

Forces of energy welfare in Central Europe: The Russian war in Ukraine as a game changer

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Abstract

The Russian war in Ukraine has changed global geopolitical priorities and the policies of individual countries. The consequences of this ongoing war will be felt for decades to come, including the militarisation of states and the strengthening of political-military alliances. This article explores the effects of this conflict through the lens of energy welfare, which is used as an essential litmus test for the transforming economies of the Visegrad Group (V4) countries in Central Europe. Energy security and the energy transition have become critical topics, and energy security and its impact on social welfare affect the sensitive areas of policy choices that will determine the direction of development in this part of Europe. The V4 countries – Poland, the Czech Republic, Slovakia and Hungary – illustrate a wide range of domestic and geopolitical orientations that place individual countries in different decision-making situations. The ideological and political forces determine the scope for achieving energy welfare and are, therefore, the subject of this article. Based on macroeconomic and survey data results, the article's primary research query examines how the V4 countries' reliance on Russian fossil fuels affects their political attitudes and societal perceptions of the conflict in Ukraine, and the implications for their energy security and welfare in the face of the European Green Deal efforts. The different strategies adopted by the four countries considered translate into energy transition pathways to a low carbon economy described in the European Green Deal and strategies to provide energy at a reasonable price at the expense of a coherent European policy towards Russian aggression.

Keywords: Russian war in Ukraine, energy welfare, just transition, Visegrad Group (V4 countries)

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Introduction

The Russian invasion on Ukraine on 24 February 2022 shattered the public's dreams of peaceful coexistence and recovery from the coronavirus pandemic, and the consequences will be felt around the world for many years to come (BÄCKER, R. and RAK, J. 2022; SÁGI, M. 2022; UWISHEMA, O. *et al.* 2022). Due to the proximity of military action, this conflict "has challenged Europeans' most basic assumptions about their security, brought the spectre of nuclear confrontation back to their continent and disrupted the global economy, leaving energy and food crises in its wake" (ASH,

T.G. *et al.* 2023, 2). All European Union (EU) countries have been affected by the war in Ukraine because economic, political and cultural relations with Russia have been significantly reduced. However, Poland, Hungary, Slovakia and the Czech Republic – the four Central European countries referred to as the Visegrad Group (or V4 countries) – are experiencing the immediate threats of the conflict even more due to their geographical proximity to Ukraine and close ties with Russia.

Since, until recently, Russia had very close political and economic relations with Germany, the EU country that has the largest economy and sets the fundamental di-

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rection of European policy, most commentators have analysed the German *Zeitenwende* ('turning point') in the context of the Russian war in Ukraine (BLUMENAU, B. 2022; BUNDE, T. 2022; ANGENENDT, M. and KINSKI, L. 2023; HELFERICH, J. 2023; MADER, M. and SCHOEN, H. 2023). In contrast, this article focuses on the V4 countries and their dependence on Russia for energy security and welfare in light of the ongoing conflict (see IACOBUTA, G.I. and ONBARGI, A.F. 2022, 6).

We decided to use energy issues as a lens to analyse the political positions of the V4 governments and societies due to the multifaceted nature and interpenetration of various determinants that have led individual governments and the public to support either Ukraine or Russia in this conflict. This choice was by no means meant to downplay the casualties of the Russian onslaught, its implications for global food security (BEHNASSI, M. and EL HAIBA, M. 2022) or the geopolitical changes to the balance of power in Europe (SIDDI, M. 2022) and the world (WANG, Y. *et al.* 2022). In the article, we aimed to show the impact of the armed conflict on the energy welfare of the V4 countries, which is rooted in the policy initiatives of the European Green Deal (EGD).

Energy welfare is a component of social welfare related to meeting the energy needs of individuals and groups in society. These needs, which include powering heating and cooling sources, cooking, lighting, electrical appliances and transport, determine the critical dimensions of modern societies' broader social welfare and national energy security issues.

It is essential to be aware that, according to the United Nations Economic and Social Council (ECOSOC), energy is "crucial for achieving almost all the Sustainable Development Goals, from its role in the eradication of poverty through advancements in health, education, [the] water supply and industrialisation, to combating climate change" (ECOSOC 2016, 11). In light of the Russian war in Ukraine and geopolitical tensions, the EU is intensifying its efforts to decrease its dependence on Russian fossil fuels. In 2021, Russia supplied over 40 percent of the gas, 46 percent

of the coal, and 27 percent of the oil consumed by the EU (European Commission, 2022).

This situation of dependence on fossil fuels highlights the importance of accelerating the EU's transition to a diversified, resilient energy mix with increased reliance on renewable energy and energy efficiency measures. This aspect, in turn, makes visible the V4 countries' links, sympathies and political-economic antipathies concerning the Russian Federation, which affect not only the positions of their ruling parties and businesses but also their societies.

Materials and methods

This study investigates the impact of the Russian war in Ukraine on energy dynamics and social welfare in the V4, which, with the exception of the Czech Republic, directly border Ukraine (*Figure 1*). Data were collected from various sources, including Eurostat's macroeconomic indicators of primary production by energy source, IEA national reliance on Russian fossil fuel imports, Eurobarometer surveys, and existing scholarly literature. All this to answer the main research question consisting of two parts: How does the dependence of V4 countries on Russian fossil fuels, particularly in their energy mixes and technology supply chains, influence their political attitudes and societal perceptions towards the Russian war in Ukraine, and what implications does this have for their energy security and welfare in the context of efforts towards the European Green Deal?

To assess public attitudes towards the conflict and EU responses, Eurobarometer survey data were analysed, focusing on questions related to EU support for Ukraine and sanctions against Russia. A comparative analysis approach was employed to examine energy mixes, dependencies on Russian hydrocarbons, and political responses across the V4 nations.

Scholarly literature provided theoretical frameworks and empirical evidence, guiding the interpretation of findings within the broader energy security and social welfare context.



Fig. 1. Geographical position of the V4 countries, with Ukraine in their eastern neighbourhood

Energy welfare as a component of (nature-based) social welfare

Energy welfare is part of energy security (KAMMEN, D.M. 2020), which is “highly context dependent (and includes various factors), such as a country’s special circumstances, level of economic development, perceptions of risks, as well as the robustness of its energy system and prevailing geopolitical issues” (ANG, B.W. *et al.* 2015, 1078). From a sociological perspective, energy welfare concerns the needs of a society whose “quality of life depends on uninterrupted energy supply” (ANG, B.W. *et al.* 2015, 1078) and increasingly includes respect for the role of the environment in meeting human needs (NATHWANI, J. and KAMMEN, D.M. 2019; BARANOWSKI, M. 2022a). In other words, energy welfare is a component of nature-based social welfare, which aims to respect nature by initially reducing and eventually eliminating the use of fossil fuels in the energy mix as planned in the EGD targets (SCHUNZ, S. 2022; ALMEIDA, D.V. *et al.* 2023; PIASECKI, A. 2023). Therefore, an essential element of energy transformation is a just transition that combines the transfer to renewable energy sources with egalitarian access to it at the national and household levels. Its opposite in the form of energy inequalities or energy-related inequalities fits into welfare scarcity (SOVACOOOL, B.K. and

DWORKIN, M. 2012; BOUZAROVSKI, S. and SIMCOCK, N. 2017; BARANOWSKI, M. 2019).

Since citizens’ material living conditions (and subjective well-being) (cf. BARANOWSKI, M. 2019) set the framework for state institutions (BILAN, Y. *et al.* 2020), which are also guided by directives related to external security and international agreements, energy issues are political. Energy issues can also be described as social because they are economic, technological and environmental, as well as related to people’s quality of life and habits (Figure 2).

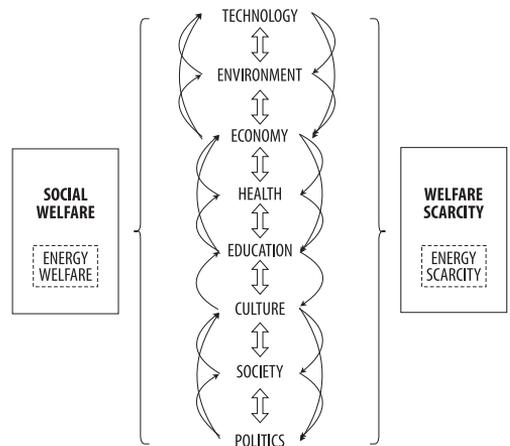


Fig. 2. Energy welfare as a component of social welfare and its dimensions. Source: Adapted from BARANOWSKI, M. 2019.

The dimensions of an individual's societal functions that influence social welfare/scarcity are shown in *Figure 2*. The complex nature of energy welfare, which is a subset of social welfare, is determined by a set of contingent factors, i.e., linkages between the environment and technology and the economy as well as linkages between health, culture and social relations, education and politics. Therefore, when examining the energy welfare of the V4 countries in the context of the Russian aggression against Ukraine, it is important to consider the wider implications of this phenomenon on the quality of life in the V4 countries and, consequently, on political perceptions of the conflict.

V4 countries and energy issues

According to political commentators, the V4 countries do not currently constitute a monolith, primarily because of “the growing divergence between Poland and Hungary – (which are) dropping fast in most measures of what makes a liberal democracy – and Slovakia and the Czech Republic, both of which have seen recent government changes sending them back into the EU mainstream” (BAYER, L. and CIENSKI, J. 2022). There are more dissimilarities, and close cooperation between these countries is hindered by their significantly different political attitudes towards the Russian war in Ukraine. These differences are evident when juxtaposing the views of the prime ministers of Slovakia and Poland, who were both elected at the end of 2023. Slovak Prime Minister Robert Fico has been described as a ‘pro-Moscow leader’ (GORYASHKO, S. 2024), while Polish Prime Minister Donald Tusk is a supporter of the “full mobilization of the free world, the Western world, to help Ukraine in this war” (DICKINSON, P. 2023).

The V4 alliance, established in 1991, was built on the countries' shared experience of the post-Soviet bloc and common goals and ambitions (CIENSKI, J. 2012; BAUEROVÁ, H. and VOŠTA, M. 2020; UTAMA, M.A. and

RAMADHANI, A. 2022). This alliance has enabled more than three decades of cooperation between these countries, especially Poland and Hungary. However, in the face of Russian aggression against Ukraine, it is worth analysing the coherence-divergence of the political attitudes of the V4 countries through the prism of energy welfare, a critical component of energy security, i.e., economic growth and development (GRAFF, M. *et al.* 2019; KASPEROWICZ, R. *et al.* 2020; BARANOWSKI, M. 2022b; DOBBINS, A. 2022; KLITKOU, A. *et al.* 2023). It is also important to be aware that Ukraine “has immediate borders with the Visegrad region” and, over the last few years, has “developed remarkable economic, political and cultural relations with the V4 states” (KUCHARCZYK, J. and MESEŽNIKOV, G. 2015, 11).

Therefore, when considering energy welfare/scarcity in the context of the war in Ukraine, it is worth bearing in mind the following statement by BEARE, M. (2018, np):

“[M]odern energy is the lifeblood of the modern economy, central to almost every economic activity, from manufacturing to transport to schooling to communicating, and, thus, integral to any country's development. It is also one of the main topics on the table at COP24, where policymakers, stakeholders and climate experts will meet to discuss policy relating to climate change.”

Energy policy is therefore related to key policy decisions that determine the competitiveness of the economy and guarantee the material welfare of society as a whole (GROSSMANN, K. and KAHLHEBER, A. 2017). It is also linked to global and regional initiatives to halt climate change and achieve EU climate neutrality by 2050, which requires each EU country to reduce its greenhouse gas emissions by at least 55 percent by 2030. These initiatives include the EGD and the RePowerEU plan to reduce reliance on Russian fossil fuels. Specifically, RePowerEU was initiated in the wake of the war in Ukraine, with the aim of accelerating the energy transition in Europe (DE JONG, M. 2023; VEZZONI, R. 2023).

Energy issues must be taken very seriously because they affect society's social welfare and subjective well-being. The problems of energy poverty and energy inequality, often referred to in terms of 'fuel poverty' or 'domestic energy deprivation' (cf. BOUZAROVSKI, S. and PETROVA, S. 2015, 31–40), are, in fact, about "a household's inability to secure a socially- and materially-necessitated level of energy services in the home" (BOUZAROVSKI, S. *et al.* 2017, 1). These are fundamental issues for the public because they directly affect the cost of housing and the price of food and industrial goods (including fuel). In other words, they determine the cost of living.

V4 countries' energy mixes and dependence on Russian hydrocarbons

Even in the wealthiest European countries, citizens are "impacted by the functioning of the energy market, the welfare system, housing policy, health policy and practice, and by the distribution of wealth, as well as by the membership of particular social groups that experience intersecting inequalities" (MIDDLEMISS, L. 2020, 110). While examining energy welfare, especially in the context of climate challenges and the Russian war in Ukraine, it is worth taking a closer look at the energy mixes of the V4 countries. The structure of the energy mixes and strategies for the transition towards climate neutrality affect foreign policies and public opinion.

Slovakia, Hungary and the Czech Republic have nuclear power plants, and Poland has made the decision to build nuclear power plants (*Figure 3*). Nuclear energy represents the largest share of the energy mixes in Slovakia and Hungary (58.3% and 37.9%, respectively), and it is the second largest share in the Czech Republic (31.3%) after fossil fuels. The largest share of fossil fuels (71.5%) was found in electricity production in Poland. In addition, Hungary produces energy from natural gas (11.1%) and crude oil (10.2%), accounting for more than 20 percent of its energy mix. In terms of the share

of renewable energy, Slovakia (33.8%) and Hungary (32.2%) are the leaders and are significantly ahead of the Czech Republic (23.0%) and Poland (21.3%). The share of renewable energy is significant in the geopolitical context because it indicates political energy independence with a few caveats, such as the critical raw materials necessary for clean energy technologies (cf. KLITKOU, A. *et al.* 2023).

Regarding fossil fuels, natural gas and nuclear energy, the V4 countries are dependent on Russian hydrocarbons and associated technologies. For example, the nuclear power plants in the V4 countries run on Russian-made fuel rods made by the TVEL Fuel Company (owned by Rosatom). Thus, the V4 countries' energy mixes and dependence on Russian fossil fuels and energy technologies since the collapse of the communist bloc demonstrate the vulnerability of these economies and the welfare of their populations to relations with the Kremlin.

In addition, it is important to examine energy carrier imports from Russia in order to understand the dependency structure shaping energy welfare/scarcity in the V4 countries. This is mainly because the European embargo on Russian hydrocarbons affects countries that, until recently, had close ties with the Russian Federation. Slovakia and Hungary are still the V4 countries with the highest levels of dependence on Russian hydrocarbons (*Figure 4*). Although Poland and the Czech Republic import far less non-renewable fuel from the country, Russia was an important trading partner for all four countries in terms of energy carriers before the attack on Ukraine.

Given the fragmentary nature of assessing the attitudes of the public and the governments of the V4 countries towards the war and the parties involved based on the energy sector alone, it is worth remembering that "the EU imported around 40% of its natural gas, more than one-quarter of its oil and about half its coal from Russia in 2019" (TOLLEFSON, J. 2022, 233). In other words, the EU's dependence on Russian hydrocarbons was an important component of the competi-

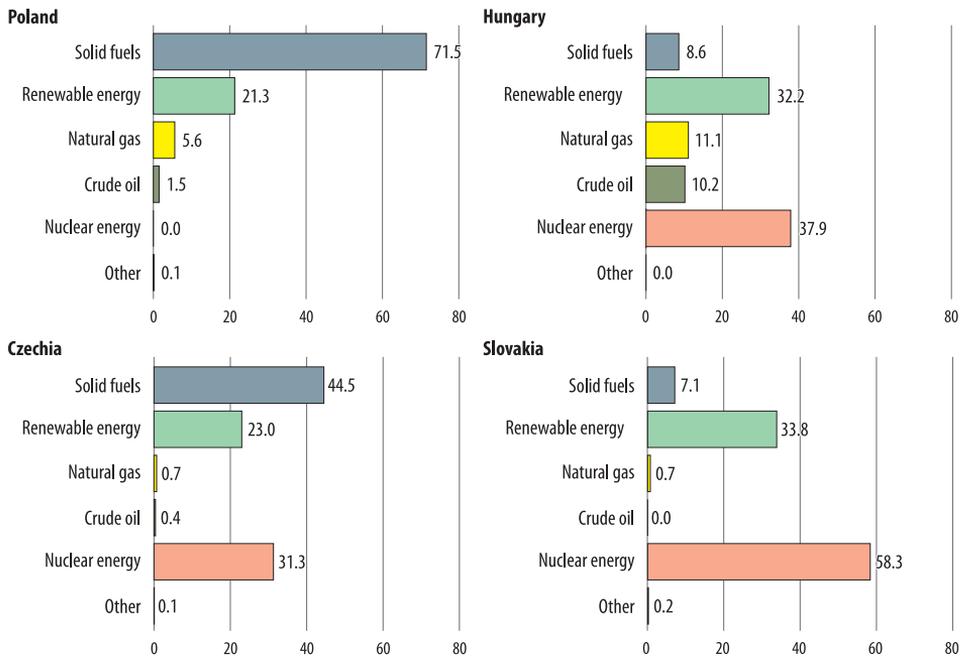


Fig. 3. Share of primary production by energy source, 2021. Source: Eurostat, 2023.

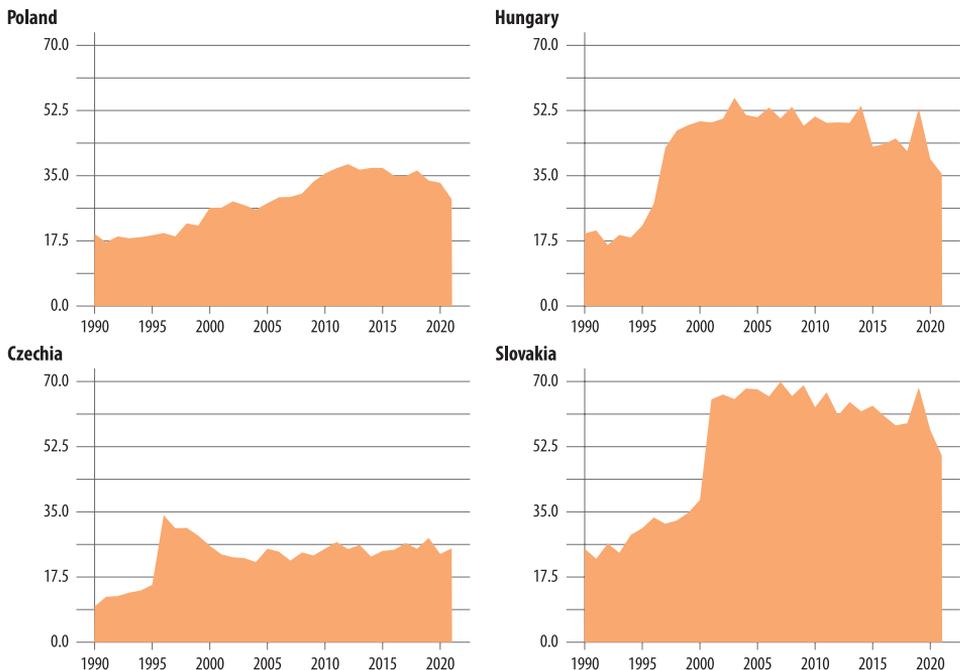


Fig. 4. National reliance on Russian fossil fuel imports (total fossil fuels). Source: International Energy Agency, 2023.

tiveness of European economies and political relations before the war (BARANOWSKI, M. 2022c, 2023a). Germany before *Zeitenwende* is the most telling example of this practice. Germany pursued energy policy that focused solely on its own interests, e.g., individually negotiated low prices for Russian gas, and seemed to conflict with other EU countries' objectives, e.g., the Nord Stream 2 project (DE JONG, M. 2024).

V4 countries' attitudes towards the Russian Federation after the invasion of Ukraine

In terms of the political response to the Russian war in Ukraine, which ACEMOGLU, D. (2023, np) described as "the biggest war in Europe since the end of World War II", the V4 countries formally adopted a critical assessment of the aggressor. Czech researchers HANDL, V. *et al.* (2023, 508) shared the following description of the V4 countries' responses:

"[T]hey called the Russian action 'a brutal, unprovoked and premeditated attack against a sovereign, peaceful democratic state', which represented 'an egregious violation of international law and the UN Charter, which undermines European security and stability' [...] However, the positions of the individual countries and their leaders differed in their details."

Some political commentators believe that, until the populist right-wing takeovers in Poland and Hungary, the V4 countries "always came together in fundamental issues. Moreover, their stance was rarely fundamentally different from that pursued by the EU as a whole" (MESEŽNIKOV, G. 2022, np). The establishment of far-right governments in Warsaw and Budapest led to a political split in the V4 countries' vision of the EU (the so-called 2 + 2 format). However, the refugee crisis of 2015 led to a renewed consolidation of the V4 countries, as "all four countries took a strong anti-immigration stance and refused to take their fair share [of immigrants] as proposed by the EU" (MESEŽNIKOV, G. 2022, np).

Russia's attack on Ukraine divided the V4 countries in a 3 + 1 direction, with Hungary as the outsider (MESEŽNIKOV, G. 2022). However, since Slovakia and Hungary were, until recently, highly dependent on hydrocarbon imports from Russia (see *Figure 4*), both countries should be characterised as still having pro-Russian positions because energy prosperity is a critical determinant of political relations. Note that we are referring to official government positions and public opinion because, although important, the personal connections of leaders such as Hungarian Prime Minister Viktor Orbán and former Czech President Miloš Zeman do not represent the official positions of the government and the public.

Data from a Eurobarometer survey were analysed to understand public opinion in the V4 countries about the Russian war in Ukraine. To approximate the public's position on solidarity with Ukraine or the Russian Federation, the survey included the following question: "Overall, do you approve or disapprove of the European Union's support for Ukraine following Russia's invasion of Ukraine?" (Eurobarometer, 2022) (*Figure 5*).

The survey results revealed that 85 percent of Poles, and 68 percent of Czechs approved of the EU's support for Ukraine, while only 47 percent of Slovaks, and 59 percent of Hungarians approved.

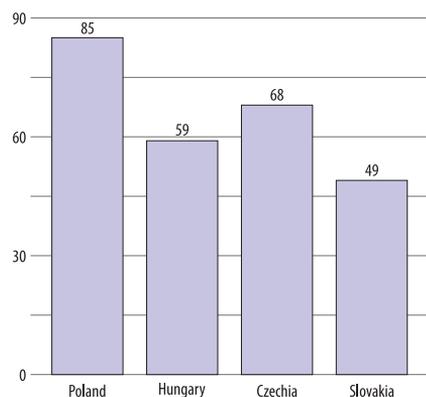


Fig. 5. Public approval of the EU's support for Ukraine (% – Total Approve). Source: Eurobarometer, 2022 (98.1 | EB042)

Hungarians shared this sentiment. These results correspond with the aforementioned 2 + 2 format of the V4 countries. A survey question about support for sanctions imposed by the EU on the Russian Federation had a similar distribution of responses; compared to people in Poland and the Czech Republic, those in Slovakia and Hungary were much less supportive of sanctions against Russia (Figure 6).

For the sake of accuracy, it should be noted that the distribution of responses to the survey questions concerning support for Ukraine and the imposition of sanctions on Russia do not directly align with the V4 countries' dependence on energy carriers and technology, especially technology and components related to nuclear power plants. However, considering other survey studies and the interpretation of their results (BARANOWSKI, M. 2022a, c), one may be tempted to make such an interpretation. For example, HANDL, V. *et al.* (2023, 509) shared the following conclusion:

“[A] significant part of Slovak society belongs among the most pro-Russian people in the European Union. According to a poll conducted in July 2022, 52% of Slovaks want Russia to win the war. Thirty percent want Ukraine to win, and 18% don't know (Dennik, 2022). A significant reason for those Slovaks' stance is their country's dependence on Russian oil and gas, which before the war was 100%.”

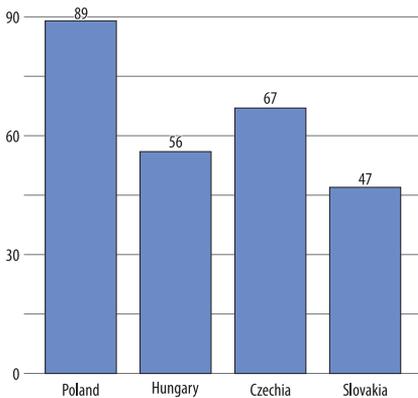


Fig. 6. Public approval of the actions taken by the EU to support Ukraine since the start of the war (% – Total Approve). Source: Eurobarometer, 2022 (98.1 | EB042)

More than just fossil fuels

The V4 countries present a spectrum of attitudes towards the Russian aggression against Ukraine, primarily through the prism of energy welfare, which, as described above, determines the foundations of individual and household functioning in the economic sphere. Politico-geographical factors, such as proximity to a war zone (HANDL, V. *et al.* 2023, 505), are not without influence on intercountry relations. Similarly, transnational alliances, such as the EU, should not be underestimated, as they utilise “a sufficient degree of unity, central authority, and effective decision-making to defend the shared interests and values of Europeans” (ASH, T.G. 2023, 64). However, the devil is in the details, and energy dependencies often determine these details. As previously mentioned, the V4 countries have different energy mixes (see Figure 2). However, like the rest of the EU, they are committed to the energy transition to a low-carbon economy described in the EGD plan, which includes various pathways away from fossil fuels and towards renewable energy production.

Russia's case (as a hydrocarbon exporter) is proving to be crucial in many ways. Before its aggression against Ukraine, Russia's fossil fuels were a guarantor of the energy transition of the EU countries. Germany, in particular, was counting on the opening of the Nord Stream 2 pipeline until recently. Furthermore, as previously mentioned, the V4 countries imported vast amounts of hydrocarbons from Russia, and Russian companies supplied raw materials for nuclear power plants.

Russia's importance in the energy sector is also evident in a less articulated topic: the rare earth elements and critical minerals essential for the energy transition (BAZILIAN, M.D. 2018; EYL-MAZZEGA, M.-A. and MATHIEU, C. 2020; GIELEN, D. and LYONS, M. 2022). Russia and its involvement with countries in Africa, South America and Asia that have reserves of these valuable elements are essential parts of the global balance of power related to access to rare earth miner-

als. According to the International Energy Agency (IEA), “the value of global trade in critical minerals will need to triple to achieve net-zero emissions by 2050” (BORDOFF, J. and O’SULIVAN, M.L. 2023, 118).

In addition, Russia’s enriched uranium reserves, which are essential for the operation of nuclear power plants and a critical link in achieving countries’ decarbonisation goals, show that Russia remains an important player in energy security. Suppose that the nuclear power plants in three of the four V4 countries are important sources of global energy production. In that case, the role of the Russian Federation as an intermediary for this resource may raise legitimate concerns. Even the United States depends on Russian nuclear fuel services, which, as American researchers have noted, “is a source of great discomfort and vulnerability, given the current geopolitical realities” (BORDOFF, J. and O’SULIVAN, M.L. 2023, 114).

Given the aforementioned entanglement of the energy welfare of the V4 countries with the import of energy sources and technologies from Russia, analyses of the attitudes of Central European societies towards the Russian war in Ukraine cannot downplay the energy security dimension.

Discussion and conclusions

According to a survey conducted by ASH, T.G. *et al.* (2023, 1–19), the Russian aggression against Ukraine “has consolidated »the West«”. However, this consolidation has come at a massive cost in terms of human lives, refugee and humanitarian crises, and food and energy emergencies. It is important to remember that the European perspective is just one point of view and is a very diverse one in which different economic, political and military security visions clash. The V4 countries are an excellent example of this diversity, and their differing positions on the war itself and the parties involved can be seen through a particular lens, e.g., 3 + 1 or 2 + 2 formats.

Examining the energy welfare in the V4 countries in light of Russian aggression against Ukraine should make one realise that energy policy is an essential component of the economy and politics. A well-functioning economy shapes energy welfare, while a poor one produces energy scarcity. Energy policy is also directly linked to climate change and the shape of the energy transition towards zero-carbon economies. Thus, energy transition concerns nature-based social welfare, which is particularly important in light of “the dominant influence of economists and their reliance on cost-benefit approaches in energy decision[s]” (LAES, E. *et al.* 2023, 4). Also, the level of public support for reforms to enable the implementation of decarbonised electricity generation technologies affects all spheres of modern society.

The case study of the V4 countries in this article has shown that many factors related to energy security are rooted in country-level relations with Russia, resulting in different attitudes towards supporting Ukraine and EU sanctions against the Kremlin. First and foremost, trade in Russian energy carriers was (and to some extent still is) an essential part of individual European countries’ relations with Russia. In addition, let us remember that “the V4 countries (except for Poland) have been even more dependent on Russian energy resources than Germany” (HANDL, V. *et al.* 2023, 504).

Moreover, when considering the factors that affect energy welfare in the V4 countries, especially Poland and Hungary, it is worth bearing in mind that research has shown that dissatisfaction with life is mainly linked to populist sentiment (in the case of Finland, cf. LINDHOLM, A. and RAPELI, L. 2023). However, the consequences of political sympathies seem more understandable if the level of life satisfaction is moderated by economic competitiveness, the state of the environment and energy policy – which ultimately affects the price level of goods consumed. For energy-consuming countries, such as the V4, in particular, “rising energy prices mean higher production and transportation costs while

affecting capital market liquidity through inflation and interest rates, reducing social welfare levels” (CHEN, Y. *et al.* 2023, 3083), and see also ANTONAKAKIS, N. *et al.* (2017). These phenomena can result in populist sentiments and smouldering radical political views, which can indirectly influence specific visions of the energy transition, in essence, the economic (and redistributive) model.

Since the energy security and welfare perspective is a single but important component of the broader picture of complex and dynamic (geo)political relations (BOMPARD, E. *et al.* 2017; BARANOWSKI, M. 2023b; CUI, L. *et al.* 2023; STRECK, W. 2023), it is worth emphasising that other forces also shape the level of social welfare in a country. This article’s focus on energy welfare and the V4 countries was intended to draw attention to the multidimensionality of energy issues in light of Russia’s attack on Ukraine and their potential far-reaching consequences on the relations between EU countries as well as the pace and shape of the energy transition towards a low-carbon economy (EGD). As we have tried to show, understanding the individual interests and political ties of the V4 countries with energy welfare at the forefront is the foundation of veritable forces of potential change towards either a European Green Deal and energy independence from foreign powers or the opposite. The opposite option in the form of a 2 + 2 or 3 + 1 formula among the V4 countries may set a critical hurdle on the road to achieving climate neutrality combined with energy security and welfare.

The dependence of V4 countries on Russian fossil fuels significantly influences their political attitudes and societal perceptions towards the Russian war in Ukraine, with profound implications for their energy security and welfare in the face of efforts towards the EGD. The Visegrad countries, particularly Slovakia and Hungary, exhibit varying degrees of reliance on Russian energy resources, including hydrocarbons and associated technologies. This dependence shapes their political responses to the conflict, as evidenced by differing levels of support for Ukraine and EU sanctions

against Russia. While Slovakia and Hungary have historically maintained closer energy ties with Russia, Poland and the Czech Republic have pursued diversification strategies, albeit with varying success (2 + 2 formula).

Public opinion within the V4 countries also reflects this divergence, with surveys indicating higher levels of support for Ukraine and EU sanctions among Poles and Czechs compared to Slovaks and Hungarians. This alignment with EU policies on Ukraine and Russia underscores the complex interplay between energy security, geopolitical factors, and societal perceptions. Furthermore, the energy transition outlined in the EGD presents both opportunities and challenges for the V4 countries. While reducing dependence on Russian fossil fuels is a crucial objective, it requires significant investment in renewable energy infrastructure and technology. This transition is essential for enhancing energy security and mitigating the risks associated with geopolitical tensions.

Overall, understanding the intersection of energy dependence, political attitudes, and societal perceptions is crucial for navigating the complexities of the Russian war in Ukraine and advancing towards a sustainable energy future. By addressing these challenges through collaborative efforts within the EU framework, the V4 countries can strengthen their resilience to external pressures and contribute to the realisation of the EGD’s objectives.

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