

# EDITORIAL NOTE

## Foreign and Energy Policies of the European Union Challenges in a Time of Growing Geopolitical Struggle between the East and the West

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To help forge the discussion, we decided to dedicate a portion of a regular issue of the *Czech Journal of Political Science* to articles dealing with the external dimension of EU energy policy. We believe that, in light of the current developments in the EU's neighbourhood, the time is ripe for a discussion on what the EU's external policies might look like and what would be the determining factors. We believe that it is also the right time to take a closer look at states that have been at the forefront of the current geopolitical struggle. Hence, in the first part of this special section, we will first focus on the key determinants of the EU's external energy policy, while in the second part, attention will be paid to specific cases in central and south-eastern Europe.

Energy is the material basis of modern economies and societies. The price and physical availability of sources of energy significantly impact the functioning of economies and societies, while the past several years have also seen an intensification of interest in the impact of the production and consumption of various energy types on the global climate and local environments, along with growing attempts to reduce those negative impacts. Last but not least, as the basic determinant of economic activity and thus the functioning of any state, energy is factored into foreign policy considerations, be it from the perspective of dependent consumers, or producers considering the use of supplies as leverage.

In the three decades after the end of the Cold War, the European integration project has seen dramatic development. The European Community transformed into the European Union with powers far beyond the original narrowly focused sectoral integration.

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The common market, the Union's flagship initiative, has sprawled to new areas, notably energy commodities. The Single European Act started a process eventually resulting in markets for electricity and natural gas. However, despite unquestionable advancements in terms of liberalization, the Union still faces significant challenges in the energy sphere. Given the ongoing decline in indigenous production and the rather stable level of consumption of natural gas, the bloc's dependence on external supplies has been rising. The supplier that has the biggest reserves while being able to deliver them to the European market in sufficient quantities with the lowest additional costs is Russia.

Following the economic crunch in the 1990s, Russia has revived its economy mainly thanks to revenues from the energy sector. Since the beginning of the 21st century, after the Russian state reinstated control over its resource base, Russian economic development has been closely tied to developments in energy commodity prices. While this approach has worked to the state's benefit most of the time, it also has caused the Russian economy to be vulnerable to price fluctuations and overly dependent on commodity export in general. Oil and gas now account for more than half of Russian exports (Observatory of Economic Complexity, 2019).

Understandably, in a setting where the state controls the industry that is most vitally important for the economy, the government's willingness to use the sector for various political purposes should not be ruled out. Given Russia's apparent aspirations to regain its former geopolitical influence, the fact that the Russian state has, *de facto*, a strong hand in supplying energy to the EU keeps several of EU members restless, and energy supplies of Russian origin assume an important position in their foreign policy considerations. The entanglement of energy supplies and geopolitics has, once again, taken centre stage. The question is whether the EU is able and willing to deal with this reality.

At the same time, the energy landscape has been changing. The liberalization of the EU market, which has so far culminated in the third energy package, effectively dissolved former market incumbents ruling the sector, has put the European Commission in the driver's seat of market oversight, and, effectively, has allowed market forces decide where the gas will go. Naturally, none of the former market incumbents were happy about this development, but none of them felt as hurt as Gazprom, which once enjoyed an uncontested position in Central and Eastern Europe. Despite still being the dominant supplier in the region, the company now has to follow the rules instead of creating them.

In a broader sense, however, it is not just the market liberalization that is challenging Gazprom's market position going forward. It is also the EU's strategy for reducing fossil fuel consumption and related CO<sub>2</sub> emissions that is lowering forecasted natural gas demand. The Union has set plans to reach climate neutrality by 2050, clearly suggesting that fossil fuels are on their way out of the energy mix. Even though coal will be the primary target of the energy transition, natural gas, despite its approximately 50% lower carbon intensity compared to coal, will be under growing pressure, too. Gazprom, and the Russian state as the primary beneficiary of its revenues, is aware that the demand for exports will be shrinking. The Russian gas giant has therefore been trying to capitalize on its European customers as much as possible while it still can. In this sense, Nord Stream 2 is the final stage in Gazprom's long-term strategy of developing pipeline connections to its largest export markets – Germany, Turkey, and Italy – that circumvent

Ukrainian transit. The Yamal-Europe pipeline (via Belarus and Poland, which was built in the 1990s and finally reached full capacity in 2006) and Nord Stream 1 (launched in two stages in 2011 and 2012) targeted the German market (and north-western Europe more broadly), while the Blue Stream and Turkish Stream pipelines (launched in 2003 and 2020, respectively) targeted the Turkish market and south-eastern Europe, with the latter as a scaled-down successor to the proposed (but never completed) South Stream pipeline. Nord Stream 2 – with its onward connections in the Czech Republic and Slovakia – was planned with the aim of facilitating deliveries to Austria and northern Italy without the need for Ukrainian transit.

This strategy has proven contentious, especially with regard to the offshore pipelines developed after the first Russia-Ukraine gas dispute of January 2006. In this regard, the Nord Stream 1 & 2 and South Stream/Turkish Stream projects are vivid examples of the entanglement of energy and geopolitics, and each was plagued by accusations of being a tool of Russian foreign policy (Beunderman, 2006). Unfortunately, the issue also revealed that EU member states lack a common ground for assessing such matters and, as a result, various attitudes stemming from individual country energy mixes and historical experiences compete with each other. There was a particularly clear division between the states in central Europe and the Baltic region that opposed these pipelines (particularly Poland and Lithuania) and the states in western Europe that backed them (Germany and Austria with regard to Nord Stream, and Italy with regard to South Stream). Clearly, if the EU as an actor wants to increase its relevance on the international scene, it needs to work on its internal unity. Finding the political will to do so, however, will pose a serious challenge.

## 1. Energy in the EU: Current issues and prospects

A significant problem faced by the EU and its member states is that not only do fossil fuels (oil, natural gas, and coal) account for the majority of EU primary energy consumption (69% in 2019), but also that the EU is highly import-dependent for its supplies of those fossil fuels (Eurostat, 2021a). In 2019, the EU-27 imported 97% of its consumption of crude oil and petroleum products, 90% of its consumption of natural gas, and 43% of its consumption of solid fossil fuels (coal, lignite, peat, and oil shale/sands). While the EU-27 imports virtually no lignite, peat, and oil shale/sands, import dependency rates for the two highest grades of coal that are used in industry (anthracite and coking coal) were 100% and 73%, respectively, while import dependency rates for the two lower grades of coal that are predominantly used in power generation, (bituminous and sub-bituminous coal) were 65% and 82%, respectively. Therefore, the EU-27 is highly import-dependent with regard to all but the lowest-grade (and most polluting) fossil fuels.

The two most visible concerns with such levels of import dependency are price fluctuations and physical availability of supplies. Oil prices have fluctuated significantly in the past 15 years, while the fluctuations in gas and coal prices were generally less dramatic until 2021. From March 2021 onwards, gas prices rose dramatically and coal prices in

October 2021 reached their highest level since at least 2005. As a result, the average price of gas in north-western Europe in 2021 was the highest on record (slightly higher than in 2008), and coal prices were the second-highest on record (after 2008, and slightly above those in 2011) (US Energy Information Administration, 2022a; Argus, 2022a).

In terms of supply availability, it is notable that EU imports of oil, gas, and coal are relatively concentrated among a small number of suppliers. The four largest suppliers of crude oil (Russia, Iraq, Nigeria, and Saudi Arabia) accounted for 51 % of EU crude oil imports in 2019. For gas, the four largest suppliers (Russia, Norway, Qatar, and Algeria) accounted for 64 % of EU imports in 2019. For hard coal, the four largest suppliers (Russia, United States, Colombia, and Australia) provided 81 % of EU imports in 2019. Indeed, Russia alone provided 27 % of EU crude oil imports, 34 % of EU gas imports, and 44 % of EU hard coal imports in 2019. In this context, an interruption in supplies from any of these major suppliers would have a significant impact on EU access to energy.

With regard to how those supplies are delivered, EU imports of fossil fuels can be divided into two groups: overland imports (by pipeline or rail) from neighbouring countries, and waterborne imports from both neighbouring countries and suppliers further afield. Regarding the supplies from further afield, whether oil and gas from North America, the Middle East and Nigeria, or coal from North America, Australia, Colombia, and South Africa, several of those suppliers can gain access to the European market only along congested shipping lanes. Although the week-long blockage of the Suez Canal by the container ship *Ever Given* in March 2021 was unusual, it was illustrative of the potential for supply interruptions. Regarding the pipeline supplies of oil and gas from neighbouring countries, Europe faced interruptions in gas supplies from Russia in January 2006 and January 2009 due to transit disagreements between Russia and Ukraine. Fears of a repeat were raised when Russia annexed Crimea in spring 2014 and the conflict in eastern Ukraine erupted that summer, and again ahead of the expiry of the Russia-Ukraine gas transit contract at the end of 2019, although such fears were ultimately unfounded. Russia's recognition of the self-styled 'People's Republics' of Donetsk and Luhansk in February 2022, and subsequent invasion of Ukraine has once again placed the issue of energy security in relation to supplies from Russia firmly in the political mainstream. Oil and gas supplies from Libya were interrupted by the outbreak of the Libyan civil war in 2011, while pipeline gas exports from Algeria to Spain via Morocco were capped by the expiry (and non-renewal) of the transit contract between Algeria and Morocco in October 2021.

Finally, there is a commercial element to this concentration of imports. Most of Russia's gas exports to Europe are delivered via pipeline, and the state-owned company, Gazprom, holds a monopoly on pipeline gas exports from Russia. While gas supplies from Algeria (Sonatrach), Azerbaijan (SOCAR), and Qatar (Qatargas) are also supplied by state-owned monopolies, the volume of Gazprom's supplies to Europe (and, therefore, its market power) are much greater. In late 2021, despite record European gas prices, Gazprom's supplies to Europe fell year-on-year, leading to accusations that it was withholding supplies to either maintain the record high prices or to put pressure on the approval process for its new pipeline from Russia to Germany, Nord Stream 2.

## 2. A three-part strategy to overcome import dependency on fossil fuels

To mitigate the impact of this import dependency on fossil fuels, the EU and its member states are currently pursuing a three-part strategy. The first part concerns the domestic market for these fuels, where the European Commission has sought to develop competitive EU-wide markets in gas and electricity through a series of Directives and Regulations. The most notable is in the gas sector, where the Third Gas Directive stipulated that gas-producing companies (such as Gazprom) could not directly control pipelines on EU territory (where they may be inclined to prevent competitors from gaining access to the system). That legislation gained renewed attention when it was revised in May 2019 to include offshore pipelines in the territorial waters of EU member states. At that time, the row over the applicability of the Third Energy Package rules outside of EU territory once again highlighted the lack of common ground within the EU. France stood against Germany, insisting on the extension of the rules on pipelines to and from third countries, effectively extending the Commission's oversight and impacting Nord Stream 2. In the end, a compromise between Germany and France was reached, leaving the final say to the German regulator (Shelton, 2019). The German regulator, BNetzA, will thus decide how the Nord Stream 2 pipeline may operate, with the decision originally expected in the second half of 2022 (Inverardi & Steitz, 2021). In response to the geopolitical events in eastern Ukraine, the German government ordered the suspension of the BNetzA approval process on 22 February 2022 (Deutsche Welle, 2022). A more competitive market reducing the market power of the large companies can be expected as a result of the revision; however, it seems that states' interests, once again, prevailed over a systemic approach.

The second part of the strategy is to encourage the development and consumption of non-fossil fuels. The most visible element of this is the EU Emissions Trading System (ETS) for carbon credits, which was created in 2005. The system covers CO<sub>2</sub> emissions from electricity and heat generation, energy-intensive industry sectors (including oil refineries, steel works, and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals), and commercial aviation within the European Economic Area (European Commission, n.d. a). Companies operating in these sectors must buy credits to offset their CO<sub>2</sub> emissions. As the cost of these credits rises over time, the cost of consuming fossil fuels will rise, encouraging investment in low-carbon alternatives. The EU ETS operates in phases, with the first three covering the period 2005–2020 (2005–07, 2008–2012, and 2013–2020). Since the start of the fourth phase (2021–2030), the cost of carbon credits has risen substantially, from 34 EUR per tonne on 4 January 2021 to 86 EUR per tonne on 4 January 2022 – a dramatic increase from under 5 EUR per tonne in January 2017 (Argus, 2022b). This policy has already resulted in a substantial decline in the consumption of coal for power generation in several large EU member states (and in the UK, which was part of the ETS until Brexit, and now has its own carbon pricing system).

The third part of the strategy is the external dimension, which includes engagement both with international climate change diplomacy and with suppliers of fossil fuels. With

regard to the former, in accordance with the Paris Agreement, adopted at the COP21 climate conference in 2015, ‘The EU’s initial nationally determined contribution (NDC) under the Paris Agreement was the commitment to reduce greenhouse gas emissions by at least 40 % by 2030 compared to 1990... In December 2020, the EU submitted its updated and enhanced NDC the target to reduce emissions by at least 55 % by 2030 from 1990 levels’ (European Commission, n.d. b). As a next step, ‘In June 2021 the European Climate Law, which made both the new target, and the goal of reaching climate neutrality by 2050, binding, was adopted. In July 2021 the European Commission presented its “Fit for 55” package of policy proposals to achieve this new goal’ (Climate Action Tracker, n.d.). Engagement with fossil fuel suppliers is arguably more challenging, given that the EU is actively promoting a reduction in its long-term fossil fuel consumption. For the suppliers, that would mean a loss of an important export market and a serious blow to their state budgets.

### 3. Changes in the EU’s supply portfolio: rising import dependence against the backdrop of energy transition

In the past decade, the EU has seen significant shifts in its supply portfolio. Although national energy policies are still highly individualized and determined by specific conditions in a given member state, we have seen certain macro-trends that impact the Union as a whole. These trends are all the more important given the looming threat of climate change and the EU’s ambitions to spearhead the energy transition. With a view to the goals of climate neutrality in 2050 and 55 % emission reduction by 2030, the European Commission came up with the so-called green taxonomy, a guide for labelling sustainable energy-related investments. After a lengthy debate, natural gas and nuclear energy were conditionally labelled as green, making them suitable for financial investments going forward. Being granted the status of a ‘transitional’ fuel, natural gas will play an important role in the energy mixes of several EU members, especially as a complement to the increasing share of renewables and as a replacement of coal-based capacity. Still, in every scenario, natural gas consumption is expected to start its decline in the mid-term outlook, ending up significantly lower by 2050 compared to the current levels. For example, BP estimate EU gas demand in 2018 at 457 bcm. In their three scenarios, BP estimate that such demand by 2050 could be 346 bcm (Business as Usual), 191 bcm (Rapid), or as low as 99 bcm (Net Zero) (BP, 2020).

However, before that happens, the EU will remain an important market for gas exporters, given the still relatively robust consumption and demand for imports pushed by the decline in indigenous production. Most notably, the EU’s domestic production fell as a result of plummeting production in the Netherlands, the biggest natural gas producer among member states (Eurostat, 2021b; Statista, 2022). In the longer term, European production will decline more quickly than demand, meaning that EU need for imports will decline more slowly than demand overall. In the past decade, only two major pipeline suppliers were able to significantly increase their exports to the EU – Norway and Russia,

with only the latter apparently having spare production capacity to address the EU's needs in the coming years (Eurostat, 2020; BP, 2019). Since 2018, the major growth in EU imports has been in the form of LNG, where European customers compete with buyers on the global market.

For the Russian state budget, natural gas is a significant source of income; therefore, the potential loss of its most important market poses an issue for Russia. The desire to improve its market position, along with the history of disputes with transit countries, apparently created enough incentive to build the Nord Stream pipeline system. In the future, if the Nord Stream 2 pipeline becomes full operational, Russia could have a total of 110 bcm of transit capacity in the Baltic Sea at its disposal, which will give enough room to ramp up supplies to the most important European markets.

However, Nord Stream 2 has become a contentious issue, as some countries, mainly in CEE, see it as a potential geopolitical leverage, fostering an undesirable reliance on Russia. Given the worsening relations between Russia and the West and the above-mentioned history of transit and supply constraints, several Central and Eastern European states feel uneasy about being circumvented by the Russian Baltic Sea pipeline system. During the presidency of Donald Trump, the Nord Stream 2 pipeline became one of the focal points of US foreign policy and a target of US sanctions aimed at companies working on the project. In the meantime, the project also revealed deep cleavages within the EU itself. It pitted Poland and the Baltic states against Germany, the main supporter of the pipeline in the EU, while the western nations of the EU stood idly by most of the time. Not having a mandate from the member states, the European Commission has not been able to take any notable actions to forge a common attitude towards the issue. It may be the case that Russia invading Ukraine has done more to unite EU members in their view of Nord Stream 2 than any previous lobbying in Brussels.

The matter is further complicated by the unbalanced development of natural gas infrastructure in the central and south-eastern parts of the Union. While member states in these regions have been able to implement the internal energy market's software, that is, the market rules, the hardware, i.e. infrastructure, has been falling behind. Without the buffer of a fully-developed energy market, countries in this region are still concerned with supply security. The difference to the situation in western Europe, where the flexible market can mitigate some of the impact of any direct external influence, is apparent, creating a difference of understanding of energy security between the so-called old and new members of the EU.

The sanctions imposed on entities working on Nord Stream 2 did contribute to the generally cold relations between the US and the EU during Trump's presidency. Still, they did not prevent the US from being an important energy supplier to Europe, a role the US has been playing for more than a decade now. The United States has been a significant exporter of coal to Europe for over a decade. Between 2009 and 2019, the US share of EU hard coal imports fluctuated between 12% and 21%, leaving it between second and fourth place in the rankings of external suppliers of coal to the EU (Eurostat, 2021c). However, a more recent development has been the dramatic growth in oil and gas production in the United States, vastly reducing its oil import dependency and heralding its emergence as a significant net exporter of liquefied natural gas. The significance of the US

LNG exports was highlighted recently when a flotilla of US LNG cargoes helped to blunt the price hike on the European market (Chapa, 2021).

Between 2008 and 2019, US oil production grew from 6.8 million barrels per day to 17.1 million barrels per day (bbl/d). In the same period, US oil consumption grew only modestly, from 18.9 m bbl/d in 2008 to 19.5 m bbl/d. Meanwhile, net imports shrank from 10.9 m bbl/d in 2008 to 1.05 m bbl/d in 2019 (BP, 2021). While global trade in hydrocarbons was distorted by the impact of the first wave of the COVID-19 pandemic in 2020, the latest data for January–October 2021 show that the United States exported slightly more oil than it imported (US Energy Information Administration, 2022b, p. 9).

Between 2008 and 2019, US natural gas production grew from 645 billion cubic metres (bcm) to 930 bcm. In the same period, US LNG imports declined from 9.7 bcm to 1.5 bcm, while exports rose from 1.0 bcm to 47.4 bcm. This means that net imports of 8.7 bcm in 2008 shifted to net exports of 46.4 bcm in 2019. The latest data suggests a continuation of this dramatic rise, with US net LNG exports reaching 93.2 bcm in 2021. This leaves the United States behind only Australia (105.9 bcm) and Qatar (101.8 bcm) for 2021, far ahead of fourth-place Russia (40.3 bcm) and fifth-place Malaysia (30.4 bcm) in the rankings for global LNG exports by country (Kpler, n.d.).

Over the past 12–13 years, the United States has moved from being a coal exporter that was import-dependent in both oil and gas to being a coal exporter that is self-sufficient in oil and the world's third-largest LNG exporter. Not only does the United States continue to supply Europe with coal, it no longer competes with Europe for oil on the international market, and in 2021, provided 33 % of EU LNG imports. Finally, while the election of Donald Trump as President in 2016 saw the US withdraw its participation in the Paris Agreement, Joe Biden reversed that course just hours after being sworn in as President in January 2021. These factors changed the geopolitical position of the United States relative to the EU in the past several years, rendering it both an important political partner in international climate diplomacy and an important supplier of fossil fuels to the European market.

Russia and the United States are the only two countries that supply at least 5 % of EU imports of all three fossil fuels (oil, gas, and coal). In terms of global CO<sub>2</sub> emissions by country in 2020, the United States and Russia were ranked second and fourth, respectively, with China first, India third, and Japan in fifth place (Global Carbon Atlas, n.d.). If the EU-27 were a single country, it would rank in third place, with emissions slightly greater than those of India. Therefore, the United States and Russia are the only countries that are both substantial suppliers of all fossil types to the EU *and* highly influential in global climate diplomacy. Two of the three articles in this special section engage explicitly with relations between the EU and its member states on the one hand and Russia and the United States on the other.

The complexity of energy policies, branching out to the spheres of foreign as well as domestic policies of member states, may thus pose the biggest long-term challenge the EU is currently facing. It shows that development within the Union has not been balanced and while some states are preoccupied with the workings of the internal market, others are still concerned with the basics of supply security. These differences could become even more imminent with the task of energy transition ahead.



#### 4. Conclusions: are the internal and external dimensions of EU energy policy complementary or contradictory?

The internal aspects of EU energy policy are driven by a desire to increase the competitiveness of the internal EU energy markets (especially in gas and electricity) while simultaneously promoting the reduction of consumption of fossil fuels and their replacement with low-carbon alternatives. These two elements are complementary. The external elements of EU energy policy are a delicate balancing act of striving for leadership in global climate diplomacy while maintaining constructive relationships with countries that produce and supply fossil fuels to the EU. These external relationships are complicated by the desire of those partner countries, the United States and Russia in particular, to influence EU energy policy. This desire for influence is especially visible in their parallel efforts to promote natural gas consumption in Europe (for the benefit of their exporting companies) and simultaneous competing efforts to promote their gas supplies at the expense of the other. Specifically, this concerns the efforts by the US government to derail the Nord Stream 2 project through sanctions and the Russian efforts to convince European importers that they cannot rely on American LNG (because it can be diverted to the Asian market, should the price on that market rise to a premium over European prices) and that only Russian pipeline gas is both reliable and commercially competitive. Additionally, the Nord Stream 2 case demonstrated that the EU lacks internal coherence in energy-related matters and thus has not been able to form a common attitude to supply security issues. The related discourse is still dominated by individual states' interests built on their respective energy mixes. The fact that the row over Nord Stream 2 was mainly dominated by the United States can serve as proof that the EU and its institutions played only a secondary role.

The articles in this special section highlight the growing importance of long-term decarbonization as a central element in EU strategic energy policy. For Crnčec and Fenko, this has enabled the Slovenian government to promote its long-term use of nuclear energy, most likely based on American technology and investment. In their article, Crnčec and Fenko examine Slovenia as a case study that illustrates the competition between the United States and Russia for influence on EU energy policy. They begin from the point that Slovenia has a more balanced relationship with the US and Russia than its Central European counterparts, insofar as it has experienced neither antipathy towards Russia nor the building of a political partnership with the United States in the post-socialist period. The authors are trying to understand how Slovenia's policy fits in the EU frameworks and how the country balances relations with the United States and Russia as external providers of energy resources, technology, and investment.

In their article, Deák, Weiner and Szabó analyze the dynamics of great-power politics in South-eastern Europe, in terms of relations between the EU, United States, and Russia. In doing so, they expand their analysis beyond the EU member states in the region (Bulgaria, Romania, and Greece) to include six countries that are contracting parties to the European Energy Community (Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia), in order to include states over which the EU may

wield some influence in the sphere of energy policy. This article identifies the shift in EU energy policy in the region from the promotion of competition and import source diversification (especially with regard to natural gas) to the promotion of decarbonization. Therefore, Deák et al. refer to the withdrawal of EU funding for gas-related projects in the region as a 'gas withdrawal'. For Deák et al., this 'natural gas withdrawal' could close the window of opportunity for US LNG in South-eastern Europe (with the exception of Greece) while also challenging the long-term consumption of Russian-supplied natural gas in the region. Thus, developments in 'internal' EU energy policy impact the 'external' relations of the EU and its member states with third parties, most notably the United States and Russia.

To conclude, the contrasts between the EU relationship with Russia (dominated by trade in fossil fuels) and the EU relationship with the United States (less dominated by trade in fossil fuels and with a greater likelihood of cooperation in global climate change efforts) are symbolic of the challenge faced by the EU itself: How to reconcile its present-day need for fossil fuels for more than two-thirds of its primary energy consumption with its long-term aims of reducing domestic consumption of such fossil fuels and taking a leading role in international climate diplomacy. In terms of energy and climate policy, the current location of the EU (dependent on imported hydrocarbons) and its desired future destination (decarbonized and with only limited import dependency) are both clear, but the navigation of that journey from current location to future destination will be complex and challenging, especially with regard to its major international partners. We believe this special section, and the articles contained therein, will contribute to our readers' understandings of those challenges.

## References:

- Argus. (2022 a, January). *ARGUS European Natural Gas*. Retrieved from <https://www.argusmedia.com>
- Argus. (2022 b). *ARGUS European Emissions Markets*. Retrieved from <https://www.argusmedia.com>
- Beunderman, M. (2006, May 2). Poland compares German-Russian pipeline to Nazi-Soviet pact. *EUobserver*. Retrieved from <https://euobserver.com>
- BP. (2019). *Energy Outlook 2019*. Retrieved from <https://www.bp.com>
- BP. (2020). *Energy Outlook 2020*. Retrieved from <https://www.bp.com>
- BP. (2021, July). *Statistical Review of World Energy*. Retrieved from <https://www.bp.com>
- Deutsche Welle. Ukraine crisis: Germany halts Nord Stream 2 approval. *DW*, 22 February 2022. <https://www.dw.com/en/ukraine-crisis-germany-halts-nord-stream-2-approval/a-60867443>
- Climate Action Tracker. (n.d.). *EU – country summary*. Retrieved from <https://climateactiontracker.org>
- European Commission. (n.d. a). *EU Emissions Trading System (EU ETS)*. Retrieved from <https://ec.europa.eu>
- European Commission. (n.d. b). *Paris Agreement*. Retrieved from <https://ec.europa.eu>
- Eurostat. (2020). *Extra-EU imports of natural gas, by country of origin, 2019–2020*. Retrieved from <https://ec.europa.eu>
- Eurostat. (2021 a, May). *Energy statistics – an overview*. Retrieved from <https://ec.europa.eu>
- Eurostat. (2021 b, October). *Natural gas supply statistics*. Retrieved from <https://ec.europa.eu>
- Eurostat. (2021 c, June). *Energy production and imports*. Retrieved from <https://ec.europa.eu>
- Global Carbon Atlas. (n.d.). *Global Carbon Atlas*. Retrieved from <http://www.globalcarbonatlas.org>

- Chapa, S. (2021, December 22). A Flotilla of U.S. LNG Cargoes Is Headed to Fuel-Starved Europe. *Bloomberg*. Retrieved from <https://www.bloomberg.com>
- Inverardi, M., & Steitz, C. (2021, December 16). Nord Stream 2 won't go live in first half of 2022, German regulator warns. *Reuters*. Retrieved from <https://www.reuters.com>
- Kpler, (n.d.). *Data coverage - LNG*. Retrieved from <https://www.kpler.com/data-coverage>
- Observatory of Economic Complexity. (2019). *Russia*. Retrieved from <https://oec.world/en/profile/country/rus>
- Shelton, J. (2019, February 7). France set to undermine Nord Stream 2 pipeline deal. *DW*. Retrieved from <https://www.dw.com>
- Statista. (2022). *Natural gas production in the Netherlands from 2006 to 2020*. Retrieved from <https://www.statista.com>
- U.S. Energy Information Administration. (2022 a, February 2). *Europe brent Spot Prices FOB*. Retrieved from <https://www.eia.gov>
- U.S. Energy Information Administration. (2022 b, January). *Petroleum Supply Monthly*. Retrieved from <https://www.eia.gov>