pacific region).[4]If we add to that the fact that the Asian market is far more attractive for large producers due to higher prices compared to Europe, but also a constant increase in demand due to positive demographic and economic trends in that part of the world. A similar strategy was applied in the case of oil exports. Namely, the Russian Federation is under sanctions due to the war in Ukraine and new conditions for the supply of oil to the European market.[5]diverted the accumulated surpluses of that energy source to India. Namely, with the new contracts with Moscow, this most populous country in the world received a long-term price discount of 20%, which brought the Russian Federation to the level of a strategic energy partnership in India and thus compensated for the losses caused by the interruption of supply to the European market.

Europe imports about 90% of its natural gas needs, of which, until the beginning of the Russian-Ukrainian conflict, about 41% came from the Russian Federation through the following gas pipelines: 1) three direct gas pipelines to Finland, Estonia and Latvia; 2) the

[3] The above became most evident with the completion of the construction of the "Turkey Stream" and "North Stream 2" gas pipelines, which were accompanied by tensions due to bypassing the territory of Ukraine for the transport of Russian gas to the EU market and in our region.

[4] It means the construction and completion of mega projects such as the Sakhalin - Vladivostok gas pipelines, the terminal in Vladivostok, the "Power of Siberia 1" gas pipeline, as well as the beginning of the construction of the "Power of Siberia 2" gas pipeline (the so-called Western route), which will cover through Mongolia China's complete natural gas needs.

[5] Moscow's decision not to sell oil to EU countries in dollars.

Yamal Europe gas pipeline, via Belarus and Poland to Germany; as well as 3) five gas pipelines that ran through Ukraine to Slovakia, Romania, Hungary and Poland.[6]In addition to the above, from 2021, gas deliveries began via the "Nord Stream 1" gas pipeline across the Baltic Sea to Germany.[7]Furthermore, the new "Nord Stream 2" gas pipeline, despite the huge needs of the German economy and population for Russian gas, showed how much the political and geopolitical influence of its key opponents (USA, Ukraine and Poland) can affect energy flows in Europe.

Moreover, even Germany conditioned the commissioning of "Nord Stream 2",[8]while the sabotage of the gas pipeline, which led to its physical damage at the end of September 2022, pointed to the use of all available instruments of power by global and regional geopolitical actors in disrupting the energy dominance of one side.

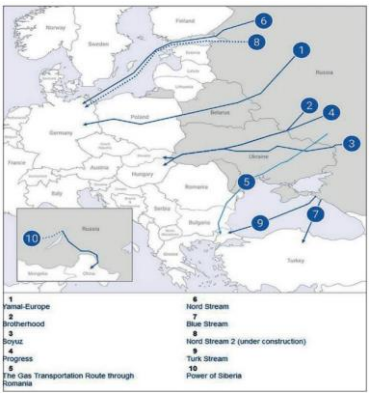

Figure 1. Map of Russian gas export pipelines
Source: editing by author

Figure 2. "North Stream 2" gas pipeline route
Source: editing by author

Regarding the dependence on imports of crude
oil and oil derivatives, the dependence of the European market reached its peak in 2019 when the EU imported about 98.8% of its needs,[9]of which the largest import was recorded from the RF (about 27%). However, despite the described indicators, the import of Russian oil has recorded a constant decline since 2005, when a record import level of about 18.7 million tons was recorded.[10]The aforementioned decline is a consequence of the fact that oil imports are carried out via maritime waterways, as a result of which it was easier for the EU to find other sources of supply on the world market.

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[6] These are the following gas pipelines: 1) West Siberian or Trans-Siberian gas pipeline; 2) Gas pipeline "Brotherhood"; 3) "Predrak" gas pipeline; 4) "Savez" gas pipeline and gas transport route to Moldova, Romania and Bulgaria or the so-called The Trans-Balkan gas pipeline, which was deactivated in 2020.

[7] The Nord Stream 1 gas pipeline is an investment by the Russian "Gazprom" (51%), i.e. companies from France, Germany and the Netherlands.

[8] By delaying the implementation of the process of certification of the gas pipeline operator in the territory of the end user and making it conditional on the de-escalation of the conflict in Ukraine.

[9] The import of crude oil and its derivatives in 2019 amounted to 507.2 million tons.

[10] Oil was transported by land to Europe via the world's largest oil pipeline "Friendship", which connects Russian Tatarstan with Ukraine, Belarus, Poland, Hungary, Slovakia, the Czech Republic and Germany.

Faced with excessive energy dependence on Russian energy sources, the EU and the West began the reconstruction of the entire energy architecture of Europe, primarily through the construction of a new land and sea gas network, which included the construction of new floating terminals for the storage and regasification of liquid petroleum gas (LPG), mainly in the coast of the continent. The mentioned projects ensured the inflow of gas from deposits in the Caspian Sea, i.e. LPG from Qatar and the USA. The most significant European capital project is the construction of the so-called The Southern Gas Corridor for the transport of Azeri gas from the Caspian Sea, via Turkey, further to the south and southeast of Europe.

The Southern Gas Corridor consists of three major gas pipelines: 1) South Caucasus Gas Pipeline (from Azerbaijan to Turkey), 2) Trans-Anatolian Gas Pipeline (TANAP) through the territory of Turkey and 3) Trans-Adriatic Gas Pipeline (TAP) which transports gas through Greece, southern Albania and the Adriatic Sea to the south of Italy (picture 3). Thus, Turkey retained the role of the most important energy hub in Europe, through whose territory two gas pipelines from the Russian Federation and the Southern Gas Corridor cross. Thus, Ankara, seeing an opportunity to strengthen its own geopolitical position, along with the construction of capacity for the transport of Russian gas via the Turkish Stream gas pipeline (and partly Blue Stream), gradually increased the supply of American and Qatari LPG, i.e. Azeri gas from the Southern Gas Corridor. Although it retains slightly less than half of natural gas and LPG for the needs of its growing economy, in the manner described above, thanks primarily to its geographical position, Turkey has profiled itself as a key gas giant from the point of view of Europe's energy security.

Figure 3. Supply of Southeastern and Central Europe with Russian and Azeri gas
Source: editing by author

Turkish Stream, which supplies the market of Southeast and Central Europe with Russian gas, was put into operation in January 2020, with the first deliveries of that energy to Bulgaria, North Macedonia and Greece, and later to Serbia, Hungary and Austria, i.e. to a lesser extent towards Bosnia and Herzegovina and Romania. Thus, the Russian Federation practically bypassed the territory of Ukraine, through which gas was delivered in the previous period via the so-called Trans-Balkan gas pipeline. In this way, Bulgaria, which, in addition to Turkey, is considered to be a low-profile Balkan gas hub, benefited from the mentioned projects, while in the future, Romania will also play a more significant role in the process of diversifying the supply of Russian gas, bearing in mind that the EU is helping to start the construction of a new regional the BRUA gas pipeline, which should connect important Black Sea gas deposits in the waters of Romania with Bulgaria, Hungary and Austria. In addition, the plan is to complete the reconstruction of the reversible flow of the Trans-Balkan gas pipeline (from south to north) in order to use its existing capacities for the transport of both Azeri and Black Sea gas from

the direction of Bulgaria and Romania towards Moldova, which would make that country in the future could solve the issue of complete dependence on supplies from the Russian Federation, i.e. Ukraine.

In addition, the construction of another gas pipeline route from Bulgaria to Serbia (Novi Iskar - Dimitrovgrad - Nis) has also started, in order to enable our country from the direction of Greece and Bulgaria to also receive Azeri, as well as American/Qatar LPG (a new floating terminal in Constantinople). Brussels (with the support of the USA) is also helping additional projects in the Western Balkans in order to build new supply routes both from the direction of Greece and Albania (the project for the construction of the Adriatic-Ionian gas pipeline in the direction of Greece - Albania - Montenegro - Croatia with interconnectors to Bosnia and Herzegovina), as well and through the interconnector from Croatia (TNG terminal on the island of Krk).

The mentioned projects would essentially form an expanded network of the European Southern Gas Corridor, which would diversify the entire area of Southeastern Europe in the long term from the supply of Russian gas. If the route of the JANAF ("Adriatic Oil Pipeline") is added to the mentioned considerations, which is currently the only route to supply our country with this energy source, it can be concluded that the entire supply network of the Western Balkans will significantly reduce or completely ignore the need for Russian energy sources in the future.

4. CONCLUSION

It is a fact that at the global level "energy geopolitics" is today very pronounced and controlled to the greatest extent by the dominant energy powers - the USA and the Russian Federation, as a result of which the Russian-Ukrainian conflict, apart from the energy stability of Europe, had a significant negative impact on the energy safety and security R. Serbia. Thus, contrary to many years of efforts, European countries still do not have a fully diversified supply of the missing energy products, which creates space for the outbreak of new energy crises and disruptions in supply. In this context, certain countries of Central, Eastern and Southeastern Europe are more vulnerable in relation to the unstable energy market and security flows that occur in the West-East relationship, as a result of which they are naturally more susceptible to all the accompanying negative impacts that energy crises bring with them.

Although in the coming period the Russian Federation will continue to be, individually, Europe's largest supplier of energy, there is a need to regulate cooperation with Moscow in accordance with the uncertain political and security conditions of cooperation, while the USA will continue to press for a complete withdrawal from the aforementioned source. supply. However, the Western alternative is still insufficient in terms of supply sufficiency, with energy prices far less favorable than Russian natural gas and oil.

Positive examples of strategic thinking are visible in our immediate region. The completion of the "Southern Gas Corridor" and the continuation of the construction of the interconnector network in the Western Balkans represent a significant shift in the context of the diversification of sources and routes of supply. Also, a positive example is presented by Hungary and Bulgaria, which, regardless of the "security and energy umbrella" in which they are located, promptly started the construction of additional capacities for the storage of strategic gas reserves[11]and electricity, through capital investments in existing or construction of new blocks of nuclear power plants, which increased the aforementioned reserves many times over.

[11] Hungary, for example, today has storage capacities of six billion cubic meters of gas.

In addition to them, even the most developed European countries have recognized that it takes five to seven years, in principle until 2030, to get out of the energy crisis and ensure a continuous supply of energy (Zdravkovic & Radosavljevic, 2022). In this context, certain countries, such as Germany,[12]Turkey, France or Great Britain,[13]have temporarily given up on medium-term plans to shut down thermal and nuclear power plants and switch to renewable energy sources or gas processing technologies for electricity production. Moreover, 10 EU members led by France submitted an initiative to put nuclear energy on the "green energy" list (Zdravkovic, 2022), which represents another indicator of long-term strategic energy transition.

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[12] Germany planned to completely shut down 17 nuclear power plants with 22 reactors by 2026, in exchange for gas-fired thermal power plants.

[13] Unlike Germany, France and Great Britain planned the construction of dozens of new so-called mini nuclear blocks for the production of electricity. Turkey, on the other hand, with the Russian "Rosatom" is building three nuclear power plants with four independent production reactors each, which will become operational in the period from 2023 to 2025.

Other:

Data collected during the visit of the 66th class of GSU to the NIS company, November 2022.