TRANSFORMING EU ENERGY POLICY - NEW CHALLENGES AND OPPORTUNITIES IN 2022

Roxana Triffonova, PhD,
European Studies Department, Faculty of Philosophy,
Sofia University „St. Kliment Ohridski"

Abstract:

The beginning of the 2022 brings to the European continent new geopolitical reality provoked by the war of the Russian Federation against Ukraine. In this unpredictable environment, the European Union is facing a serious challenge – how to reduce its dependence on Russian energy sources and thus limit Russia's influence on the energy market. The aim of this report is to trace the prospects for the transformation of EU energy policy. A brief reference is also made to the energy crisis in 2009.

Key words: European Union, Russian Federation, energy, gas, supplies

„We must prepare ourselves for a Russian gas cut-off through savings, diversification and solidarity.

And at the same time wage a global campaign for energy efficiency and savings."

Josep Borrell[1]

1. Introduction

In February 2022, the Russian Federation invades Ukraine and initiates a brutal war on the European continent, an event that will lead to and is already causing serious negative consequences for the development of the economy, world markets, finance, as well as energy sector. Access to energy resources

[1] Josep Borrell is High Representative of the European Union for Foreign Affairs and Security Policy as well as Vice President of the European Commission. Source: Delegation of the European Union to the Russian Federation (2022), Europe's energy balancing act (01.08.2022), https://www.eeas.europa.eu/eeas/europe's-energy-balancing-act_en?s=177, last consulted on 25.09.2022.

and the domination of energy markets historically has had a serious impact on geopolitical processes, and is currently being used as a „military weapon" by Russia. This article aims to examine the main elements of the European Union's energy policy and identify the prospects and challenges for its transformation during a specific period in the continent - the start of the military actions in Ukraine and the bilateral sanctions imposed between the EU and the Russian Federation. In this regard, the first part of the research is focused on the process of the development of this policy for a specific period of time (2000-2020), identifying the main problems faced by the Member States. Key statistical information maintained by Eurostat regarding the dependence on the import of energy resources in the member states will be examined and analysed. In the second part will be examined the development of the energy crisis on the continent in 2022 as a result of the war in Ukraine and the accompanying events - bilateral sanctions and the suspension of energy supplies from Gazprom to some member countries. In the conclusion of the current research, the new opportunities for diversification before the European Union and the prospects for the development of its energy policy are identified.

2. Development of the EU energy policy in the period 2000-2020

For the sake of accuracy of the study, it is necessary to briefly highlight some main elements of the Union's energy policy. For this reason, the distribution of competences in this area between the EU and the Member States should be considered first. The Treaty on the Functioning of the European Union stipulates that the energy policy fall within the scope of the so-called shared competence, which lays the foundations for a future transition to a more integrated common energy policy.[2] It should be noted that at the moment this policy is based on a number of measures aimed at achieving an integrated energy market, security

[2] Consolidated version of the Treaty on the Functioning of the European Union, XXI „Energy", Article 194:
1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:
(a) ensure the functioning of the energy market;
(b) ensure security of energy supply in the Union;
(c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and
(d) promote the interconnection of energy networks.
2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.
Such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c).

of energy supplies and a sustainable energy sector. Nevertheless, each Member State retains the right to determine the conditions for the use of its energy resources, to choose between different energy sources and to determine the general structure of its energy supply.[3]

The European energy policy is based on five key objectives (listed in Box 1), which are directly linked both to the environmental protection and the fight against climate change, as well as to the development of the single market and the foreign trade policy of the Union.

Box 1:

Main objectives of the EU energy policy[4]

1. Ensuring energy security in Europe through diversification of energy sources and solidarity and cooperation between Member States.
2. Limiting dependence on energy imports and improving energy efficiency, including reducing emissions.
3. Creating conditions for the functioning of an integrated internal energy market, on the basis of which a free flow of energy through the Union is ensured without administrative and regulatory burdens.
4. In line with the Paris Agreement - transition to a low-carbon economy and decarbonisation.
5. Supporting the energy transition by promoting research in the field.

The focus of the present study is on the first and second objectives presented in the information box. For this reason, a review of EU energy imports over a 20-year period (2000 to 2020) has been made, with interim data for 2010 also considered. Emphasis is placed (according to the direction of the study) on the Russian Federation as the main exporter of energy sources into the Union. Statistical information is presented in the form of graphs and tables, and infographics are also used. The main source of the data is Eurostat, and at the time of the study (September 2022) a full database is available up to and including 2020[5,6] with interim data for 2021 and 2022 used for individual indicators.[7]

---

[3] See Footnote 2.

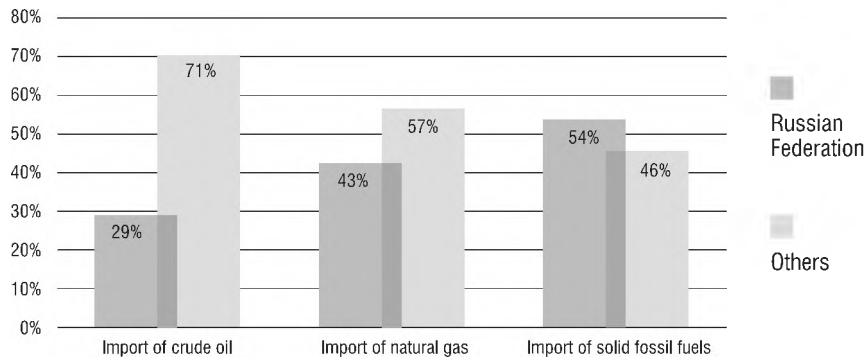
[4] European Parliament. Fact Sheets on the European Union, Energy policy: general principles, available online at https://www.europarl.europa.eu/factsheets, last consulted on 26.09.2022

[5] Eurostat. Date Browser. Environment and energy. Available at: https://ec.europa.eu/eurostat/databrowser/explore/all/envir?lang=en&subtheme=nrg.nrg_quant.nrg_quanta&display=list&sort=category&extractionId=NRG_IND_ID__custom_1851622, last consulted on 24.09.2022

[6] Shedding light on energy in the EU, 2022 Interactive Edition available at: https://ec.europa.eu/eurostat/cache/infographs/energy/index.html?lang=en, last consulted on 24.09.2022

[7] Bruegel (the European think tank that specialises in economics). European Union demand reduction needs to cope with Russian gas cuts (07.07.2022) Available at: https://www.bruegel.org/2022/07/european-union-demand-reduction-needs-to-cope-with-russian-gas-cuts, last consulted on 24.09.2022

One of the key problems for the Union's energy policy is the dependence on the import of energy sources. During the period from 2000 until 2020 the main exporter of crude oil, natural gas and solid fossil fuels is the Russian Federation. Visible from the Graphic No 1 crude oil imports from Russia in 20202 are 29 %. The main part of the remaining 71% is divided between the USA, Norway, Saudi Arabia, United Kingdom, Kazakhstan and Nigeria. In terms of solid fossil fuels' import, it is again dominated by the Federation at 54%, with other leading importers being the USA (16%) and Australia (14%). The situation is identical with natural gas, where 21% is imported from Norway and 43% from Russia.[8]



Graph No 1. Source of energy imports in EU in 2020

Source: Eurostat [9]

The strong dependence of the Union (as well as the member states themselves) on the import of energy sources can also be traced from table No. 1. In 2020 dependency rate in the Union was 57%, which means that Union's economy relies on serious imports to meet more than a half of its energy needs. The rate during the last twenty years varies between 56-60%, which means that for a period of 20 years the issue of energy independence has not been resolved. Across the Member States 17 countries have dependency rate more than 50% in 2020, which reaffirms the statement above. Exceptions are member states such as Estonia, which develops its energy policy in the direction of using mainly renewable energy resources and managing the resource intensity of the economy. Proof of the effectiveness of this approach is the fact that over a period of 10 years, the country's dependency rate has decreased from 33% to 10%. Unlike Estonia, Germany, whose economy is highly dependent on imported energy sources (mainly natural gas), saw a dependency rate increase of 4% in the period 2000-2020 (although in 2020, due to the COVID 19 crisis production rate is significantly reduced). The situation is identical in Poland. The EU's policy towards the closure of coal plants also has an influence on these processes.

---

[8] Shedding light on energy in the EU, From where do we import energy?, Available at: https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html?lang=en

[9] See Footnote 5 and 6

Table No 1. Energy import dependency

	2000	2010	2020
European Union	56%	55%	57%
Belgium	78%	78%	78%
Bulgaria	46%	40%	37%
Czechia	22%	25%	38%
Denmark	-35%	-16%	44%
Germany	59%	59%	63%
Estonia	33%	14%	10%
Ireland	85%	87%	71%
Greece	69%	68%	81%
Spain	76%	77%	67%
France	51%	48%	44%
Croatia	48%	46%	53%
Italy	86%	82%	73%
Cyprus	98%	100%	93%
Latvia	61%	45%	45%
Lithuania	57%	79%	74%
Luxembourg	99%	97%	92%
Hungary	54%	56%	56%
Malta	100%	99%	97%
Netherlands	38%	28%	68%
Austria	65%	62%	58%
Poland	10%	31%	42%
Portugal	85%	75%	65%
Romania	21%	21%	28%
Slovenia	51%	49%	45%
Slovakia	65%	64%	56%
Finland	55%	48%	42%

Source: Eurostat[10]

[10] Eurostat. Energy statistics. Energy indicators. Energy Imports Dependency. Available at: https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID_custom_3476581/default/table?lang=en, last consulted 25.09.2022

According to the Eurostat Methodology „The dependency rate shows the extent to which an economy relies upon imports in order to meet its energy needs. It is measured by the share of net imports (imports - exports) in gross inland energy consumption (meaning the sum of energy produced and net imports)."

An eloquent example of the stated problems in the Union's energy policy are the consequences of the energy crisis that broke out as a result of the Russian-Ukrainian gas dispute, which escalated in January 2009, after Gazprom completely cut off natural gas supplies to Ukraine. Since the Ukrainian country is the transit country for gas transmission, these actions of the Russian company directly affect a number of EU member states. Faced with the threat of an energy crisis, each of the governments of the member states began to look for independent solutions to the problem. This further aggravates the situation and proves that at certain times the EU does not know how to speak with one voice. A reflection of this fact is the inconsistent and rather fragmented actions of the Union in search of energy independence and diversification.[11] For a period of twenty years, several of the key energy projects, such as the Turkish-Austrian gas pipeline (Nabucco-West) and the Trans-Caspian gas pipeline, have not been realized.

It is evident from what has been presented so far that at the end of 2020 and 2021, the Union still faces a number of challenges in the field of energy, which include:

- Insufficient diversification and increasing dependence on imports.
- Growing demand for energy on a global scale, leading to high and volatile energy prices.
- Security risks affecting producing and transit countries.
- Slow progress in energy efficiency.
- Growing threats of climate change and decarbonisation, including the relatively limited use of renewable energy sources.
- The lack of transparency and integration of energy markets.
- The consequences of the COVID 19 pandemic on the development of the economy and a number of sectors, including energy.[12,13]

3. New challenges in 2022 - the war in Ukraine and the emerging energy crisis

The main objective of the research in this part is to present the challenges that have arisen in 2022 to the energy policy of the Union as a result of the war in Ukraine and the outbreak of a serious energy crisis on the continent.

---

[11] Oxford Institute for Energy Studies, Pirani, S., Stern, J., Yafimava, K. (2009). The Russo-Ukrainian gas dispute of January 2009: a comprehensive assessment. Available online at: https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG27-TheRussoUkrainianGasDisputeofJanuary2009AComprehensiveAssessment-JonathanSternSimonPiraniKatjaYafimava-2009.pdf

[12] European Parliament. Fact Sheets on the European Union, Energy policy: general principles, available online at https://www.europarl.europa.eu/factsheets, last consulted on 26.09.2022

[13] Center of Study of Democracy. The Great Energy and Security Climate Divide. Accelerated Green Transition vs. the Kremlin Playbook in Europe. (2022), Available at: https://csd.bg/fileadmin/user_upload/publications_library/files/2022_09/Kremlin_Playbook_in_Energy_WEB.pdf

A short description should be made first, the focus of which is the „routes“ of natural gas supply in Europe. A large number of Member States receive between 80 and 100% of the natural gas they consume from only one supplier – the Russian Federation, often through only one or two delivery routes. As it can be seen from Map No 1, through more than ten main pipelines Russian natural gas has been delivered to Europe. Some of them are direct pipelines to Member States (for example to Germany), some provide gas through Ukraine (to Slovakia, Romania, Hungary and Poland) and some through Belarus (to Poland). This exposes member states and also the European Union to a situation of dominance of a single supplier, risks of cutting delivery and high inflation as the price is not always determined on a market basis.

Original source: European Commission - European Political Strategy Center
With additions on the original map regarding the proposed TurkStream line 2

Map No 1 „Major natural gas pipelines from Russia to Europe“
Source: ELIAMEP[14]

[14] ELIAMAPEI. Russian pipelines and EU energy security: Utilizing the externality elements of the EU's regulatory framework. Last updated May 2022. Available online at: https://www.eliamep.gr/en/publication/

The beginning of the war in Ukraine (one of the main transition countries) and the bilateral sanctions between Europe and Russia[15] brings new challenged in front of the energy policy expressed in the following:

- Economic growth in all member states has been slower and energy prices have been increasing. For this reason, many member state governments impose stricter energy-saving measures on their citizens and business. This situation is defined as „perfect storm"[16], because the winter of 2022 is coming, there is the uncertainty if there will be enough volume of natural gas and moreover if its price will be affordable.
- The Russian state uses its energy resources as a weapon. There is an obligation to pay for gas in Russian rubles when the buyers are from so called „unfriendly states" (the list of „unfriendly states" includes all EU member states) or when gas is supplied to such state.[17] Second the Federation has already stopped or reduced supplies to 12 member states (this has broken several long-term supply contracts). Supplies trough Nord Stream 1 were cut to 20%. In September 2022 four leaks in both the Nord Stream 1 and Nord Stream 2 pipelines in the Baltic Sea appeared (all of them in strange circumstances). There is a real risk that Russia can stop all supplies to the Union ahead of the winter, if it deems this strategically beneficial.[18]

During the year (2022) the European Union (and each member state) has made an enormous step forward and a serious change in its energy policy. As it was stated in April 2022 by the European Commission President Ursula von der Leyen „the era of Russian fossil fuels in Europe will come to an end".[19] The following decisions and legislation are transforming the dependence to diversification:

- March 2022, the Versailles Declaration - Leaders of the member states made an agreement to overcome EU dependency on Russian gas, oil and coal imports by: „reducing overall reliance on fossil fuels faster, taking into account national circumstances; diversifying supplies and routes, including through liquefied natural gas and biogas; further developing an EU hydrogen market; accelerating the development of renewables; improving the interconnection of European electricity and gas

---

[15] For more information about the sanctions see: Simeonov, K., Trifonova, R. Implication of Economic and financial sanctions towards Russia. The case of CEECs (forthcoming publication).

[16] „Schuman Report on Europe, State of the Union 2022". Éditions Marie B, May 2022. Available online at: https://www.robert-schuman.eu/en/european-issues/0634-europe-in-a-perfect-storm

[17] Russian President's Decree No. 172 of March 31, 2022.

[18] BBC News. Nord Stream 1: How Russia is cutting gas supplies to Europe (29.09.2022) Available online at: https://www.bbc.com/news/world-europe-60131520

[19] Press statement by President von der Leyen following the announcement by Gazprom on the disruption of gas deliveries to certain EU Member States. Available online at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2685

networks; reinforcing EU contingency planning for security of supply; improving energy efficiency and promoting circularity".[20]

- May 2022 REPowerEU - it has been established a voluntary EU energy platform that supports coordinated common energy purchases for all EU countries and some European partners. [21,22]
- June 2022 New legislation - first about gas storage, which aims to ensure that storage facilities are filled before the cold season: underground gas storage on the territory of the Member States must be filled to at least 80% of their capacity by 1 November 2022 and up to 90% by the following winters. [23] Second - an agreement on a Council position ('common approach') on the „Fit for Target 55" package, the EU's plan to translate the European Green Deal targets into EU law. [24]
- July 2022 - EU member states agreed to reduce overall EU gas demand by 15% between August 2022 and March 2023.[25]
- New energy supply agreements with international partners (USA, Kanda, Norway, Azerbaijan, Israel, Egypt, Algeria).
- October 2022 - the launch of the intersystem gas connection Greece-Bulgaria - key project for diversification in the EU.

As a result of the described actions the share of the European Union's gas supply provided by Russia dropped from over 40% in 2021 to just 20% in June 2022.[26] This was possible by making additional imports of liquified natural gas (LNG). Also there has been an enormous progress in buying more pipeline gas from Norway, Algeria and Azerbaijan.

---

[20] Official website of the Council of the EU and the European Council. Informal meeting of heads of state or government, Versailles, 10-11 March 2022. Available online at: https://www.consilium.europa.eu/bg/meetings/european-council/2022/03/10-11/

[21] Official website of the European Commission. REPowerEU: affordable, secure and sustainable energy for Europe. Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en#repowereu-actions

[22] REPowerEU is the European Commission's plan to make Europe independent from Russian fossil fuels well before 2030, in light of Russia's invasion of Ukraine.

[23] Official website of the Council of the EU and the European Council. Transport, Telecommunications and Energy Council (Energy), 27 June 2022, Fit for Package 55. Available at: https://www.consilium.europa.eu/bg/meetings/tte/2022/06/27/

[24] The European Green Deal is a package of policy initiatives aimed at putting the EU on the path to a green transition, with the ultimate goal of achieving climate neutrality by 2050.

The EU is working on revising its climate, energy and transport legislation within the framework of the so-called „Fit for Goal 55" package with the aim of bringing the current legislation in line with the ambitions for 2030 and 2050.

[25] Official website of the Council of the EU and the European Council. Member states commit to reducing gas demand by 15% next winter. Available at: https://www.consilium.europa.eu/en/press/press-releases/2022/07/26/member-states-commit-to-reducing-gas-demand-by-15-next-winter/

[26] Bruegel (the European think tank that specialises in economics). European Union demand reduction needs to cope with Russian gas cuts (07.07.2022), https://www.bruegel.org/2022/07/european-union-demand-reduction-needs-to-cope-with-russian-gas-cuts, Last consulted on 24.09.2022

4. Conclusion

„After Russia's annexation of Crimea, we should have but didn't develop a real EU energy union, built around diversification away from Russia and investing in energy efficiency and home-grown and climate-friendly renewables. This time the stakes are even higher: we cannot afford to make that same mistake again."[27] Unity among EU member states is essential to address the energy crisis. Working together is the best way for EU countries to better mitigate the impact of the crisis and reduce risks. In the current context of great uncertainty regarding energy supplies and supply disruptions from Russia, solidarity between EU countries is also needed to provide support to those countries that are more dependent on Russian energy and are therefore affected in greater extent from reduction in supply. Active actions are needed in the direction of strengthening the energy sustainability and autonomy of the EU countries. Key elements in this process are: diversification and accelerating the transition to clean energy.

Bibliography:

- BBC News. Nord Stream 1: How Russia is cutting gas supplies to Europe (29.09.2022) Available online at: https://www.bbc.com/news/world-europe-60131520
- Bruegel (the European think tank that specialises in economics). European Union demand reduction needs to cope with Russian gas cuts (07.07.2022), https://www.bruegel.org/2022/07/european-union-demand-reduction-needs-to-cope-with-russian-gas-cuts
- Center of Study of Democracy. The Great Energy and Security Climate Divide. Accelerated Green Transition vs. the Kremlin Playbook in Europe. (2022), Available at: https://csd.bg/fileadmin/user_upload/publications_library/files/2022_09/Kremlin_Playbook_in_Energy_WEB.pdf
- Consolidated version of the Treaty on the Functioning of the European Union, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT
- ELIAMAPEI. Russian pipelines and EU energy security: Utilizing the externality elements of the EU's regulatory framework. Last updated May 2022. Available online at: https://www.eliamep.gr/en/publication/
- European Parliament. Fact Sheets on the European Union, Energy policy: general principles, https://www.europarl.europa.eu/factsheets
- Eurostat. Date Browser. Environment and energy. https://ec.europa.eu/eurostat/databrowser/explore/all envir?lang=en&subtheme=nrg.nrg_quant.nrg_quanta&display=list&sort=category&extractionId=NRG_IND_ID__custom_1851622

[27] Josep Borrell is High Representative of the European Union for Foreign Affairs and Security Policy as well as Vice President of the European Commission. Source: Delegation of the European Union to the Russian Federation (2022), Europe's energy balancing act (01.08.2022), https://www.eeas.europa.eu/eeas/europe's-energy-balancing-act_en?s=177, last consulted on 25.09.2022.

- Eurostat. Energy statistics. Energy indicators. Energy Imports Dependency, https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID__custom_3476581/default/table?lang=en
- Delegation of the European Union to the Russian Federation (2022), Europe's energy balancing act (01.08.2022), https://www.eeas.europa.eu/eeas/europe's-energy-balancing-act_en?s=177
- Official website of the Council of the EU and the European Council. Informal meeting of heads of state or government, Versailles, 10-11 March 2022. Available online at: https://www.consilium.europa.eu/bg/meetings/european-council/2022/03/10-11/
- Official website of the Council of the EU and the European Council. Transport, Telecommunications and Energy Council (Energy), 27 June 2022, Fit for Package 55. Available at: https://www.consilium.europa.eu/bg/meetings/tte/2022/06/27/
- Official website of the Council of the EU and the European Council. Member states commit to reducing gas demand by 15% next winter. Available at: https://www.consilium.europa.eu/en/press/press-releases/2022/07/26/member-states-commit-to-reducing-gas-demand-by-15-next-winter/
- Official website of the European Commission. REPowerEU: affordable, secure and sustainable energy for Europe. Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en#repowereu-actions
- Oxford Institute for Energy Studies, Pirani, S., Stern, J., Yafimava, K. (2009). The Russo-Ukrainian gas dispute of January 2009: a comprehensive assessment. https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG27-TheRussoUkrainianGasDisputeofJanuary2009AComprehensiveAssessment-JonathanSternSimonPiraniKatjaYafimava-2009.pdf
- Press statement by President von der Leyen following the announcement by Gazprom on the disruption of gas deliveries to certain EU Member States. Available online at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2685
- Shedding light on energy in the EU, From where do we import energy?, https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html?lang=en
- Shedding light on energy in the EU, 2022 Interactive Edition, https://ec.europa.eu/eurostat/cache/infographs/energy/index.html?lang=en
- Schuman Report on Europe, State of the Union 2022. Éditions Marie B, May 2022. Available online at: https://www.robert-schuman.eu/en/european-issues/0634-europe-in-a-perfect-storm
- Russian President's Decree No. 172 of March 31, 2022.