



Secure and Sustainable? Unveiling the Impact of the Russian War on EU Energy Governance

Michèle Knodt, Marc Ringel, and Nils Bruch

Initially, Russia's war of aggression against Ukraine raised fears in many European countries of supply shortages due to the European Union's (EU) heavy dependence on Russian oil, gas and coal. Dependence on Russian gas, in particular, was one of the biggest threats to the EU's energy security because of its pipeline-bound nature and the difficulty

M. Knodt (✉)

Institute of Political Science, Technical University of Darmstadt, Darmstadt,
Germany

e-mail: knodt@pg.tu-darmstadt.de

M. Ringel

European Chair for Sustainable Development and Climate Transition, Sciences
Po, Paris, France

e-mail: Marc.ringel@sciencespo.fr

N. Bruch

Institute of Political Science, Technical University of Darmstadt, Darmstadt,
Germany

e-mail: bruch@pg.tu-darmstadt.de

of substituting it. In consequence, the issue of security of supply was put high on the agenda. Overall, EU energy policy pursues the triangle of competitiveness, sustainability and (security of) supply. In the history of European integration, these objectives have had different weightings: from a strong focus on competition in the 1950s, to a focus on security of supply in response to external shocks such as the oil crises in the 1970s, to the sustainability objective of the European Green Deal (EGD) in recent years. The aggression against Ukraine and the strong focus on energy security led some to speculate whether energy transformation and climate policy was being marginalised or if, on the contrary, it would promote a higher degree of coherence of goals and instruments between energy security and climate goals (Osička and Černoch 2022; Giuli and Oberthür 2023). Our main research question therefore asks what the impact of the war of aggression against Ukraine will be on energy and climate policy, particularly in terms of a possible downgrading of the sustainability target.

Many of the short-term responses of the European Member States point to a downgrading of the energy- and climate policy on the path to climate neutrality in 2050, at least in an initial period, and appear to be following a “security first” policy, as we will show in Sect. “[The Security-Sustainability Nexus: REPowerEU for Secure and Sustainable EU Energy Policy](#)”. For example, coal-fired power have been brought back into operation and Member States have focused on replacing Russian gas with liquefied natural gas (LNG) delivered by sea. This in turn hit European countries hard, leading to a price increase in global energy markets. Many suppliers exploited the weak negotiating positions of individual EU countries and their failure to coordinate among each other by setting their prices strategically. The unilateral focus on finding alternative suppliers and diversifying supply furthermore seems to run the risk of missing climate targets and marginalising action on the climate crisis. However, it has also quickly become clear that the energy crisis that the EU is facing is a crisis of fossil fuels, of their prices and of their availability. This demonstrates that energy security and sustainability are not mutually exclusive. Our paper will show that, on the contrary, the war has promoted a greater degree of coherence between goals and instruments, and thus the linkage between energy security and climate goals (Sect. “[The Security-Sustainability Nexus: REPowerEU for Secure and Sustainable EU Energy Policy](#)”). The war could even lead to a frontloading and strengthening of the Green Deal and thus become a catalyst for

Europe's energy transition (as is looking likely with respect to the REPowerEU package). However, a closer look at the legislation shows that the devil lies sometimes in the detail—as we will show in Sect. “[Hydrogen: Bringing Together Energy Security and Sustainability?](#)” using hydrogen as an example. Structural changes in European energy policy have accompanied these developments. Especially in the first year, as we have seen only once before in the case of the pandemic, the EU made extensive use of the option of emergency legislation. This abridged procedure, which bypasses the European Parliament, is associated with a deficit of legitimacy that has to be weighed up (Sect. “[EU Emergency Measures: Quick But Democratically Challenging](#)”). Moreover, EU energy policy has always faced a key obstacle to its effectiveness: the Lisbon Treaty's sovereignty reservation regarding European intervention in national energy policies and measures. However, the Russian war of aggression has also had an impact on the hardening of this otherwise soft energy governance beyond what has been achieved in the last five years (Sect. “[REPowerEU and Emergency Measures as Instruments for Hardening Soft Energy Governance](#)”). We will conclude by attempting to make a preliminary overall assessment of these first eighteen months of war and the *Zeitenwende* in energy policy.

“SECURITY FIRST” IN A DEPENDENT EU?

The EU already, well before February 2022, faced a significant challenge regarding its energy dependency. EU Member States are highly reliant on external energy sources, which have substantial impacts on their economic stability and geopolitical position. Reasons for the EU's energy dependency are its limited domestic fossil energy resources such as coal, oil and gas. As a result, a significant portion of EU energy imports traditionally comes from countries outside the Union.

Since the end of the 1960s, and through the oil crisis of the 1970s, this dependence has become a cause for concern in Brussels and European capitals (Knodt 2018). The European Commission, in particular, has since been at the forefront of calls for a much greater diversification of European imports. It was supported by the Eastern European states, especially with regard to the ever-increasing dependence on Russian gas, in which Germany in particular stood out in a negative light.

The risks associated with these dependencies were always obvious. Firstly, price volatility is posing a high risk to EU energy policy. Energy

import prices can fluctuate significantly as we witnessed in autumn 2021, causing uncertainties for consumers and the economy, with a high impact on the competitiveness of the European industry. Secondly, geopolitical dependence has been a threat since the beginning of the EU's energy policy. The Commission, in particular, was aware of the danger of politically unstable suppliers and regional crises, and the associated risk of supply disruptions and coercive behaviour on the part of suppliers, even if the current development with the almost total cessation of energy trade with Russia seemed unimaginable to many Europeans. Thus, energy dependence has continued to increase since the 1970s.

After 24 February 2022, the EU dramatically reduced its dependence on Russian imports. Already on 24 February, the European Council condemned the war of aggression and invited the Commission to propose emergency energy measures. The EU has adopted a twin-track approach. On the one hand, it has adopted energy-related measures as part of its sanctions. On the other, it has adopted legislative measures in the form of emergency legislation, but also through its REPowerEU legislative package to decrease Russian fossil fuel imports and reduce supply dependency (see below for both) (Figs. 7.1 and 7.2).

Energy has been a crucial part of the sanctions since they began after 24 February, as Table 7.1 shows. However, it was clear from the outset that it was not possible to impose sanctions on Russian energy imports to an extent that would have been very damaging to the Russian economy, as the European economy was too dependent on Russian energy (Boehm and Wilson 2023). Moreover, states with close political ties to Russia, most notably Hungary, torpedoed a strict EU sanctions policy, as Patrick Müller and Peter Slominski show in their contribution to this volume.

Thus, Russian coal exports to the EU were completely banned when the coal sanctions agreed in the fifth EU sanctions package (April 2022) came into force, in August 2022. The embargo on coal imports was part of the sixth sanctions package, which was agreed in June 2022. It applied to imported crude oil after 5 December 2022 and to imported refined petroleum products after 5 February 2023. The oil embargo covers around 90 per cent of Russia's oil imports to the EU. Temporary crude oil deliveries by tanker to Bulgaria and Croatia, as well as deliveries to the two countries supplied by the Druzhba pipeline—Slovakia and Hungary—are limited until the end of 2023. In addition, a price cap on Russian oil sold to countries outside the EU was introduced in the eighth sanctions package (agreed in October 2022). The EU agreed a

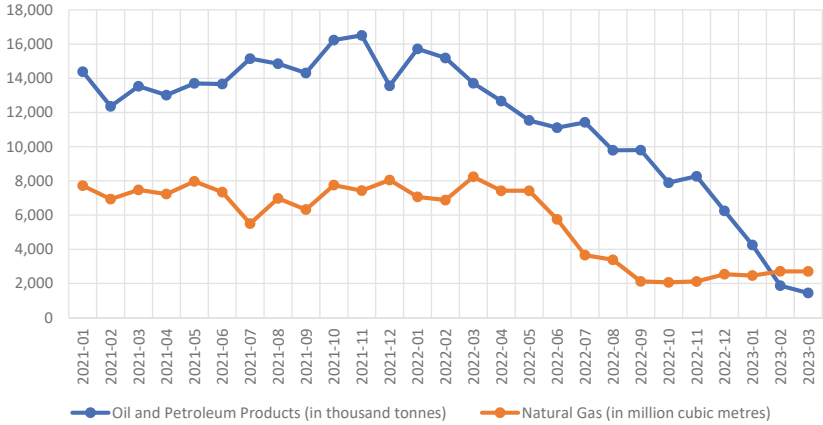


Fig. 7.1 Monthly Imports of Oil and Petroleum Products and Natural Gas from Russia to the European Union from January 2021 to March 2023. *Source* Data: Eurostat, NRG_TI_OILM, https://ec.europa.eu/eurostat/databrowser/product/view/NRG_TI_OILM;NRG_TI_GASM, https://ec.europa.eu/eurostat/databrowser/product/view/NRG_TI_GASM

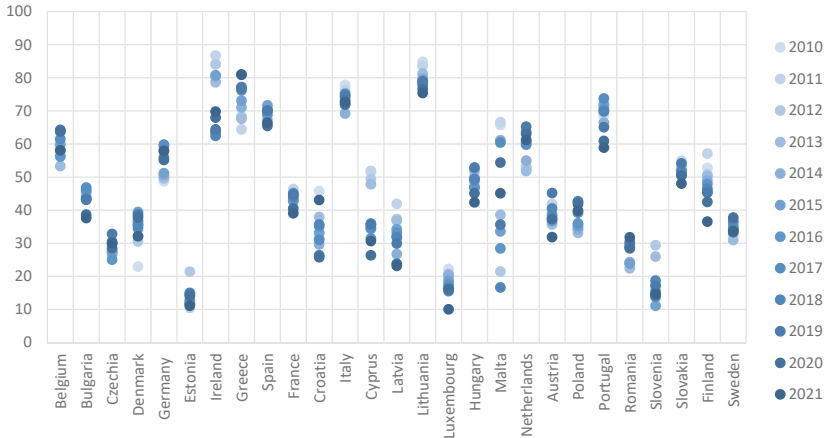


Fig. 7.2 Import Dependency on Third Countries from 2010 to 2020 in per cent. *Source* Data: Eurostat, NRG_IND_ID3CF, https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID3CF/default/table?lang=en

25 February (2nd package)	Export ban on specific goods and technologies in oil refining and restrictions on the provision of related services.
28 February (3rd package)	Individual sanctions on persons and entities in the Russian state oil and gas sector (continuing within the following sanction packages).
15 March (4th package)	Prohibition of new investments in the Russian energy sector , as well as the introduction of comprehensive export restriction on equipment, technology and services for the energy industry.
8 April (5th package)	Prohibition of the purchase, import or transfer of coal and other solid fossil fuels into the EU if they originate in Russia or are exported from Russia, as from August 2022.
3 June (6th package)	Prohibition of the purchase, import or transfer of crude oil and certain petroleum products from Russia into the EU. The phasing out of Russian oil will take from 6 months for crude oil to 8 months for other refined petroleum products . Temporary exception for imports of crude oil by pipeline into those EU Member States that, due to their geographic situation, suffer from a specific dependence on Russian supplies and have no viable alternative options. Bulgaria and Croatia will also benefit from temporary derogations concerning the import of Russian seaborne crude oil and vacuum gas oil respectively.
6 October (8th package)	The setting of a price cap related to the maritime transport of Russian oil for third countries and further restrictions on the maritime transport of crude oil and petroleum products to third countries.
16 December (9th package)	Prohibition targeting new investments in the Russian energy sector by additionally prohibiting new investments in the Russian mining sector , with the exception of mining and quarrying activities involving certain critical raw materials.
25th February (10th package)	Prohibition of the provision of gas storage capacity (with the exclusion of the part of LNG facilities) to Russian nationals, in order to protect the security of gas supply in the EU, and avoid Russia's weaponisation of its gas supply and risks of market manipulation.

Table 7.1 Energy related Sanctions against Russia after 24 February 2023
Source https://finance.ec.europa.eu/eu-and-world/sanctions-restrictive-measures/sanctions-adopted-following-russias-military-aggression-against-ukraine_en#timeline-measures-adopted-in-2022-2023

similar cap on refined oil products from Russia sold on world markets, on 5 February 2023. There are still no sanctions on natural gas, because the dependence on gas was too great and the degree of rapid substitutability was too low. However, Russia has sharply reduced the volumes it exports to EU markets, and gas supplies on all pipeline routes from Russia (except Turk Stream) slowed dramatically in 2022. However, since the attack on the Nordstream I and II gas pipelines through the Baltic Sea on 26 September, the supply of Russian gas to Germany has come to a virtual standstill. The approval process for Nordstream II, which is not yet operational, was suspended until further notice anyway due to the war.

Recent developments include the EU's increased intervention in EU gas markets through a joint gas procurement mechanism, the facilitation and regulation of cross-border LNG deliveries and the development of a new EU gas pricing index, which will reduce the dependence on Russian pipeline gas. It also created a temporary market correction mechanism in December 2022, which acts as a price cap for natural gas when prices are exceptionally and unreasonably high (in response to high gas prices in the summer of 2022). Only imports of LNG from Russia have seen a slight increase and account for less than 15% of the EU's LNG imports. The latter can be explained by infrastructure constraints for EU LNG imports. LNG import terminals are unevenly distributed across the EU. The highest capacities are located in Spain, but it has weak interconnection capacity with France and thus with other EU countries. Against this backdrop, many EU countries increased their LNG capacity in 2022, quickly approving the construction of LNG terminals and smaller floating gas storage and regasification units. The most notable example is Germany, which had no LNG capacity until February 2022, but managed to instal one floating LNG terminal with unprecedented speed by December 2022, with several more planned to be completed by the end of 2023. In any case, the LNG solution comes with a lock-in effect on fossil energy, counteracting the goal of climate neutrality and at the same time leaving the EU vulnerable to market constraints, high prices and overall dependence on third country supplies. To mitigate the latter, the EU has developed its relations with LNG exporting countries such as the US, Norway and Qatar, negotiating medium-term supply commitments. However, this focus on the search for alternative suppliers and the diversification of supply (Lambert et al. 2022) has resulted in a further increase in prices on world energy markets, with a significant impact on European countries as well (IEA 2022a). Many supplier countries took

advantage of the weak negotiating position of the individual EU states and their lack of coordination through strategic pricing (Boehm and Wilson 2023).

The example of LNG shows that part of the management of the crisis also involved restructuring the supply of fossil fuels (Saul 2022). This was also accompanied by coal-fired plants starting up again to replace missing gas supplies, and an extension of the lifetime of coal-fired power plants. These measures go hand in hand with the risk of missing climate targets and marginalising action on the climate crisis. However, it soon became clear that the crisis facing Europe was a fossil fuel crisis, characterised by limited fossil fuel resources and a projected continued growth in global demand. As this situation of increased competition for resources is leading to increased uncertainty in the market and the resulting fluctuations in prices, the EU has a strong interest in not being caught unprepared. Combined with the costs of climate change (IPCC 2021), there is a clear case for moving forward rapidly on EGD, along with the security of energy supply.

THE SECURITY-SUSTAINABILITY NEXUS: REPOWEREU FOR SECURE AND SUSTAINABLE EU ENERGY POLICY

In 2019, European Commission President Ursula von der Leyen announced the European Green Deal, a plan to achieve a carbon-neutral European economy and society by 2050 (European Commission 2019; Elkerbout et al. 2020). To this end, the “European Climate Law” (Regulation (EU) 2021/1119) has set the target of achieving climate neutrality by 2050 at the latest and a net reduction of at least 55 per cent of greenhouse gas emissions by 2030 compared to 1990 levels. In July and December 2021, measures to implement the EGD were bundled into a legislative package called “Fit for 55” (FF55) (European Commission 2021), covering many areas such as the European Emissions Trading System (ETS), renewable energy and energy efficiency. The aim of the package is to adapt all relevant EU legislation to these increased climate ambitions. While most of the legislation in the FF55 package was under negotiation, the Russian war against Ukraine began. It was clear to the Commission that, in addition to the mitigation of the negative effects of the war on the energy sector, the energy transition in particular would have to be advanced more rapidly than had been envisaged in the FF55. Against this background, the European Commission presented the

REPowerEU plan in May 2022, a strategy detailing medium to long-term measures which further raised the ambition of transformation and made structural adjustments in order to become independent of Russian energy by 2030. The REPowerEU package thus combined the sustainability and the security of supply aim, above all by adding security of energy supply, but also affordability as policy goals to the FF55 approach (Schlacke et al. 2022). Interestingly, it is strongly oriented towards the more general proposals of the International Energy Agency to ensure energy security in Europe (IEA 2022b) and specifically proposes the following (Schlacke et al. 2022; Widuto 2022):

- An increase of the target for the use of renewable energies from 40 to 45% by 2035;
- An increase of the target for energy savings from 9 to 13% by 2030;
- The application of short-term energy saving measures, as set out in a separate “EU SaveEnergy” Communication (European Commission 2022d);
- The alignment of governance in the Energy Efficiency Directive (EED) with the Renewable Energy Directive (RED III) and the further development RED III to support the higher level of ambition in both policy areas;
- The channelling of funding into these areas and an increase of funding for European research and development programmes such as Horizon Europe or LIFE;
- The acceleration of technologies and partnerships to develop green hydrogen as a new resource for Europe, both in terms of domestic production and import partnerships.

First and foremost, these proposals increase the ambition in key areas that are necessary to reach climate neutrality and thus advance the planned implementation of the EGD. Concerns remain about achieving ever more ambitious policy targets (Table. 7.2).

As seen in the case of the EU 2020 targets, there were already a number of obstacles to achieving these comparatively “low” targets (Ringel and Knodt 2018). Even the previously valid 2030 targets for the increase of both renewable energy and energy efficiency were achieved only for the renewable energy targets by the target of the sum of the Member States ambitions within the European Energy and Climate Plans

	Reduction in CO ₂ emissions	Share of renewable energies	Increase in energy efficiency
2020 targets (2008)	20%	20%	20%
2030 targets (2014)	40%	27%	27%
2030 targets (2018)	40%	32%	32.5%
2030 targets (2021) “Fit for 55” proposal	61%	40%	36/39%*
2030 targets (2022) „REPowerEU“ proposal	61%	45% (NECPs 2021 EU=33%)	40/43%* (NECPs 2021 EU=just under 30%)

*expressed in final/primary energy reduction

Table 7.2 Development of the EU climate and energy targets

(NECPs) after the recommendations of the Commission (33 per cent / demanded 32 per cent). In the case of the efficiency targets, these were still not met (30 per cent/ demanded 32.5 per cent). The increase of the targets by approx. 10 percentage points for 2030, proposed in the REPowerEU, will alone greatly exceed the previous ambitions of the Member States, even excluding the actual implementation, because of the soft governance approach of the EU energy policy (Knodt et al. 2021, see Fig. 7.4 and Sect. “REPowerEU and Emergency Measures as Instruments for Hardening Soft Energy Governance”).

In any case, the REPowerEU package shows that the measures of the EU in reaction towards the Russia’s war of aggression against Ukraine cannot be interpreted as a sole reorientation towards security of supply at the expense of energy transformation. Rather, the measures should be seen as a strengthening of the security and sustainability nexus.

HYDROGEN: BRINGING TOGETHER ENERGY SECURITY AND SUSTAINABILITY?

In the context of the energy security-sustainability nexus, hydrogen is another element with the potential to decrease import dependency on fossil fuels, while contributing to the climate neutrality objective of the European Union (European Commission 2022e). Hydrogen can be used in hard to abate sectors, like the chemical industry, steelmaking, shipping and aviation which have a lack of options for direct electrification and a high dependence on fossil fuels (Gibb et al. 2022). Depending on the production method, it can be differentiated between conventional hydrogen from fossil fuels, renewable hydrogen and low-carbon hydrogen. Renewable hydrogen is produced by an electrolyser that splits water into hydrogen and oxygen, using electricity generated by renewable energy installations, therefore producing hydrogen almost emission-free. In low-carbon hydrogen production, fossil fuels with subsequent carbon capture, utilisation and storage are used to significantly decrease emissions and are therefore considered as useful for decarbonisation. Furthermore, low-carbon hydrogen can also be produced using nuclear energy, providing another method causing less emissions than conventional fossil-based hydrogen. As the development of the market is in its infancy, the production costs are still high in comparison with fossil-based hydrogen and it will take time until renewable and low-carbon hydrogen will become cost-competitive (IEA 2022c; Janssen et al. 2022).

In 2020, the European Commission published the EU Hydrogen Strategy (European Commission 2020) to address the barriers of the hydrogen uptake, and proposed a target of 40 GW electrolyser capacity by 2030, accompanied by measures to enable the development of a hydrogen market. Following the strategy, the Commission integrated hydrogen in the regulatory framework, notably the REDIII with renewable hydrogen targets in the transport sector and delegated acts setting requirements for the production, and greenhouse gas emission reductions, of renewable hydrogen (European Commission 2021). Additionally, the Gas and Hydrogen Markets Package defines low-carbon hydrogen and sets up the foundations of the hydrogen market ramp-up (European Commission 2021a; Barnes 2023).

The development of a hydrogen policy framework was already ongoing when the Russian invasion of Ukraine began in 2022 and caused the energy crisis in Europe. As hydrogen was already considered a major

element of the energy transition with the potential to substitute natural gas, hydrogen experienced another push through REPowerEU that integrated the energy carrier throughout the plan. With the hydrogen market still in its infancy, the use of hydrogen was approached as a mid to long-term solution, rather than a short-term measure to counter supply shortages. REPowerEU is intended to set additional foundations for the uptake of renewable hydrogen and to introduce new instruments and objectives. Under the so-called hydrogen accelerator, 20 million tonnes of hydrogen should be available by 2030 in the European Union, split into 10 million tonnes of domestic production and 10 million tonnes of imports, which could replace approximately 27 bcm of natural gas by 2030 (European Commission 2022f, 27). These new objectives represent a significant increase of hydrogen volumes, as the EU Hydrogen Strategy target of 40 GW electrolyser capacity would only account for 5.6 million tonnes of renewable hydrogen (Bonciu 2022). In the REPowerEU plan, the Commission also proposed new sub-targets in the industry and transport sector for Renewable fuels of non-biological origin (RFNBOs) in the REDIII to the European Parliament and Council, and urged for a rapid conclusion of the legislative process of the Gas and Hydrogen Markets Package. Additionally, it declared the publication of revised delegated acts for the production and definition of renewable hydrogen. Furthermore, efforts to accelerate the development of the hydrogen infrastructure and mobilise additional funding and research is part of the plan. The EU Energy Platform, established to facilitate joint gas purchases of Member States, also includes hydrogen and is another instrument to enable the uptake of hydrogen in Europe. Moreover, an additional instrument to the measures of REPowerEU was proposed by the European Commission in 2023: the European Hydrogen Bank (European Commission 2023). This initiative aims to facilitate investments and establish a renewable hydrogen market by launching auctions for domestic producers who can receive fixed premiums for renewable hydrogen. Plans for double-sided auctions have also been put forward for renewably hydrogen producers in third-countries.

The development of European hydrogen policy since 2020 shows that hydrogen is acknowledged as a mid to long-term solution to improve energy security, as domestically produced hydrogen can substitute imported fossil fuels, while simultaneously advancing decarbonisation. While the EU Hydrogen Strategy mentions the advantages of hydrogen for the security of supply, REPowerEU integrates hydrogen as a

central component to strengthen energy security and so significantly raises the level of ambition for renewable hydrogen. Throughout the documents, the focus is on renewable hydrogen, while fewer details are given about the role low-carbon hydrogen should play. The EU Hydrogen Strategy states that during a transitional phase towards a renewable hydrogen economy, support for low-carbon hydrogen is needed, but should not lead to stranded assets. This is not followed up in REPowerEU, with its focus on renewable hydrogen and the leaving aside of low-carbon hydrogen. This can be explained by the changed circumstances, as the REPowerEU plan was developed as a measure against an acute energy crisis, in particular a natural gas crisis. In this context, it is not surprising that natural gas-based low-carbon hydrogen is not included as a solution to the shortage of gas supply. Yet low-carbon hydrogen is not abandoned in the European Union and is addressed outside of the REPowerEU plan.

Agreements in the field of energy between the EU and third countries include sections about provisions for hydrogen imports. The agreements between the EU and Egypt/Israel in 2022 (European Commission 2022g), Japan in 2022 (European Commission 2022h), Ukraine in 2023 (European Commission 2023a) and the EU-Norway Green Alliance formed in 2023 (European Commission 2023b) integrate renewable hydrogen, as well as low-carbon hydrogen. Furthermore, low-carbon hydrogen is integrated into the EU regulatory framework through the Gas and Hydrogen Markets Directive (European Commission 2021b), that defines low-carbon hydrogen, and should be followed by delegated acts with detailed requirements for production.

Additionally, the debate over the role of nuclear power in the energy transition is drawn into the development of European hydrogen policy. The energy security-sustainability nexus is approached by some Member States with a focus on nuclear energy that should ensure a reduction of fossil fuel import dependency in combination with low-carbon emissions. The establishment of a nuclear alliance of European governments planning to extend their fleet of nuclear power plants, or to phase-in nuclear energy, showcases the renewed interest and relevance of nuclear energy (Messad 2023). Other Member States refrain from the use or phasing-out of nuclear energy, and have a critical position on the inclusion of nuclear power in European energy and climate policy (Messad 2023a). This controversy was particularly evident during the legislative process of the revision of the Renewable Energy Directive. The adoption of REDIII

was put on hold after an interinstitutional agreement between Council and Parliament had already been reached in the trilogues. The cause of the delay can be ascribed to a group of Member States led by France, pushing for both the recognition of nuclear power for reaching climate neutrality and reducing GHG emissions, as well as exemptions from renewable hydrogen industry targets in the REDIII, which ultimately were added as recitals in the Directive (Messad [2023b](#)).

While the strategic approach of the European hydrogen policy is focused on renewable hydrogen to merge energy security and sustainability objectives, the international agreements and the development of the regulatory framework gives evidence that low-carbon hydrogen is integrated with the intention of strengthening the security of supply. Yet, there are potential risks for both energy security and sustainability associated with low-carbon hydrogen production and use. First, the construction of new capacities for production can lead to carbon lock-ins and new path dependencies on fossil technologies, even if carbon capture technologies are used. This can lead to a delay in decarbonisation and in independence from fossil energy. Second, regarding energy security, low-carbon hydrogen can be used to augment supply, as renewable hydrogen production capacities might not be sufficient to satisfy potential demand. However, there is a risk that new import dependencies with countries supplying low-carbon hydrogen arise. To mitigate this risk, the European Union should extend their strategic approach to hydrogen and formulate an import strategy that highlights the importance of import diversification in the field of hydrogen, in line with sustainability standards and a long-term perspective to phase out fossil-based hydrogen.

EU EMERGENCY MEASURES: QUICK BUT DEMOCRATICALLY CHALLENGING

In response to the war of aggression, the EU has taken short-term measures focused on the nexus between security of supply and sustainability. In doing so, it makes partial use of the provisions for emergency measures for such crises and is thus incurring a legitimacy deficit.

In the course of March 2022, these short-term proposals were fleshed out by the Commission in the form of regulations, mainly based on the emergency Article 122 of the Treaty on the Functioning of the Union (TFEU), on gas storage, joint fuel procurement, reducing dependence on Russia and measures to cushion citizens from high energy prices.

A first regulation on gas storage could be adopted swiftly in June with Regulation (EU) 2022/1032, as it was based on the European Regulation on measures to safeguard security of gas supply (EU) 2017/1938 (SoS Regulation) from 2010, which was amended in 2017. Due to the low level of gas storage in the EU, it was decided that underground gas storage facilities on the territory of Member States had to be at least 80% full before the start of the 2022/2023 winter and must be 90% full before the start of the following winters. The Regulation also provides for the national implementation of a three-level escalation system (early warning, alert and emergency) in the event of a supply crisis.

The EU used the emergency Article 122 TFEU in areas where it was not possible to rely on existing secondary legislation. Thus, in response to the threat of a short-term disruption of Russian gas supplies, it proposed the Gas Emergency Plan (European Commission 2022b, Council of the European Union 2022a) on 22 July 2022 as a short-term measure. It was adopted by the Council on 4 August 2022 as Council Regulation (EU) 2022/1369 on coordinated “gas demand reduction measures” and came into force on 9.8.2022 for one year. It commits Member States to reducing gas consumption by 15% from 1 August 2022 to 31 March 2023 compared to their average consumption over the last five years. In case of the non-realisation of the savings targets, the EU could have triggered the alert level. Thus, the savings targets, which had been voluntary until then, would have become binding if at least 15 EU countries, which together accounted for at least 65% of the total population of the Union, had agreed. Regulation 2022/1369 is based on Article 122, paragraph 1 TFEU.

Council Regulation (EU) 2022/1854 of 6 October 2022 on emergency measures in response to high energy prices, which among other things introduced the excess profits tax for energy companies announced by the Commission, is also based on Article 122 TFEU. As early as 14 September 2022, EU Commission President Ursula von der Leyen had announced a draft regulation for the introduction of an excess profits tax for energy companies in the European Parliament. The background to this was the high electricity price that had set in, due to the high gas price and the merit order principle,¹ on which the European electricity

¹ Under the merit order principle, the electricity price is set by the most expensive producer clearing the market.

market is based. The regulations also apply to excess profits of oil and gas companies and certain others.

Also based on Article 122 TFEU are further temporary emergency measures by Council Regulation (EU) 2022/2576 to curb high energy prices and improve security of supply (within the framework of the Council Regulation on greater solidarity through better coordination of gas procurement, reliable price reference values and cross-border exchanges of gas as of 19 December 2022). It is based on the EU Commission's proposal for a regulation in October 2022, which provided for joint gas procurement at EU level and for the introduction of a dynamic price cap for gas imports into the EU (European Commission 2022c). The new rules are intended to allow Member States and energy companies to jointly purchase gas on the world market. This is to ensure that EU Member States gain greater leverage in procuring gas on world markets and do not outbid each other in the process.

Council Regulation (EU) 2022/2578 of 22 December 2022 aims to protect Union citizens and the economy from excessive prices. It is again based on Article 122 TFEU and introduces a price brake at EU level in the Title Transfer Facility (TTF) area.² Specifically, it sets a price limit for the TTF monthly month-ahead derivatives.

Also, in December, the Council adopted Regulation (EU 2022/2577) establishing a framework for the accelerated development of the use of renewable energy as another emergency measure based on Art. 122 TFEU. It is primarily intended to help speed up the lengthy authorisation procedures for the expansion of renewable energies in the Member States. This emergency measure is also limited to a period of eighteen months.

The concentrated use of emergency measures, based on Article 122 TFEU, is accompanied by a deficit in democratic legitimacy, as already stated by von Ondarza for the COVID-19 crisis (von Ondarza 2023). This shows a high number of Council decisions in the relatively short period of nine months, which intervene in an area in which the EU has no competences according to Article 194 (2) TFEU. Article 122 (1) TFEU mandates the Council to decide "in a spirit of solidarity between Member

² Founded in 2003 and based in the Netherlands, the TTF gained importance with the liberalisation of the energy sector and is now considered a reference point for monitoring and understanding the European gas market.

States on the measures appropriate to the economic situation”. It explicitly goes on to say: “in particular if serious difficulties arise in the supply of certain goods, especially in the field of energy”. However, there was no reference here to implementing provisions yet to be adopted, so that the actual implementation in the case of supply bottlenecks remained unclear (Villagrasa, and Scheuer 2011, 77). Initially, only the improvement of strategic oil stockpiling was regulated in detail. A legal basis for securing gas supply in the event of a crisis is provided by the SoS Regulation, which was amended in 2017. The diversification of energy sources and transport routes did not materialise, and no further crisis mechanisms were agreed (Knodt and Tews 2014, 224).

Intensive use of Article 122 (TFEU) in crisis situations has only been observed recently. Both in the financial crisis of 2010/11 (for aid programmes and the establishment of the European Financial Stabilisation Mechanism (EFSM)) and for support in the situation of the sudden increase in refugee flows in 2016 (Emergency Aid Regulation), the emergency article was rarely accessed. Only in the COVID-19 crisis did a more frequent use of Article 122 TFEU become apparent. Three key measures, the joint vaccine procurement, the short-time working allowance programme and the Next-Generation EU reconstruction fund, were based on the emergency article (von Ondarza 2023). We now see similar heavy use in response to the 2022 energy crisis.

According to Article 122 TFEU, paragraph 1—on which all Regulations 2022 based on Article 122 are founded—the Council shall act on a proposal from the Commission “without prejudice to the other procedures provided for in the Treaties”. The European Parliament is not involved in the decision-making process, and has no rights of co-determination or control. Since the possible financial assistance provided for in Article 122, paragraph 2, was not affected here, there was also no information to the Parliament. Moreover, the Council can decide by qualified majority. Thus, among other things, the decision on Regulation (EU) 2022/1854 on the introduction of an excess profits tax for energy companies in response to high energy prices was taken against Hungary’s vote. Moreover, this was despite the fact that, in parts with this special levy, it interferes with the fiscal sovereignty of the Member States, for which there are no European competences (Giegold 2022, quoted in von Ondarza 2023, 35). In addition, the secondary legitimisation, through the involvement of the parliaments of the Member States and the elimination of a veto option, is also omitted.

In order to assess the legitimacy of this crisis governance, we can refer to the mechanisms of legitimation of government activities from EU research. Scharpf distinguishes between input and output legitimacy (Scharpf 1999). Vivien Schmidt added a third dimension to Scharpf's dichotomy: output legitimacy (policy performance), input legitimacy (political responsiveness) and throughput legitimacy (procedural quality) (Schmidt 2013). There is a deficit in input legitimacy, as the European Parliament was not involved in any of the regulations based on Art. 122. In addition, throughput legitimacy is also deficient, as the transparency of decision-making is also difficult due to the concentration on the Council and its sometimes non-transparent discussions on legal acts. Now, emergency legislation in times of crisis per se tends to impair above all input and throughput legitimacy, and relies rather on output legitimacy. Moreover, due to the temporary nature of the measures, temporary legitimacy deficits are usually considered less serious. As the implementation of the measures is still in its infancy, output legitimacy cannot be assessed at this stage. However, special features of emergency measures not only have a direct effect on legitimacy, but also show indirect effects. This can be shown with the example of the Renewable Energy Regulation 2022/2577 and its relationship to the REPowerEU plan.

REPOWEREU AND EMERGENCY MEASURES AS INSTRUMENTS FOR HARDENING SOFT ENERGY GOVERNANCE

A look at the table of rising targets and the sobering sum of national ambitions set out so far in the national energy and climate plans (Economidou et al. 2022) reveals the main problem with European energy policy—the limited competence of the EU level in energy policies. The reservation of sovereignty in Article 194(2) TFEU ties the hands of the Commission and prevents it from intervening with sanctions in national strategies and their implementation. The Commission is left with only soft governance mechanisms. In the face of national reluctance to relinquish control over the national energy mix, the EU's only recourse is to try to “harden” its soft governance mechanisms in order to enhance its ability to effect policy change at the national level. The concept of “harder soft governance” in energy policy introduced by Knodt and Ringel points to the possibility of greater EU influence on the Member States in questions

of energy transition, as was already laid out in the Governance Regulation, at least in the area of renewable energies (Knodt and Ringel 2019; Knodt et al. 2020). Such attempts to harden soft governance can be observed, most importantly, in the Governance Regulation (Regulation (EU) 2018/1999), which entered into force at the end of 2018, and was part of the EU's "Clean Energy for All Europeans" initiative package, setting the legal framework for achieving the Union's 2030 climate and energy targets (Knodt et al. 2020). In addition to the "soft governance" of requiring each Member State to take due account of the Commission's recommendations on the draft NECPs, a "justification requirement" was introduced, whereby each Member State has to state and publish its reasons when it fails to do so. In the event of an "ambition gap" in the renewable energy sector, Annex II of the Governance Regulation provides for an algorithm to allocate the missing percentage points to Member States. This formula compensates for the lack of a binding national target for renewable energy. For the energy efficiency target, however, the algorithm did originally not apply. In addition, an "indicative trajectory" for increasing the share of renewable energy needs to be added to the national contributions. For energy efficiency, there is also no such provision. Moreover, compared to the monitoring system for the 2020 objectives, the governance system provides greater opportunities to "blame and shame", as it requires the submission of the State of the Energy Union to the Parliament and the Council. However, sanction mechanisms are still missing from the Governance Regulation. As a result, soft monitoring and control mechanisms have only been strengthened to a limited extent. This is particularly the case for renewables and, to a lesser extent, for energy efficiency (Knodt et al. 2023, 385f.).

Under FF55 and REPowerEU, these approaches are now applicable to the area of energy efficiency, for example in the area of the stronger binding nature of target paths or the formula for calculating national targets. These changes are anchored in the sectoral directive proposals, but have not changed governance regulation so far, which is likely to lead to inconsistencies (Schlacke et al. 2022). Overall, the measures to harden soft governance are probably not yet sufficient to achieve the targets that have been raised, again with the REPowerEU plan in particular. Together with calls for better applicability of infringement procedures through reference values in the sectoral directives (which sanction across policy fields through conditionality and standardisation through Governance Regulation reform), the Emergency Regulation 2022/2577, establishing

a framework for accelerated expansion of renewable energy use, could now also contribute to hardening.

Regulation 2022/2577 anticipates parts of the acceleration from the REPowerEU, specifically the draft Renewable Energy Directive (European Commission 2022h). The regulation declares an overriding public interest in renewable energies over any environmental, nature conservation and species protection interests and shortens the maximum permissible duration of authorisation procedures to up to one year. In doing so, the regulation expands the obligations of the Member States. However, the Council of the EU watered down the regulation and conceded the possibility of limiting the scope of the regulation to certain areas and also exempting buildings. The Regulation, which has now already entered into force during the RED III negotiations in the trilogue and has been partially implemented in the Member States, can have a significant precedent-setting influence on the discussions in the trilogue. Thus, the Commission and the Council can instrumentalise the emergency measures to influence the regulations in RED III at an early stage.

This indirect effect of the use of the emergency article in the Lisbon Treaty thus gives the Council more room for manoeuvre in the trilogue negotiations, as it can now refer to measures already implemented. This gives the Council, as an executive body, prerogatives over Parliament not only in the area of direct emergency legislation, but also has the option of pre-empting measures in the ordinary legislative procedure. It is now in a position to use this to shape the content of the legislation in the sense of the majority of its members. This can lead to greater interference in national sovereignty in the energy sector, as shown by examples from Regulation 2022/2577, but this does not necessarily have to be the case. Thus, using emergency legislation does not guarantee a hardening of soft governance, as the exceptions regulated in Regulation 2022/2577 have also shown.

CONCLUSION

Clearly, Russia's war of aggression against Ukraine has catapulted the EU's energy security to the top of the agenda. This initial focus on energy security as one of the three objectives of the energy triangle—along with sustainability and competitiveness—should not, however, obscure the fact that the way in which the war in European energy policy is being handled

is above all to be understood in terms of the close link between energy security and sustainability in the sense of the fight against climate change.

The example of hydrogen could exemplify the driving forces of the security-sustainability nexus in times of war. The market ramp-up and development of a regulatory framework for hydrogen as a solution for the decarbonisation of hard to abate sectors was already ongoing, when the Russian invasion of Ukraine led to increasing ambitions for renewable hydrogen production and use through REPowerEU and its hydrogen accelerator. While hydrogen from renewable sources has a lot of potential to benefit energy security and sustainability, low-carbon hydrogen has its pitfalls regarding both dimensions, and yet is integrated within European measures to satisfy demand during a transitional phase. To prevent negative impacts on energy security and sustainability, low-carbon hydrogen needs to be integrated further into the strategic approach of the European hydrogen policy.

All in all, the EU responded to the supply challenges of missing or interrupted fossil energy supplies from Russia caused by the war with a strategy mix based on emergency measures. This included energy aspects of sanctions and intensified efforts in both climate and, above all, energy policy in the area of renewable energies and energy efficiency.

Neither of these two approaches is free of difficulties. Emergency legislation suffers from a legitimacy problem because it bypasses Parliament for reasons of efficiency and the Council alone decides on a proposal from the Commission. Similarly problematic, EU legislation in the energy sector as a whole—unlike climate policy—lacks the competences to influence national energy policies. Therefore, the ambitious increase in the renewable energy and energy efficiency targets in the FF55 was already very challenging given the present ambitions in the NECPs. The REPowerEU package, combined with FF55, shows that attempts are still being made at the European level to overcome the handicap of soft governance by adding further hard elements—especially in energy efficiency legislation. This will become even more necessary as the targets are raised again in the REPowerEU legislation. Until now, the iterative process of strategic energy and climate policy planning through the NECPs has been overarched by the Governance Regulation. The need for harder governance due to the ever-increasing level of ambition was not taken into account in the adaptation of the Governance Regulation. It was only in the wake of the war in Ukraine that the Commission decided that a review and

possible revision of the Regulation was imperative and announced it for the beginning of 2024.

For EU research, it will be extremely exciting to see how the use of emergency measures can impact future legislation. The analysis of the trilogue negotiations and the implementation of RED III will show how emergency measures such as Regulation 2022/2577 can be used to allow deeper intervention in areas outside the EU's competence, such as the influence of EU energy policy on national strategies. In the face of increasingly complex crises and challenges to the EU's resilience, the use of emergency legislation in its many facets is certain to be at the centre of EU studies in the coming years.

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