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Energy Security of the West in the Conditions of Russian Aggression Against Ukraine

Abstract. The relevance of the study is conditioned by the fact that the fuel and energy sector of the state is one of the key ones for ensuring a comfortable life of the population. In recent years, the process of energy development has been negatively affected by climate change and the COVID-19 pandemic, but now the most important problem is the Russian invasion of Ukraine. Political events have only proved that Europe is suffering significant losses in the energy sector and is quite dependent on Russia's fuel and energy resources. That is why the issue of ensuring fuel and energy security and creating a sufficient level of reserves is the most relevant. In this regard, the purpose of this study is to analyse the issue of energy security of Western countries in the context of Russia's invasion of Ukraine. The leading methods of investigating this problem are logical analysis, periodisation, induction, deduction, comparison and systematisation of approaches, which will help determine the consequences of the Russian invasion of Ukraine and the current state of energy security development in Europe. The paper describes the concept of security and its features in the energy sector; analyses the studies by historians, economists, sociologists, political scientists, and researchers who deal with the problem of energy security of the West in the context of Russia's aggression against Ukraine; describes the danger of further use of Russian gas; suggests various methods and ways to save energy and help reduce dependence on Russian gas supplies; diagnoses risks and threats in the fuel and energy sector of Ukraine and Western Europe; disclosed main statistical data and facts of dependence of European countries on fuel and energy resources from Russia. The materials of the study are of practical and theoretical value for political scientists, economists, politicians, and diplomats, which would help them create conditions for ensuring the country's energy security. In addition, the information may be relevant for researchers and scientists who are concerned about the economic damage to the whole world as a result of the Russian invasion of Ukraine

Keywords: electricity, Europe, aggressive policy, military conflict, fuel and energy complex

Introduction

Energy is an important factor in economic development and an engine of society's progress. Without it, there would be no social development and prosperity in industry, transport, housing, and services. Energy security is an indicator of national security and a factor in international relations. L. Tai-Ha and N. Kang Fuk suggest that today energy and information represent the basis of the economy and are key components of the country's economic growth [1]. The standard of living of society and the economy depends on reliable, efficient, and affordable energy supply.

The problem of the study is that during the war in Ukraine, the dependence of European countries on oil and

gas imports from Russia was revealed. A. Razavi found that about a quarter of all energy consumption in the EU comes from natural gas, which is an imported product. Such events indicate the West's energy dependence on Russia. Researchers have shown that the high energy dependence on oil and gas imports from Russia is caused by the inability to supply energy from Iran and Venezuela due to sanctions. The most important strategies of the countries are to strengthen international institutions, use alternative sources, ensure joint investment with oil producers, and build new pipelines for gas transportation [2].

P. Kosovsky and K. Kosovar state that energy security is the ability of the economy to ensure a stable supply

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of energy resources. In addition, an important indicator is the regulation of energy prices, which will not have a negative impact on the economy [3]. Now it is important to ensure equal access to energy for all social groups, because Russia's military invasion of Ukraine has jeopardised the energy security of the whole of Europe.

T.P. Gregory noted that Europe depends on Russian supplies. The EU's dependence on Russian imports in 2020 was 38%, but since 2010 it has increased by 30.6% [4]. The result of the war in Ukraine was an increase in European military spending and a decrease in the dependence of European countries, especially Germany, on Russian energy supply (natural gas). Finding new exporting countries (the United States, Australia, Central Asia, North Africa, or the Middle East) does not help create conditions for rapid replacement. In addition, prices for fossil energy carriers only indicate their shortage on the global market [5].

V.V. Dubrovsky established that Russia produced approximately 14% of the world's oil reserves and 17% of its natural gas reserves. It was one of the most important coal exporters to Asia and Europe. Before the war in Ukraine, Russia reduced supplies to Europe to make the West feel a shortage of gas [6].

S. Gaderi investigated the concept of energy security of Western countries and pointed out that it is France and Germany that are most dependent on Russian energy imports. It was noted that Russia's goal was to control the European Union's Energy Market by influencing Iran and military attacks on Ukraine and Georgia. In addition, Russia has close contacts with Central Asian countries that are landlocked and cannot easily supply energy to Europe [7].

The relevance of this study is conditioned by the fact that Russia's invasion of Ukraine affected the emergence of a number of economic, social, and food problems in the world. As a result of the imposition of sanctions on Russia, European countries are unable to import energy resources, which creates a problem of energy security. In addition, Western countries did not express a uniform position on energy regarding Russia's invasion of Ukraine in February 2022. M. Mishyk points out that the rapid rise in energy prices and the shortage of natural gas in the winter of 2021-2022 only indicates the limited ability of Europe's existing energy resources to ensure energy security. Important prospects are the creation of energy security for Western countries based on providing them with internal energy sources [8]. It is the transition to renewable energy sources that would help overcome the consequences of the Russian invasion. The originality of the study is its very topic, because this issue has not been described before.

The purpose of the study is to investigate in detail the issue of energy security of Western countries in the context of Russia's war against Ukraine. Additional tasks are to analyse strategies and actions that can affect the improvement of the level of energy security.

Materials and Methods

The following methods were used in the course of the study: theoretical (investigation and analysis of political and economic literature and papers on the importance of energy security in the world; analysis of the features of

the impact of the Russian-Ukrainian war on the state of energy supply in Europe; generalisation of theoretical material on the problem under study; logical method with a systematic approach to the investigation of the phenomenon; deduction and classification when highlighting the main strategic actions of the European Union in the field of energy stability; system and structural method for presenting the phenomenon of energy security from different sides and priorities; comparison of approaches to theoretical understanding of the essence of the problem of energy security and methods of its solution; comparison and systematisation of research on this problem); diagnostic (study of the works of researchers, findings of scientific research, collection and grouping of empirical facts).

The study was conducted in three stages:

1. At the first stage, a theoretical collection and analysis of existing approaches in the economy, history, political science, and the system of international relations on the issue of energy security of the West in the context of Russia's aggression against Ukraine was carried out. Studies devoted to this problem, its features and approaches to explanation were investigated; information data of books, electronic articles, monographs, conferences, dissertations were considered, in which the aspects and problems faced by European countries were deeply and comprehensively revealed; Europe's dependence on Russian energy resources, which was built up over the years, the amount of gas and oil that were exported were determined; brief reviews of different studies were presented and unexplored issues were identified; the problem, purpose, forms, and methods of analysing the problem were highlighted, and a research plan was drawn up.

2. At the second stage, the research, analysis, and design of tools for studying the problem of energy security of the West in the context of a full-scale military invasion of Russia in Ukraine was carried out. The features and aspects of this international economic phenomenon were considered; a three-level model of energy security and its components were defined; measures and tools for developing an international energy security system were explained; percentage data of Russian energy supplies to Europe were presented; the results of the analysis were revealed, which helped identify the specifics of this problem; the components of the Energy Union were analysed; the increase in fuel and electricity prices was determined; alternative solutions of the West to find new gas supplier countries were described and the conclusions obtained during the study were systematised.

3. At the third stage, there was a systematisation and classification of material obtained during the analysis and investigation of scientific and theoretical studies; the theoretical and practical conclusions and results of this study were substantiated; a comparative analysis of research and approaches aimed at investigating the problem of energy security and stability of the West in the context of Russia's aggression against Ukraine; the main economic and political facts and data that certify the real state of EU energy resources was presented; effective methods of ensuring the energy stability of Western countries were analysed; the importance of renewable energy sources for political

independence and economic development was shown on the example of Lithuania; the results of the analysis of different studies and their contribution to the economy, the system of international relations and political science; the importance of developing a fully integrated domestic market based on supporting competitive oil refining companies in Europe was presented. In addition, the author of this study described the general principles of energy security of the West in the conditions of war in Ukraine.

Results

3.1. The concept of energy security and its features

Providing the population with energy is a major issue that needs to be addressed to minimise the risks of depletion of economic, environmental, and social resources in the future. The main goal of each state is to fully provide it with energy in a certain quantity and quality. Energy security strategies are always a response to threats to the state's energy systems [9].

It is important for European countries to ensure their economies and create good conditions for the existence of the population, but for this purpose, it is necessary to ensure the import of the necessary amount of fuel and electricity and supply them at reasonable prices. Often, the concept of "energy security" can be interpreted as the creation of guaranteed energy resources in order to overcome external energy dependence. This is also highlighted in the Energy Security Strategy. Energy dependence on energy supplier countries is also a component of energy and national security. It is imported energy resources and their diversifica-

tion that determine the level of energy dependence of the state. To assess the level of energy security, a system of indicators determined by the subject composition of the energy security system is used. The main indicators of electricity supply are such aspects as: the share of own production; the index of changes in consumption per capita; the index of changes in the share of energy consumption within a certain region in relation to the total volume of state consumption; the share of restrictions in electricity production [10].

Interest is also shown by the idea of F. Cornell, where energy security comes in the form of a three-tier model:

1. The first level consists of "military energy security", which ensures the supply and delivery of logistics chains to combat sites, managing total losses and needs.

2. The second level meets the needs for energy resources and electricity for the education system, transport, health-care, etc.

3. The third level is a priority for the economic sphere, because it regulates energy prices. At the same time, this level is the most unstable due to interruptions in the supply of gas and oil [11].

The implementation of an effective mechanism of interaction to create conditions for international energy security affects the functioning of the global fuel and energy sector and requires regulating the process of inclusion in the global energy space, the interests of the company, and the cost of resources. The mechanism of interaction between countries in the energy sector should be based on a system of economic, technical, institutional, and political measures (Table 1).

Table 1. Measures and tools for establishing the international energy security system

Measures	Tools
Structural and investment	- resource-saving (technologies for creating and distributing electricity, using energy-saving equipment and control automation tools); - energy efficiency to reduce the process of energy use.
Monetary and credit	- availability of state funding; - concessional lending; - focus subsidies and benefits for the consumption and production of energy sources.
Fiscal	- differentiation of taxes depending on resources and difficulties of their extraction; - establishment of a single tax for energy-consuming enterprises; - establishment of taxes depending on energy products; - increased taxation for industries that are associated with traditional energy sources.
Price	- methods of state intervention in activities of natural monopolies.
Regulatory	- existence of laws and bylaws for energy policy that can regulate the issuance of subsidies and establish guarantees for loans in the energy sector; - special regulations that should ensure the protection of nature.
Programme-oriented	- development of strategic plans for adjusting energy use plans and prospects.
Informational	- creation of an information system to improve conditions; - information policy in the field of energy resource reorientation.
Administrative and organisational	- state bodies in the energy sector; - existence of scientific and training centres on energy saving.

Note: the table describes the main measures and methods for creating energy security in the world

Source: compiled by the author based on [10]

3.2. The state of energy security of European countries in the context of the Russian-Ukrainian war. Possible solutions to the problem

The European energy security strategy was adopted in 2014 due to the gas supply crises in 2006 and 2009. The most influential was the Russian-Ukrainian conflict, which negatively affected the transit of natural gas to Central and Western Europe. The energy security strategy was supposed to consider the prospects for the development of the energy sector until 2030 and was aimed at creating competitiveness of EU countries in this area. The European Council and its members are trying to develop and implement plans to create competitive, safe, and sustainable energy. The solution to the problem of energy security should be based on flexibility, the ability to adapt and change in accordance with world circumstances [12]. The most important and urgent problem was Russia's full-scale military

invasion of Ukraine on February 24, 2022, which affected economic instability in the world, and especially in Europe. Many sanctions and restrictions were imposed on Russia, which also affected the economy of Western countries.

It is worth noting that Russia was a leading energy producer. In 2018, this country was an exporting 21% of the world's gas and 11% of oil. In addition, the EU produced only 39% of its energy in 2019, and most of the energy consumed came from fossil fuels (petroleum products and natural gas). It was Russia that supplied energy resources to the EU: the share of crude oil was 27%, and natural gas – 41% in 2019. In 2019, Western European countries received approximately 17% of the total energy volume from Russia [13]. According to the latest available data, among the largest economies in Europe, it is Germany that imports about 50% of gas from Russia, while France receives about a quarter (Fig. 1) [14].

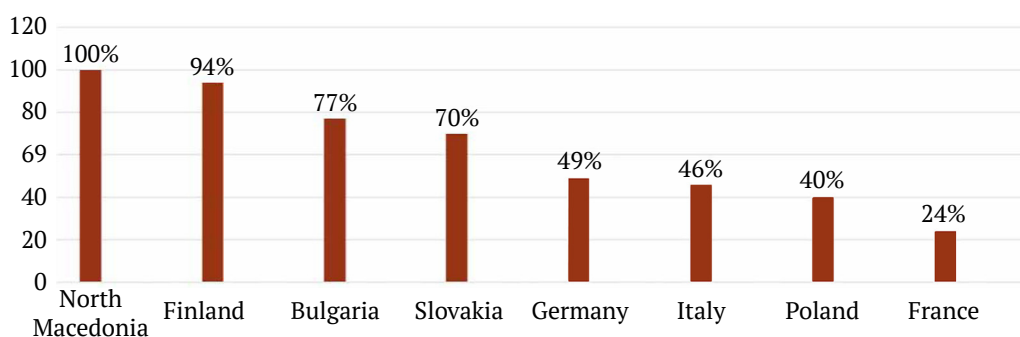


Figure 1. Dependence of European countries on gas in 2020-2021

The most difficult task remains to find substitutes for natural gas suppliers. Now Europe is trying to dramatically reduce this dependence by imposing sanctions on Russia that prohibit the import of energy carriers. It is the political component that poses an important threat to the energy security of countries that import energy resources. For example, in 2012, the European Union imposed an embargo on oil supplies from Iran and reduced oil consumption due to the sanctions imposed. The purpose of such actions was to ensure the non-proliferation of Iran's nuclear weapons.

In 2021, the European Union imported 155 billion cubic metres of natural gas from Russia. This accounts for 45% of gas imports and 40% of its total consumption [15]. Western countries are trying to reduce energy burnout to improve the ecological state of the planet, but today Europe is not yet ready for such radical changes.

An important stage that affected the division of production and supply in the gas and electricity sectors was the Third Energy Package (2009). It was supposed to facilitate the integration of the energy sector into the

single internal market. In addition, a very large amount of cross-border infrastructure has been created. The main idea is to provide new gas transmission infrastructure and reverse supply. The principles of ensuring energy security should also include improving the prospects for natural gas imports and increasing the volume of gas storage facilities. In Europe, prices were standardised and an independent market was created in the electricity sector throughout the EU. This is evidenced by markets in the Middle East and the Baltic States, Central Europe, and the Midwest of Europe. Despite this fact, Western countries should improve cross-border ties and promote greater diversification of energy supply [15].

European countries work closely and cooperate to prevent energy problems and avoid crises in the electric power industry. In 2020, monitoring was conducted in this area to determine the most likely regional crisis scenarios for the electric power industry. It is important to follow the recommendations for fair compensation of resources and mutual assistance for crisis prevention (Fig. 2).

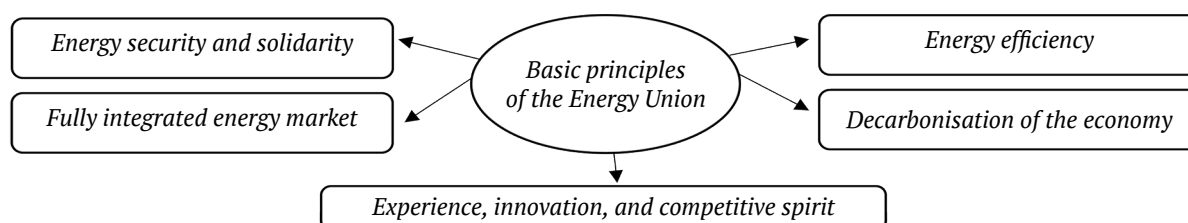


Figure 2. Components of the Energy Union

The problem of security of oil and gas supplies also arises due to the fact that some of these energy resources are a strategic reserve. In addition, maintaining controlled prices is equally important. In Europe, these solutions remain a topical issue. Possible alternative solutions can be described as follows:

1. Creation of the state strategic reserve agency, which will deal with the purchase of oil and petroleum products from the budget, and apply taxes on the turnover of oil companies or introduce special subsidies for energy prices;
2. Creation of a joint-stock company in which oil suppliers and various companies will participate [15].

Now in Western Europe, energy prices are actively rising, which negatively affects the majority of the population, which is forced to spend most of its funds on fuel and heat for basic needs. The prospect of an increase in 2022-2023 would lead to a shortage of supply, because wealthy companies and segments of the population would be able to accumulate energy resources. In addition, high prices will begin to affect developed countries. For example, in the UK, the number of households that fall below the poverty line will increase. In 2020, approximately 13% of households in England (3.16 million) were short of energy, 25% in Scotland, 12% in Wales, and 18% in Northern Ireland. As a result of the military events in Ukraine caused by Russia's armed aggression, energy prices for households in the UK were increased (by about 54%). As a result, electricity bills have increased from GBP 700 to 2,000. It is important that from April 2022, the number of households that will not be able to provide themselves with energy resources may grow to 27%, and payment for electricity may reach 3,000 pounds per year [12]. Now politicians and authorities are trying to create protection in the form of cuts in fuel duties and by supporting household energy bills. The popularity of introducing a super-income tax is spreading in the EU, but EU leaders have not yet reached a final agreement.

It is also worth noting Germany, which imported all its natural gas through pipelines in 2020, but is now determined to create liquefied natural gas terminals in its country. At the same time, Poland is also expanding its terminals in the Baltic Sea and signing new contracts with other gas supplier countries [6].

Many European countries are actively trying to reduce their dependence on Russian energy resources. A possible solution is to use campaigns to save energy, expand renewable and nuclear capacity. It is equally important to find alternative solutions for suppliers. Oil exporters are Canada, the United States, Saudi Arabia, and the Middle East. Natural gas can be supplied from Algeria, Norway, the Netherlands, and Azerbaijan to Europe in large volumes. In addition, Western countries should pay attention to such supplier countries as Australia, Qatar, the United States, Malaysia, and Nigeria. In Europe, the number of natural gas shipment terminals is actively increasing, which would allow the continent to be less dependent on Russian energy resources.

Since Western countries depend on imports of Russian gas and energy resources, the European Commission has put forward a proposal to quickly reduce the use of Russian

fossil fuels and completely abandon it. In addition, it is considered necessary to introduce an emergency tax on excess profits for energy companies that produce oil and gas, and redirect these revenues to help consumers [16].

It is planned that Western countries will reduce the use of Russian gas in 2022 by 60% using methods such as:

1. Improving the energy efficiency of homes, warming them, and using heat pumps;
2. Expansion of gas and oil imports from other countries and creation of its own renewable gas production;
3. Use of renewable energy sources.

Discussion

Energy supply security is important in an aspect of EU energy policy. Most Western countries are dependent on Russia's natural gas, which creates a major security problem in Europe. In addition, Russia's military actions in Ukraine have put the issue of gas security at the centre of European energy policy. It was the sanctions that led to a reduction in gas and oil supplies, or even a complete rejection of Russian energy resources. In March 2014, a gas conflict broke out between Russia and Ukraine related to the war in Ukraine and the annexation of Crimea by Russia. I. Henderson points out that the economic dispute between the two countries ended with new stops of gas supplies to Ukraine in June 2014, which created a threat to energy supplies to the EU [17]. Most political scientists consider these events as Russia's political steps to expand its influence and negotiating position in the international arena [18]. The presented studies indicate a high level of vulnerability of the Western European energy system, which was analysed by the author.

In addition, the study indicated that even before the Russian invasion of Ukraine, the world economy suffered from the consequences of the COVID-19 pandemic and climate change, which negatively affected the stability of Western countries. Russia's full-scale military invasion of Ukraine on February 24, 2022, was a turning point and an opportunity for European countries to refuse to supply oil and gas from Russia. The prospects for the development of the European energy sector based on the rejection of Russian gas and oil were considered, and alternative solutions to this problem were indicated.

T.G. Benton and A. Froggatt suggest that the most important thing for creating energy security for the West in the face of Russia's military invasion of Ukraine is to comply with the following principles:

1. Increase the development of renewable energy sources.
2. Maximise production from low-emission energy sources to increase supply.
3. Increase coal production and supply.
4. Speed up the process of electricity accumulation and storage to address the supply and demand imbalance.
5. Speed up the conversion of heating systems and the use of heat pumps at the domestic level.
6. Reduce the amount of Russian energy imports to Europe to minimise geopolitical and economic consequences.
7. Promote the extraction of new fossil fuel reserves to increase supply.

8. Involve people in the rational use of energy to reduce overall demand.

9. Accelerate the introduction of energy efficiency measures and reduce energy costs.

10. Create social protection for the population that does not have enough monetary resources.

11. Introduce minimum requirements for the energy storage process;

12. Encourage active public transport based on renewable energy to facilitate travel [16].

Such results are a logical addition to the study and consideration of methods of Western countries that would help to abandon Russian energy resources.

Interesting is the development of renewable energy in Lithuania, which demonstrates an effective solution for ensuring the energy security of Western European countries. According to T. Sattich, R. Morgan and E. Mo, it is energy independence that has become a key condition that has been the dominant narrative in political energy discourses over the past decade. Energy dependence on Russia posed a great threat to Lithuania's economic stability and independence. Many special actions have been taken to neutralise this threat, namely, combining networks with the European market, diversifying natural gas supplies, and increasing energy production in the country. In addition, the construction of a nuclear power plant became important. Consequently, renewable energy has been the goal of Lithuania's policy and national energy security strategy since 2018. The turning point was Lithuania's connection to the European energy system, which affected the importance of developing renewable energy sources. These events have opened up many opportunities for a new policy regarding the country's energy component [19]. Lithuania also refused to buy oil and gas from Russia on May 22 because of its position on Russia's military aggression in Ukraine. The example of this state shows how countries can successfully create an energy security system in the context of the Russian-Ukrainian war.

P. Prisetsiru emphasises an urgent need for a new strategy to see the problem of energy supply at the EU and national level in the context of political stability and environmental protection. The energy strategy is based on eight key pillars that must be interconnected:

1. Active actions aimed at improving the ability of European countries to overcome difficulties during the winter of 2014-2015. Special attention was paid to the most dependent states, and actions were aimed at increasing storage facilities, creating reverse flows, and developing supply security plans at the regional level.

2. Strengthen emergency response mechanisms by coordinating risk assessment and contingency plans and protecting critical infrastructure. It is the response plans, the development of risk assessment, security plans and the establishment of a pan-European platform for information exchange that have become key elements for the development of a regulatory framework for gas storage facilities.

3. Reducing energy demand and its saving.

4. Development of a fully integrated internal market based on the support of competitive oil refining companies in Europe.

5. Increase energy production in the European Union to reduce its dependence on individual suppliers and fuels, and improve the use of local energy sources.

6. Development of energy technologies to optimise the energy grid infrastructure.

7. Diversification of external natural gas supplies and related infrastructure. For example, in 2013, approximately 39% of EU gas imports came from Russia, 33% from Norway, and 22% from North Africa (Algeria and Libya). In addition, it is worth developing supplies from North America, Australia, Qatar, East Africa, and the Caspian region.

8. Improving the effectiveness of coordination of national energy policy and creating a common goal in foreign energy policy. International energy markets should become stable, transparent, and coordinated with the promotion of sustainable energy technologies [12].

These results reveal the aspects and strategies of the Energy Union of Western European countries that were considered by the researcher. The most effective method of ensuring the energy stability of Western countries is to conduct stress tests of energy security, considering the reduction and termination of energy supplies due to military operations in Ukraine. In addition, it is necessary to develop backup mechanisms, namely: increase gas and oil reserves; develop infrastructure for emergency situations; reduce energy needs; switch to alternative fuels; develop cooperation with gas suppliers and transport system operators.

K. Siriopoulos considered the progress made in energy security at the European and regional levels [20]. The state of energy resources prior to the adoption of the EU Energy Strategy, its main aspirations and political goals of the main actors involved in the policy development process were demonstrated. Specific case studies were also considered, namely Regulation (EU) 2017/1938, establishing regional cooperation in South-Eastern Europe and the EU Energy Strategy. The research complements the results of the study on the issue of energy security and political decisions in this area.

Russia's military aggression in Ukraine has influenced the understanding of strong dependence on foreign energy resources, and especially Russian gas and oil [21]. T.V. Berling and I. Survillo diagnosed that achieving energy security appears as a common regional goal, which should include further synchronisation of energy networks, development of new energy innovations and technologies, improvement of energy efficiency measures and the establishment of a regional gas market. The first actions were the signing of an agreement between the EU and the United States on the purchase of 15 billion cubic metres of gas in 2022. The EU energy procurement platform was also created. Such an initiative would help fill gas storage facilities across Europe by next winter and facilitate cooperation with key external suppliers [22]. The presented data indicate the possibility of a successful rejection of Russian gas and oil and a reduction in external energy dependence.

The issue of striving for European strategic sovereignty has acquired a new urgency due to the significant military conflict in Europe provoked by Russia. Western Energy Security should be based on rethinking goals, priorities, and finding new partner countries. European

countries should change their course and direct their strategic interest to trade policy and the introduction of new sanctions against the actions of the Russian Federation. It is also necessary to work on reducing dependence on other countries' energy resources and improving financial policies.

Conclusions

Thus, in the context of modern political events and the process of globalisation, the energy supply of states is characterised by instability, increased variability, and unpredictability. As a result of such processes, most countries face the need to develop their own energy security systems that will be resilient to new challenges and threats. An example was the Russian military aggression against Ukraine, which provoked the termination of any current or planned bilateral interactions with representatives of Russian state bodies and state-owned enterprises in the energy sector at various levels.

This study indicates that the Russian military attack negatively affected the energy sector of the Ukrainian economy, and also demonstrated Europe's strong dependence on Russian fossil fuels. The whole world called for the introduction of powerful sanctions against Russia, which created instability in the energy sector of Western countries due to the use of fossil fuels and insufficient development and supply of resources.

The study found that it is international economic cooperation in the energy sector that will become one of the most important factors in the development of Western

countries and their economic progress. The importance of prioritising energy efficiency and creating an efficient energy sector based primarily on renewable sources was highlighted. It was also noted that Western countries adhere to an important global policy in order to stop Russia's destructive actions in Ukraine. Currently, the Energy Union's goals focus on such dimensions as: energy security and trust; internal energy market; energy efficiency to save energy; decarbonisation of the economy; innovation and competitiveness.

The materials of the paper are of practical and theoretical value for political scientists, economists, politicians, sociologists, international figures, and diplomats, which would help them create conditions for improving the energy security system of Western countries in difficult global circumstances. In addition, the information may be relevant for researchers and scientists who analyse the dependence of European countries on Russian energy resources and investigate possible risks to the whole world as a result of the Russian-Ukrainian war.

It is worth continuing the investigation and deepening it, analysing the issues of economic and political nature, namely, the problem of energy security in Western Europe. The conducted study does not exhaust all aspects of this regional problem and requires further consideration of such issues as: interaction between situations of regional conflict, material and social determinants of perception of energy security; the importance of immediate improvement of energy production in the European Union to reduce its dependence on individual suppliers.

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Енергетична безпека Заходу в умовах агресії Росії проти України

Анотація. Актуальність дослідження зумовлена тим, що паливно-енергетична сфера держави є однією з ключових для забезпечення комфортної життєдіяльності населення. В останні роки процес розвитку енергетики зазнавав негативного впливу внаслідок зміни клімату, пандемії COVID-19, але зараз найголовніша проблема – це російське вторгнення в Україну. Політичні події лише довели, що Європа несе значні втрати в енергетичному секторі та доволі сильно залежить від паливно-енергетичних ресурсів Росії. Саме тому питання забезпечення паливно-енергетичної безпеки та створення достатнього рівня резервів є найбільш актуальним. У зв'язку з цим стаття автора спрямована на аналіз проблеми енергетичної безпеки країн Заходу в умовах вторгнення Росії в Україну. Провідними методами дослідження цієї проблеми є методи логічного аналізу, періодизації, індукції, дедукції, зіставлення та систематизації підходів, що допоможе визначити наслідки російського вторгнення в Україну та сучасний стан розвитку енергетичної безпеки в Європі. У статті наведено опис поняття безпеки та її особливостей в енергетичній сфері; проведено аналіз робіт істориків, економістів, соціологів, політологів, дослідників, які займаються проблемою енергетичної безпеки Заходу в умовах агресії Росії проти України; описано небезпеку подальшого використання російського газу; запропоновано різноманітні методи та способи заощадити енергію та допомогти зменшити залежність від постачання російського газу; діагностовано ризики та загрози в паливно-енергетичній сфері України та країн Західної Європи; розкрито основні статистичні дані та факти залежності країн Європи від паливно-енергетичних ресурсів Росії. Матеріали статті становлять практичну та теоретичну цінність для політологів, економістів, політиків, дипломатів, що допоможе їм створити умови для забезпечення енергетичної безпеки країни. Крім того, інформація може бути актуальною для вчених та науковців, які замагаються питанням економічних збитків для всього світу внаслідок російського вторгнення в Україну

Ключові слова: електроенергія, Європа, агресивна політика, воєнний конфлікт, паливно-енергетичний комплекс