

The Green Deal and the Resilience of EU-Russian Energy Relations¹

T. Romanova

Tatiana Romanova – PhD in Political Science, Associate Professor, Department of European Studies, St. Petersburg State University; 1/3 Smolnogo Str., St. Petersburg, 191060, Russian Federation; t.romanova@spbu.ru

Abstract

In this article, the influence of the European Union's (EU) Green Deal on its energy relations with Russia is analyzed. Two models of resilience are identified in the EU's discourse. One aims at achieving resilience at the level of the EU's energy sector (the "microsystem" for the purpose of this study) while destroying the system of EU-Russia relations (the "macrosystem"). The other aims at achieving resilience in the micro- and macrosystem at the same time. Empirically, the study relies on EU documents and speeches by its national and supranational representatives. Three cases are studied. The first covers competition of two models of resilience in the principles that the EU defined for its relations with Russia. The second case involves investments that slow down the development of renewable sources of energy in favour of natural gas. This case demonstrates how resilience can be achieved as a return to the previous pattern (bouncing back). Although it can be achieved both at the EU-only level and at the level of the EU and its relations with Russia, it clearly favours the latter. The third case involves the import of hydrogen, which creates possibilities for resilience both at the microsystem alone and at the micro- and macrosystems at the same time. This latter option is achieved through adaptation to new challenges (bouncing forward). The author concludes by comparing the two models of resilience. The model that prioritizes the microsystem's resilience and challenges the macrosystem is based on the synthesis of environmental and geopolitical logics. The other model is based on economic and market logics, but the EU's normative leadership is a prerequisite. The EU's discourse demonstrates the viability of both models and related governance practices. Most likely, the two models will co-exist, but their relative importance will vary over time. This variation will be primarily determined by the EU's internal constraints. However, Russia's policy can facilitate the model of resilience, achieved in both the micro- and macrosystem.

Keywords: resilience, Green Deal, EU-Russia relations, energy, geopolitics, market, energy transition

For citation: Romanova T. (2021). The Green Deal and The Resilience of EU-Russian Energy Relations. *International Organisations Research Journal*, vol. 16, no 3, pp. 108–123 (in English). doi:10.17323/1996-7845-2021-03-05

The Green Deal, introduced by the European Commission in 2019, became the central pillar of the European Union's (EU) internal and external policies in 2020. The EU links the energy sector with 70% of greenhouse gas emissions [EC, 2019]; therefore, it is the subject of the bulk of present legislative initiatives. Brussels focuses on energy transition, and in particular, on boosting renewable sources of energy (RES) and developing hydrogen facilities. At the same time, energy is the centrepiece of EU-Russian economic relations, with hydrocarbons accounting for 70% of Russia's export to the EU [EC, 2021b]. In this context, the goal of this article is

¹ The article was submitted 07.07.2021.

to identify how the Green Deal is supposed to affect EU-Russia energy relations. The EU's discourse is identified as an interplay of two models, which form divergent governance practices. The first model presupposes building resilience only at the level of the EU (the "microsystem" for the purpose of this study) while undermining the system of EU-Russia energy relations (hereinafter, the "macrosystem"). The second model looks at strengthening the resilience of both micro- and macrosystems.

Studies of the concept of resilience, which are summarized in the next section, provide the theoretical basis for this analysis. The methodology is built around three case studies: the general context of the EU's relations with Russia in the field of energy and the Green Deal; investments in energy, which illustrate the influence of the past patterns; and the import of hydrogen to the EU, which demonstrates the influence of new technologies and governance practices. The first case sets a conceptual framework for the two models of resilience in EU-Russia energy relations. The second and third cases demonstrate how these models are shaped in specific cases and illustrate the search for resilience respectively as bouncing back and bouncing forward.² All three cases are based on discourse analysis of EU official documents and the speeches of its supranational and national representatives from 2019 (when the Green Deal was launched) until present. In some cases, earlier EU sources are used to illustrate the formation of the two models of resilience as discussed in this study. In the final part, the two competing models and ways of their articulation in the EU are summarized.

Resilience and Energy

The concept of resilience is not new. Its genealogy can be traced to the 16th century [Bourbeau, 2018]. The contemporary usage of this term originates in the writings of C.S. Holling, who defined resilience as a "measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables" [1973, p. 14]. Resilience quickly became a "dominating discourse in natural resource management" [Walker, Cooper, 2011, p. 143]. In the following years, resilience was also integrated in social and economic studies as well as in the policies of different countries across the world. On the one hand, the process was driven by the idea that everything is a system linked to other systems. On the other hand, the self-organizing logics of resilience have been in tune with neoliberalism and it has established itself as an attractive governance principle in the context of growing uncertainty and multiplication of unpredictable threats [Chandler, Coaffee, 2017; Romanova, 2019].

At least three approaches to resilience can be identified in the academic literature. According to the first, resilience is a category, which characterizes any system; it is the system's ability to maintain itself and further develop [Anderson, 2015; Folke et al., 2002]. In the second approach resilience is seen as a technique of political and social governance [Coaffee, Fussey, 2015; Kotsur, 2018]. In both the first and the second approaches the focus is on resources – how they are mobilized in response to various challenges, risks and threats. The reorganization of resources allows either a return to the previous state (bouncing back), or a new equilibrium as a result of the adaptation to new threats (bouncing forward). Finally, within the third approach to resilience in the academic studies the focus is on the analysis of various discourses on resilience. In particular, it identifies how various ethical connotations emerge (for example, the EU

² The most discussed part of the EU's Green Deal in Russia is the carbon border adjustment mechanism (CBAM) to be introduced gradually in the coming years. Yet, the draft that the Commission proposed in July 2021 does not affect Russian export of oil and gas to the EU. Hence, it is beyond the scope of this article. However, the CBAM will certainly influence the character of Russia's energy consumption

links resilience to democracy) and how threats rather than resources came to dominate in the discussions on resilience [Romanova, 2019].

In energy studies resilience is understood mostly in the context of the first or second approaches. For example, A. Cherp and J. Jewell [2011] suggested that contemporary concepts of energy security should be based on resilience because the latter is in tune with liberalized markets and allows resisting today's unpredictable challenges and risks. These authors also specified that resilience "searches for more generic characteristics of energy systems (flexibility, adaptability, diversity) that ensure protection against any threats by spreading risks (both known and unknown)" [Ibid., p. 208]. A. Gatto and C. Drago, based on their study of various writings on resilience, suggested defining energy resilience as "the adaptive capacity of improving performance, as a result of learning and adaptation, informed by continuous change" [2020, p. 1]. Finally, P.E. Roege and his co-authors identified three elements in energy resilience: physical (existence of resources), information (data on resources that we have), and human (how this information is used and how communication is organized) [Roege et al., 2014].

In this study, resilience is understood as a governance technique. The analysis is focused on how the EU suggests using physical (natural) resources in the context of its Green Deal, what information about resources is circulated, how the EU plans to organize production cycles around those resources, and what type of relations with Russia emerge as a result. As of the 1970s, when the Soviet Union started to supply energy resources to Western Europe on a large scale, energy resilience was achieved synchronously at the levels of micro- and macrosystems. The Green Deal can either maintain this approach (and hence develop the second model of resilience), or prioritize the EU's energy sector by concentrating on resources and technologies that are available internally, thus weakening the macrosystem (EU-Russia energy relations). Today's EU discourse creates possibilities for both models of resilience and respective governance practices. The following analysis demonstrates how the EU articulates these two models, how these models compete in the EU's discourse, and what the potential of each of these models is.

The Overall Context of EU-Russia Relations: Between the Two Principles?

The EU's discourse on relations with Russia is dominated by the so-called five principles [EEAS, 2016], of which two are relevant to the present discussion. The first is about the EU's resilience to threats and risks that Russia provokes. Initially, the EU specified these threats as energy dependence, cyberthreats and disinformation [EC and High Representative, 2017]. However, gradually the latter two moved to the forefront as Russia's capacity to blackmail the EU and its members with energy deliveries diminished [EC, 2020a]. Yet, the key for this discussion is that the EU's discourse on resilience focuses on threats rather than on resources; it is also based on the geopolitical approach to energy and favours strengthening the microsystem (the EU and its energy sector), whereas the macrosystem (EU-Russia energy cooperation) is viewed as a source of threats to the microsystem. In this context, the EU logically chooses the first model of resilience, that is, to strengthen the resilience of the microsystem through reliance on internal resources, minimization of external dependence, and use of resources coming from other macrosystems (such as EU-U.S. interaction) at the expense of the EU-Russia system.

At the same time, another EU principle for relations with Russia is selective engagement. The EU has always recognized the necessity of cooperation with Russia where interests overlap, in particular in the field of climate change [EEAS, 2016], which is closely connected to energy. Vice-President of the European Commission Frans Timmermans underlined that "we

will have to collectively make sure that those countries who depend a lot on fossil fuel have an opportunity to transform their economy and society so that they can prosper in the post-fossil fuel society... [this is] a collective responsibility... this is about making this transition together... causing trouble to one or both sides is going to hurt both sides” [Timmermans, 2020]. Thus, the discourse on cooperation in the field of climate change also leads to the recognition that resilience is to be achieved in both the micro- and macrosystem.

The contradictory nature of the EU’s discourse – the coexistence of two different models of resilience in it – was preserved in the 2021 communication on relations with Russia. On the one hand, the document underlined that “the EU has made significant progress in strengthening its resilience against challenges emanating or being instrumentalised from abroad,” and that “[m]anaging and accelerating the twin green and digital transitions enhances EU resilience, by making [the EU] gradually less dependent on foreign supplies and the geopolitics of energy” [EC and High Representative, 2021, p. 5]. The document also stresses that “by moving decisively toward decarbonization [the EU’s] energy independence will further grow and reliance on Russian supplies overall decrease” [Ibid.]. Hence, dealing with threats and geopolitics considerations are key for this line of thinking.

On the other hand, the document strengthened climate and energy components of the EU’s selective engagement with Russia. In particular, the communication specifies such questions as “carbon pricing, renewables, methane emissions, climate change adaptation and the EU’s future carbon border adjustment mechanism” [Ibid., p. 12]. At the same time, the document stresses that cooperation in this field is “all the more important for Russia given the fast-changing geopolitics of energy and its own delayed low-carbon transition” [Ibid.]. Here one can see the traces of the second model of resilience, the wish to guarantee resilience in both micro- and macrosystems through the involvement of Russia. Yet, the emphasis is on Russia lagging behind while the EU is leading the way based on its normative hegemony. The lessening of energy dependence on Russia, which the EU sees as imminent, gives the EU the feeling that its positions have strengthened. Earlier, the universality of market regulation, democracy, and human rights served as the source of its normative leadership; now the EU relies on the universality of the climate agenda and on its achievements in this field, which substantiate its leadership.

The competition of two models of resilience in the EU’s relations with Russia will continue. The first model is reinforced by the EU’s discourse on sovereignty, which is interpreted as limiting intervention in the EU’s affairs from outside [Breton, 2020]. The second model is driven by actualization of the climate agenda, in particular by the EU’s delegation in Russia [Ederer, 2021], or by efforts of some EU members to partly restore relations with Russia [Santos Silva, 2021]. The interest of business is noteworthy; for example, representatives of CREON Group argue that the success of the EU’s Green Deal will come from it becoming the “Eurasian Green Deal” and from paying attention to Russia as a partner in both energy and climate change mitigation [RIAC, 2021].

In sum, the EU’s discourse on general relations with Russia demonstrates co-existence of two models of resilience. While the first model became the EU’s preferred choice following the 2014 breakdown of EU-Russian relations, the second model, oriented to the resilience of the micro- and macrosystems, has been recently growing in importance. Yet, the EU’s normative leadership is a prerequisite for the latter, which logically leads to the restoration of a mentor attitude toward Russia and its achievements in the field of climate policy [Bardon, 2021]. This would inevitably provoke negative sentiments in Russia.

The contradictory character of the EU’s discourse, which creates openings for two different models of resilience, also manifests itself in more narrow aspects of energy transition and the EU’s Green Deal.

Old Wine in New Skins: RES or Gas?

The general direction of the EU's energy policy is to stimulate the development of RES, which will provide more and more electricity and serve to produce hydrogen in the EU. As a result, the EU's external dependence will decrease. Already, in 2018, a European Commission study forecasted that the EU's external dependence will fall from 55% to as low as 20% by 2050 "in the net zero emissions scenarios"; natural gas will remain "an important energy source" until 2030 but its import will fall by 60–92% by 2050 [EC, 2018, pp. 214, 216]. In sum, even before the Green Deal the EU promoted the development of RES with the help of geopolitical arguments about the need to decrease its external dependence and strengthen its self-sufficiency; in other words, it favoured the first model of resilience (that focuses on the microsystem).

This line of argument has been further developed in the documents that clarified the Green Deal. In particular, the Commission underlined that the "the share of natural gas in gaseous fuels is projected to reduce to 20% and most of the remaining 80% gaseous fuels should be of renewable origin" by 2050 [EC, 2020c, pp. 15–16]. Moreover, the consumption of natural gas in Europe will decrease by 25% by 2030. Similar to the general discourse on EU-Russia relations, "a more resilient European economy" is linked to the "lessen[ing of the EU's] dependency on external fossil fuel supplies" [Ibid, p. 4]. Hence, the EU's discourse on resilience is about strengthening the microsystem at the expense of the macrosystem and promotes the first model of resilience. The symbiosis of environmental and geopolitical logics that was identified in the previous section is preserved here.

At the same time, when the EU puts framework policy decisions into a specific form, the refusal of natural gas in favour of RES is challenged. The 2021 discussions on the energy taxonomy, which is to clarify for investors which projects are in line with the Green Deal, well illustrate this trend [EC, 2021a]. Initially it was suggested that natural gas would be excluded from this taxonomy. Yet, in 2020, the European Council stressed the need to preserve the EU's "competitiveness," to respect "specific national circumstances," and member states' right to "decide on their energy mix" [European Council, 2020, p. 6]. German representatives, in particular, emphasized the transition and balancing role of natural gas in the context of RES volatility, as well as the importance of natural gas to preserve competition in the energy markets [Wettengel, 2021] and to guarantee "energy security" [Amelang, 2021]. Poland insisted on the transition potential of natural gas for the production of both electricity and hydrogen [Taylor, 2021a]. A group of seven EU states (mostly from Central Europe) stressed that "a transition based solely on renewable energy sources does not consider the need for a diversified energy mix in the EU" (cited in F. Simon [2020]). As a result, the European Commission had to admit that for some members energy transition is a "big jump" and intermediate investment measures are needed (M. McGuinness cited in Euronews [2021]); their legitimation is expected at the end of 2021.

A similar example is provided by the programme of expenditures from the EU's Recovery and Resilience Facility. EU members are supposed to spend at least 30% on climate priorities, that is on RES, energy efficiency, and the development of new generation of transport [European Council, 2020]. Yet, most Central and Eastern European countries included gas in their "climate" expenditures, rationalizing it by their move from dirty coal and by the transition period on the way to expensive biogases and hydrogen [CEE BankWatch Network, 2021]. Here again, the European Commission had to agree with this transition solution [Simon, 2021b], with investments in gas recognized as green investments.

The role of natural gas in the EU's energy transition has always been recognized. Yet, new investment decisions mean that the transition to RES will be postponed indefinitely. It is

for this reason that the commissioner for energy expressed her concern that investments in gas “may displace other green investments” (K. Simson cited in K. Taylor [2021b]). Investments in natural gas do not automatically mean that it will be supplied from Russia; yet, those decisions legitimize the role of natural gas and therefore support the second model of resilience, which presupposes strengthening of both the micro- and macrosystems, and the use of the resources of the latter to address challenges of the transition to the climate neutral economy in the EU. From the point of view of theoretical approaches to resilience, this case also illustrates resilience as bouncing back to solutions that previously guaranteed equilibrium in various energy systems.

This case illustrates that the first model of resilience is characterized by the symbiosis of environmental and geopolitical argumentation. The second model of resilience, for its part, is advanced by the discourse on economic rationality, competitiveness, and member states’ competences. Both Russia-friendly (Germany) and Russia-critical (Poland) members support the role of natural gas in the energy transition. The latter group counts mostly on natural gas from Norway or the U.S., that is, on the support of the microsystem (the EU) with resources from other macrosystems. In most cases, gas is presented as an intermediate option. Yet, similar to the case on general EU-Russia relations, all EU actors allocate to the EU the role of rules-setter (in particular, in defining requirements for natural gas at all stages of its life cycle).

New Wine in Old Skins: Which Hydrogen?

The competition between the two models of energy sector resilience continues in numerous discussions on hydrogen. The EU believes that hydrogen is key for the success of the Green Deal. It is to substitute oil products in the transport sector and some other sectors of the economy, and it will also provide a possibility to store energy and thus balance the volatility of RES [EC, 2020b]. The EU’s hydrogen strategy prioritizes the so-called green (or clean) hydrogen that is produced from RES. At the same time, its price at the moment is much higher compared to the price of other types of hydrogen, including grey (produced from natural gas or other sources with CO₂ emissions), blue (produced from natural gas with CO₂ emissions being captured), yellow (produced from nuclear energy), or turquoise (produced from natural gas with the help of relatively new pyrolyze technology) [Ibid.].

From the point of view of resilience, the import of hydrogen to the EU is particularly interesting. The EU cannot by itself produce the needed amount of green hydrogen (due to the insufficient amount of RES, limited territory, and other constraints). On the one hand, hydrogen import returns the EU to resource dependence, changing only what is shipped from outside. On the other hand, the EU’s hydrogen strategy sees the EU as a future centre for the global hydrogen market, as a source of its norms and with the euro being its key currency [EC, 2020b]. Moreover, this document sees western countries as priority partners in the development of rules, whereas neighbouring countries (in particular, Ukraine and those of the Southern Mediterranean) are key for the trade in hydrogen [Ibid.]. Russia, for its part, is not mentioned as a partner although EU institutions in general declare their readiness for any international cooperation, which creates a window of opportunities for both hydrogen cooperation and wider EU-Russia relations.

EU states have not yet formulated a single position on the import of hydrogen. Countries that call for the minimization of external energy supply (in particular, from Russia) are predictably against the import of hydrogen. Polish representatives specify that the EU “should be rather cautious about extending cooperation outside the EU or the EEA” [Kurmayer, 2021]. This logic is also typical of members that would like to enlarge their own production of hydrogen (including yellow and blue) and thus look for some protectionism. For example, Hungar-

ian representatives underline that “[e]ntering new geopolitical or technological dependencies should be avoided” [Ibid.], whereas France calls for a strategy that would “be linked to innovation and deployment of industrial capacity in Europe, not based on imports from third countries” [Kurmayer, 2021]. These geopolitical arguments that lead to the strengthening of the microsystem’s resilience at the expense of the EU-Russia macrosystem are also shared by EU companies that produce RES [Grare, 2021].

At the same time, countries that traditionally support open international trade also support hydrogen import to the EU. Germany has already launched a targeted programme – H2Global – which it justifies by citing insufficient space in Germany and the EU to produce the needed amount of green hydrogen [Franke, 2021; Kurmayer, 2021; Schulz, 2019]. The Netherlands, Spain and Belgium are also active proponents of hydrogen import [EuroEFE, 2021; Simon, 2021a]. German representatives actively support the import of (mostly green) hydrogen from Russia [Schulz, 2020; Wehrmann, 2019]. Vice-President of the European Commission Frans Timmermans [Timmermans, 2020] and High Representative Jose Borrell [Borrell, 2021] also called for trade in hydrogen with Russia (including blue hydrogen during the transition period).

Discussions on hydrogen import are key for the second model of resilience, the one that reinstates resilience of both micro- and macrosystems. The EU’s constraints on import, on the other hand, will undermine the macrosystem of EU-Russia relations; the resources of the latter will not be taken into account. The EU’s openness to the supply of hydrogen from outside (including from Russia) will allow strengthening of the micro- and macrosystems at the same time and a more comprehensive use of the resources of both systems. From the theoretical point of view, the intensification of EU-Russia trade in hydrogen will also be an example of finding resilience in a new context (bouncing forward) and adjusting to new challenges.

Much like in previous cases, the limit on hydrogen import that leads to the increased resilience in the EU’s energy system at the expense of the macrosystem is based on the combination of environmental and geopolitical arguments. At the same time, synchronous enhancement of micro- and macrosystem resilience is based on economic arguments and effective use of different resources. Similar to the previous cases, the second model of resilience (that is enhancement of the resilience in the micro- and macrosystems) requires the recognition of the EU’s regulatory authority, its norms, and its rules. The formula “rules-based market” [EC, 2020b] is particularly noteworthy because it reflects the EU’s ambitions but also links hydrogen trade to a wider discussion on “rules-based order” that is the quintessence of the EU’s contemporary normative hegemony [Lavrov, 2021].

Which Model of Resilience?

The three cases above demonstrate that the EU at present articulates two competing models of resilience in the context of the Green Deal and energy transition. The first focuses on resilience of the EU’s energy system only (microsystem) and on its own resources, while undermining the resilience of the EU-Russia macrosystem. The second model presupposes a synchronous search for resilience in both micro- and macrosystems and the use of macrosystem resources for the microsystem. These cases demonstrate that the two models can be identified in both EU-Russia general relations and in more narrow fields of the Green Deal and energy transition.

The first model is based on the symbiosis of the two logics; these are ambitious goals in the field of RES, radical energy transition and geopolitical concerns, increase in the EU’s self-sufficiency, and perception of Russia as a threat. The European Commission instrumentalizes the geopolitical logics to stimulate members to bolder decisions in the field of energy transition

and the Green Deal, whereas companies that produce RES recur to this logic to limit competition. These developments lead to external players reproaching the EU for its protectionism.

The second model of resilience presupposes a more or less synchronous search for resilience in both micro- and macrosystems; it is based on the discourse about shared climate challenges and on economic arguments and member states' competences. In the second case this model of resilience is a part of the medium-term solution that can be viewed as bouncing back to the practices that existed previously. The third case, on the other hand, demonstrates adaptation to new challenges and conditions, that is, resilience as bouncing forward. The second (synchronous at the level of different systems) model of resilience is based on the EU's normative leadership. In the case of hydrogen, the EU even talks about the "rules-based market". In fact, here the EU follows a familiar path of leadership, yet its leadership is explained not so much by the universality of norms like democracy or market relations, but rather by its activities and achievements in the field of climate.

The juxtaposition of geopolitical and market logics in the EU's energy sector has been discussed at length [Siddi, 2018; Stoddard, 2013]. Yet, the present situation is characterized by a number of new points. First, the geopolitical logics reinforce protectionism and environmental arguments. Second, the division of member states into those that follow geopolitics and market logics is fluid; it is the result of their internal politics and economic constraints. Poland provides the most vivid example of this trend. This fluidity is a guarantee of the resilience of the EU-Russia energy system in the medium term. Third, the EU's discourse links geopolitics with resilience, whereas openness to resilience at the level of both systems and cooperation on the Green Deal is based on the EU's normative leadership.

The EU's discourse can differ from its policy; however, it demonstrates varying possibilities of how existing resources, information about them, communication, and human resources can be used to achieve resilience. From the theoretical point of view, the study also demonstrates that the systems of different levels can evolve in different directions; searching for a new equilibrium in one system might challenge another system. The choice of a model is the result of internal developments in the EU and its members. Russia's policies seem to be of secondary importance. Most likely the two models of resilience will coexist; yet their relative importance will change dynamically.

Finally, this study also allows for recommendations to Russia as to how to build energy cooperation with the EU. First, it seems inevitable that there will be a legal approximation between the EU and Russia in certain fields of energy transition and climate policy; this legal approximation is a prerequisite for the second model of resilience. However, it would be better for Russia to concentrate on technical aspects of this approximation rather than on its conceptualization in the binary terms of norm-setter and norm-taker. Otherwise, there is a high risk of EU-Russia normative competition [Lavrov, 2021] infecting cooperation in the field of energy transition and climate policy. Second, Russia must take more active steps in the field of climate policy; this is the only way to increase trust among EU members that Russia is an international climate policy partner, thus enhancing its reputation in this field and bolstering its weight in defining the rules and norms. These steps will also help to ensure that the second model of resilience prevails in EU-Russia energy relations in the longer run.

References

Amelang S. (2021). EU Indecision Over Gas as Green Investment Imperils Supply Security – German Utilities. *Clean Energy Wire*, 22 April. Available at: <https://www.cleanenergywire.org/news/eu-indecision-over-gas-green-investment-imperils-supply-security-german-utilities> (accessed 30 June 2021).

- Anderson B. (2015). What Kind of Thing Is Resilience? *Politics*, vol. 35, no. 1, pp. 60–6. Available at: <https://doi.org/10.1111%2F1467-9256.12079>.
- Bardon L. (2021). Speech, Experts and Business Representatives Discuss Prospects for Ecological Cooperation Between Russia and the EU. Russian International Affairs Council (RIAC) Seminar, Moscow, 21 April. Available at: <https://russiancouncil.ru/en/news/experts-and-business-representatives-discuss-prospects-for-ecological-cooperation-between-russia-and/> (accessed 30 June 2021).
- Borrell J. (2021). How to Deal With Russia? European Union External Action Service (EEAS) Blog, 28 June. Available at: https://eeas.europa.eu/headquarters/headquarters-homepage/100901/how-deal-russia_en (accessed 30 June 2021).
- Bourbeau P.A. (2018). A Genealogy of Resilience. *International Political Sociology*, vol. 12, no 1, pp. 19–35. Available at: <https://doi.org/10.1093/ips/olx026>.
- CEE Bankwatch Network (2021). The Role of Gas in the Recovery and Resilience Plans. Briefing, 31 May. Available at: https://bankwatch.org/wp-content/uploads/2021/05/2021-31-05_Briefing-on-RRF-and-gas_final.pdf (accessed 30 June 2021).
- Chandler D., Coaffee J. (eds) (2017). *The Routledge Handbook of International Resilience*. London: Routledge.
- Cherp A., Jewell J. (2011). The Three Perspectives on Energy Security: Intellectual History, Disciplinary Roots and the Potential for Integration. *Current Opinion in Environmental Sustainability*, vol. 3, iss. 4, pp. 202–12. Available at: <https://doi.org/10.1016/j.cosust.2011.07.001>.
- Coaffee J., Fussey P. (2015). Constructing Resilience Through Security and Surveillance: The Politics, Practices and Tensions of Security-Driven Resilience. *Security Dialogue*, vol. 46, iss. 1, pp. 86–105. Available at: <https://doi.org/10.1177%2F0967010614557884>.
- Ederer M. (2020). Speech. EU-Russia Climate Conference, Plenary Session 1, “Climate and Decarbonisation Strategies in the COVID-19 Era: Perspectives From Russia and the EU.” Moscow, 1–3 December. Available at: <https://www.skolkovo.ru/programmes/eu-russia-climate-conference/> (accessed 30 June 2021).
- EuroEFE (2021). Spain Positions Itself to Be Europe’s Green Hydrogen Hub. *Euractiv*, 24 May. Available at: <https://www.euractiv.com/section/energy/news/spain-positions-itself-to-be-europes-green-hydrogen-hub/> (accessed 30 June 2021).
- Euronews (2021). Brussels Delays Decision on Making Natural Gas and Nuclear Energy a Green Investment. 21 April. Available at: <https://www.euronews.com/2021/04/21/brussels-delays-decision-on-making-natural-gas-and-nuclear-energy-a-green-investment> (accessed 30 June 2021).
- European Commission (EC) (2018). In-Depth Analysis in Support of the Commission Communication COM(2018) 773: A Clean Planet for All: A European Long-Term Strategic Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy. Brussels, 28 November. Available at: https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_analysis_in_support_en_0.pdf (accessed 17 August 2021).
- European Commission (EC) (2019). Communication From the Commission to the European Parliament, the European Council, the Council, and the European Economic and Social Committee and the Committee of the Regions: The European Green Deal. COM(2019) 640 final. Brussels, 11 December. Available at: https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf (accessed 17 August 2021).
- European Commission (EC) (2020a). Communication From the Commission to the European Parliament and the Council. Strategic Foresight Report: Charting the Course Towards a More Resilient Europe. COM(2020) 493 final. Brussels, 9 September. Available at: [https://ec.europa.eu/transparency/documents-register/detail?ref=COM\(2020\)493&lang=en](https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2020)493&lang=en) (accessed 17 August 2021).
- European Commission (EC) (2020b). Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Hydrogen Strategy for a Climate-Neutral Europe. COM(2020) 301 final. Brussels, 8 July. Available at: https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf (accessed 17 August 2021).
- European Commission (EC) (2020c). Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Powering a Climate-Neutral Economy: An EU Strategy for Energy System Integration. COM(2020) 299 final. Brussels,

8 July. Available at: https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf (accessed 17 August 2021).

European Commission (EC) (2021a). Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties: Directing Finance Towards the European Green Deal. COM(2021) 188 final. Brussels, 21 April. Available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2021:188:FIN> (accessed 17 August 2021).

European Commission (EC) (2021b). Countries and Regions: Russia. Available at: <https://ec.europa.eu/trade/policy/countries-and-regions/countries/russia/> (accessed 30 June 2021).

European Commission and High Representative of the Union for Foreign Affairs and Security Policy (2021). Joint Communication to the European Parliament, the European Council and the Council: On EU-Russia Relations – Push Back, Constraints and Engage. Brussels, 16 June. JOIN(2021) 20 final. Available at: <https://ec.europa.eu/info/sites/default/files/joint-communication-eu-russia-relations.pdf> (accessed 17 August 2021).

European Council (2020). European Council Meeting (10 and 11 December 2020): Conclusions. EUCO 22/20. Brussels, 11 December. Available at: <https://www.consilium.europa.eu/media/47296/1011-12-20-euco-conclusions-en.pdf> (accessed 17 August 2021).

European Union External Action Service (EEAS) (2016). Remarks by High Representative/Vice-President Federica Mogherini at the Press Conference Following the Foreign Affairs Council. Bruxelles, 14 March. Available at: https://eeas.europa.eu/headquarters/headquarters-homepage/5490/remarks-by-high-representative-vice-president-federica-mogherini-at-the-press-conference-following-the-foreign-affairs-council_en (accessed 30 June 2021).

Folke C., Carpenter S., Elmqvist T., Gunderson L., Holling C.S., Walker B. (2002). Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations. *Ambio*, vol. 31, no 5, pp. 437–40. Available at: <http://dx.doi.org/10.1579/0044-7447-31.5.437>.

Franke A. (2021). Germany Launches H2Global System to Galvanize Green Hydrogen Imports. *S&P Global*, 17 March. Available at: <https://www.spglobal.com/platts/ru/market-insights/latest-news/electric-power/031721-germany-launches-h2global-system-to-galvanize-green-hydrogen-imports> (accessed 30 June 2021).

Gatto A., Drago C. (2020). A Taxonomy of Energy Resilience. *Energy Policy*, vol. 136 111007. Available at: <https://doi.org/10.1016/j.enpol.2019.111007>.

Grare L. (2021). Europe Cannot Simply Rely on Third Countries for Its Green Hydrogen. *Euractiv*, 8 June. Available at: <https://www.euractiv.com/section/energy/opinion/europe-cannot-simply-rely-on-third-countries-for-its-green-hydrogen/> (accessed 30 June 2021).

Holling C.S. (1973). Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics*, vol. 4, no 1, pp. 1–23. Available at: <https://doi.org/10.1146/annurev.es.04.110173.000245>.

Kotsur G.V. (2019). Vozniknovenie stressoustojchivogo sub"ekta: krizisnoe vzaimodejstvie gosudarstva i obshchestva [The Emergence of a Stress-Resistant Subject-Object Crisis Interaction Between the State and Society]. *Vestnik Sankt-Peterburgskogo universiteta. Serija Mezhdunarodnye otnoshenija*, vol. 12, no 1, pp. 93–112. Available at: <https://doi.org/10.21638/11701/spbu06.2019.106>.

Kurmayer N. (2021). EU Countries Clash Over Scale of Future Hydrogen Imports. *Euractiv*, 14 June. Available at: https://www.euractiv.com/section/energy-environment/news/eu-countries-clash-over-scale-of-future-hydrogen-imports/?utm_source=piano&utm_medium=email&utm_campaign=9707&pnespid=hORzuaBH XxyN220q68vxnuv2G6am4btsdsbJHkaVAg (accessed 30 June 2021).

Lavrov S.V. (2021). O prave, pravah i pravilah [On the Law, Rights and Rules]. *MID*, June 28. Available at: https://www.mid.ru/ru/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/4801890 (accessed 30 June 2021).

Roegel P.E., Collier Z.A., Mancillas J., McDonagh J.A., Linkov I. (2014). Metrics for Energy Resilience. *Energy Policy*, vol. 72(c), pp. 249–56. Available at: <https://doi.org/10.1016/j.enpol.2014.04.012>.

Romanova T.A. (ed.) (2019). *Koncepcija stressoustojchivosti Evropejskogo sojuza: artikuljacija i posledstvija dlja Rossii* [The European Union's Resilience Concept: Articulation and Implications for Russia]. St Petersburg: St Petersburg University.

- Russian International Affairs Council (RIAC) (2021). Fares Kilzie: Europe's "Green Deal" Must Become a Eurasian Green Deal. 5 June. Available at: <https://russiancouncil.ru/en/analytics-and-comments/interview/fares-kilzie-europe-s-green-deal-must-become-a-eurasian-green-deal/> (accessed 30 June 2021).
- Santos Silva A. (2021). Speech at the Tenth Meeting of the EU-Russia Series, Russian International Affairs Council, Moscow, 31 May. Available at: <https://russiancouncil.ru/en/analytics-and-comments/analytics/russia-and-the-european-union-relations-portugal/> (accessed 30 June 2021).
- Schulz F. (2019). Germany Eager to Become Global Leader in Developing Hydrogen Technologies. *Euractiv*, 24 July. Available at: <https://www.euractiv.com/section/energy-environment/news/germany-eager-to-become-global-leader-in-developing-hydrogen-technologies/> (accessed 30 June 2021).
- Schulz F. (2020). Franco-German Team-up Aims to Drive Hydrogen Production Forward. *Euractiv*, 11 September. Available at: <https://www.euractiv.com/section/energy/news/franco-german-team-up-aims-to-drive-hydrogen-production-forward/> (accessed 30 June 2021).
- Siddi M. (2018). The Role of Power in EU-Russia Energy Relations: The Interplay Between Markets and Geopolitics. *Europe Asia Studies*, vol. 70, no 10, pp. 1552–71. Available at: <https://doi.org/10.1080/09668136.2018.1536925>.
- Simon F. (2020). Eight EU States Back "Natural Gas" in Net-Zero Transition. *Euractiv*, 22 May. Available at: <https://www.euractiv.com/section/energy-environment/news/exclusive-eight-eu-states-back-natural-gas-in-net-zero-transition/> (accessed 30 June 2021).
- Simon F. (2021a). Belgian Port Lays Out Plans for "Massive" Imports of Green Hydrogen. *Euractiv*, 28 January. Available at: <https://www.euractiv.com/section/energy-environment/news/belgian-port-lays-out-plans-for-massive-imports-of-green-hydrogen/> (accessed 30 June 2021).
- Simon F. (2021b). EU Does Not Exclude Funding Gas, Highways Under Green Recovery Plan. *Euractiv*, 8 February. Available at: <https://www.euractiv.com/section/energy-environment/news/eu-does-not-exclude-funding-gas-highways-under-green-recovery-plan/> (accessed 30 June 2021).
- Stoddard E. (2013). Reconsidering the Ontological Foundations of International Energy Affairs: Realist Geopolitics, Market Liberalism and a Politico-Economic Alternative. *European Security*, vol. 22, iss. 4, pp. 437–63. Available at: <https://doi.org/10.1080/09662839.2013.775122>.
- Taylor K. (2021a). "Low Hanging Fruit": Eastern EU States Eye Existing Gas Network for Hydrogen. *Euractiv*, 15 February. Available at: <https://www.euractiv.com/section/energy/news/low-hanging-fruit-eastern-eu-states-eye-existing-gas-network-for-hydrogen/> (accessed 30 June 2021).
- Taylor K. (2021b). Infrastructure Dispute Reveals Deep Divisions in Europe Over Gas. *Euractiv*, 14 June. Available at: <https://www.euractiv.com/section/energy/news/infrastructure-dispute-reveals-deep-divisions-in-europe-over-gas/> (accessed 30 June 2021).
- Timmermans F. (2020). Keynote Speech. EU-Russia Climate Conference, Plenary Session 1, "Climate and Decarbonisation Strategies in the COVID-19 Era: Perspectives From Russia and the EU." Moscow, 1–3 December. Available at: <https://www.skolkovo.ru/programmes/eu-russia-climate-conference/> (accessed 30 June 2021).
- Walker J., Cooper M. (2011). Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation. *Security Dialogue*, vol. 42, iss. 2, pp. 143–60. Available at: <https://doi.org/10.1177%2F0967010611399616>.
- Wehrmann B. (2019). "The World Needs Russia" to Solve Climate Crisis – German Development Minister. *Clean Energy Wire*, 29 November. Available at: <https://www.cleanenergywire.org/news/world-needs-russia-solve-climate-crisis-german-development-minister> (accessed 30 June 2021).
- Wettengel J. (2021) Gas Pipeline Nord Stream 2 Links Germany to Russia, but Splits Europe. *Clean Energy Wire*, 16 July. Available at: <https://www.cleanenergywire.org/factsheets/gas-pipeline-nord-stream-2-links-germany-russia-splits-europe> (accessed 30 June 2021).