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## Jean Monnet Network VISTA Teaching Case Study

### Assessing the consequences of the war in Ukraine for the EU energy policy

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**Summary:** This teaching case provides the students with the required background knowledge and analytical tools to understand and discuss a highly topical issue, namely the consequences of the war in Ukraine for integration in the field of energy policy. It introduces the students to the process and dynamics of integration in this policy field in order to put current events into a longer-term perspective. Moreover, it elaborates on how integration is complicated by the so-called energy trilemma, i.e. the trade-offs between security of supply, sustainability and affordability. The relevance of the problem case is further illustrated by market data, and the assignment informs students about relevant policy measures which have been taken in response to the crisis. Based on these materials the students are asked to address two research questions: First, whether the current events alter institutional power dynamics and are a push for further integration and second, whether the crisis provides an opportunity to solve the energy trilemma.

**Student level:** advanced undergraduate and postgraduate students

**Implementing the case study:** The completion of this teaching case requires three sessions in order to first introduce the students to the topic, and to then give them enough time to reflect on the two research questions in one session each.

**Keywords:** energy policy, energy trilemma, security of supply, sustainability

## Introduction to the Topic

The construction of the Internal Energy Market (IEM), launched in the mid-1990s with the goal of delivering more sustainable, secure, and affordable energy, remains an ongoing process. The unfinished nature of the IEM is a reflection of the magnitude of the challenge of achieving all the above-mentioned goals together (the so-called energy trilemma), as well as the reluctance of EU Member States to integrate further in a domain that is highly sensitive for their economic performance and security. Recent advances in energy policy integration have taken place in the wake of severe crises, which forced Member States to find EU-level solutions. For example, the gas supply crisis of 2006 and anticipation of further similar events gave the final impetus for the formal recognition of EU energy policy in the Lisbon Treaty. The crisis in EU-Russia relations following the latter's annexation of Crimea was also the breeding ground for the *Energy Union* initiative launched in 2015. In turn, the *European Green Deal*, aimed at achieving carbon neutrality by 2050, was a response to the widespread societal mobilization urging the EU to declare a state of "climate emergency". The Covid-19 crisis contributed to accelerate the roll-out of the European Green Deal, in view of the urgency of articulating a post-pandemic recovery plan fit for the main challenges of the 21<sup>st</sup> Century. Last but not least, Russia's invasion of Ukraine in February 2022 prompted an unprecedented series of measures that could transform the IEM in ways that seemed unimaginable just a few months ago.

In view of this evidence, this teaching case is addressing two questions:

- (1) *To what extent can the war in Ukraine alter the political dynamics and institutional balance in EU energy policy towards further integration?*
- (2) *Do the effects of the Ukraine war open a window of opportunity to solve the energy trilemma, or do these rather aggravate the energy trilemma?*

The aims of this case study are:

- Firstly, to increase your empirical understanding of the drivers and challenges of the energy policy integration in a particularly challenging geopolitical context.
- Secondly, to provide you with analytical lenses that can help you to diagnose and assess the relevance of recent developments in the field of European energy policy.

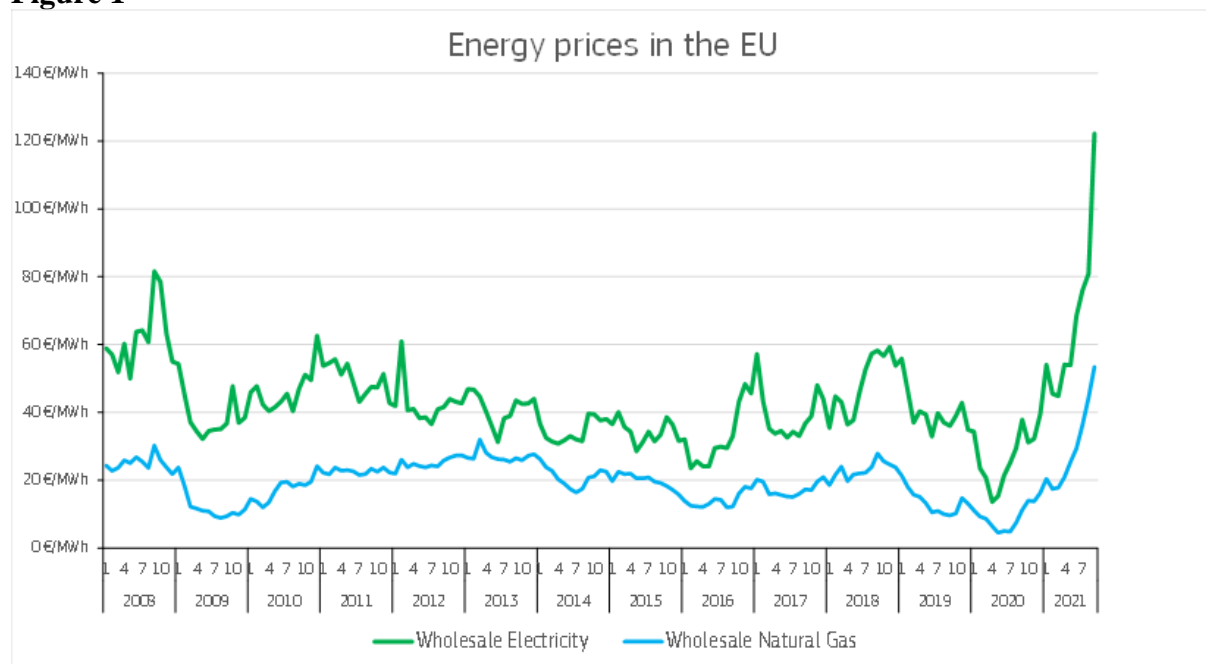
## Implementing the teaching case study

### Session I – Understanding the context and policy challenges

Russia played a central role in the European energy system for several decades as the main supplier of fossil fuels to the EU. Despite the mounting tensions in EU-Russia relations, Russia still supplied the EU with more than 40 per cent of its natural gas and 30 per cent of its oil imports. While the EU decarbonisation plan laid out in the European Green Deal already envisaged a gradual phase-out of gas, particularly from 2035 onwards, Russia was still considered as a reliable supplier for the long transition phase until 2050. The construction of the Nord Stream 2 pipeline from Russia to Germany, which was completed in 2021, exemplified this long-term commitment. This long-standing engagement with Russia in the energy domain was rooted in the liberal institutionalist idea that economic interdependence was a guarantee for peaceful relations. However, this premise came abruptly to an end in February 2022, when Russia initiated a full-scale invasion of Ukraine. Just two weeks after the start of the war, the EU Member States unanimously agreed to stop importing gas from Russia, despite their heavy dependency and the sharp rise in gas and electricity prices resulting from the conflict. More specifically, national governments agreed to a reduction of two thirds by the end of 2022 and a complete stop by 2027. In May 2022, Member States also agreed on a partial embargo of Russia's oil imports. These decisions represent a major shock for the EU's energy system that require urgent action on several fronts. Such action is envisaged in the so-called *RePowerEU Plan* proposed by the European Commission on 18 May 2022.

#### (1) Dealing with the price crisis

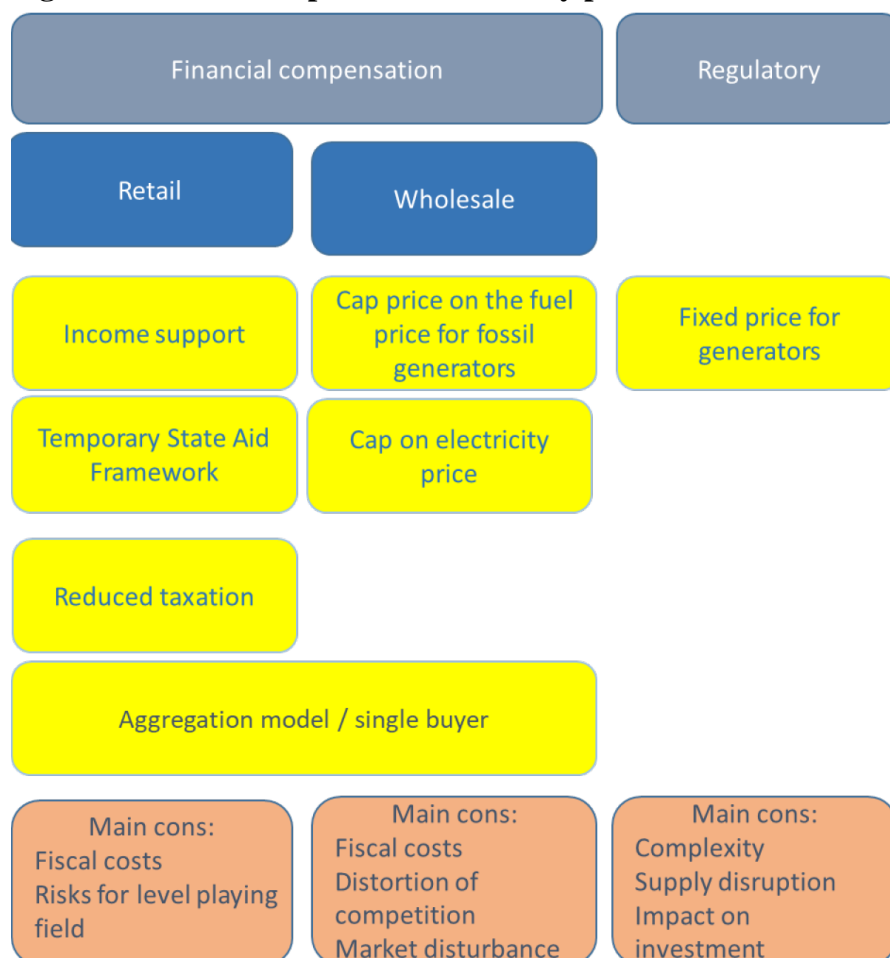
**Figure 1**



Source: European Commission (2021, p. 3)

Energy prices were on the rise as of the second half of 2021 (as illustrated in Figure 1), with price surges becoming ever more dramatic after March 2022. In October 2021 the European Commission tabled a toolbox for action and support to tackle rising energy prices (European Commission, 2021), followed by another Communication issues in March 2022 (European Commission, 2022b). Finally, the REPowerEU plan includes a Communication (European Commission, 2022c) addressing short-term market interventions and long term improvements to the electricity market design. In comparison to the Commission’s pro-market stance taken prior to the price crisis, the proposals open the door for various kinds of temporary intervention in order to allow for time limited compensation and direct support to energy-poor end-users and industry including social payments, vouchers, taxation, aid to companies and safeguards to avoid disconnection. The grouping of the various options to act on electricity prices issued by the European Commission emphasises the role of financial compensation as opposed to regulatory measures.

**Figure 2 Short term options on electricity price**



Source: European Commission (2022b, p. 2)

Thus far, European Member States have adopted very different measures to shield consumers from rising energy prices, and are also advocating distinct reforms of the IEM – France, for instance, suggests reforming the pricing mechanism (Sgaravatti et al., 2022).

### *(2) Refilling gas storages for next winter*

Gas storage typically covers about one quarter of EU gas consumption (about 400bcm a year), thus playing an important role in the stability of the IEM. Since Autumn 2021, storage facilities experienced an important underfilling (about 20 per cent less than usual), contributing to the sharp rise in gas prices discussed above. In order to prevent a similar situation next winter, in March 2022 the Commission put forward a new regulation (European Commission, 2022d) that requires Member States to ensure a minimum of 80 per cent storage capacity by November 2022 and 90 per cent in the following years. The Regulation introduces several new aspects:

- In order to dispel the concerns from the Member States having the largest underground storages (Germany, Italy, French, The Netherlands and Austria) that they would bear the cost of refilling at a moment of soaring prices, the Regulation establishes a burden-sharing mechanism, so that countries with no storage capacity contribute financially to this effort.
- Both the EU and the Member States will incentivize the energy companies to refill the storages through discounts on tariffs and other compensatory measures, which in usual circumstances would be forbidden forms of state aid.
- The Commission will play a central role in ensuring that the intermediary targets are met and report to the Gas Coordination Group (GCG), composed of experts from the national ministries and European organizations of the gas sector, which will be given a formal mandate to monitor Member States' performance.
- In response to the situation that important gas storage facilities in the EU were owned by Russian subsidiaries, the European Commission has also identified gas storage as a critical infrastructure and introduced the obligation to certify (for all existing and future storage facilities) that foreign ownership does not put security at risk.
- At the request mostly of the European Parliament, the regulation includes the possibility that Member States will use a mechanism to jointly procure gas. The idea of joint gas purchasing had been proposed several times, for example in the context of supporting gas diversification projects in the Southern Corridor in the late 2000s, but was never implemented.

### *(3) Terminating gas supplies from Russia*

Following the commitment to phase out two thirds of Russian gas imports to the EU by the end of 2022, in May 2022 the Commission presented a detailed plan on how to replace the 140 bcm

that the EU was typically importing from Russia every year. While an important part of this volume is set to come from alternative suppliers of gas and LNG (60 bcm), the plan also envisages a faster roll-out of renewable energy (21 bcm), via a new set of measures to speed up the permitting and the designation of go-to areas for the production of solar and wind power. Even more importantly, the Commission is counting on reducing about 60 bcm demand by greater energy efficiency measures. The detailed measures are presented in Table 1.

*Table 1. Detailed measures of RePowerEU to phase out Russian gas*

<b>RePOWER PLAN</b>	<b>Equivalent GAS SAVED</b>	<b>JOINT EU AND MS RePOWER EU ACTIONS</b>	<b>INVESTMENT NEEDS (EUR)</b>
<b>SAVINGS</b>			
Citizens : Behavioural change	10 bcm	EU Save Energy communication Play my part campaign	-
Residential sector: energy efficiency and heat pumps	37 bcm	EU Save Energy communication Higher 13% EED target by amended EED Ecodesign and energy labelling requirements for solar PVs heat pumps Potential Important Projects of Common European Interest (IPCEI) focused on breakthrough technologies and innovation	56
Industry: energy efficiency and electrification	12 bcm	Higher 13% EED target by amended proposal Higher 45% RES target by amended proposal Innovation fund RRF chapter	41
Curtailement		EU coordinated demand reduction plan	-
<b>FUEL DIVERSIFICATION</b>			
LNG and pipeline gas	50 (LNG) + 10 bcm (pipeline)	Diversification obligation Joint Gas and Hydrogen Purchasing EU IT tool for demand aggregation and infrastructure transparency MoUs with partner countries Adoption of the storage proposal RRF chapter	
Biomethane	17 bcm	Biomethane action plan RRF chapter	37
Renewable Hydrogen	+ 14 Mt of additional H2/ammonia of which 8 Mt replace natural gas equivalent to = 27 bcm 10 Mt is imported and about 4 Mt of additional domestic production	RFNBO sub-targets in line with higher RED targets Hydrogen Valleys Regulatory framework: Delegated acts on definition and standards Imports: Joint Gas and Hydrogen Purchasing Vehicle and International Hydrogen Partnerships Industrial Capacity: Electrolyser Declaration Innovation fund RRF chapter	27 bn is direct investment in domestic electrolysers and distribution of hydrogen in the EU.  (excludes the investment of solar and wind electricity needed to produce renewable hydrogen, and it excludes the investments for the imported hydrogen)
<b>RENEWABLE ELECTRICITY</b>			
Solar & Wind	21 bcm	Higher 45% RES target by amended RED PPA guidance Solar strategy Solar roof top initiative by amended RED RRF chapter Solar alliance	86 bn EUR

		Potential Important Projects of Common European Interest (IPCEI) focused on breakthrough technologies and innovation	
Permitting		Legislative proposal on permitting amending RED EC recommendation	-
<b>SMART INVESTMENTS AND REFORMS</b>			
Infrastructure		Integrated EU-wide infrastructure gaps and needs assessment for gas, electricity and hydrogen	29 bn (power grids) + 10 bn (power storage) + 10 bn (gas) Oil for security of supply 1,5 bn [hydrogen infrastructure see Staff work document]
RRF		Revised RRF proposal close to EUR 300 billion (225 bn loans+ up to 72 bn grants) RRP guidance	
Innovation Fund		Revised Innovation Fund proposal rolling out carbon contracts for difference Dedicated RePowerEU call in Autumn 2023 Dedicated RePowerEU funding windows	
CEF		Dedicated RePowerEU calls, starting May 2022	
Reform		European semester Country-specific recommendations Permitting PPA guidance RRF chapters	

Source: European Commission (2022a), *Communication on REPowerEU Plan – Annexes*, COM(2022) 230 final, 18.05.2022.

While these measures seem at first to indicate an unprecedented show of unity on the EU side, tensions are also emerging. For example, Member States have been divided over Russia's demand to pay for gas supplies in rubles, in a move to prop up the value of the Russian currency. While Russia has already cut supplies to Bulgaria, Poland and Finland in response to their unwillingness to pay in rubles, other countries, including Hungary and major German companies have already announced they will give in to the Kremlin's demands, even if that means circumventing the EU sanctions. Unity of action might also suffer when European governments and citizens are asked to cut down on energy consumption and accelerate the roll-out of renewable energies. According to the Commission, terminating Russia's gas supplies requires €210 billion in investment. Even if the EU will make additional funds available, unlocking massive investment in a context of post-pandemic recession and hyper-inflation caused in large part by the soaring energy prices will be a heavy task.

In sum, the jury is still out on whether the war in Ukraine will lead to further integration of the IEM and square the so-called energy trilemma between energy security, sustainability and affordability. Assessing the extent of the proposed changes and the challenges that lie ahead in their implementation is your task in this assignment.

## Session II – Assessing the consequences of the war in Ukraine for the Institutional Power Balance

Energy is a shared competence, and its development has been characterised by a struggle between the European Commission and the Member States. On the one hand, being a crucial factor in the functioning of national economic systems, Member States have carefully guarded their prerogatives in the organization of their energy market, the choice of suppliers as well as the composition of their energy mix. On the other hand, although these sovereign rights are duly recognized in article 194.2 TFEU, Member States have also gradually accepted the necessity of common policies and obligations, de facto acquiescing to limit their own room of manoeuvre. Energy policy has therefore been a fertile ground where to test classical integration theories.

In line with *neofunctionalist* expectations, EU supranational institutions, particularly the European Commission, have been key drivers pushing for the expansion of the EU competence in this domain, through its agenda setting powers and successful use of framing (Maltby, 2013; Wettestad et al., 2012). At the same time, energy policy has not followed a typical supranationalisation path, as the Member States continue to play a strong role, as predicted by *intergovernmentalist* approaches. Resistance to a one-size-fits all integration is expressed in several examples of “differentiated integration”, for instance in the internal market and decarbonisation policies (Andersen & Sitter, 2015; Herranz-Surrallés, 2019).

The particular mix of supranational and intergovernmental competence in energy policy has also been an inspiration for scholars to conceptualise new forms of integration and governance, such as orders of governance in the multilevel context (Eckert 2016), “embedded intergovernmentalism” (Bocquillon & Maltby, 2020), “experimentalist governance” (Rangoni & Zeitlin, 2021), or “harder soft governance” (Knodt & Schoenefeld, 2021). Also in matters of external energy supplies, scholars have identified a mixture of strong intergovernmental control with elements of supranationalism where the Commission has forged a role for itself through ensuring “real-time compliance” (Thaler & Pakalkaite, 2021) or a “foot-in-the-door technique” (Batzella, 2021).



With these debates in mind, you are asked to consider: *To what extent can the war in Ukraine alter the political dynamics and institutional balance in EU energy policy towards further integration?* The following table can help you in diagnosing the main changes and challenges for the IEM in the context of the EU’s energy response to the war in Ukraine.

Policy measures and dynamics reinforcing EU authority	Challenges in the implementation of these measures

### Reading assignments session II

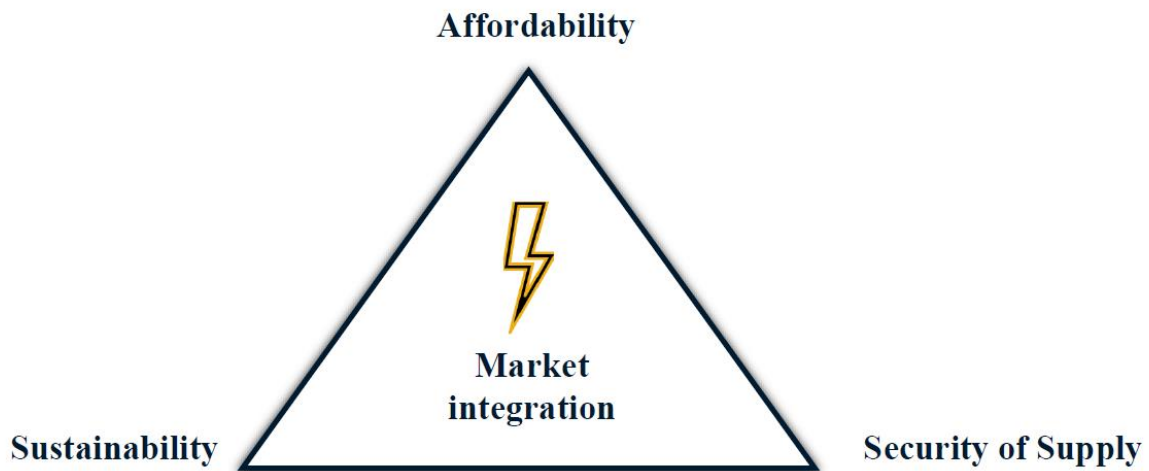
Herranz-Surrallés, A. (2019). Energy Policy and European Union Politics. *Oxford Research Encyclopedia of Politics*. <https://doi.org/10.1093/acrefore/9780190228637.013.1079>

Tagliapietra, S. (2022, May 18). REPowerEU: will EU countries really make it work?. *Bruegel Blog*. <https://www.bruegel.org/2022/05/repowerEU-will-eu-countries-really-make-it-work/>

### Session III – Discussing the Energy trilemma

The manifold and contradicting goals in energy policy are frequently described as a trilemma between affordability, sustainability and security of supply (e.g. Buchan (2020), Eckert (2016), Herranz-Surrallés (2019)). In addition, these three policy objectives might be in contradiction with the creation of the IEM as visualised in Figure 3.

**Figure 3 The Energy Policy Trilemma and the IEM**



Source: Authors' visualisation

Sustainability is a declared goal of the European Union also in energy policy, especially with the adoption of the so-called 20-20-20 goals (20% renewables, 20% energy efficiency, 20% reduction of greenhouse gas emissions by 2020) adopted in 2008. The 2019 “Clean Energy Package”, while focusing on internal market integration seeks synergies with the green transition, and the 2019 Green Deal puts emphasis on energy efficiency, cleaner energy and cutting-edge clean technological innovation. This green transition does, however, require massive investment and structural change that is costly at least in the short- to medium-term, and thus can lead to trade-offs with affordability. Again, the Green Deal agenda formulates the ambition of a just transition that leaves no one behind, but rising energy prices pose a challenge in this context. Similarly, realising sustainability goals can be conflicting with security of supply where generation from intermittent renewables requires a different kind of infrastructure. One way of addressing this challenge was to introduce so-called capacity mechanisms. These are payments to investors in conventional plants to guarantee their production in case of shortfall of demand, justified by the need to prevent under-supply in the transition to renewable energy. Related measures, which diverge widely across member states, have been criticized as hidden subsidies to the fossil industry (see Herranz Surrallés (2019, p. 12)). Third, there is an inherent tension between security of supply and affordability. Energy provision is ideally highly reliable, i.e. blackouts should be avoided as these are costly and dangerous. The regulation of energy infrastructure typically tends to favor over- rather than under-investment in order to avoid interruptions and make sure the infrastructure functions in

a reliable way. This concern in terms of security of supply thus causes tension with the goal of affordable energy prices and might require political intervention (e.g. regulating energy prices) in order to achieve both goals at the same time. Finally, these three goals of energy policy, but also their interplay as a trilemma can cause tension with the market integration agenda. The win-win narrative goes that market integration will help fuel the green transition and will provide more secure supply at better prices. There is, however, also a case to be made that market dynamics as such do not always favor the more sustainable energy sources, that market integration thus far has not led to a decrease in energy prices, and that more cross-border infrastructure and integration is needed to boost security of supply. Moreover, diverging policy responses at national level, such as a North-South divide regarding interventionist policies to tackle soaring energy prices, pose a challenge for a uniform and EU-wide market design.

With these tensions in mind, you are asked to consider: *Do the effects of the Ukraine war open a window of opportunity to solve the energy trilemma, or do these rather aggravate the energy trilemma?*

The following table can help you in considering these two possible outcomes in further detail, addressing the various aspects of energy policy.

CRISIS EFFECT	Window of opportunity	Aggravation of trilemma
GOALS		
<b>Market Integration</b>		
<b>Affordability</b>		
<b>Sustainability</b>		
<b>Security of Supply</b>		

### Reading assignments session III

Buchan, D. (2020). Energy Policy. Sharp Challenges and Rising Ambitions. In H. Wallace, M. A. Pollack, C. Roederer-Rynning, & A. R. Young (Eds.), *Policy-Making in the European Union* (8 ed.). Oxford University Press.

Sandbu, M. (2021, September 26). Energy crisis is moment of truth for Europe's green ambition. *Financial Times*. <https://www.ft.com/content/ab284905-8f54-4200-ab12-783d4580ad03>

Sgaravatti, G. Tagliapietra, S. & Zachmann, G. (2022). National policies to shield consumers from rising energy prices. *Bruegel Dataset*. <https://www.bruegel.org/publications/datasets/national-policies-to-shield-consumers-from-rising-energy-prices/>

### **Additional and recommended readings:**

- Andersen, S. S. & Sitter, N. (2015). Managing heterogeneity in the EU: Using gas market liberalisation to explore the changing mechanisms of intergovernmental governance. *Journal of European Integration*, 37(3), 319–334.
- Batzella, F. (2021). The Role of the Commission in Intergovernmental Agreements in the Field of Energy. A Foot in the Door Technique?. *Journal of Common Market Studies*, 59(4), 745-761.
- Bocquillon, P., & Maltby, T. (2020). EU energy policy integration as embedded intergovernmentalism: the case of Energy Union governance. *Journal of European Integration*, 42(1), 39–57.
- Buchan, D. (2020). Energy Policy. Sharp Challenges and Rising Ambitions. In H. Wallace, M. A. Pollack, C. Roederer-Rynning, & A. R. Young (Eds.), *Policy-Making in the European Union* (8 ed.). Oxford University Press.
- Eckert, S. (2016). The Governance of Markets, Sustainability and Supply. Toward a European Energy Policy. *Journal of Contemporary European Research*, 12(1), 502–517.
- European Commission. (2021). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Tackling rising energy prices: a toolbox for action and support. COM (2021) 660 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A660%3AFIN&qid=1634215984101>*
- European Commission. (2022a). *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REPowerEU Plan. COM/2022/230 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A230%3AFIN>*
- European Commission. (2022b). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Security of supply and affordable energy prices: Options for*

*immediate measures and preparing for next winter. COM (2022) 138 final.* <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0138>

European Commission. (2022c). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action. COM (2022) 236 final.* <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:236:FIN>

European Commission. (2022d). *Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) 2017/1938 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply and Regulation (EC) n°715/2009 of the European Parliament and of the Council on conditions for access to natural gas transmission networks. COM/2022/135 final.* <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2022:135:FIN>

Herranz-Surrallés, A. (2019). Energy Policy and European Union Politics. *Oxford Research Encyclopedia of Politics.* <https://doi.org/10.1093/acrefore/9780190228637.013.1079>

Knodt, M. & Schoenefeld, J.J. (2020). Harder soft governance in European climate and energy policy: exploring a new trend in public policy. *Journal of Environmental Policy & Planning*, 22(6), 761–773.

Maltby, T. (2013). European Union energy policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism. *Energy Policy*, 55, 435–444.

Rangoni, B., & Zeitlin, J. (2021). Is experimentalist governance self-limiting or self-reinforcing? Strategic uncertainty and recursive rulemaking in European Union electricity regulation. *Regulation & Governance*, 15, 822–839.

Sandbu, M. (2021, September 26). Energy crisis is moment of truth for Europe's green ambition. *Financial Times.* <https://www.ft.com/content/ab284905-8f54-4200-ab12-783d4580ad03>

Sgaravatti, G. Tagliapietra, S. & Zachmann, G. (2022). National policies to shield consumers from rising energy prices. *Bruegel Dataset.*

<https://www.bruegel.org/publications/datasets/national-policies-to-shield-consumers-from-rising-energy-prices/>

Tagliapietra, S. (2022, May 18). REPowerEU: will EU countries really make it work?. *Bruegel Blog*. <https://www.bruegel.org/2022/05/repowereu-will-eu-countries-really-make-it-work/>

Thaler, P., & Pakalkaite, V. (2021). Governance through real-time compliance: the supranationalisation of European external energy policy. *Journal of European Public Policy*, 28(2), 208–228.

Wettestad, J., Eikeland, P. O., & Nilsson, M. (2012). EU climate and energy policy: A hesitant supranational turn. *Global Environmental Politics*, 12(2), 67–86.