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The European Union and energy governance: Changes following the outbreak of the War in Ukraine?

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a chi mi ha sempre sostenuto
in questo meraviglioso percorso

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List of Abbreviations

Only abbreviations used more than once are included.

ACER	European Union Agency for the Cooperation of Energy Regulators
DG	Directorate General
ECSC	European Coal and Steel Community
EU	European Union
EURATOM	European Atomic Energy Community
RRF	Recovery and Resilience Fund
TFEU	Treaty on the Functioning of the European Union

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1. Introduction

The outbreak of the war in Ukraine caught Europe by surprise as the large-scale invasion announced by President Putin had not been envisaged by European leaders. The European Union ('**EU**') found itself struck by a new crisis with overreaching consequences for the European continent and not only for Ukraine itself. EU leaders have been quick to adopt a strong and united response of condemnation against Russian actions. While this has confirmed Europe's position on the matter, it has had the negative consequence of "bringing Europe into the conflict" with strategic and economic consequences, even if though no EU soldier has actually been involved in fighting on the ground. Indeed, the European position was already precarious prior to the conflict because of a series of factors mainly related to the energy sector. If the outbreak of the conflict caught EU leaders by surprise, then it caught the European energy infrastructure unprepared and put it in a difficult position. Not only because of its structural weaknesses but, also, because of the negative impacts of the recent pandemic crisis. The Covid-19 pandemic not only affected the economic and social spheres, but also significantly impacted on a large number of sectors, including energy. The energy sector has been affected by the Covid-19 pandemic, causing a steep rise in energy prices which have put the EU under pressure, prompting in turn intervention from Member States to shield consumers. Therefore, the outbreak of the war in Ukraine caught Europe in an already weak position and, while EU leaders have condemned Russian actions, those same leaders have acknowledged the need to act to protect the EU from the possible consequences of an inevitable energy crisis.

The awareness of the risks related to the war in Ukraine for the energy sector originated in a series of characteristics of the European energy network which created a strong link of interdependence with Russia and saw Ukraine become an important partner for European security of supply. Historically Russia has been the most important European partner for the supply of natural gas delivering, at times, 75% of the total EU supply. Such link has created both situations of total energy dependence for some eastern European countries and important political links which have reinforced the Russian position in Europe. Despite the consequences on the EU energy system following the three Russo-Ukrainian crises in 2005, 2009 and 2014 respectively, Russia has remained the main European gas supplier giving President Putin leverage with power to undermine the security of gas supply in the EU. At the same time, Ukraine represents the most important gas transit route

with 25% of the total European gas supply passing through its territory in 2021. Before 2021, this percentage was even larger, reaching 80% in 2011.

European energy governance has slowly developed over time, having been largely neglected during the evolution of the EU with the consequence for the energy sector of a lower degree of integration compared to other sectors and large inequalities between the various Member States. Ironically, energy is the field through which the process of integration first began. The Coal and Steel Community was the first communitarian organization but, after a promising start, energy faced the combination of Member States' unwillingness and a lack of formal powers which has hindered its evolution towards greater integration and supranationalization. The integration of the energy sector, beginning in the early 90, has, unusually, not been direct. Instead, it has been affected by environmental and commercial policies which have brought a series of changes which have lacked a coherent plan for energy integration. In fact, EU institutions, lacking formal powers, have acted to promote energy integration through the use of interconnected policy areas but have not managed to create a coherent roadmap for security of supply. It can be affirmed that energy integration in the field of security of supply has been the result of energy crises management. Since the 70s, Europe has been struck by various crises which have pushed EU institutions to act to deal with the crisis at a supranational level while, at the same time, increasing the level of integration. The champion of such effort has been the Commission which, despite not achieving its objective, has been the most active actor in European energy integration. This evolution through crisis has resulted in, among others, the successful creation of an energy chapter in the Lisbon Treaty which, for the first time, provided the EU with a legal framework in which to act to integrate the energy sector. The Lisbon Treaty can be defined as a game-changer for the energy field as, since its enactment, the EU has begun a more intense activity which has led to the adoption of a few, fundamental, regulations which have shaped the European energy governance. Such regulations, without fettering Member States' rights, have created a system of European coordination aimed at increasing energy security mechanisms.

The normative evolution of the EU, despite making significant progress, has not managed to fill the gaps and to guarantee security for European energy sector because of a series of interrelated factors. The first of these factors is the reluctancy of Member States to reduce their prerogative powers in favor of a more integrated governance. Such prerogative powers have allowed Member States to create strong bilateral relationships with their supplying parties, relationships which they are reticent to put in a secondary place. Such preference for bilateral energy agreements has seen Member States take action in an uncoordinated manner which, in turn, has led to a high level of dependency on a

small number of suppliers, namely Russia. Which leads to the second factor, high dependency levels. These have been both an active and passive consequence of the design of the European system. Some Member States, such as eastern European countries, have found themselves strongly linked to Russia as their most important or even sole supplier as a consequence of their historical position as members of the eastern bloc before the end of the Cold War, creating a situation of passive dependence which required structural reforms to be modified. At the same time, countries such as Germany, actively became more dependent, creating additional infrastructures such as the NorthStream 1 and 2 pipelines and, consequently, tying their security of supply to Russia.

EU institutions have had very different roles and levels of importance in the process of energy integration. The Commission has been the most important driver of EU energy integration, adopting the role of policy promoter. Over time, the Commission, not having formal powers until the Lisbon Treaty, has produced a series of initiatives which have increased EU powers in the sector though economic and market policies. Since the Lisbon Treaty, the Commission has tried to produce and reinforce European mechanisms with a view to improving security of supply, coordination and EU direct action in the energy field. Such effort has been made more difficult by an opposite attitude of Member States who have hindered the implementation EU policy initiatives and, often, acted against EU regulations on the subject. The attitude of Member States towards energy integration has been echoed by the EU intergovernmental institutions in which they are represented. This attitude has produced a fragmented and incomplete energy integration. Before the outbreak of the energy crisis, EU energy policies were mainly market-centered policies, while the security of energy supply and emergency mechanisms were governed by regulations with general provisions which gave Member States significant discretion.

The lack of integration and the infrastructural and institutional deficiencies have become even clearer in the wake the outbreak of the war in Ukraine. EU Member States acknowledge that their energy security position was much weaker than expected in the face of a commercially strategic partner whose position has become intolerable for European countries and who has become the target of an extensive series of sanctions. Supply insecurity was already an issue for those eastern European states which were part of the soviet bloc. However, it has also become a reality for those countries, such as Germany and Italy, who heavily relied on Russian gas. Such counties, at the same time, represent the largest European economies, and so such insecurity has had far-reaching consequences for the entire EU economic and political system. In the light of such situation, the EU has been forced to act rapidly in order to avoid the risk of uncoordinated national measures which could be detrimental

for the Union. EU institutions have, therefore, found themselves obliged to act in order to solve a series of structural deficiencies which hampered an effective and efficient crisis response.

In the light of the above, this thesis seeks to analyze the institutional premises to the Ukrainian crisis in order to evaluate how the crisis has impacted the European energy governance, with the ultimate aim of considering the following research questions:
(1) how has the was in Ukraine changed the modes of EU energy governance?
(2) Have there been changes in the balance of powers among EU institutions?
(3) Has there been any development in the integration of the EU energy sector?
In answering these questions, this thesis will be divided into three main chapters which will analyze the issues in turn. Firstly, this thesis will consider the EU modes of energy governance as the independent variable, before analyzing how the war in Ukraine and the consequent energy crisis are, together, the intervening variable. This will culminate in an explanation of the dependent variable, represented by the changes to the modes of energy governance produced by the crisis.

The first chapter will be devoted to the analysis of the EU energy governance system. Beginning with a description of the European process of integration of the energy sector, this chapter will concentrate on the key historical stages in energy integration. The history of EU energy integration will be considered in three distinct historical moments during which different modes and priorities were adopted with different speeds of change. The first of these is the inception of energy integration in the 1950s, during which time coal and nuclear energy represented the weight-bearing pillar of EU process of integration. This will be followed by a description of how integration ceased when energy was sidelined to concentrate on other sectors and how, when energy was once again addressed (as in the 70s energy crisis), there was not enough traction to achieve integration. The third, and final, historical moment to consider is the period beginning in the 90s. This was the most intense period of energy integration and intensified yet further in the early 2000s, leading to the creation of a section on energy in the Lisbon Treaty.
The second section of the chapter will describe and analyze the normative evolution of EU energy policies in order to elucidate on the most important treaties and pieces of legislation and how they have changed over time. This will provide a clear picture of the relevant legal framework in order to understand the formal powers of the EU institutions and the legal procedures of energy governance. Such section will be key to providing the necessary setting for a more detailed description of the institutional mechanisms of energy governance.

The third section of the chapter will deal with energy governance *per se.* This section will explore the role of each EU institution and agency in the energy field together with an analysis of the role of Member States and their powers in order to clarify the relative position of each single actor. In particular, this section will explore the role of the Commission as the fundamental driver of EU energy integration and the central agent in the coordination of energy policies. This section will paint a picture of a sector with a peculiar institutional balance that does not reflect with the formal powers granted to each institution by the treaties and regulations. Such analysis will highlight the fundamental institutional compromises which have been accepted in order to proceed towards further integration without undermining Member States' prerogatives.

The final section of the chapter will deal with the institutional weaknesses of the EU energy governance system in order to emphasize the *ex-ante* deficiencies with which the EU has had to cope when facing the consequences of the Ukrainian crisis. Three fundamental shortcomings with EU energy policy will be highlighted. Firstly, fragmentation both in the policy making and in the competence attribution. Secondly, the way in which the EU suffers from a series of diverging interests between the supranational institutions and the Member States which have given rise to the third shortcoming, conflict, at the level of EU institution-Member States relationship.

The second chapter will provide both a description of the EU gas system and an analysis of the war in Ukraine. Part one of the chapter will concentrate on the characteristics of the EU gas system with a view to better understanding how it functions. Building on this analysis of the EU's dependency on foreign gas supply, the chapter will highlight the fundamental importance of Russia and Ukraine in order to explain the reasons behind the effects of the war in Ukraine on Europe. To this end, a description of the EU natural gas infrastructure and of its main supply routes will be necessary in order to clarify the reasons behind the EU dependence on specific suppliers and identify the weaknesses in the EU gas system. Particular attention will be given to the position of the South-eastern European area and to the role of Ukraine as a transit country. The former will be necessary to understand the area's strong dependence on Russian gas supplies while the latter will be key to showing Ukraine's strategic importance for EU security of supply because of its role as a 'transit country', as well as its large gas storage system.

The second part of the chapter will describe and analyze the war in Ukraine. In order to clarify the position of each of the powers involved, a brief exploration of the historical causes behind the conflict will be provided. Following which, the main events of the crisis will be discussed, outlining the main phases of the war and their characteristics. Against this backdrop, the energy conflict between the EU and Russia will be discussed, highlighting the evolution of the crisis from the point of view of gas

supply and energy prices. An explanation of the development of the energy crisis will be provided both from the internal perspective of the EU, and from that of EU-Russian relations. This will be followed by a description of the consequences of the war on the role of Ukraine as a transit country and gas storage country.
An analysis of the developments of the crisis would not be complete without a description of its effects on the European system. The third, and final, part of the chapter will elucidate on the consequences of the crisis on three main systems: energy, economic and institutional. A description of each is necessary in order to clarify the extent of the crisis for the EU and show that, even if it began as an energy crisis, it has affected the economic system and forced a rethinking of the European interinstitutional relationships and future development plans. From the description provided it will be clear that the war in Ukraine has had far-reaching consequences on many aspects of EU life and justified an emergency response by EU institutions in order to stem its effects and mitigate further serious threats to the Union and its population.

The thesis will reach its climax in the third chapter with a presentation of the EU measures implemented to deal with the crisis. This chapter will answer the question of whether there have been changes in the modes of energy governance. In order to provide a satisfactory description of EU measures both its chronological development and its main characteristics will be illustrated. The chapter will describe each of the five regulations which have been adopted by the EU to face the crisis. Such regulations will be presented not only in their contents but, also, in their institutional premises. This will reveal the existence of two main groups of regulations: firstly, Regulation EU 2022/1369, Regulation EU 2022/1854 and Regulation 2022/2576, and secondly, the Regulation EU 2022/1032 and Regulation 2023/435. The former represents a package of emergency measures enacted under Art. 122 TFEU, and which has a limited temporal application in order to directly face the effects of the crisis. Such regulations concentrate on tackling supply security concerns by creating a mandatory gas reduction mechanism and a system of joint gas purchases while also addressing rising energy prices through the introduction of an energy price cap mechanism. The latter, on the other hand, introduces more structural measures which have both short term and long-term effects by implementing new rules for gas storage and introducing the REPowerEU plan.
Following this description, the analysis of the EU modes of governance will move to focus on the position of each institution in the management of the crisis by considering the mechanisms put in place, the consequences of the crisis on each institution and, more generally, the impact on the process of EU integration of the energy system. As in the previous part of the chapter, each regulation will be analyzed in turn evidencing again the division between emergency and more structural measures and

further highlighting the institutional dialogue and compromise behind each regulation. Particular attention will be devoted to the use of Art. 122 TFEU as a legal basis for the adoption of regulations and to its institutional consequences. Finally, a description of the main consequences of the crisis on the process of integration will provided in order to consider possible future developments in EU energy governance.

The thesis will reach the conclusion that EU modes of energy governance have not been substantially changed and that there has not been any significant shift in the balance of powers among EU institutions. It will, furthermore, affirm that any changes to the EU institutional dynamics originate from the use of energy mechanisms which do not create long-term institutional effects, but rather reflect the need to react quickly to manage potentially disruptive situations. Even if no significant institutional changes have occurred, the thesis will conclude that some important steps towards further integration have been made and that future developments have the possibility to prompt important progress towards a more integrated EU energy sector.

2. CHAPTER ONE The European Institutions and the Energy Policies

2.1 Introduction

In the analysis of the consequences at the European institutional level of the 2022 Ukrainian crisis it is necessary to begin by establishing a framework in which such crisis has erupted. The European Union action in the field of energy policies has evolved through time as a series of responses to energy crises in which the supranational agents of the EU have attempted to seize a shift in the balance of powers and to enact a stronger European legislation which could erode the prerogatives of the Member States.

The war in Ukraine was not the first time that the European institutions had faced an issue like this; they have had to cope with energy crises in relation to Russia since the beginning of the 21st century. It was exactly in these crises that the framework of action had its impetus for innovation after being neglected for most of the European integration history. The 2006 Russo-Ukrainian crisis sparked concern over the security of gas supply, the 2009 and 2014 crises further reinforced it. These crises have led the European Commission to push for a European response and a supranationalization of the field of energy policies which could have guaranteed an increase in security. Despite such effort and major improvements, Europe failed to reach the Commission's targets and the 2022 gas crisis marked a new critical juncture for the innovative action of the Commission.

To understand fully the impact of the 2022 gas crisis and to analyze the consequent measures and responses, it is necessary to consider the institutional setting in which the European institutions act. Such framework of action is multilevel and multi-institutional, characterized by high levels of competition between the supranational institutions and the Member States which are not ready to renounce their historical prerogatives.

This chapter seeks to provide a general picture of the field of energy governance in the EU while, at the same time, analyzing the most important mechanisms of action in the hands of the European institutions. Such analysis will be centered both in the formal mechanisms to which the

various agents can resort and in the intrinsic weaknesses of the governance system which impede or reduce the effectiveness of the European action.

To carry out the intended analysis, this chapter will begin providing a brief historical outlook of the European integration process of energy policies. Such effort is necessary in order to provide a general perspective of the most important institutions involved, given the fragmentation of the decision-making process in the field.
A second section will focus on a further historical analysis which will be centered on the normative side of energy governance. Also, in this area, fragmentation remains a peculiarity and normative integration has proceeded mostly through secondary legislation rather than through treaty evolution.
The third section will contain the central dissertation of the chapter which will provide an analysis of the modes of energy governance, considering the formal powers attributed to each institution and their practical application. This section will be followed by a fourth one which will be devoted to pointing out the weaknesses of the system. The purpose of such section will be to highlight the *ex-ante* deficiencies of the EU energy system before the beginning of the 2022 crisis. Furthermore, the analysis of the system's weaknesses will ease the task of understanding the elements of change which were brought about by the war in Ukraine and whether such changes truly impacted the European institutions.
Finally, a concluding section will be devoted to a brief recap of the entire chapter with the purpose of clarifying those central institutions and decision-making procedures which have the greatest impact in the energy field.

2.2 European Integration of Energy Policies

Energy governance has lived more than one life in the history of the European Union integration process. Beginning from being the driving force to achieving some targets at a supranational level, it has since become an element of fierce opposition among Member States and a crucial element of change in the politics of the EU institutions. The history of energy governance can be neatly divided into three major periods which display a different degree of centrality in the European Dialogue and a different level of conflict between the players involved.

The first period begun with the creation of the first European entities themselves and lasted until the beginning of the 60s. Such path begun in 1951 with the creation of the Coal and Steel Community (ECSC), a six-member[1] administrative (Britannica 2023) agency aimed at integrating industries of the sector to reduce the possibility of conflicts between the different countries. Despite the secondary relevance of coal for today's Europe it should be noted that at the time of the signing of the founding treaty of the ECSC, such resource was fundamental for power generation and the allowance for a supranational control implied the recognition of the potentialities of the energy sector as a driver of change. Such idea was further reinforced in 1957 with the signing of the Treaty of Rome which, other than creating the first European Economic Community, increased the centrality of energy sources in the European dialogues through the creation of the European Atomic Energy Community (EURATOM), an international organization which aimed to coordinate research processes and manage nuclear energy in Europe. Both agencies demonstrated the political will of European leaders to begin a journey of supranational integration centered on the issue of security rather than on commitment for the creation of a common energy policy. (Herweg 2018)
Two elements are worth noting regarding this first period: firstly, it shall be pointed out that in the process of integration EU institutions favored market-oriented measures to proceed in the integration of the energy field; energy integration begun together with market integration, and it will be through the market that the future developments in the energy sectors will be obtained. Secondly, the general agreement between the various agents involved in the process should be noted: the first period of integration is characterized by the central relevance of energy in the European discourse and by a low level of conflict among the different institutions which agreed on a supranational effort that, at the same time, did not harm state's sovereignty and prerogatives.

The second period of the integration process, which was a 30 year long period beginning in the 60s and ending at the beginning of the 90s, witnessed a complete change in the minds of European governments and energy governance lost all its traction. A decrease in importance of the energy sources on which integration concentrated (namely, coal) (Herweg 2018) and a revival of state sovereignty in the field reduced the possibilities of integration leaving the Commission as the only actor pushing for integration. Dialogues concerning energy governance related merely crisis resolution, the two oil crises of the 70s being the most relevant moments, but the Commission did not manage to exploit such windows of opportunity and no further integration was achieved. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) Despite such lack of integrating momentum two important

[1] The six original members of the ECSC were: Belgium, France, West Germany, Italy, Luxembourg, the Netherlands

elements came to light in these 30 years. The first related to the importance of energy security, while the second was a further reinforcement of the idea of the importance of market integration as a medium for energy integration. Energy security gained relevance, becoming a topic of major concern, mostly for the Commission, which begun producing a policy-making effort to increase security standards which remained overlooked by national governments. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) Understanding the sovereignty priority of Member States, the Commission understood that energy integration could be better achieved through market integration and proceeded, beginning from the 80s, to change its approach. (Talus 2016)

The third period of the process of integration in the field of energy governance begun in the 90s with a revival of energy importance in the European dialogue and an acceleration of EU policies and EU powers in the field. Two main reasons lie behind the increased interest of the EU. Firstly, the issue of environmental protection came to be one of the top priorities of the Union which presented itself as one of the leading promoters of sustainability. Consequently, energy became a policy area to tackle and an instrument to increase the importance of EU institution's role in the field. Secondly, the Commission increased its awareness on the problem of security of supply given the high reliance of the Union on foreign gas sources. Since the beginning of the 90s, European effort begun to be prominent with the Commission being, once again, the driving force. In a 15-year period, there was a clear change in European energy governance. Firstly, the integration of the European energy sector through the market was obtained thanks to a set of three energy packages (the first energy package being approved in 1996 for electricity and 1998 for natural gas, the second being approved in 2003 and the third being approved in 2009) which begun by creating a general framework of action and, progressively, introduced more precise legislation and competences which aimed to create a common energy market which was based on competitiveness and was meant to guaranty the security of the network.

Market integration policies, both at the internal and external level, focused on creating a single energy market through a rule- based market approach. The creation of the single market passed through a double initiative which, on the one hand, aimed to create a European level system of electricity and gas markets while, on the other hand, concentrating on the elimination of monopolies in the sector. The elimination of monopolies was meant to reduce the power of any single actor in the market (Directorate-General for Internal Policies 2016) with the aim of increasing the security of the system. The energy sector creates natural monopolies given the particularly rigid structure of the

system making it challenging, but essential, to eliminate them in order to guarantee a more stable energy market with a lower degree of dependence from foreign sources and a higher competitiveness which guarantees more sustainable prices. The European Council set 2015 as the target-year to complete the integration of the energy market with full interconnection of the infrastructures and the total elimination of monopolies. Such an objective has not been achieved and the Commission (Ciucci 2022), in 2019, produced a set of three pieces of legislation focused on the electricity market[2][3][4] which aimed to facilitate the process.

A point worth noting is the lack of explicit provisions in the treaties regarding EU competences in the energy field. This legal void required EU institutions to proceed under different competences to reach the same objectives; the first evident turning point was the signing of the Treaty of Maastricht which begun to devolve competences to the EU in the management of the energy infrastructure and in the environmental action but did not grant any competence of energy governance, whose absence mainly impacted the field of external relations (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013). Certainly, such an evolution was significant but did not have an overreaching impact given that the hardcore prerogatives firmly remained in the hands of the Member States. The first attempt to obtain legal competence in energy governance was carried out during the writing of the Constitutional Treaty in which energy was inserted as an area of "shared competence" with the Union institutions having the duty to ensure both the improvement of the environmental sustainability and the functioning, security, and efficiency of the energy system at the European level. Such provision found hard opposition from Member States who feared a loss of control over policies and, mostly, over resources. (Hancher e Salerno 2012)

During the first 10 years of the new millennium three fundamental developments occurred and successfully changed the way in which energy governance was carried out. The first element of change relates to the geography of the Union which was modified through a double enlargement in 2004 and 2007, which resulting in European boundaries extending towards the East and bringing ex-soviet countries into the European Union. Such enlargement had overreaching implications, mostly for the energy sector and its security; a higher number of countries modified the security balance and prerogatives, given the high reliance of the new members on Russian gas. (Buchan 2020) The

[2] Internal market of electricity (Regulation 2019/943)

[3] Common rules for the internal market for electricity (Directive 2019/944)

[4] Risk-Preparedness Regulation (Regulation 2019/941)

Commission noted this important shift also as a consequence of the gas dispute between Russia and Ukraine in 2005/6.
The institutional response to such changes was contained in two fundamental documents: the Lisbon Treaty of 2007, which was a game changer, and the Third Energy Package of 2009. Both pieces of legislation determined a complete shift in the role of the Commission and a further understanding of the primacy of the problem of gas security of supply, also following the second gas crisis caused by the Russia-Ukrainian dispute of 2009.

The Lisbon Treaty introduced, for the first time, an energy title containing a clear division of competences and a set of shared powers which entitled the Commission to act in the energy policy field. The Lisbon Treaty, despite being a great advancement toward a more supranational control over the energy sector, did not manage to tackle some of the strongest prerogatives of EU Member States, such as the possibility to select the energy sources that were deemed to be appropriate to achieve the EU targets. The energy title in the Treaty was an answer to a double problem. On the one hand, there was the necessity to fill the legal void which had accompanied energy governance since the beginning of the integration process. While. On the other hand, it was necessary to consider two new realities: the new interest in environmental protection required new instruments for the European Union to tackle the problem, and legislating in the energy sector became one of the Unions priorities while, as a second but even more relevant element, the new concerns about security of supply put forward by the eastern European member countries required stronger cooperation and coordination at the EU level to guarantee such security.
For its part, the Third Energy Package introduced an element of important innovation: the European Union Agency for the Cooperation of Energy Regulators (ACER), a body designated to coordinate national regulating bodies and to provide information to the Commission to foster the objective of gas security. Furthermore, the Third Energy Package granted further competence in the legislation on market functioning to the EU institutions. (Talus 2016) Overall, in the space of only two years, the Commission and the EU institutions more generally, acquired a much stronger power in energy governance.

Following these two fundamental pieces of legislation, energy governance proceeded through the issuing of regulations and directives which focused on the setting of minimum requirements, common standards, and practices in order to prevent and solve possible crisis situations. Furthermore, the EU put considerable effort into the promotion of infrastructural projects in order to reduce dependency on Russian gas while, at the same time, increasing regulation regarding market rules.

In understanding the evolutive process of the European Union energy governance it is important to point out two critical elements. Firstly, the evolution of energy policies can be defined as an evolution through crisis; Member States' unwillingness to reduce their powers and prerogatives has produced a limited amount of institutional development. Eventual changes in the institutional balance of power were brought about by periods of crisis which required paradigm changes in the EU to allow the survival of the Union. In such crises, Russia has (mostly in the last 20 years) been, and continues to be, a major actor. European dependence on imported Russian gas and its hostile relationship with Ukraine have posed a serious threat to the security of the EU supply of natural gas. The second element to be taken into consideration is the essential role played by the Commission as a sponsor for institutional change. The Commission, despite the slow progress in European legislation and institutional endowments, has been active in the production of communications, green papers and regulations which have allowed it to shape the energy discourse despite a lack of formal powers. Such discourse has allowed for the production of the necessary normative change to overcome, at least partially, the resistance opposed by national governments against a supranational control over energy issues.

2.3 Normative Evolution of Energy Policy in the European Union: Treaties and Secondary Legislation

The founding treaties of the European community were centered on the issues of energy, in the form of both coal and nuclear power. 1952 with the ratification of the Brussel Treaty creating the ECSC and 1957 with the creation of EURATOM marked the beginning of the integration process. The two newly born organizations had rather different characteristics with the ECSC creating an embryonal type of supranational organization, while EURATOM was mostly concerned with market and technical aspects. (Buchan 2020) An element of overreaching importance present in both treaties is represented by the centrality of security: Art.3 of the ECSC Treaty recognizes the necessity to guarantee the security of supply at a European Level, while EURATOM Treaty recognized the same necessity in Art. 52. Such necessity of ensuring security of supply was coupled with the desire to create a common market to administrate coal and nuclear sources. In order to foster such interest, the supranational agencies were granted the power to legislate in the matter and even to have the

"exclusive right to conclude contracts'" for supplies of nuclear material[5]. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) Such power was significant and, in general, the two organizations were granted relevant rights and powers but did not go so far as to create an energy community which was strongly opposed by Member States who wanted to maintain their prerogative in the field.

The lack of desire to build an energy community impeded most normative evolution, leaving the energy sector far behind other areas (namely the common market) in the integration process while causing, at the same time, a reduction in the regulatory powers attributed to the European institutions. For this reason, the Commission, rather than introducing norms, has adopted resolutions to establish frameworks, strategies, and guidelines. The previously cited instruments concentrated on producing a general policy for the Union which was centered on gas and electricity markets. The shift away from coal proved to be challenging from a legal point of view for the Union which was not equipped with the necessary power to operate and had to resort to internal market legislation in order to be able to act.[6]

Such use of internal market legislation can be seen in the first four directives on energy which were defined as the "First Energy Package" (composed by directive 96/92/EC on electricity and directive 98/30/EC) and the "Second Energy Package" (composed by Directive 2003/54/EC and directive 2003/55/EC). These two packages begun to regulate the energy market both in the electricity and natural gas domain by providing for company unbundling and market opening which should have fostered a tow-fold objective: increase in competitiveness and, consequently, increase in security. Two rounds of legislation were necessary given the lack of "strong" provisions in the First Energy Package. (Buchan 2020) Despite being market oriented, both directives were aimed at improving the security of the system preventing market failures and supply shortages in the Union. Furthermore, they had the difficult task of opening a breach in the Member States' prerogative on the matter. Such a breach would allow a deep change in the system in less than 10 years.

The energy field was not a successful area at the European level. A legislative void remained present until the Lisbon Treaty and, during the various Treaty developments it became clear that

[5] Art. 53, EURATOM Treaty 1957

[6] Before the beginning of the 1990s the European legislation on energy matters had not been updated leaving a legal gap in the powers of EU institutions. Such legal gap was created because both the ECSC and EURATOM were treaties concentrated on specific energy sources and did not legislate the energy field in its entirety. Therefore, EU action in the energy field had to resort to connected fields to be enacted, in particular the market one.

Member States had no interest in inserting an energy title in the primary EU legislation. EU institutions had competences over the internal market thanks to related provision but, despite three approved treaties and a constitutional creation attempt it was only in the Lisbon Treaty that a Chapter on energy competences was provided. The Maastricht Treaty granted the Commission the power to improve energy infrastructures (Art. 129b), but the choices related to energy sources and supplies remained a prerogative of the Member States and the EU could only act through an intergovernmental procedure (Art. 130s). Such preference was reconfirmed in the two subsequent treaties (Amsterdam, 1997 and Nice, 2002). The aforementioned Treaties, furthermore, did not give any authority to the EU institutions in relation to external matters. It was the attempt to draft a Constitutional Treaty carried out in 2004 that marked a hotly debated (Hancher e Salerno 2012) change in the institutional dynamics with the creation a clear separation of powers and the beginning of a sharing of competences between the Member States and the Union institutions. "Energy"[7] was inserted between the areas of shared competence implying a supranational turn in the decision-making procedure. Such possibility greatly expanded EU powers which were, at the same time, limited in their scope given Art III-129[8] which imposed unanimous approval by the Council for measures affecting Member States' rights in choosing "energy sources and the general structure of their energy supply"[9]. Despite such advancement the Constitutional Treaty was not ratified so that all the new entitlements which the Union managed to obtain disappeared.

It was the Lisbon Treaty that introduced the single, most important, piece of legislation in which the energy provision allowing the Union to act will be contained filling the legal void and allowing for a supranationalization of the policy field. The Lisbon Treaty, signed in 2007 and operative since 2009, provided for a complete readjustment of the European Union institutions, powers, and modes of governance. In such readjustment the process of European sponsorship for an energy title and competences in energy policies managed to find its way in, with the inclusion, after more than 50 years, of clear competences and powers attributed to the supranational institutions of the Union. It is clear that, as far as energy policies and related powers are concerned, the Lisbon Treaty mostly reflects the work previously done for the Constitutional Treaty of 2004.
Energy competences are enshrined in the Treaty on the Functioning of the European Union (TFEU). Treaty Art. 4 includes energy among the competences shared by the Union with the Member States allowing for a supranational policy-making procedure and for competence both in the internal market

[7] Art I-14 of the Constitutional Treaty draft, 2004

[8] Constitutional Treaty Draft of 2004

[9] Art III-129 of the Constitutional Treaty draft, 2004

and in external relations. The possibility of managing external relations in the matter greatly expands the possibilities of the Union allowing for the creation of relationships at a European level with third parties which previously had to be carried out through the creation of separate treaties[10].

In order to understand fully the importance of energy governance in the TFEU, it is important to analyze not only the specifically created Title for energy policies but, also, all those articles which mention energy and, in particular, those which increase or limit the supranational action of the EU institutions. Art. 122 TFEU, under the Title on Economic policies, allows for supranational control of energy supplies in case of severe crisis: the Council is authorized to adopt, respecting the solidarity principle, those measures necessary to overcome the crisis. Art. 122 TFEU does not specify the limits and the methods by which such measures shall be applied. Even remembering that the article is part of the Title on Economic Policies, such lack of explicit limits gives a very large power to the EU institutions which can act, at least in theory, with the "full force" of the Union. The only explicit limit to which this article is subject is the fact that it should act as a last resort as it applies "without prejudices to any other procedures provided"[11].

Furthermore, the Union is tasked with the duty, set out in Art. 170, to develop trans-European networks (TENs) in the field of energy infrastructures. The duty to manage and create transnational infrastructures is aimed at a double objective of the Union in the case of energy policies. On the one hand, it fosters the continuous promotion of a single market in the energy field while, on the other, it increases the efficacy of the Union in the field of security of supply of the entire system. The power to legislate in the field infrastructures is fundamental, mostly in the case of natural gas, because pipelines and grids require significant investments which the EU can better help to coordinate.

The abovementioned articles are summarized in the Energy Title which contains the most important article on the subject of energy policies, namely Art. 194.
Art. 194[12] states that:

[10] Few very important treaties were signed to overcome the problem of the lack of competence of the EU. The most important treaty in this sense is the European Charter Treaty of 1994 which provided for trans-European market rules in the Energy Sector.

[11] Art. 122 TFEU

[12] Art. 194 TFEU

1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:

(a) ensure the functioning of the energy market;

(b) ensure security of energy supply in the Union;

(c)promote energy efficiency and energy saving and the development of new and renewable forms of energy; and

(d) promote the interconnection of energy networks.

2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.

Such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c).

3. By way of derogation from paragraph 2, the Council, acting in accordance with a special legislative procedure, shall unanimously and after consulting the European Parliament, establish the measures referred to therein when they are primarily of a fiscal nature.

The framework established by Art. 194 TFEU attributes clear competences to the Union while clearly defining the instruments of governance to be employed to reach the objectives enlisted in the first comma of the article. It is necessary to highlight a few elements in order to clarify the meaning of the article. First, in its first line, Art. 194 reaffirms the historical connection between energy and the internal market; such element reaffirms the centrality of market regulation and market integration as an instrument of European development and action. Second, the connection between energy and the environment is explicitly provided. In this case, it is a historical consideration which has led the Commission to push for a connection between the two elements. Since the beginning of the 90s an increased interest in climate change and the desire to protect the environment has fostered regulation in the energy field, for such a reason, and despite other European interests, the two policy areas are seen as intrinsically linked. (Westphal 2004) A final element to highlight of the *incipit* of the article is the reaffirmance of the principle of solidarity as the guiding principle for European and Member States' action.

The core part of the article is composed of two parts. The first is the list of the aims of energy policy, while the second concentrates on the policy-making procedures. Art. 194- par. 1 in its second part clearly stipulates the four objectives of the Union action. For the purpose of this dissertation three of them are particularly relevant because they are centered on energy security and, consequently, on

natural gas security. Ensuring the functioning of the internal energy market enables energy security to be addressed from the perspective of avoiding market failures. Security of supply and the promotion of energy networks are centered on the avoidance of supply interruption. The three provisions aim to issue preventive measures rather than to give competences to tackle crisis situations, which are already enshrined in Art. 122 TFEU. Furthermore, Art. 194 is the basis for further development of EU legislation and provides for a political backing for extensive policymaking. (Hancher e Salerno 2012)

The second part of the Article provides for the supranational and intergovernmental decision-making procedures. Energy policies shall be adopted through an ordinary legislative procedure meaning that energy is a field of supranational competence. At the same time, Art. 194 provides two limitations to the powers of the European institutions. In the second part of Comma 2, it recognizes the historic limitation to which the Union has been subject. Namely the prerogative of Member States to choose the general structure of the energy supply and the power to choose between the various energy sources. Secondly, the ordinary procedure cannot be applied in those measures which primarily concern fiscal matters which are energy related. In this case it is the special legislative procedure, requiring unanimity, which applies, making it, *de facto*, an intergovernmental field of competence. Art. 194 reestablished, once again, the old dichotomy between the European target of supranationalization and the strong will of Member States to maintain their traditional powers in a strategic sector such as energy.

The powers of Member States are not only defended by Art. 194 but, also, by Art. 192 which reestablishes their old prerogatives in the choice of energy mix and in the structure of their energy supply (Art. 192). Such provision greatly limits the action of the Commission which loses most of the necessary power needed to conduct a proper European energy policy and imposes an intergovernmental procedure based on unanimity in the Council. The peculiarity of Art. 192(2c) is that it is part of the Title on the environment, establishing, once again, the close connection between energy and environment. From Art. 192 it can be deduced that the legislator wanted to build up a system of strong guarantees for the rights of the Member States, avoiding the possibility of legislation by the Union through closely connected areas.

The European legislative effort did not end with the Lisbon Treaty but, on the contrary, became with it. The Union legislation expanded through the production of directives and regulations which aimed to promote security of energy supply. A fundamental step in the energy governance has been the production of the Third Energy Package of 2009 which followed the two previous packages

by increasing the efficacy of the measures already in place. The Third Energy Package concentrated on the unbundling of energy companies to contrast natural monopolies, increasing competition, and improving the security of the system. Market regulation also proceeded through the creation of network codes on interoperability, gas balancing rules, capacity allocation mechanisms and transmission tariff structures. At the same time the Third Energy Package introduced some important innovations, mostly for natural gas governance. The most relevant of these was the creation of the European Union Agency for the Cooperation of Energy Regulators (ACER). This institution, created by Regulation No. 713/2009, is tasked with promoting cooperation and coordination between the different national regulatory authorities pushing the control over energy companies to a European level rather than leaving it at the national one. The objective of the legislative package has been to increase the security of supply of natural gas while improving the general coordination of the system. Such objective was reached by filling the legal and regulatory void left by previous legislation. (Hancher e Salerno 2012)

The importance of the Third Energy package is not restricted to the provisions creating ACER and regulating the internal market but there are some important clauses which regulate the external dimension of the Union which is a complete innovation in the European system. The "Gazprom Clause"[13] had important external effects while regulating the internal market. Such clause imposes the duty of consideration of threats of security in the certification by national regulators of third-country firms in the natural gas sector. (Goldthau e Sitter 2015)

Furthermore, the Third Energy Package has produced a shift in the relative positioning of the different European institutions and of the Member States producing a change in the balance of powers in favor of the democratic institutions of the Union through two important innovations. Firstly, the Union has been granted increasing regulatory powers (both in the internal market and through ACER) which have been subtracted from national authorities. Secondly, the Commission has been empowered to regulate in the field through the use of comitology procedures[14] effectively reducing the importance of the Council in terms of policy making. (Hancher e Salerno 2012)

The Commission was empowered by the third package to proceed to regulate the energy field through the adoption of guidelines, frameworks, and strategies. Such instruments, despite being directly

[13] Art. 11 Directive 73/2009

[14] Comitology refers to those situations in which the Commission is given implementing powers. Comitology proceeds through the formation of a Comitology committee composed of Member States' representatives and Commission officials which discusses the relevant topic and approves it through a qualified majority voting. Once approved, if approved, the Commission is obliged to adopt the act, if, however, the committee does not approve it the Commission is allowed to revise the matter by referring to an appeal committee. (European Commission 2023)

addressed by the Third Energy Package, have been consistently employed by the Union to affect the energy field even prior to their formal recognition in the legislation.

The European Commission has produced a series of Green Papers which outline the energy strategies of the Union making explicit the objectives to be reached by the Union and the national government with particular attention to the different spheres of energy management such as the security of energy supply and the sustainability of the system. The 2000 Green Paper "Toward a European Strategy for the security of energy supply" highlighted various structural weaknesses centered on a high dependence on Russian gas supplies, strong infrastructural interdependence, and a lack of power at the level of the European Union. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) A second Green Paper was issued in 2006, following the Russo-Ukrainian crisis, reaffirming the deficiencies in the security of supply and the strong reliance on Russian gas imports. Through an analysis of the 2006 Green Paper, it can be assessed that the Commission begun to identify a list of new priorities which included the creation of a common policy for external relations (Sierra 2010). Secondly, the Commission began to adopt the "Energy Trilemma" (World Energy Council s.d.) which is the desire to foster three objectives to guarantee energy security: energy security, environmental sustainability, and energy equity. The Energy Trilemma represents a suitable instrument to clarify the road ahead for policy makers who should seek advancement in the three areas while considering a careful balance in those cases in which sacrifices are to be made.
The instrument of Green Papers served a double purpose. On the one hand it allowed the Commission to express its opinion on the energy related matters by clarifying the priorities of the Union to the Member States and increasing coordination in the system. On the other hand, such instrument allowed the Commission to present a strategy to the Member States on the external relations of the Union, sector in which, prior to the Lisbon Treaty, the Commission had no powers.

The Commission, furthermore, has produced a vast number of Strategies and Communications which have served the same purpose as the abovementioned Green Papers. The first strategy for gas security was issued in 2003[15], a second one in 2008[16] and a third in 2014[17]. There has been an

[15] Council of the European Union, 2003. A secure Europe in a better World: European Security Strategy

[16] Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee and the Committee of the Regions, 2008. An EU energy security and solidarity action plan

[17] Communication from the Commission to the European Parliament and the Council, 2014. European Energy Security Strategy

increasing sense of concern in the three Security strategies. In 2003, energy security was seen as a concern but not as a priority, but the disputes between Russia and Ukraine have changed the European position, which, already in 2008, considered it as a high priority. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) In 2014 the Commission even considered emergency measures in case of gas disruptions making gas security a top and urgent priority.

In the European legislative process, Green Papers, which provided a general framework to orientate institutional action, were followed by the production of White Papers which contained a more specific proposal for EU action. White Paper, differently from Green Papers do not give a strategic outlook for action but provide technical elements to clarify the process and results of European legislation. In the context of energy governance, White Papers have been an important step in the construction of European legislation as they allowed precise objectives to be set which national government and, most of all, private companies, could, and indeed had to, adjust. Furthermore, White Papers were used as a useful instrument of communication with private actors given the possibility, for citizens and companies, to submit comments and opinions to shape the final policy proposal. One, fundamental, White Paper energy-related shall be mentioned: in 1995 the White Paper "An Energy Policy for the European Union"[18] was issued, following the 1995 Green Paper[19] on the same subject, identified the European strategic objectives (namely competitiveness, security of supply and environmental protection) which have been leading European action ever since. In the same White Paper renewable energy was recognized as a suitable instrument to foster the aforementioned objectives.

Communications have been employed to emphasize some positions of the Commission or to build a dialogue between the different European institutions with the intent of giving guidelines of action to Member States and to the Union itself. In 2002 a Communication on the security of supply of the internal market was published and focused on those criticalities to which the Union was most exposed. It can be said that such communication was an early warning given the fact that at the time Russia was still considered a reliable partner. A second, important, Communication was published in 2007 containing "An energy policy for Europe" in which the Commission proposed an over comprehensive plan for energy policy. All these Communications have been a useful instrument to

[18] COM(95) 682 Final 13 December 1995- European Commission White Paper – "An Energy Policy for the European Union"

[19] COM(94) 659 Final 11 January 1995 - European Commission Green Paper - "For a European Union Energy Policy"

complete a framework of action in which the Union could move and to which Member States could refer.

The Commission, in 2010, published the 20-20-20 Strategy, a Communication[20] aimed at clarifying the Union objectives in the energy sector for a timespan of 10 year and setting three targets: 20% decrease in greenhouse gas emission, 20% share of renewable energy on final consumption and 20% improvement in energy efficiency. Despite seeming centered on environmental change and protection the Communication had overreaching consequences on the security of supply as it promoted a strengthening of security on the external dimension by making the EU more self-sufficient and promoting security for consumers. It reaffirmed the necessity for the opening of the market through the reduction of monopolies while, also, considering a general strategy for energy relations with neighbor partners. The 20-20-20 Strategy promoted the opening of the markets vis-à-vis the neighbors while pushing for a reduction of dependence from foreign energy sources.

Other than several important pieces of legislation which have shaped the institutional dialogue and have granted powers to the Union, there is a set of sector-specific directives and regulations which aim to regulate the energy sector and to guarantee the security of gas supply and of the gas market. The most relevant provision in the sector of gas security is Regulation 2017/1938 which repealed Regulation 994/2010 and improving the solidarity, transparency, cooperation, and coordination. Such regulation aims to create the conditions for a safe management of natural gas considering the Russian invasion of the Crimean Peninsula.

This legislative framework shapes and constrains the modes of governance in which the European institutions have to carry out their tasks and objectives. Gas security and more in general natural gas governance is a field in which the supranational agents have to carefully balance the increased powers and competences while considering Member States' wish to maintain national control. In such a sense the analysis of the European governance of energy policy shall take into account not only the formal powers granted by law, but also the informal constraints to action and the practical necessities of compromise both among the European institutions and with the Member States.

[20] Communication 2010/639

2.4 The European Union Governance of Energy Policies

An institutional analysis of the field of energy governance and policymaking in the EU has to begin with an inquiry of the role of the Commission which is the key actor of the supranational governance and of the institutional initiative. The Commission, as previously affirmed, has been the historical driver of the European institutions' desire for a common energy policy that could overcome national prerogatives. The Commission's effort has been so important that its role has been defined as visionary (Brutschin 2016) given its early understanding of the need for a long-term strategy for the EU.

The Commission, following the Lisbon Treaty and the Third Energy packages, has been endowed with formal powers while maintaining its long-standing influence and informal ways to affect the energy market and the policymaking process in the energy sector. The informal power of the Commission is based on the possibility of a dialogue with private companies in the energy sector. Such discussion would allow the Commission to express its preferences and push for an agreed solution. This informal power is particularly notable given the importance of the Commission in the funding of infrastructures. As natural gas infrastructures are particularly costly and with private companies being at risk of a major loss, the EU has been actively engaged in the building of such infrastructures. This is recognized by Art. 170 TFEU and the fundings allocated to energy infrastructures under the Trans European Network- Energy (TEN-E) have been increasing over time. (Prontera 2020)

The formal powers attributed to the Commission constitute a complex system of fragmented competences and instruments giving rise to a fundamental involvement which is not, for the large part, a resolutive one. The Commission is endowed with the formal right of legislative initiative which is mostly concentrated in the regulatory field. The Commission can be defined as a regulatory power given the predominant type of legislation which it enacts. (Goldthau e Sitter 2015) Through regulations it has expanded the internal energy market, it has legislated on the security criteria and has pursued the interests of the EU in the energy field.

Despite regulatory powers being one of the most effective instruments available to the Commission, the Commission's effort and option to enact legislation have not been evenly distributed between the different areas of competence. The efficacy of the Commission in the area of the internal market should not be underestimated. The regulatory effort of the Commission, together with the beginning of the infringement procedures against Member States for non-compliance, have led to the creation

of a consensus over a full integration of the energy market. The European Council, following such effort, has agreed to the completion of the integration procedure by 2014.[21] However, at the same time, the Commission's action has not been as successful in the field of energy security.

Art. 194 gives the European institutions the competence to "ensure the security of supply". Yet, despite such formal power, the Commission has encountered a strong opposition from Member States who want to maintain their prerogatives. In the light of this attitude, the Commission's regulatory powers have been, for the large part, overlooked and, in order to avoid a clash between powers, the Commission has preferred to renounce to its legislative prerogatives and to opt for a milder approach centered on coordination and cooperation between different institutions. (Thaler 2016)

In order to address this source of conflict, the Commission has preferred to use a mild approach based on the exploitation of crises and on the use of the Commission's expertise in the field. Crises situations have been used by the Commission to raise awareness of the structural weaknesses of the Union and to push for institutional reforms which could shift the balance of powers away from Member States. At the same time, the Commission has managed to exert a strong influence in the energy field thanks to its expertise. The Commission has mobilized its resources to become an incisive advisor of the European Council and to lead it towards those targets which were considered to be a priority. (Thaler 2016)

The Commission's effort is two-fold. On the one hand, it is concentrated on the production of quality policies centered on rational and effective criteria. On the other hand, it pushes for an increase in the technical expertise of its machinery to be able to shape the policy-making effort of the Union.

Inside the Commission, in the input production, there is synergic work of more than one actor: the technical expertise rests in the hands of the Directorate Generals (DGs) who are tasked with producing policy initiatives and supporting the general structure of the Commission in their areas of competence. The Commission secretariat is tasked with coordinating the work of the various DGs and producing the conclusion drafts to share with the European Council.

In the field of energy governance, the Directorate-general Energy (DG-ENER) covers a relevant position given its double role. On the one hand, it is entrusted with the task of oversight both of the infrastructural and financial systems. On the other hand, it is part of the policy-making procedure, and it fosters the innovation of the system. This latter task is fulfilled both through a bottom-up and top-down procedure depending on whether DGs take part in it as policy initiators or technical experts. In the latter case, the DG-ENER becomes an expert advisor, who mostly focuses on technical aspects. A further element of complication relates to the interdependent work of the different DGs. Despite

[21] Communication COM(2014) 634 of 13 October 2014

the presence of a division of labor and competences between the different DGs, the field of energy governance often involves more than one policy-making sector making a synchronized work of more than one DG necessary. The simultaneous effort of more than one DG, despite the complicacies it carries with it, can prove to be an element of added value for the Commission given the possibility of producing overreaching policy initiative which can prove to be very effective in advising the European Council.
The role of DGs should not be overestimated. It is, in its essence, a role of technical support.

If it is the Commission who has managed to find its way to the table when legislating in the internal market, in the case of energy security, the European Council is the keystone for cooperation between the supranational institutions and the Member States. As energy is an area in which Member States have always exercised their prerogative rights, the European Council has found itself in the peculiar position of being the most suitable agent to connect the supranational European institutions with the sovereign Member States. Member states have managed their energy policies maintaining sovereignty not only over the national resources but, at the same time, preferring bilateral agreements with third countries and full control over national policies and infrastructures. In such a context, the unanimity requirement of the European Council allows for policymaking at a European level without any threat to Member States' prerogatives. Despite the requirement of unanimity, the importance of the European Council as an institution is related to the role, which rests in the hands of the European Council President, of mediator and sponsor of interest. Through such role, it is possible to aggregate the diverse necessities of the energy governance of the Member States and to produce a common policy. The European Council, in such sense, becomes an arena of discussion and interest aggregation, allowing for a compromise solution.

Despite its important role as a mediator, the European Council lacks the necessary technical expertise and the structural capacity to carry out its task and to provide suitable solutions for the EU. The Commission has addressed this by providing its expertise and consequently influencing the direction of the European Council's decisions and the general agenda of energy governance. The Commission has become a key 'figure' of the European Council which has, ultimately, retained power over the final decision. In this way, a cooperative relationship between the two institutions has been established, avoiding unnecessary conflict and concentrating their efforts on a concerted solution. It should be highlighted that such governance mode is not supranational or to intergovernmental but, instead, aligns with “new intergovernmentalism” (Fabbrini e Puetter 2016) in which competition over institutional power is replaced by increased cooperation and power sharing between the two key

European institutions. With this cooperative effort, the Commission, the European Council and the Member States can all participate in the decision-making procedure. This type of cooperation has allowed the Commission and the European Council to tackle crisis situations which have occurred in the energy sector but, at the same time, has prevented a shift in the power balance between the supranational and intergovernmental institutions, producing a change in the working mechanisms of the Union.

When it comes to energy discourse, the European Parliament and the Council of the European Union have been, historically, secondary actors (Braun 2011). Since the Lisbon Treaty both institutions have been given formal powers, increasing their relevance but without challenging the primacy of the Commission.

In accordance with Art. 194 of the TFEU, the EU Parliament and the Council should be central figures in the pursuit of those objectives prescribed by the same articles. Both institutions are granted a role both in the ordinary legislative procedure and in the special legislative procedure. Because of the requirement of the ordinary legislative procedure to enact EU legislation, the European Parliament, also in the field of energy policies, is required to approve the Commission's proposals through majority voting. The same applies to the Council which has to act through a qualified majority. Qualified majority procedure can be applied in decisions regarding security of supply (Art. 122 TFEU), energy networks (Art. 170-172 TFEU), internal energy market (114) and, at times, also for external policies. It should be highlighted that the procedure for a qualified majority voting can require consultation with the Economic and Social Committee and the Committee of Regions. (Chopin, Durant e Kubišta 2009)

Despite different modalities, both institutions must act (even in the case of the special legislative procedure in which the Council becomes the major actor) by absolute majority while the Parliament is, only, a consultative body.

It becomes clear that, following the requirements of Art. 194, the involvement of both institutions is required to enact energy legislation at the EU level. Despite such clarity, the relevance of both institutions in the agenda setting is rather limited. With few exceptions[22], there has been no role of both institutions as agenda setters in the process of integration and legislative innovation making them secondary players and leaving the energy discourse to the tripartite dialogue between the Commission, the European Council, and the Member States. The EU Parliament role has been limited to a promotion of the expansion of the supranational powers of the Commission so that in such task the EU Parliament has been an all-time ally of the Commission but has not managed to imprint its

[22] One case worth citing relates to the EU Parliament effort to tackle energy poverty which begun in 2014

will. The Council, on the other hand, has been less supporting of the Commission's effort. It has been keen to underline the inefficacy of the Commission's action without the Council's support and the need for a cooperative, rather than centralized, attitude which the Commission was displaying. (Braun 2011)

A field of fundamental development for the efficacy of the European action relates to the powers of the European institutions in energy external relations. In external energy relations, a complex institutional system has been set up with a share of competences between the Commission, the European Council and the Member States. In this area Member States have maintained, for a long time, complete control over policies preferring bilateral agreements instead of negotiations at a European level. However, following the Lisbon Treaty, the EU has managed to obtain partial competences.

The leading figures in this area of policymaking are Member States which have direct relationships with supplying countries and negotiate prices and quantities. The major limit posed by the EU to the negotiations relates to the security of supply guarantees which must be upheld and to the insurance of competition in the market. Furthermore, Member States are constantly involved in energy diplomacy, not only in terms of the supply of resources but, also, with regards to infrastructural projects sponsored by Member States for their private companies.

In the area of infrastructural external relations, the Commission has managed to gain a relevant standing by coordinating national instances and subsidizing those projects of European interest. With regards to the latter, the Commission has not only played the role of a supplier of financial resources but has pushed to be involved in the whole negotiation process.

The Commission governance in external relations relies on a complex and very peculiar system in which attributions of powers are not clear cut and various players substitute each other. Normally the Commission is represented, for its external relations, by the High Representative of the European Union who is in charge of coordinating foreign policy. He or she is the "high ambassador" of the Union. In energy governance, the High Representative loses its role as a *primus* because, during negotiations, it is the Commissioner for Energy who takes the lead indicating the direction and who makes the final decision. On the other hand, the High Representative plays the role of supporter or promoter of specific regional dossiers related to other interests of the Union. (Braun 2011)

To this peculiar reversal in powers a further element of complexity is added given the tripartite nature of the usual negotiating groups. In fact, it is not only the Commissioner for Energy who conducts negotiations with the support of the High Representative. There is an additional actor, the president of the Council of the EU, which makes representation hybrid.

The EU lacks a common external energy policy, mostly in the field of energy security. (Amadio Vicerè e Venneri forthcoming) It proceeds through a series of compromises based on consent given the duty of sharing competences with Member States. Consent from Member States allows the Commission to proceed in negotiations of European interest on a case-by-case basis. This case-by-case basis, which is mainly concentrated on infrastructural negotiations of which the Union becomes sponsors, allows for a supranational decision-making process following a delegation of powers. In such sense it can be affirmed that external energy policies under this type of procedure are not supranational but are better considered as a delegation of intergovernmental powers. Despite such instances it should be highlighted that the Commission has successfully increased its importance in the field through a series of groundbreaking initiatives that have increased coordination and coherence. Certainly, an important role is played by regulations which have allowed for coordination and minimum-security requirements between Member States while, given the historical use of such instruments, the Commission has managed to impose on Member States[23] the review of bilateral agreements with third parties before their conclusion. (Ferguson 2018)

One last element of particular importance related to the governance of external energy policies concerns EU parliamentary approval for international agreements. This requirement[24] puts the EU Parliament in a high-standing position effectively. It brings democratic legitimacy to energy negotiations with third parties and represents a possible means of increasing the relevance of supranational institutions while, also, requiring parliament representatives in the most relevant organizations and energy- related conventions[25] (Braun 2011).

To have a clear picture of the complex institutional system of energy governance it is necessary to outline the role of regulators who have become an increasingly important actor following the Lisbon Treaty. ACER has been set up by the Third Energy Package and has proven to be a strong instrument to foster coordination and cooperation effectively reorganizing national authorities. National regulators are obliged to comply with ACER decisions and to submit to the agency reports on functioning and surveillance both of natural gas and electricity. (Hancher e Salerno 2012) In such a way, ACER represents a centralized European regulator authority with national regulators having a role of decentralized units. It should be noted that ACER, in respect of national regulators, has two

[23] Decision 668/2017

[24] Art. 218 TFEU

[25] Parliament representatives are present in the International Energy Agency, Energy Charter Treaty and Energy Community

roles. On the one hand, it is tasked with coordinating and monitoring while, on the other, it assists with the execution of regulatory tasks. (Kannellakis, Martinopoulos e Zachariadis 2013)
The powers of ACER are further increased by the possibility of making area-specific decisions on infrastructures and cross-border issues. (Talus 2016) This undertaking falls under the cap of the new style of management of the Commission: comitology. Under the comitology procedure, powers are delegated to ACER which is empowered to issue guidelines under the delegation of the Commission, given the technical competence of the agency to regulate the system. (Hancher e Salerno 2012) ACER has a further, fundamental role for the supranational institutions: it advises on policy matters. This duty is carried out through the issuance of opinions and recommendations that can shape dialogue over energy risks.

In conclusion, the institutional system of energy governance is characterized by few peculiarities which make the supranational management very complex. Following the Lisbon Treaty, the principle of solidarity, the Commission's effort and the cooperation between European institutions have facilitated an increase in the level of integration and supranational governance. On the other hand, national governance, and mainly some western European countries, have managed to oppose the European effort by retaining overall control over resources and keeping the intergovernmental procedure as the underlying procedure, even in those cases in which the Union has delegated powers. In this way, a multilevel governance has been created with an intermingling of powers in which the Commission has been the figure pushing for innovation, the European Council has managed to become the compromising institution and, the Parliament and the Council have not managed to find a large space for action.

2.5 Weaknesses in the European Union Energy Governance

Energy governance in the EU has suffered of a series of shortcomings and weaknesses which, at times, have proved to be fatal for the policy-making process.
Such shortcomings arise both at the interinstitutional level and in the vertical relationship between the EU institutions and the Member States.

Starting from the weaknesses at the European level, the complexity in the relationship between the various institutions opens up space for institutional competition. Starting from the internal

procedures of the Commission, an important element of policy incoherence originates from the competition between the different DGs. Under the Commission umbrella there is more than one DG with competence in the energy field or related issues, producing an interplay of actors which risks prejudicing coordination. Although, in theory, the DG ENER is the competent directorate, there are at least another four DGs (DG Competition, DG trade, DG environment, DG external relations) who participate, at different times, in the decision-making procedure. This creates a complex synergy and reduces the effectiveness of the sole DG ENER. (Maltby, European Union Policy integration: A case of European Commission policy entrepreneurship and increasing supranationalism 2013) Such lack of effectiveness can be caused by the different priorities expressed by the players which can be mutually reinforcing as much as mutually exclusive. A further element of complexity is the desire of the different DG to reach the same objectives in different ways. The DG ENER has always kept conflict to a minimum, mindful of the historical reluctance of Member States to tackle the energy field. On the other hand, the DG COMP, for example, conscious of its strong powers in relation to the internal market, has favored a more incisive approach. (Eikeland 2011) Also in this case, internal competition risks undermining the external action of the Commission.

A further element of weakness for the action of the Commission is the lack of clear competences in the field of external relation. Negotiation with third parties follows a hybrid method in which the Commission, the Council and the European Council are represented. This greatly limits the power of the European institutions which have to follow an intergovernmental logic given the participation of the European Council. At times, the Commission can act alone if it has received a mandate from the Member States. This might seem as a supranational turn in the European politics but, in reality, the power remains in the hands of the Member States who have to confer a mandate to the Commission. (Thaler 2016) We can therefore see that the Commission is empowered only when it is in the best interest of all Member States and in those matters which are considered to have a lower political importance. As with other areas of energy governance this partial endowment of powers proves to be a hurdle for European policy making as compromise tends to water down the Commission proposals in favor of Member States' preferences.

Remaining in the field of external relations an element of further uncertainty concerns the primary figure in negotiation whose role has not been clearly defined. This has led to a legal and political confrontation. The Commission claims to be the most suitable institution to conduct negotiations given the presence of the High Representative of the EU and of the competence of the DG ENER. On this point it is worth mentioning that during a negotiation, the leading figure would be that of the Commissioner for energy rather than the High Representative who is assigned the task of supporting the Commissioner. (Braun 2011) On the other hand, the Council opposes the Commission based on

the idea that it is attempting to seize powers which are not within its field of competence. From a legal perspective, the Commission is in confrontation with the Member States to understand who has competence as a negotiator between the two given that energy is an area of shared competences. Both issues prevent the EU from “speaking with one voice”.

The weakest part of energy governance relates to the vertical relationship between European institutions and Member States. As previously mentioned, Member States have been claiming the competence to set their own energy policies, which led to a conflictual relationship with the Commission. Consequently, Member States have promoted bilateral agreements with third countries in order to have direct contact with their suppliers. Such preference for bilateral agreements has been the major cause of the low level of energy security because, at times, it has prevented real coordination and cooperation putting national interest above the European one. Here it is worth mentioned a second, important, tendency of some western European countries: non-compliance. Despite the production of European legislation, Member States have tried to slow down the application of such laws or and have even gone against it when national interests have required. Non-compliance has prevented Europe from building a real common policy given the non-observance of the strategic objectives and need for a safer EU. Two cases are worth noting. The first relates to France's non-compliance with the directives on energy security, while the second relates to Germany's non-compliance with the security of gas supply. In the former, France has been unwilling to fully adapt to the directives of the EU in a voluntary way given its desire to maintain control over energy policies as a useful instrument for public policy. (Engels 2022) A similar situation can be seen in Germany which has been condemned by the European Court of Justice for an incompatibility between German energy laws and European prescriptions over the security rules related to vertically integrated companies. (Schürer e Boewe 2021) It is worth noting that the German case is a peculiar one given that, in order to allow for the construction of the North Stream 2 pipeline, the rules on external undertakings have been softened, granting more maneuvering space to Germany. (Yafimava March) Two further elements of weakness are related to the European Member States. Firstly, EU action is strongly preempted as a consequence of the ownership over energy sources and of the Member States' freedom to choose the energy mix. The Commission has been keen to tackle such shortcomings but has never managed to find a breach. Without the possibility of impeding on such prerogatives, the European institutions do not dispose of the necessary instruments to push integration to a further level given the possibility by Member States to uphold European legislation on the basis of a lack of competence. Despite such intrinsic weaknesses, it should be pointed out that energy and gas regulations have gone a long way towards a stronger control over security guarantees even if the

states' prerogatives have not been touched. With regards to the second element, it is important to discuss a structural weakness of the EU which dates back to the beginning of the 21st century following the eastern enlargements of the Union. When the EU opened its boarders to the previously Soviet countries it accepted an important threat, mainly to is supply of gas security. Eastern countries are highly dependent on Russian gas and a weak diplomatic energy power put them at risk of gas disruptions and market failures. For this reason, the EU has been driven by a double preference: on the one hand, eastern European countries have pushed for EU institutions to have more power in the energy field and, mostly, in the energy external relations. This is because a stronger EU would have taken the energy issue away from national governments and would have increased gas security in the eastern countries. On the other hand, some western countries which enjoy much better diplomatic power, as previously said, have preferred bilateral diplomacy and the freedom to choose energy mixes and contracts given the risk of a strong European intrusion in a strategic field such as energy. The above issues have fragmented and slowed down European action because the difference in preference between countries and the prerogative over energy mix have proven to be a large obstacle for the Commission.

The aforesaid problem is related to the European institutions' ability to put in place only soft powers and not hard ones. Hard powers are the remit of Member States who are ultimately responsible for energy mixes and choices, being the real negotiator with third parties for gas supplies and, more importantly, maintaining partial but important control over energy policies given the predominance of states' prerogatives compared to European interests. On the other hand, the EU institutions have no choice but to resort to soft powers, both internally and externally. Such soft powers allow the Commission to direct institutional discourse and to enter into negotiations with third parties to promote cooperation and solidarity. However, ultimately, they do not allow for the definition of a clearcut external Union policy and to establish the necessary internal conditions for a common policy between Member States.

The above stated weaknesses can be well summarized by affirming that European Union energy policy suffers from three fundamental shortcomings: fragmentation both in the policy making and in the competence attribution; a series of diverging interests between the supranational institutions and the Member States giving rise to the third shortcoming, conflict at the level of EU institution-Member States relationship.

2.6 Conclusions

Energy governance is a complex field of institutional compromises and diverging interests characterized by two opposite tendencies. On the one hand, there is close cooperation between various institutions while, on the other, there is a deep fragmentation at all levels of action which undermines the European effort.

The Commission has been, and still is, the central actor of cooperation. Throughout the history of energy governance, it has been the Commission's role which has promoted integrative instances and produced European level policies. This has remained a peculiar characteristic of the Commission's effort and can still be appreciated as a background element of all actions undertaken in the energy field. Despite such role, the Commission's integrative effort in the internal market has not been entirely successful, marked by stronger integration in environmental and commercial energy policies but less pervasive results in security of supply. In the field of external policies, the Commission has found itself in a similar position. It has managed to become a relevant figure in dialogue with third parties but only under states' mandate on a case-by-case basis and with strong opposition even when such competences have been granted. As a result, the Commission has found itself in the difficult position of fighting a double battle: one with third parties and one with Member States. Despite these inherent difficulties, the Commission has managed to gain a high standing position mainly in respect of the other European institutions.

In the energy dialogue the Commission's role is immediately followed by the European Council which has been the favorite instrument of the Commission to promote its interests. It has become an area characterized by close institutional cooperation with the Commission and by compromise with and between Member States. The requirement of unanimity has made it the Member States' favorite institution to produce European level policies without giving up their historical prerogatives. Furthermore, the President of the European Council is, normally, part of the tripartite delegation for external negotiation. A role which, once again, reinforces the idea that Member States are not yet willing to renounce their powers.

Member states have a fundamental role in shaping the European energy policy making. They are the main element of fragmentation and, in a sense, the greatest opponents of cooperation, preferring coordination. Fragmentation is both horizontal and vertical. Member states are fragmented

between themselves as there is a double tendency with small eastern countries being strong advocates of a European level policy effort, while some Member States are more keen to keep energy governance in their hands given the possibility of carrying out a stronger energy diplomacy. Vertical fragmentation depends on the different priorities expressed by Member States compared to European institutions; such fragmentation often creates incoherent policies and non-compliance.
Despite these intrinsic problems Member States have been keen to respect the principle of solidarity and to promote an efficient infrastructural system of which the EU has been a major stakeholder and manager.

A less effective role is attributed to the two other European institutions: the European Parliament and the Council of the European Union. Neither institution have managed to find their way in between the various players, with the Commission being the most suitable information provider and the European Council acting as an arena for possible compromise. Both the Parliament and the Council have been given formal powers that, in reality, have remained a mere formality. Compared to the Parliament, the Council enjoys a slightly more privileged position mostly in the field of external governance as its President has to be part of the delegation.

In the field of energy security, and mostly in gas security, EU governance has been based on regulation and infrastructural investments without any interference with Member States' rights to choose energy mixes and gas supply. The EU has managed to become a primary actor through providing financial support to large investments which have upgraded the general European infrastructure. Thus, attempting to reduce the risks connected to a third-party supply while centralizing regulation in the hands of ACER which has acted as coordinator and watchdog for regulation.

In conclusion, the European Union found itself in a weak position when the Ukrainian crisis first broke. The Commission has managed to build up a partially supranational system in which formal powers do not coincide with real ones. The Commission is the only supranational actor which has managed to find its way in and to push for further supranationalization. But in doing so, it has encountered a large number of diverging interests. Compared to previous crises, the EU has managed to create a better regulated system in the field of security of supply but, despite the aforementioned regulations, it is clear that Member States are more willing to cooperate rather than coordinate and prefer bilateral action rather than centralized European decision-making. No doubt the EU will have to cope with the issue of different gas dependencies from Russia, the difficulties of managing the

natural gas infrastructure and the tendency of European countries to exploit their diplomatic powers to foster their national interest before considering their European partners.

3. CHAPTER 2 European Union gas system, the war in Ukraine and its consequences

3.1 Introduction

Despite a promising start[26], the European continent discovered, in the last thirty years of the 20th century, to be a poor land when it comes to energy resources. The shift towards new energy mixes which proved to be cheaper and more efficient, together with the natural decrease in coal reserves, transformed Europe from an energy producer into an energy importer.

Nowadays, the European Union is the largest energy importer in the world and is reliant on a vast number of players to supply both gas and oil to support its economy. This reliance is not evenly distributed among the various suppliers but rests, mainly, on a few fundamental countries with which the EU has established strong energy ties. The EU's main partner was, and in a way still is, Russia. The EU imports from Russia around 40% of its gas (Genschel, Leek e Weyns 2023) and 27% of its oil imports (European Commission 2022), making it an indispensable actor not only for the economy but, also, for the security of the Union. The strong reliance on Russian resource has worried European bureaucrats since the early 2000's and has fostered a large number of actions intended to reduce such predominance.

History has proved those same European bureaucrats right. In less than 20 years Russia has put at risk European gas supplies various time. The climax came on 24th of February 2022 when, following the invasion of Ukraine, Europe found itself in a serious energy crisis which has put enormous strain on its whole society and economic system and has forced the EU and its Member States to reconsider their energy dependence from foreign powers and to review their historical reliance on gas suppliers.

[26] Europe has been the greatest coal producer since the beginning of the industrial revolution up to the Second World war. Europe was producing, in 1905, roughly 2.5 billion tons of coal followed only by the US which was producing 350 million tons (Bauerman 1911)

The purpose of this chapter is to outline the situation in which the EU has found itself in order to understand the premises of the EU's actions in the field of energy policy following the outbreak of the war in Ukraine.

The first section will describe the European gas system providing a general perspective on the EU external gas dependency and describing, in particular, the dependence on Russian gas while, at the same time, outlining the security standards and the vulnerabilities of the system.

The second section will provide a brief description of the Ukrainian crisis beginning from the premises and outlining the major events that have involved the EU, mainly concentrating on gas related issues. At the same time, this chapter will elucidate on the developments of the energy crisis. For the purpose of this thesis the war in Ukraine will not be described in detail, but, instead, will be summarized in order to provide the key economic, political and energetic developments of the crisis. This will enable clarification of the position of the principal actors and the causes of the energy crisis in Europe.

A third, and final section, will describe the impact of the energy crisis on the EU at both an economic and institutional level. The illustration of the disrupting effects on these two levels will provide a clear starting point from which to analyze the subsequent actions undertaken by the EU and its Member States.

3.2 The European Union gas system

The EU energy system is complex and constantly evolving. The mix of energy sources has changed to adapt to economic, security and environmental necessities. The increasing speed of industrial and scientific development has modified the European energetic necessities prompting profound transformations in the system since the end of the Second World War. At the start of the 50s, coal began to compete with other energy sources such as petroleum, gas and nuclear energy. Each of these sources proved to be beneficial for the European economies reshaping, over time, the political and social discourse on the pros and cons of the various energy sources. In order to understand effectively the characteristics of today’s European energy system, it is important to highlight the existence of two waves of social mobilization which have modified the direction of the European nations’ energy development. The first relates to the wave of opposition against nuclear energy which began in the late 60s and limited (until almost causing a complete disruption to) the creation of nuclear power plants and the incrementation of nuclear share as a part of the energy mix. The second wave of change

began at around the end of the 20th century from the mobilization of environmentalist groups who saw climate change as a threat for human survival and tried to oppose fossil fuels, mainly coal. These two waves of popular mobilization have been, in part, why the EU has moved towards a greater use of oil and natural gas as primary sources of energy production. The EU does not have a good internal supply of these resources which has forced most European nations to look to neighboring countries with which it has created strong dependency ties.

In 2021, Europe was the third greatest energy consuming area of the world, following Asia and North America (Enerdata 2023). However, it was also the largest oil and natural gas importer[27] (BP 2021) in the world. The relevance of these statistics is two-fold. Firstly, it highlights that, despite having a relatively smaller population compared to other areas of the globe Europe has a really high level of industrial and economic development which requires large quantities of energy production to be sustained. Such necessity creates a strong link between energy and the sustainability of the economic and social systems: a crisis in one of the two has unavoidable consequences on the other[28]. Secondly, the aforementioned statistics highlight the poverty of the European territory when it comes to energy resources: Europe imported 83% of its natural gas in 2021 with countries such as Malta, Sweden and Lithuania having more than a 100% dependency on imports[29] (Eurostat 2022).

As it is possible to extrapolate from *Table 1,* the 83% import of gas is not evenly distributed among supply sources and countries. Gas through pipelines was the preferred route of import, accounting for more than four times the quantity of LNG imports. A quick analysis of pipeline gas origin highlights the uneven distribution in country provenience: Russia provides more than 50% of natural gas while the second and third partner, together, account for 35% of the total.
Table 1 highlights two main elements. Firstly, it can be seen that the European gas system does not work at maximum capacity but has the possibility to increase its import by a maximum of 40%. Not considering Russia, the other partners could together provide, at most, around 55% of the European gas imports. Secondly, *Table 1* highlights the secondary importance of LNG imports which are used

[27] Natural gas import statistics are limited to imports by pipeline, for LNG sources Europe is the second largest importer following the Asia-Pacific region (2021 data)

[28] The relationship here cited is easily demonstrated if the Covid pandemic period is described: Covid has produced a slowdown of the economic system and has put on a halt the social life of the European continent and, as a consequence energy consumption has dropped by an average of 8.1% in the EU (Tsemekidi Tzeiranaki, et al. 2022) with peaks of 30% in specific countries in the first lockdown period (IEA 2021)

[29] Such three countries have had more than 100% as they not only consumed natural gas but, at the same time, have increased their stocks

only at 40% of their capacity and could provide a rather limited quantity of gas imports. The only country which has a truly relevant LNG infrastructure is Spain, which can import 69 bcm[30] of gas per year. This is nearly twice the Spanish annual consumption (Fernández 2023). France, on the other hand, can only import just enough LNG to satisfy its internal needs, increasing its general security of gas supply but providing little benefit to the more general European system.

Table 1. EU Gas Import Capacity and, Supply by Source 2021

EU Gas Import Capacity and Supply by Source (bcm), 2021

Billion cubic meters	**Annual Capacity**	**2021 Flow**	**Spare Capacity**	**Utilization Rate**
		Pipeline Flows		
Russia	276	153	123	55%
Norway	109	88	21	81%
North Africa	79	40	38	51%
Azerbaijan	13	8	5	62%
Total pipelines	**477**	**289**	**188**	**61%**
		LNG Import Terminals		
Spain	69	19	50	27%
France	43	18	26	41%
Italy	20	10	10	50%
Belgium	17	4	13	24%
Netherlands	14	8	6	57%
Greece	7	2	5	29%
Portugal	7	6	1	86%
Poland	6	4	2	67%
Lithuania	4	2	2	50%
Croatia (as of Dec. 2021)	3	-	-	-
Total LNG	**187**	**72**	**115**	**39%**
excluding Spain	**117**	**53**	**64**	**45%**
Total	**663**	**361**	**302**	**54%**
Russia	276	153	123	55%
Non-Russia	387	208	179	54%

Source: Bruegel (2022) based on ENTSOG, GIIGNL, GIE, NPD

Table 1

In order to fully understand the way in which the European gas system works it is necessary to consider its gas infrastructure from a geographical point of view. As shown by *Figure 1,* the European infrastructure rests on a few strategic pipelines which extend to the borders of the EU. It is possible to note 4 main directions of the pipeline infrastructure: in the northern part of the Union, an

[30] Billion Cubic Meters

intricated set of pipelines allows Norwegian gas to be transported to France and Germany[31]. The north-eastern infrastructure is totally dependent on Russian gas and allows this to be imported through four main routes of which only one – North Stream- allows a direct connection between the EU with Russia without passing through transit countries. The final infrastructures deliver Russian gas through Belarus, Ukraine (which has the largest and most important infrastructure for the EU) and Turkey. From the East, the EU, by passing through Turkey, has managed to develop a route which connects it with Azerbaijan and allows gas imports to be diversified.[32] The fourth route toward Europe is to the south, dispatching gas from northern Africa (Algeria and Libya) towards Spain and Italy. These corridors cover more than 10% of the European gas consumption but face the fundamental threat of political instability and social turmoil which prevents them from being seen as reliable partners.

It is worth briefly elucidating on the existing LNG terminal which allows gas to be imported from non-neighboring countries[33]. Looking at the map below two elements are visually clear. First, most of the LNG facilities are in countries which are already served by pipeline infrastructures and, second, looking at the LNG facilities distribution, the eastern part of Europe is not well sourced, giving rise to the need for a *quasi*-complete reliance on pipeline infrastructures and, in particular, on Russian infrastructures.

[31] A third access point passes through the UK and allows to connect the Norway with Belgium and the Netherland; before the Ukrainian crisis the direction of the gas flow went from Belgium and the Netherland toward the UK providing gas to the island and not getting it. Given the crisis and the necessity to increase import from sources different from the Russian ones the flow has been reverse and the UK has now become a transit country between Norway and the EU

[32] Gas imports from Azerbaijan are not truly relevant for the European economy as the quantity imported and its possibility of increasing it in the medium term are very limited.

[33] The definition of the term "Neighboring countries" follows the one provided by the Commission for its neighborhood policies (European Commission 2023)

Figure 1

Main EU Natural Gas Imports routes (Zachmann, Sgaravatti e McWilliams 2023)

Having provided a general perspective on the European gas import system it is necessary to analyze more in depth the role of Russia as a gas supplier. To provide a clear picture it is necessary to describe not only the relationship between Russia and the EU before the beginning of the Ukrainian crisis, but also provide a brief historical analysis to understand the evolution which has led the EU to become so dependent on a single supplier.

The relationship in the energy field between Russia and the EU has been long-standing, with a progressive increase in the strategic relevance of Russian imports for the EU. Even during the Cold War, central and western European countries began to rely on the abundant reserves which could be provided by the USSR. However, the main expansion of Russian gas trades came in the 1990s when even the most sceptic European countries[34] agreed to enter into a trading relationship with Russia. (Siddi, EU-Russia Energy Relations 2022) At the beginning of the 1990s, the EU relied on Russia for 75% of its gas and, despite various initiatives to diversify the origin country of European gas imports,

[34] Poland is the best example given the long-standing mistrust for the neighbor and the decision to enter in a 30 years long supply contract with Russia which has led to the construction of the Yamal pipeline

Russia maintained a dominant position compared to the other energy partners. By 2004 Russia was supplying 45% of Europe's gas. The clearest sign of the strong European dependence on Russian gas can be deduced by looking at the percentage of Russian gas supply from 2004 and 2013. Over this 10 year there were two crises between Russia and Ukraine, the latter being the most important transit country of Russian gas toward Europe. These caused European reliance on Russian gas to fall, reaching its lowest point of 30% in 2010. Russia then increased its predominance quickly and levels returned to 40% level 2013. (Siddi, The EU-Russia Gas Relationship 2015) This trend was re-confirmed in the successive years, also in the wake of the 2014 Russo-Ukrainian crisis. Since 2016, and despite the Commission's opinion on the need to reduce European dependence on Russian gas imports, Russian exports toward Europe have grown considerably. (Henderson e Sharples 2018)

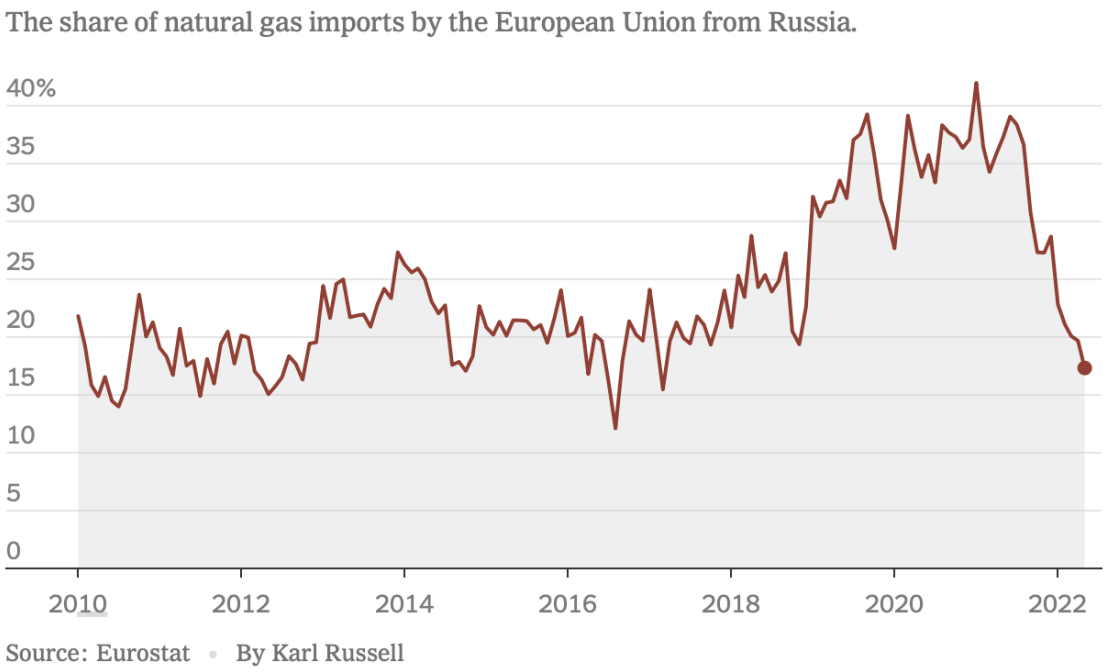

Figure 2

(Karaian e Russell 2022)

As it can be seen in *Figure* 2 the EU, in 2020, relied on Russia for around 39% of its gas. This is a slightly lower percentage compared to 2018 (40%) and 2019, when it peaked at 45%. A further analysis is required here. European dependence on Russian gas is not evenly distributed among countries. There is a greater degree of dependency among the eastern European countries where, mainly in the Balkans, Russia has long-since enjoyed a near complete monopoly over the gas sector. Eurostat statistics clearly show the above-mentioned differences. In 2020 two countries -Czechia and Latvia- relied on Russia for 100% of their gas, while another six countries were above 80%. All these

countries are located on the eastern border of the EU and have no LNG facilities which could, otherwise, allow them to diversify their supply. (Eurostat 2020)

An even more concerning statistic is that Germany relies on Russia for 69% of its gas supply. Germany is the largest gas importer of the Union and the country with the biggest economy, making this its reliance a serious threat for the stability of the Union itself.

Russia and Germany have had a close relationship when it comes to energy-related matters over the last thirty years, with Germany siding with Russia often at the expense of the European community as a whole or going against the Commission's indication. Such conflict between Germany and the Commission was evident in the wake of the 2014 crisis between Russia and Ukraine which forced the EU to revisit its energy strategy with a view to reducing Russia's relevance as a partner. A clear example of this is the construction of the North Stream 2 pipeline which has been a source of controversy between European countries and European institutions. Germany has been the leading figure in its battle for the construction of the pipeline which saw the Commission stand against the projects. (Siddi, EU-Russia Energy Relations 2022)

The point to consider in relation to EU's dependency on Russian gas is Russia's heavy dependence on the European market to sell its fossil fuel products. The EU was, before the outbreak of the Ukrainian crisis, the first Russian economic partner with 40% of its exports directed toward Europe, 62% of which was composed of mineral fuels.(European Commission 2023) Among the various mineral fuels, natural gas is the economically less important one representing just 15% of the total energy revenues. Despite such low percentages, technical aspects of the gas market make it a very sensitive area for both parts. For Europe, the need to guarantee supply and the dependence of most European countries on Russian gas puts the supplier in a very strong contracting position. On the other hand, Russia is constrained by the need to sign long-term sales contracts in order to cover the costs of the very expensive gas infrastructure, in order to reduce price volatility and reduce the risk of supply diversification in the EU. (Siddi, The Role of Power in EU–Russia Energy Relations: The Interplay between Markets and Geopolitics 2022)

EU institutions have been aware of the security issues related to the European gas system and have tried to produce security standards and guidelines which could partially contrast such intrinsic weaknesses. Among the critical vulnerabilities of the EU, three stand out in a particular way: the southeast area's total dependence on Russian gas, the Ukrainian pipeline transit and the risk of sudden reductions or total suspension from Russia.

The South-Eastern European area, despite being a very limited part of the total energy market of the EU, poses serious considerations when it comes to the sustainability of the system in times of crisis. The South-Eastern European area represents only 5% of the total gas consumption of the EU but, up

until 2018, it relied almost entirely on Russian gas with very little possibilities of differentiating its supply market. The main supply route for the area was, and still is, the Trans-Balkan pipeline which supplies three EU countries – namely Bulgaria, Greece and Romania- while, also, serving North Macedonia and Turkey. A further element of stress for the system is the lack of infrastructural connectivity between the various gas systems in the area which do not provide a sufficient degree of flexibility that would reduce the security concerns. Most of the southern east infrastructure has been designed without considering the possibility to revert the direction of flow. This means that the area considered only gas flows from east to west. Since 2018, actions to increase security standards in the area have been undertaken both to diversify supply partners and to reduce infrastructural deficiencies. LNG facilities have been planned[35] and a new pipeline (TAP) has been commissioned to transport Azerbaijan's gas toward the area. Interconnectivity in the area has begun to adapt its already existing infrastructure to allow reverse flows and to transport gas from west to east and, in particular, from the LNG facilities in the area.

A second element which requires a careful analysis is the role of Ukraine as a transit country between Russia and the EU. Ukraine, until 2011, was the route through which 80% of Russian gas reached Europe, making it a strategic partner to guarantee the security of supply. In 2020, the newly signed agreement between Russia and Ukraine established a transit volume of gas of 65 bcm for the year and a quantity of 40bcm for the successive three. Such quantities largely reduced European dependence on Ukraine which transported only 25% of the total Russian supply in 2021. This reduction has been possible thanks to the creation of two alternative routes -namely the North Stream 1 and 2 pipelines and the TurkStream- which allowed for the elimination and diversification of the transit partners. Even with the new infrastructure put in place, the EU has not managed (Pirani 2018), nor has it been willing, to bypass Ukraine from its gas supply chain. (Russell 2021)

Ukraine's gas infrastructure has two characteristics which increase its reliability as a transit partner and allow it to increase both the country and European's security of gas supply. Firstly, the Ukrainian pipeline system has been engineered to allow a high level of flexibility which permits it to reroute gas flows, thereby avoiding damaged segments without disruptions. Secondly, Ukraine's gas infrastructure is not only composed of a long network of pipelines but, also, by a large gas storage system which is the biggest in Europe by capacity and ensures stability across the European network. Ukraine possesses a storage capacity of 31 bmc which corresponds to more than 75% of the total flow of gas transiting from Russia to the EU. Even considering the reserves needed to guarantee life

[35] 4 LNG facilities have been planned in Greece one of which is already under construction and expected to be operational by the end of 2023. Croatia is planning to expand its already operational LNG facility (European Commission 2022)

standards in its own territory, Ukraine could contribute to increase EU gas storage by 10 percent of the total.[36]

From a general perspective on security conditions and threats, it is worth noting the importance of the risk of disruptions to the flow which had to be taken in account by EU Member States and institutions. As previously affirmed the most active institution in pointing out such security threats has been the Commission which has tried to reform the gas system to reduce such vulnerability. Data shows that such objective has not been reached as the EU has not managed to move in a systemic way, but Member States have, instead, preferred a national approach which considers domestic necessities at the expense of a Union concerted solution. The Commission managed to reduce the level of threat but, still in 2019, the International Energy Agency (IEA) highlighted the long-term trend of gas dependence on Russia and the risk connected to the gas flow infrastructure which did not allow the necessary flexibility to adapt it in case of energy crises. (Zeniewski, A long-term view of natural gas security in the European Union 2019)

To evaluate the level of energy security, ENTSOG[37] conduces supply disruption simulations which highlight the main elements of weakness of the system. ENTSOG, in its last report (ENTSOG 2019), despite reporting an overall capacity of cooperation in case of supply disruptions, highlighted the possibly of local shortages and the lack of sufficient infrastructure to reach the maximum efficiency of cooperation among nations. An independent publication (McWilliams, et al. 2023) echoes ENTSOG's report, affirming that the EU would be able to replace 50% of Russian gas supply if there was a total stop of gas flows. However, reaffirming the ENTSOG report, it highlights, once again, the presence of severe deficiencies in the gas flow capacity from western countries to center-eastern ones. ENTSOG, at the same time, reported important improvements in the general security capacity of the system which, from 2017 to 2021, managed to improve the situation, also thanks to regulation 2017/1938 which increased security standard requirements for the EU.

[36] 10% of the total EU gas storage capacity is calculated by considering a 100 bmc of gas storage in the EU and by considering Ukraine to contribute for an additional 10 bmc of storage which would correspond to a 33% of Ukrainian gas reserves (Harper 2023)

[37] European Network of Transmission System Operators

3.3 The Ukrainian crisis

The 2022 Russian invasion of Ukraine has deep historical roots and a long series of precedents which demonstrate Russian interest in the country. In order to fully understand the reasons behind the "special operation" which began in February 2022, it is necessary to explain the cultural and political rationale of President Putin's actions while, also, summarizing the previous situations of tension and conflict which preceded them.

Following the end of the Cold War and the fall of the USSR, Ukraine gained its independence in August 1991 and began its history as a 'free' country. Despite the overwhelming mandate for the independence of the country, Ukraine was not a culturally homogeneous territory and faced a constant tension between the nostalgia of the past and the move towards a new Ukrainian civil identity. 10 years after the declaration of independence around 30% of Ukrainians identified themselves as both Ukrainian and Russian and 30-35% preferred the Russian language. (Wilson 1999) Despite this, while Ukrainian civil identity has developed over time it has never been recognized by the Russian political elite nor, importantly, by President Putin who has historically defined it as an artificial construction based on fragile basis and aimed at undermining Russian geopolitical role. (Mankoff 2022)

The Russo-Ukrainian conflict originates from two opposing views of the reality which contrapose the Ukrainian perspective sustaining that the same existence of their country can only be guaranteed outside of Russian domain. On the other hand, the imperial narrative adopted by President Putin promotes the idea that Ukraine cannot exist either as a country or as a national identity because there is no difference between Russian and Ukrainian people. (Kordan 2022) Such opposing views have pushed Ukraine to identify itself as a European country, while Russia continues to affirm the need to "reconstruct" its nation and, therefore, pushes its borders westward.
The aforementioned tension has led to a series of crises which, from the early 2000's has counterposed the two countries both ideologically and militarily. Two main themes of dispute and four main moments of crisis can help to clarify the reasons which led to the outbreak of the Ukrainian crisis. The first is the commercial relations between the two countries and, more specifically, the Ukrainian role as a transit country for Russian gas. The second relates to territorial integrity, auto-determination and the national identity of the Ukrainian country and people.

Exploring the various crises in a chronological order, the first moment of crisis came in 2004 when an internal Ukrainian crisis begun following the election of a pro-Russian prime minister who was accused of having rigged the election. So-called the 'Orange Revolution', it led to the resignation of the prime minister and to the election of the anti-Russian candidate Yushchenko. The importance of the Orange Revolution in Ukrainian history relates to a few factors which have characterized the elections and the successive revolution. First of all, it should be noted that, during this crisis, Ukraine has been close to disintegration because of the two opposing views in its territory. On the eastern side of the country, the population was, and still is, mostly pro-Russian and satisfied with the electoral results before its overturning by the Ukrainian Supreme Court. On the other side, the remaining part of Ukraine was largely anti-Russian and accused the pro-Russian candidate, Yanukovych, of having rigged the elections. (Britannica 2023) The crisis demonstrated the existence of two types of citizens in Ukraine and that the largest part of the population- namely anti-Russian - had begun to feel a sense of national identity which was detached from Russia.

The 2004 internal crisis was followed by two commercial disputes over gas prices and supplies between 2005 and 2009. In 2005 the first gas crisis broke out over a dispute over gas prices which led to a 1-day suspension of gas supply on the 1st of January 2006. Although the dispute was successful resolved, a series of actions followed, undertaken by Ukrainians to exit from Russia's sphere of influence. At the same time, Russia tried to pressure Ukraine through commercial acquisition, price altering and supply disruptions. All these elements were present in the 2008-9 crisis during which Russia halved and then completely suspended gas supply to Ukraine. The crisis further escalated leading to the interruption of gas supply to Europe. The EU was forced to act to reactivate the gas flow. (Reuters 2009) The above-mentioned crises highlighted the inherent risks of Ukraine's dependence on Russian gas and of the EU's dependence on the Russo-Ukrainian gas transport system. Despite the crisis not having long lasting effects, all involved acknowledged the risks of Ukraine's new position which had started out as a country ideologically oriented toward the EU and the NATO ecosystem, but which had since become infrastructurally dependent on Russian resources.

The 2014 crisis in Ukraine represented the most dramatic moment in Ukrainian history since the country gained independence in 1991 and before the outbreak of the Russo-Ukrainian war in 2022. Following the creation of an *ad interim* pro-European government, a group of heavily armed pro-Russian men occupied key buildings in Simferopol and expanded its control over the region of Crimea. Despite declaring it as an autonomous action President Putin began to mobilize Russian troops to "protect Russian interests in Ukraine". A quick escalation of the conflict lead to a six-month

long conflict which concluded in a cease-fire that left Crimea under Russian control and granted a special status to the regions of Donetsk and Luhansk which had also been involved in the conflict. The 2014 Crimean crisis cannot be said to have 'resolved', as there has since been continuous conflict in the regions of Donetsk and Luhansk.

The 2014 crisis had far-reaching consequences for all players involved. Ukraine was most severely affected. In addition to obvious territorial consequences, implied political choices have since led Ukraine to lean toward its western allies looking for a fast admission to the Atlantic alliance and the EU. Furthermore, a long reforming process was implemented to cut all infrastructural and economic ties with Russia, mainly in the energy field. The effort that Ukraine had to put in place to change such a situation should not be underestimated. Despite the conflictual relations maintained between the two countries since the beginning of President Putin's government it should be remembered that Ukraine was a fundamental part of the USSR and was 'designed' and built in order to be totally dependent on the Russian ecosystem. An opening towards the west was much more difficult in practice, than in the political domain.

The Russian perspective reflects the opposite side of the coin. The imperial attitude of President Putin was put into action through the invasion of the Ukrainian regions. Russia's objective was not only to conquer great swathes of territory but, also and mainly, to put more pressure on Kiev's government to reduce freedom of action and distance Ukraine from western influence. (Konończuk 2014) Following the annexation of Crimea, Russia's geopolitical position was strengthened thanks to the unpredictability of Russian actions, showing the willingness of the Russian government to protect its interests even with the use of physical force.

The third, and final, position which should be analyzed is that of the EU which was caught in a peculiar situation of weakness. In 2014 both Russia and Ukraine were strategic energy partners of the Union and Ukraine was a new political partner which had already adopted a European outlook and demonstrated an interest in accession to the European community. The EU condemned and sanctioned Russian action and took an active role in resolving the crisis. The most far-reaching consequences for the Union related to energy security which, despite not being affected *per se* by the conflict, needed to be completely reconsidered in recognition of the unpredictability and unreliability of its most important supply partner. Despite beginning to reconsider its security procedures and standards following the crises of 2006 and 2009, the EU escalated the issue and implemented a series of measures directed towards a decrease in dependence on Russian gas and a general increase of energy security of supply.

The 8 year-long conflict, which began in 2014 with the annexation of Crimea, did not reach a peaceful conclusion but, instead, was exacerbated on the 24th of February 2022 when President Putin announced the beginning of a special operation on the Ukrainian territory aimed at defending Russia's interests in the area and protecting Russian people living in the country. (CNN 2023)

For the purpose of this thesis three main aspects of the war in Ukraine will be analyzed. Firstly, a brief chronology of the main developments will be provided. The second part will consist of a summary of EU actions and sanctions. The third, and final part will describe the developments of the energy crisis focusing on the Ukrainian disruptions and events as well as giving consideration to more general implications, specifically for the EU.

The ongoing conflict in Ukraine began with the invasion of more than 10,000 Russian soldiers who, crossing the northern border, sought to conquer the capital city. The Russian advance managed to get close to the capital but never reached it. There are two points worth highlighting with regards to the first phase of the war. Firstly, the Russian invasion was designed to be a quick operation which should have (in theory) defeated Ukraine in two weeks or less. President Putin's plan had been clear since 2014 when he affirmed during a meeting with EU Commission President Barroso that the Russian military could take complete control of the country in that timespan, if wanted. (Nicks 2014) Such plan will be turn out not to be as water-tight as thought when Russia, as of the 1st of September 2023, had still not managed to capture Kyiv nor to inflict any decisive attack to defeat Ukraine's army or to succeed in taking its territory. The second point worth highlighting relates to Ukrainian President Zelensky. Zelensky became the symbol of the war maintaining its grip over the defense operations but, most of all, he represented the growing nationalistic sense that spread among Ukrainian citizens in the wake of the Russian attack.

It is worth briefly mentioning a couple of important stages of the war in order to give context to the broad series of consequences caused by how the war panned out. The first phase of the war, which lasted until April 2022, was concentrated around Kyiv and reflected Russian hope for a brief war. When Russian troops lost this hope, they found themselves caught in a difficult situation with a disrupted supply. A significant battle of the first phase was the massacre of Bucha which strongly undermined Russian international perception. In response, they sought to concentrate their power on an assault from the east with a view to conquering the Donbass region. This marked the start of the second phase of the war.

The first phase of the war saw Europe response swiftly and decisively with four different groups of economic sanctions adopted in just three days , aimed at targeting both the Russian economy and key Russian leaders.[38] The European response to the "unprovoked and unjustified attack" (European Council 2023) was not limited to the enactment of economic sanctions but passed through a joint declaration of the European heads of government and through the European Council, Charles Michel, who directly addressed Ukrainian people and reaffirmed European support. During this phase European action concentrated on the condemnation of the war and on Ukraine itself, with the aim of supporting the country's efforts and managing the flow of refugees leaving the country. At this stage, European institutions had not started dealing with the consequences of the war at the EU economic, political, and social level.

The second phase of the war was a 5-month long period which lasted from the beginning of April 2022 to the first half of September. During this time, fighting centered around the southern and eastern areas of Ukraine and was characterized by a predominance of Russian troops in the area who, at the same time, were not able to penetrate further into the Ukrainian territory. The most concerning conflicts of this period happened around the Zaporizhzhia nuclear plant. These conflicts mobilized the international community in the hope of preventing a nuclear disaster. Part of this effort included a series of internationally mediated ceasefires, however these failed to resolve the conflict.
The focus of the EU institutions began to change with the beginning of the second phase of the war[39]. Despite the persisting condemnation of Russian actions and support to Ukraine, EU ministers' concerns shifted towards the more pressing consequences of the conflict and, namely, the following three areas of concern: gas security and storage, food security and transport related issues. these issues were inextricably connected with Ukraine's role in the international market before the outbreak of the war. As well as being the most important transit country for Russian gas towards Europe, Ukraine was the largest world producer of sunflower oil and, more importantly, the largest wheat exporter in the world.

[38] A package of sanctions was adopted on the 23rd of February 2022 even before the beginning of the Russian special operation and on the same day of the invasion reinforced them. On the 25th of February 2022 President Putin and its Minister of Foreign affairs were targeted with ad hoc sanctions aimed at freezing all international assets of the two.

[39] As it can be inferred from the chronology of the EU response to the Russian invasion of Ukraine (European Council 2023) the first ad hoc meeting to consider the war's consequences on the EU took place on the 8th of April 2022 to consider the impact of the war on the transport's system and to commit to a coordinated response. The same week the second phase of the Ukrainian war begun as, on the 6th of April 2022, the totality of the Russian troops had already been redeployed in the Donbass region.

When discussing the second phase of the war it is necessary to describe briefly the development of EU-Ukrainian relations since the beginning of the war. EU support to Ukraine involved economic, political and social measures. The most relevant of these was a series of six different packages of economic sanctions, the use of the European Peace Facility (EPF) to supply funds to Ukraine, trade liberalization measures, migration flows management and support as well as, most importantly, the grant by European Council on the 23rd of June 2022 of EU candidate status to Ukraine (European Council 2022). Ukraine's candidacy to the EU represents a historical turning point for the country which, after 20 years of tensions with Russia, finally managed to move closer to western Europe and to begin breaking its legacy from the past.
The second phase of the war ended in September 2022 when Russian difficulties on the battlefield began to become ever more evident. Ukrainian troops managed to reconquer the Kharkiv area, gaining their largest territorial regain at the start of October. During the same period, President Putin announced a partial mobilization of the country to face the war's challenges.

The third and last phase of the war which, as of July 2023 is still ongoing, began with the illegal annexation of four Ukrainian regions[40] by Russia on the 30th of September 2022. One of these, Kherson, was liberated less than two months later[41]. The third phase of the war is characterized by a *quasi*-complete immobility of the areas under control of the respective parts, by Ukraine's repeated request for larger military supplies and by the impossibility of finding an agreement during peace talks because of the irreconcilable desire by both parties for total victory. During this period, attacks on the civil population and on crucial infrastructures have increased in intensity. Two major phenomena have occurred. Firstly, the Russian geographical range of attacks expanded to include areas outside the conflict area with drones bombing various cities across the entire Ukrainian territory. Secondly, direct attacks on the energy network and on infrastructures such as the Kherson dam caused irreparable damages which left the population without electricity. At the same time, since the beginning of the summer 2023, Ukrainian forces began to attack Russia through drone bombings and announced the beginning of a counteroffensive in the disputed areas.

The EU reacted during this period with a multitude of internal and international actions to deal with the consequences of the crisis in the Union and to reiterate its support to the war in Ukraine. To support Ukraine further, funds were devolved through the EPF[42] and, on the 17th of October 2022,

[40] Donetsk, Kherson, Luhansk and Zaporizhzhia

[41] On the 11th of November 2022 Ukrainian troops entered the city regaining control of it

[42] A total of 5.6 billion euros have been devolved to Ukraine to support lethal and non-lethal aims

the EU Council announced the creation of a military assistance mission (EUMAM) to support Ukrainian forces through the enhancement of their military capabilities. This was with a view to supporting Ukraine until the internationally recognized borders were restored (Council of the EU 2022). This mission was launched on the 15th of November, providing Ukraine with military supplies aimed at delivering lethal force.

Furthermore, political relations between European leaders and Ukrainian President Zelensky increased in intensity with repeated visits by the President to various European capitals and vice versa. Discussions around Ukraine's accession path to the EU continued and, despite delays in the process of admitting Ukraine to the NATO treaty, Ukrainian efforts to enter the western political system have continued to gain traction.

From an internal perspective, the EU found itself hindered by two of the aforementioned problems: food security and energy issues. The acted EU directly by providing support in both areas to mitigate the humanitarian crisis during the winter. Internally, the food crisis saw rising prices for raw materials which caused, together with a series of other factors, a dramatic increase in inflation. The energy related issues, on the other hand, had much greater implications which should be explored in detail.

The war in Ukraine had grave repercussions for the energy system across the continent, causing a severe energy crisis which destabilized the economic and political systems of most European countries. The development of the energy crisis did not follow, for the most part, the actual fighting in Ukraine but was mostly related to the international retaliation put in place by the EU against Russia. In other words, the political choices made by various actors saw a series of incisive attacks on the gas system infrastructure that affected its supply.

The initial phases of the war caused a natural concern for energy-related risks. Such concerns did not relate to gas supply which was not considered at risk, even with a complete halt of Russian exports towards the EU (European Council 2022). The first, and most important concern of EU representatives related to the economic impact caused by the unstable situation in which the EU found itself. Such impact was reflected in the quotation price of natural gas which doubled in just one week[43]. Despite the successive stabilization of the market, prices continued to reflect the general instability of the area, as demonstrated by the volatility of gas prices.

[43] The reference point for EU natural gas price is the price of natural gas on the Dutch Exchange market. On the 21st of February 2022 EU natural gas price was at 94.42 EUR/MWh while on the 28th of February 2022 it had risen to 192.55 EUR/MWh (Tranding Economics 2023)

It should be underlined that, against the backdrop of the battlefields of Ukraine, a second "war"[44] was being fought in Europe. This war, which was mainly economic and political, played out in the energy-sector relations between the EU and Russia. For the most part, the EU employed economical instruments to impose its will, while Russia had the major advantage of being able to control supply streams. Indeed, Russia flexed this power extensively during the most intense phases of the conflict. On the 23rd of March 2022, President Putin acted for the first time in the energy field, imposing a ban on Euro and Dollar payments for gas supplies[45]. This action was meant to be a retaliation for the EU sanctions imposed on Russia. Politically, EU countries, together with the United States, were defined as "unfriendly countries" demonstrating the conflictual climate among the partners. Such measure was withdrawn on 30th of December 2022 ending a complicated phase for the EU which had to balance between EU law imposing sanctions on Russia and the need to buy Russian gas even if it had to be paid in Rubles.

Security of supply concerns arose at the end of April 2022 following the first gas cut offs put in place against Bulgaria and Poland on the 27th of April. During the following month, gas supply was interrupted in three more countries – Finland, Denmark and the Netherland – when they refused to pay in Rubles.

Before the end of May, EU institutional discussions revolved around three major points of concern: gas storage planning, price related issues and the possibility of imposing sanctions against the Russian energy sector. The first and second issues were to accompany the first year of war as they reflected EU concerns about the resilience of the EU energy and economic systems for the upcoming 2022/23 winter. On the other hand, on the 31st of May, the EU Council announced the first set of sanctions on Russian exports of fossil products. A ban on crude oil and petroleum product imports was also imposed, excluding, at the time, only crude oil imports via pipelines.[46] The EU Council measure

[44] Despite its strong meaning the word is used to reflect the European common attitude toward the energy issue; journal articles commonly employed the term to underline the conflictual relationship between the two partners. It should be underlined that academic literature does not adopt the same terminology; the only case which can be cited which expresses the EU-Russian relations in the same terms is Lambert Lauren A. (Laurent A. Lambert 2022). To enlist a few authors which employed such definition: Yanatma S. (Yanatma 2023), Balmaceda M. (Margarita Balmaceda 2023) and Sabadus A. (Sabadus 2023)

[45] Decree No. 172, "On Special Procedure for Discharge of Obligations of Foreign Buyers to Russian Suppliers of Natural Gas" (Decree), effective as of March 31, 2022

[46] EU measures put in place were part of the sixth package of sanctions on Russia. Such measures, despite entering into force immediately, had various exceptions to permit the closure of existing contracts and to take into account the needs

reflected both the general agreement among countries on the need to act to punish Russia for the gas supply disruptions carried out since the end of April and, more importantly, to reflect the will of EU member countries to diversify their supply away from Russia in a bid to reduce the EU's dependence. From the end of May, Russia began putting pressure on Europe through gas flow reductions and total interruptions. Such measures mainly interested the North Stream 1 pipelines whose flow was reduced and interrupted several times in the summer months. Russia denied that such disruptions were a political move, instead claiming that they were part of scheduled and unscheduled maintenance works which need to be carried out on the line. On the 11th of July, gas flows through North Stream 1 were completely suspended in order to carry out annual maintenance works but, after completion, pipelines restarted their operations at 40% capacity and later reduced to 20% on the 27th of July.

Gas flow disruptions had two major impacts on the EU systems. On the one hand, uncertainty made gas prices skyrocket to unprecedented levels. At its peak, gas price quotations reached 339.20 EUR/MWh (Tranding Economics 2023), forcing the EU Member States to make harsh choices to support their economies (Amelang, et al. 2023). On the other hand, gas supply security was threatened with the risk that gas storage targets wouldn't be reached to sustain EU consumption for the upcoming winter. These two events together plunged the EU into what can only be described as the worst moment of its energy crisis: reduced competitiveness, deep economic difficulties both for households and industries and an increased probability of gas shortages that threatened winter production and consumption. Europe's worries lasted until the emergency meeting on the 9th of September 2022 when extraordinary measures to support the economy were discussed and a preliminary assessment on Member States' preparedness for winter was carried out. The latter concluded that, despite disruptions to the gas system, the EU was sufficiently ready to face the upcoming period. (European Council 2023)

On the 27th of September 2022, both the North Stream 1 and 2 lines began leaking gas. Successive investigations discovered that such leaks were caused by a series of explosions aimed at sabotaging gas flows. The perpetrators were not found, leading to a series of accusations among the possible interested parties. The *de facto* consequence was a suspension of gas flows which, as of the 30th of July 2023, is still in place due to the necessary repairs on the pipeline which have not yet been scheduled because of the worsening relations between Russia and the EU. (Soldatkin, Astakhova e Steitz 2023)

of countries such as Croatia and Bulgaria which, given the *quasi*-total dependence on Russia oil, could not observe EU measures (European Commission 2022)

The situation stabilized following the North Stream explosions. Russian supply of gas passed through Ukraine and the TurkStream and no further disruptions occurred. The EU increased its effort to find internal solutions for the crisis and continued to focus on prices. In terms of supply, at the beginning of January, the EU confirmed that the winter crisis had passed and that gas storages would last until the end of the winter. Despite such results it should be highlighted that the EU reached such result by putting in place a series of coordinated measures which reduced the demand for gas and created solidarity mechanisms in case of gas shortages in one or more areas of the Union.

A final point worth noting in order to fully understand the EU gas crisis is Ukraine's role as a transit country since the beginning of the war. On the 27th of February 2022, attacks on the Ukrainian gas infrastructure in Kharkiv were carried out by Russian troops (Auyezov 2022). Since then, the Ukrainian pipeline system has not been a target for Russian military operations. Gas flows through Ukraine suffered severe reductions, with a 50% reduction in gas flows from Russia to Ukraine between the first and the third quarters of 2022. Such reduction, despite allowing a continuous gas flow, squandered Ukraine's gas storages which were running at 25% capacity after the 2022/23 winter, putting the future gas supplies of the country at risk. Such risk is, in part, also due to the slim chances of the gas supply contract between Russia and Ukraine being renewed. The previous supply contract will terminate automatically at the end of 2024. If not renewed, this will cause a complete halt in the supply of gas from Russia to the EU through Ukraine.

The war in Ukraine and, more importantly, the subsequent energy crisis the ensued, have had significant repercussions for the EU, with far-reaching implications for Member States' gas and economic systems. These consequences have had a serious political and institutional impact and have shaped EU dialogue ever since.

3.4 Impact of the gas crisis on the European Union

The war in Ukraine has been a dramatic event for a continent which based its entire political, economic, and social system on the idea of peaceful coexistence, and which had become unaccustomed to the idea of military conflicts in its territory. The social response to the war was harsh, with public discourse focusing entirely on the daily events of the war for a long time. The

European social reaction created a sense of collective solidarity with the Ukrainian people which was translated into a sense of unity among European peoples. This in turn encouraged a common response against Russian aggression and a perception of Russia as a rival. (Krastev 2023) Two elements provide an interesting clarification of the new European outlook. Firstly, European indignation for Russian actions had no political color. Despite different positions on how the Ukrainian government should conduct the war, political parties, governments and EU institutions came together to take a united position of condemning the act of aggression and calling for an end to Russia's unlawful actions. A second trend is that of European companies and governments who turned their backs on the Russian market. Despite market losses numerous companies shut down their Russian shops in a common act of protest against the invasion. At the same time, EU governments recognized their questionable decisions in previous trade agreements with Russian companies. The clearest example of such *mea culpa* is the German government's harsh criticism of its own historic commitment to the creation of the North Stream 2 pipeline, which it had championed even though the EU Commission was against the idea.

Despite this significant social impact, the war in Ukraine had much larger effects on the EU institutions, economy and on its gas system. The interconnection among the three created a self-reinforcing series of repercussions which called for immediate and effective actions both from the EU and its Member States.

The most direct consequences of the Russian war in Ukraine related to the resilience of the EU gas system. The EU gas market was immediately plunged into a position of uncertainty, suffering a sharp increase in prices and volatility. Together this forced the energy sector into a severe crisis which required short-term adjustments and long-term measures to face it.

Demand fell by 13% in Europe (Zeniewski, Molnar e Hugues, Europe’s energy crisis: What factors drove the record fall in natural gas demand in 2022? 2023) because of two separate but interrelated phenomena. On the one hand, the increase in prices and disruptions to gas supply disruptions of the 2022 summer caused an inevitable fall in demand. (Zeniewski, Molnar e Hugues, Europe’s energy crisis: What factors drove the record fall in natural gas demand in 2022? 2023) While, on the other hand, the fall in demand was the result of political actions aimed at reducing demand in order to lower the Union's dependency on Russian gas and to reduce the risk of supply shortages. The effects of these two phenomena are well demonstrated by comparing data to the average gas demand of the Union in the previous years. As *Figure 2* shows, since the outbreak of the crisis, EU gas demand has always been below the average for the period 2017-2022. Looking at *Figure 2* in detail, it is possible to identify 4 phases: the first predates the outbreak of the crisis and shows a lower gas demand compared to the past. This reduced demand can be explained by the higher average temperature across

the Union compared to the previous years[47] which meant that less stored gas was consumed. Despite a 20% lower initial filling quantity, the percentage of storage filling at the end of the 2022 winter remained almost unchanged compared to the previous year. (Gas Infrastruture Europe; AGSI 2023) The second phase is the timespan between the outbreak of the Ukrainian war and the beginning of April 2022. During this period, gas supply security was not considered at risk by EU institutions and Member States and no immediate actions were undertaken. As the graph shows, EU gas demand closely resembled that of the previous year. The third period, from the beginning of April to the beginning of August, reflects the tensions between the EU and Russia. The request for ruble payments, the first series of disruptions to gas flow and the successive reductions of flow and closures of the North Stream pipelines are all reasons for the reduction in demand. Initial talks on demand reduction measures began at the European level aimed at reducing EU dependency on Russian gas and preparing for the upcoming winter and the risk of supply cuts by Russia.

From the beginning of August, the gap between the quantities of gas consumed increased as the fall in demand caused by the Russian disruptions to the gas flow was exacerbated by the EU measures undertaken to reduce gas consumption and dependency. Gas flows were further reduced by the complete shutdown of the North Stream 1 pipeline following the September sabotage, causing an 11% reduction in gas demand compared to the previous month[48]. At the same time EU Council regulations imposed a mandatory gas demand reduction of, at least, 15% which could be achieved through nationally implemented measures [49]. The actual results were better than anticipated as the EU area managed to reduce gas demand by 17.7% in the period August 2022-March 2023 with only 7 countries not reaching the expected target of 15%[50].(Eurostat 2023) At the same time, gas storage facilities were filled more than in any previous year reaching 96% capacity.

[47] Average temperature of the EU was 2 Celsius degrees higher than 1991-2020 average

[48] Gas demand in September 2022 was 16% lower compared to the 2019-21 average. In October this increased to 27%. It should be highlighted that this reduction was caused by a mix of factors and not only by the closure of the North Stream 1 pipeline.

[49] Council Regulation (EU) on coordinated demand-reduction measures for gas of 2022, Regulation 2022/1369 of 5 August 2022.

[50] Ireland (-0.2%), Slovakia (-1.0%), Spain (-10.8%), Poland (-12.5%), Slovenia (-13.8%) and Belgium (-14.5%). Malta was an unusual case as it increased its gas demand by 12% across the period. However, it is worth noting that, given the country's dimensions, as a country it consumes less energy and its impact on the overall EU gas system is *quasi-irrelevant*

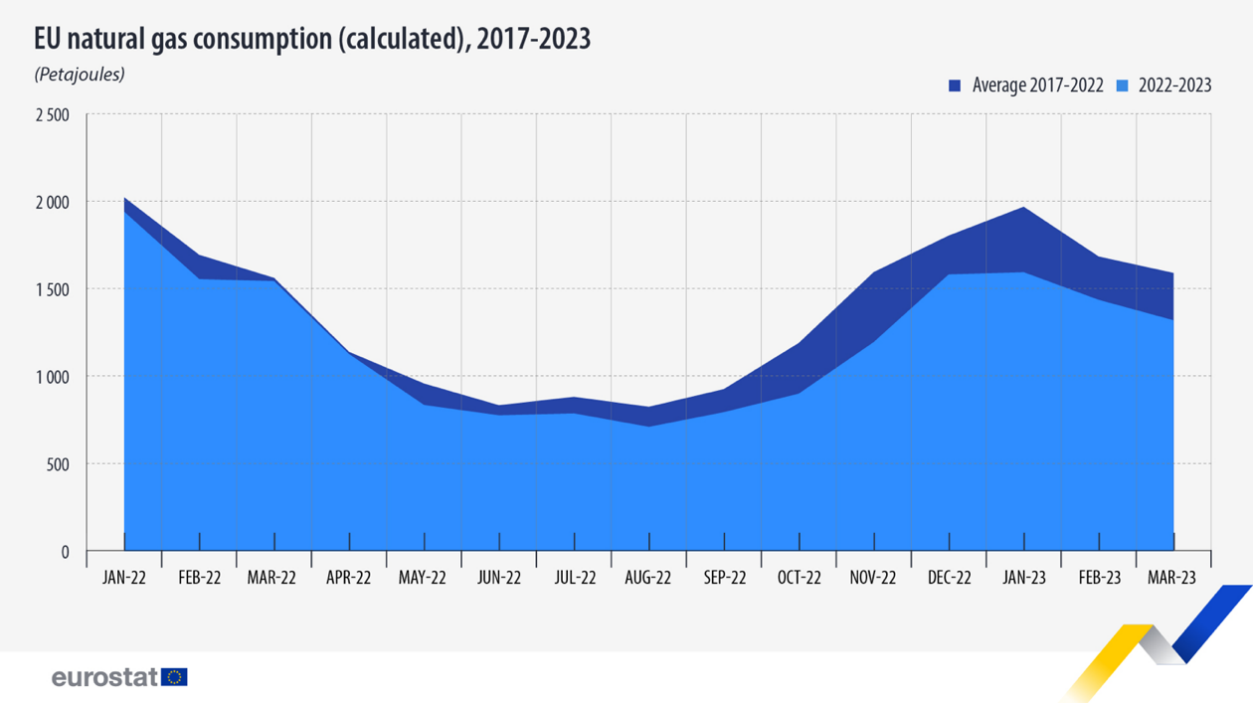

Figure 3

(Eurostat 2023)

Fall in demand was accompanied by changes in supply of gas. Security concerns and EU condemnation of Russian actions induced a change both in the energy mix and in the supply partners who distanced the EU from its historical partner.

Two simultaneous trends reduced EU dependence on Russian supply. Firstly, the EU began to modify its energy mix to obtain short-term and long-term benefits while, at the same time, it started to search for alternative supply partners. In the short-term, energy mix changes were necessary to stem the risk of supply disruptions which could prove disastrous for the EU population. Short term measures included increased use of LNG facilities, increased reliance on nuclear energy and, even, preparatory measures to reactivate coal plants in case of extreme necessity. In the long-term, the Ukrainian crisis gave impetus to the EU green transition with important investments made to increase renewable energy production which would, in turn, increase both EU self-sufficiency and reduce its environmental impact. As *Figure 3* shows, the EU managed to begin its transition in less than one year with renewable sources being the only form of energy to see an increase in share of electricity production.

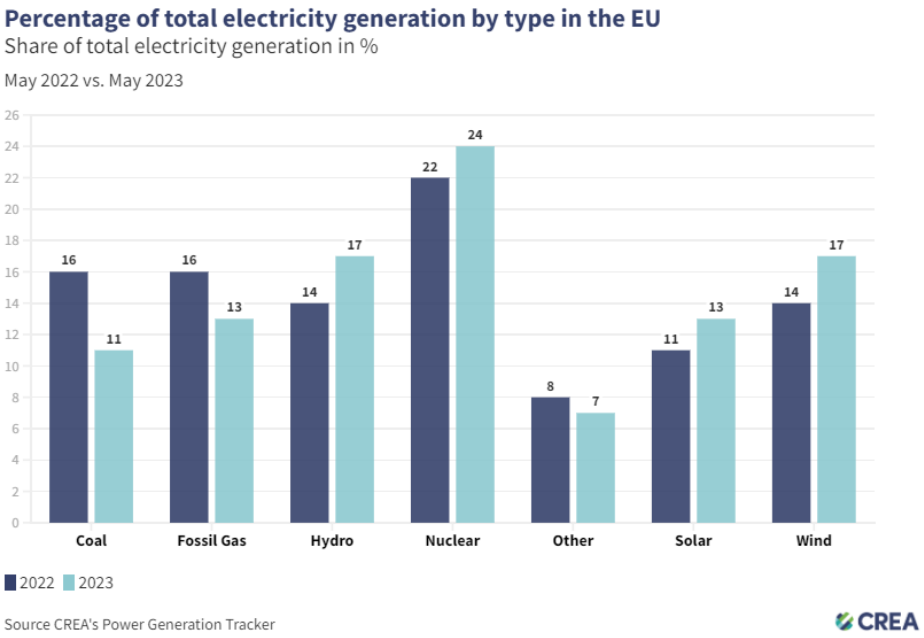

Figure 4

(Levi 2023)

Figure 3 shows two necessary specifications are required for coal and natural gas. Coal statistics in *Figure 3* might seem to contradict previous statements on the EU reopening of coal plants to face risks of natural gas supply disruptions. However, the real reason for such discrepancy relates to the lack of demand for coal during the 2023 winter as no supply issues were faced by the Union. Natural gas statistics, on the other hand, only reflect a minor reduction which, in reality, was much larger as dependence on natural gas had, already, been reduced in the period March- May 2022[51].

The second trend relates to the process of diversification of supply routes initiated by the EU. Despite earlier intentions, the EU never truly diversified its supply away from Russia. Following the invasion of Ukraine, the EU raced to solve its security threat by looking at new supply routes. The EU Member States' effort was two-folder. On the one hand, they re-evaluated the LNG market for gas supply as LNG provides greater flexibility and enables states to diversify their suppliers. At the same time, Member States began reconsidering previous partnerships with neighboring countries examining new pipeline systems to connect with the North African and Asia areas. Initial diversification on already existing pipelines and LNG facilities lead to a drop in the EU share of gas imports from Russia from 37.1% in March 2022 to a mere 12.9% in November of the same year. In order to reduce dependency so quickly, short term measures mainly concentrated on increasing LNG imports. The USA nearly doubled its LNG supply to the EU in 2022. (European Council 2023)

[51] Natural gas consumption was reduced by 23% (International Energy Agency 2022)

A third fundamental aspect of the impact of the Ukrainian crisis on the EU gas system relates to the change in the gas prices and the subsequent consequences. The effects on gas prices have been a hotly debated topic throughout the energy crisis as the issue represents the most serious and immediate threat to the EU population and economy. Gas prices skyrocketed as soon as President Putin announced the Russia special operation, increasing by 180% in just two weeks. Since then, gas prices have suffered high levels of volatility and reached a new peak on the 22nd of August 2022 to, then, begin a slow decrease which allowed prices to reach pre-war levels on the 27th of December.

The reduction in EU gas prices was the result of a series of interconnected measures undertaken by the Union which stabilized the markets by ensuring the stability of gas flows despite eventual future disruptions of Russian gas supply. The fall in gas prices was, mainly, the consequence of EU measures to take the fall in gas demand adopted since August 2022 and of EU actions to fill gas storages. EU measures were made more effective by the mild winter of 2023 which reduced natural gas use and, as a consequence, the risk of gas shortages.

A further measure enacted by the EU is worth noting when analyzing the impact of gas prices on the EU: the EU gas price cap. Since June 2022, such measure has been a topic of discussion throughout the most intense moments of the Ukrainian war. EU discussions took nearly 6 months before reaching a consensus and a gas price cap was established on the 19th of December 2022, limiting the prices to 180 €/MWh. It should be noted that such measure was more of a 'safety net' rather than an actual measure to contain prices, as the limit set by the Union was much higher than gas prices in December 2022 which averaged at 76 €/MWh.

Even if gas prices began decreasing after less than six months, the economic impact of the crisis on the EU area was dramatic. On the 8th of June 2023, Europe entered a period of recession as a consequence of the cost-of-living crisis. The causes of the ongoing economic crisis are not only the result of gas prices. The beginning of the Ukrainian war coincided with the concluding moments of the Covid-19 pandemic which had already put EU economy under pressure. The wake of the Covid-19 pandemic was further exacerbated by the effects of EU sanctions against Russia, the rise in gas prices and by the food and raw material crisis.

The economic effects of the war in Ukraine were *quasi*-immediate in their impact on the EU area. Already in June 2022 households and firms were suffering the consequences of the war. More pronounced effects were seen in eastern European countries such as Poland and Hungary because of their geographical proximity both to Russia and Ukraine. A European Investment Bank (EIB) analysis reported a 7% increase in the number of firms facing losses, while the share of firms risking default on their debt increased from 10% to 17%. (Lefort 2022) As *Figure 4* shows, except for Cyprus and Malta, no country escaped the effects of energy prices and the loss of exports towards Russia.

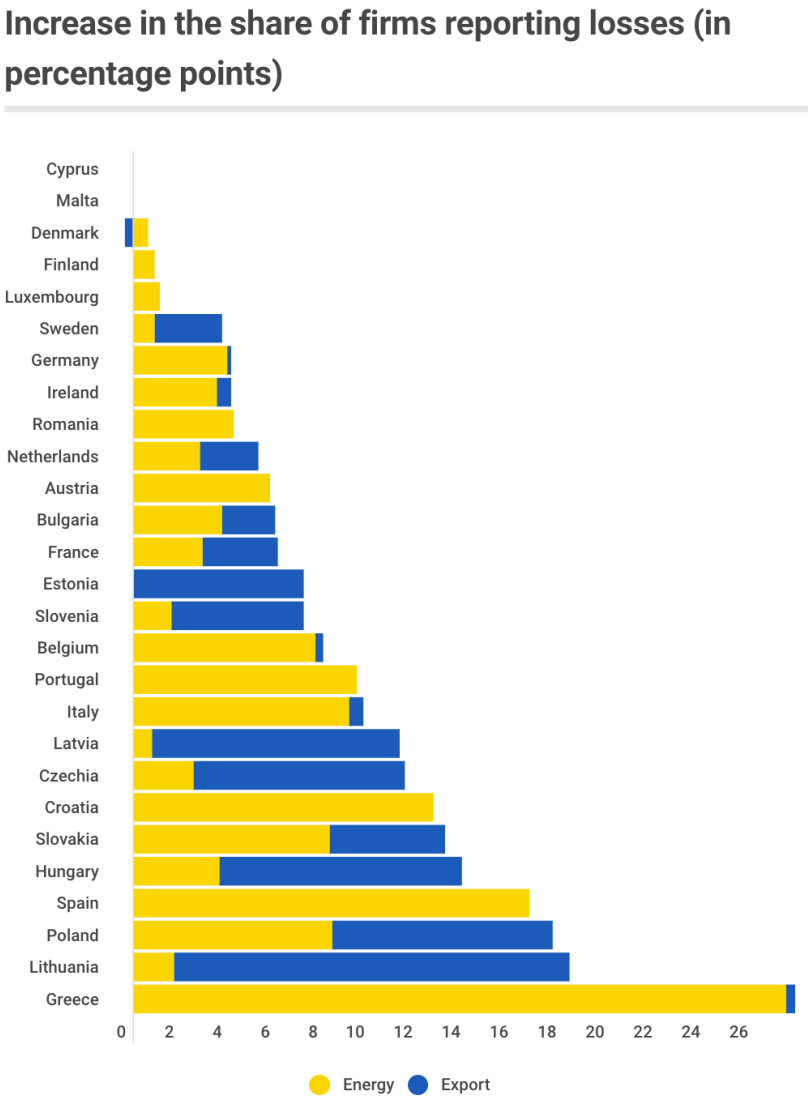

Figure 5

(Lefort 2022)

As it is possible to infer from *Figure 4,* firms suffering for export losses were mainly located in eastern European countries. However, overall, these firms did not represent a major loss for the EU as the respective economies account for a small fraction of the total EU economy and the overall EU exports toward Russia represented just 1.1% of the total EU GDP.[52] The impact of energy prices, on the other hand, was greater and more widespread. It affected the whole Union, including larger economies such as Italy and Germany. Italian firms suffered a 7 billion increase in energy costs with

[52] Data refers to 2019 (Lefort 2022)

consequential losses in industrial competitiveness. By looking at *Figure 4,* we can see that when it comes to industries negatively impacted by energy prices there seems to be no relationship between the geographic energy source and the level of impact on countries. This lack of correlation is explained by the percentual presence of energy-intensive productions notably present in countries such as Greece.

The war in Ukraine caused a sudden increase in the inflation rate which had already risen as a result of the Covid-19 pandemic. Inflation was, and still is[53], the most concerning economic effect of the war in Ukraine. The rise in inflation caused a cost-of-living crisis which has tipped Europe into a technical recession. (Euronews 2023) *Figure 5* shows both the effects of the Covid-19 pandemic and of the Ukrainian war on the EU annual inflation rate. As can be seen, inflation rose the most in March 2022 and August 2022, showing a close correlation between gas prices and the rate of inflation. Despite the correlation between gas prices and inflation rate it should be highlighted that these are not the only contributing factors.

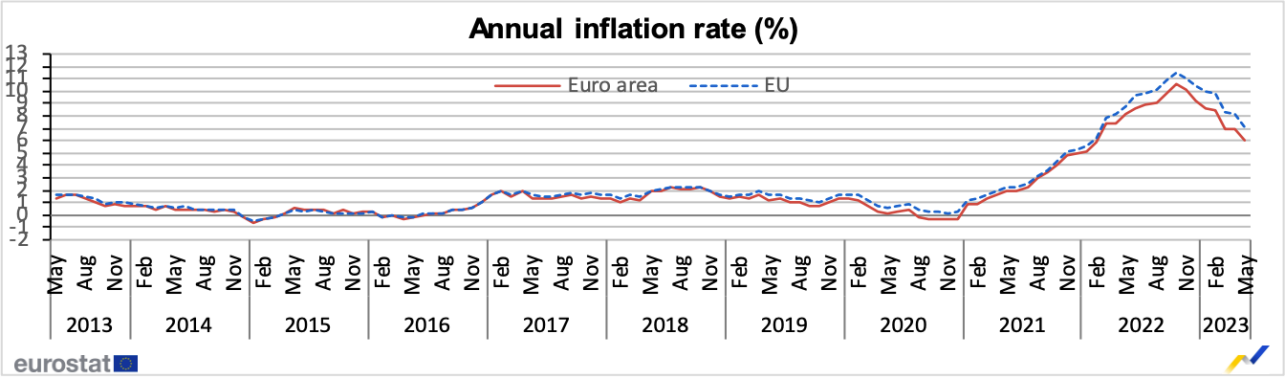

Figure 6

(Eurostat 2023)

While the rise in inflation was sparked by rising gas prices, this was no longer the case from February 2023.

As show in in *Figure 6,* inflation in the food and beverage sector became the main driving factor with an average inflation rate of around 10%.

[53] Data refer to the moment of writing, 30th of July 2023

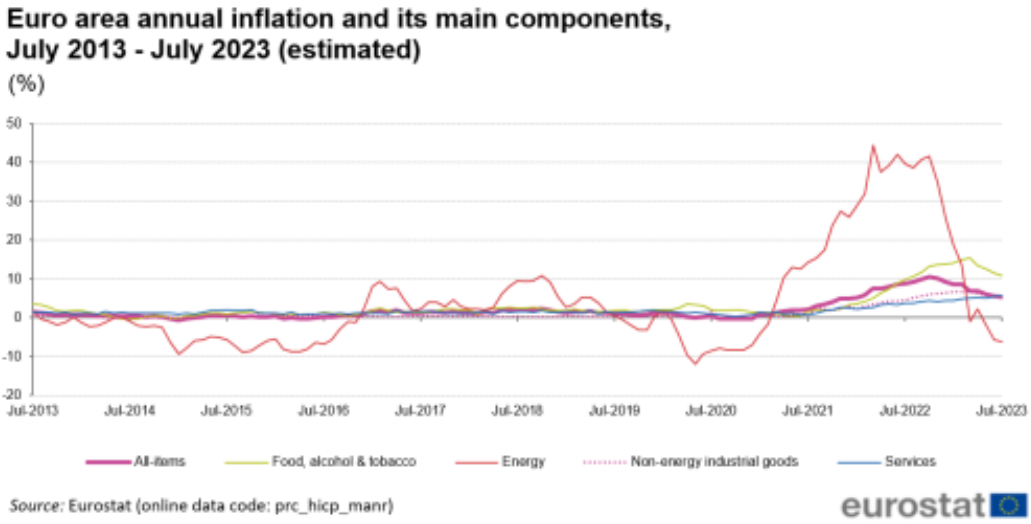

Figure 7

(Eurostat 2023)

Figure 6 highlights the overreaching consequences for the EU of the war in Ukraine on the EU. Despite a correlation with the increase in gas prices, the rising inflation of food items is also related with the war rather than with its energy consequences. Food production is not only energy-intensive, but it is also reliant on Russian and Ukrainian agricultural products such as wheat and vegetable oils. The combined impact of these two factors hindered the inflations drop consequential with the reduction of gas prices and made food the most concerning factor for the overall inflation rate.

The war in Ukraine, in conjunction with the energy and economic crisis, have had a significant institutional impact both on the EU and on its Member States. The war in Ukraine forced the Union to reconsider its international position focusing both on internal and external relations, while be conscious of the fact that measures in one would have overreaching consequences on the other. The proximity of the war to the EU territory required the EU to rethink its approach to external relations while also reconsidering its conditionality approach (European Commission s.d.) to account for the need to ensure energy security supply.

The institutional impact on the EU's external relations required a review of both its security approach and of its enlargement policies. The first was required given the territorial proximity of the war in Ukraine and the strength of the political and economic relationship with the parties at war. For the first time, the EU had to assess its military capabilities of support and intervention on its own territory but, most of all, had to assess the willingness of its Member States to leave to the EU institutions a coordinated response to the crisis. EU enlargement and neighborhood policies were among the most hotly discussed issues as Ukraine pushed to become an EU member and, at the same time, had to reconsider its overall security, opening towards the east. (Dabrowskif 2022)

Internally the EU faced the need to orientate its institutional dialogue and balance of power in the long-lasting tug-of-war between EU institutions and Member States. This need was reinforced by the issues at stake -energy policies *in primis*- which were among the most competed for.
The institutional impact did not automatically translate into an institutional crisis as, despite the need to assess the institutional dynamics in the crisis resolutions process, the popular support of EU institutions remained stable while witnessing a general increase for a collective defense, a strong support for the EU response to the war in Ukraine and for a stronger global standing for the EU. (European Union 2023)

3.5 Conclusions

The European gas system represents the internal complexity of the EU which is a Union representing a variety of states with different histories and needs. The EU gas system has been heavily impacted by the Union's growth which, expanding towards the east, has included ex-Soviet countries with a high level of dependence on Russian gas reserves. Other than a *quasi*-total reliance of a few, minor, countries on the Russian gas supply, the entire Union has heavily depended on Russia, which accounted for 83% of its gas imports in 2021.
The impact of the war in Ukraine becomes clear when looking at the EU gas infrastructure which is developed around six main routes, four of which transport gas from Russia and one, the largest in terms of gas flow, passes through Ukraine. A war between Russia and Ukraine, a war in which the EU has strongly sided with the latter by suppling economic and military aids while sanctioning the former, could not leave gas supplies to the EU unscathed. Despite the lack of damage to the Ukrainian gas system, infrastructure was targeted by a series of Russian measures aimed at reducing gas flows, creating instability to the gas market and threatening the general security of supply across the Union. During the summer of 2022, Russia acted to destabilize the Union by imposing the Ruble as the only medium of payment for gas supplies and by reducing and stopping gas flows by claiming the need to operate technical maintenance to the pipeline infrastructure. Russia did not expose itself by expressly admitting the political motive behind its actions while the EU, other than forcedly condemning Russian action, began a process of reducing its dependance on Russian gas by increasing the use of LNG supplies and pipelines gas flows from other partners. At the same time the EU accelerated its

process of transition towards greener energy sources with the aim of reducing dependence from foreign supplies and increasing its security.

The EU has been caught both in a gas and economic crisis which, coupled with the fall-out from the Covid-19 pandemic's economic consequences, has created a steep rise in inflation, plunging households in a cost-of-living crisis. At the same time, industries have suffered an increase in energy supply and raw materials costs which has put significant pressure on the economic system. The institutional response had to balance short-term measures which aimed to alleviate the immediate consequences of the increase in gas prices while implementing structural reforms across the entire EU territory in order to promote a smooth exit from the crisis.

EU institutions closely followed the developments of the war by supporting Ukraine in its military efforts, promoting a resolution of the crisis and opening the way for Ukraine's entry into the Union following the ending of the war. At the same time, institutional dialogue sought to push for a coordinated answer to the multitude of issues developing at the same time with the aim of concerting a truly European response which could prevent particular Member States' interests prevailing over those of the Union. EU measures succeeded in increasing cooperation among Member States to achieve greater general security of gas supply in advance of the 2023 winter, while containing gas prices and market expectations to avoid more disruptive economic consequences.

In conclusion it is clear that the EU approach to deal with the crisis situation – beginning with supply security before impacting the overall European economy - requires careful analysis in order to understand the institutional capacity of the Union to deal with a complex crisis. Such analysis is required in light of the peculiarity of the crisis which, despite being mostly economic, originated in the energy field which, historically, has been a source of conflict for the EU and its Member States.

4. CHAPTER THREE European Union Energy Policy response

4.1 Introduction

The consequences of the invasion of Ukraine have required a swift intervention both from national states and from the EU which have had to intervene on multiple fronts in order to avoid disruptions to the energy and economic systems. Before the outbreak of the war in Ukraine, the EU was already suffering the consequences of the Covid-19 pandemic which had affected both the social and economic European systems. At the same time the post-pandemic period had affected the energy system, mostly in terms of energy prices, and the EU had already implemented actions to try to face the rising energy prices.

EU institutions reacted promptly to the outbreak of the crisis in Ukraine by condemning Russian actions and by considering, since the beginning, the potential effects it could have on the European energy system. Despite an initial moment in which the EU did not think it was at risk of supply disruptions, all EU institutions began to act in order to tackle three major issues: dependence on Russian gas, risk of gas shortages in the near future and rising energy prices. The EU addressed the second and third elements with a greater degree of urgency. Despite being initially optimistic, the Union quickly realized that it was at serious threat both because of the skyrocketing gas prices and because Russia had begun playing with gas supplies to bring Europe to its knees.

The European response to the energy crisis saw Member States take action from an economic perspective in an attempt to shield consumers from the risks related to the rising gas prices. The EU's coordinated response, on the other hand, required longer to be enacted and initially concentrated on the securing of gas supplies in preparation of the upcoming winter. More structural reforms were left to the REPowerEU plan which was presented at the beginning of 2023 and summarized the position of the EU, which concentrated on a greener and less depended Union.

EU action was based on five main regulations which tackled all the major European issues and tried to coordinate Member States' action on two main fronts. Firstly, on securing gas supplies both by reducing energy demand and filling gas reserves. Secondly, it concentrated on limiting rising energy prices by coordinating gas purchases and by creating a gas price cap mechanism to avoid exceptional changes to gas prices.

This chapter seeks to describe the European response to the energy crisis and analyze the changes in the modes of energy governance following the outbreak of the war. The first part of the chapter will briefly describe the national response to rising prices mostly concentrating on the elements of similarity among such measures which, despite not being concerted, displayed a substantial degree of affinity.
Once carried out, such description will move to elucidate on the European level measures adopted through five main regulations: Regulation EU 2022/1032 with regard to gas storages, Regulation EU 2022/1369 on coordinated gas demand-reduction measures, Regulation EU 2022/1854 on emergency interventions to address high prices, Regulation EU 2022/2576 creating a price cap mechanism and enhancing solidarity and, finally, a brief discussion will be provided of Regulation EU 2023/435 which amended the Recovery and Resilience Fund (RRF) to add a REPowerEU chapter.
The second part of the chapter will take the previously analyzed measures and will consider the way in which the EU institutions have acted in order to enact the regulations and which powers were conferred to each institution to allow the implementation of the prescribed policies. The purpose of such part will be that of understanding what type of relationship was created among the various European agents in the peculiar characteristics of the energy crisis in order to understand if the European modes of energy governance have changed during, and because of, the crisis or if there have not been any substantial changes. Such analysis will be carried out by considering each single regulation method of law-making and the powers and the respective positions of each single institution, Member States and European agencies compared with the past.

This chapter will conclude that the energy crisis has brought some changes in the European energy governance but that such changes have not been overreaching as Member States have maintained strong control over national resources and large freedom of choice in the enactment of energy policies, while the position of each European institution has not changed dramatically compared to the past. It will be recognized that, despite a lack of important changes at an institutional level, some fundamental steps have been made in the direction of an increased integration of the energy field.

4.2 European Union Response Measures

European response measures and policies have been swift in their proposal and have been targeted to contrast energy issues by reducing dependence on Russian fossil fuels. EU level policies have been characterized, since the beginning, by a long-term perspective rather than one which is more focused on short-term solutions and issue-focused. EU actions considered the immediate effects by inserting them in the more general planning of structural reforms. EU structural reforms had a double, intertwined, objective. On the one hand, the aim was that of reducing the Union's dependence on Russian supplies because of the unreliability of the partner. On the other hand, the Union promoted a faster transition towards renewable energy sources which could increase the domestic energy production. Reduction of dependence on Russian gas could be partially obtained by modifying energy supply mixes between the existing energy partners. Total displacement of Russian gas supplies required, however, a more substantial effort centered on the modification of the gas infrastructure to implement new gas supply routes by means of pipelines or LNG facilities. Acceleration of the green transition, on the other hand, required a restructuring of the entire European energy system to reduce energy dependence on fossil fuels while reducing energy consumption and increasing domestic energy production. Green transition plans were already existing before the outbreak of the crisis which acted as a catalyst to reduce the time span of the implementation of the necessary reforms and directed a considerable number of resources towards the measures necessary to reach the objective of the European Green Deal and the Fitfor55 objectives.
The Commission focused its action structurally modifying the EU energy system rather than on alleviating the effects of the crisis in the short term, such perspective is clear if it is considered the Commission’s support for gas demand reduction measures and its reluctance in placing a price cap to alleviate economic difficulties in member countries.

The master plan of EU action in the long term was quick to be presented. Just two weeks after the outbreak of the Ukrainian war the creation of the REPowerEU plan was proposed. On the 10th and 11th of March an informal meeting among EU leaders led to the signing of the Versailles Declaration which set out the intentions and the future projects of the EU in the wake of the new Ukrainian crisis.

The importance of the Versailles Declaration was recognized by the President of the EU Council Charles Michaels who affirmed that it "*will go down in the history of the European project. It will go down in the history of the European project because we have for some time understood and believed that we should embark on an agenda for sovereignty, an agenda for strategic autonomy for the European Union*" (European Council 2022). In addition to underlining the need for a common European response against the Russian invasion, the importance of the Declaration is reflected in the double task entrusted to the Commission for the creation of two energy plans. By the end of March 2022, the Commission had to present an energy plan centered on security of supply and prices while, by the end of May 2022, a second plan, with a medium to long-term perspective had to be proposed in order to eliminate EU dependence on Russian gas. REPowerEU was the proposal presented by the Commission on the 18th of May 2022 with the slogan "REPowerEU: affordable, secure and sustainable energy for Europe" (European Commission s.d.).

Before beginning an actual analysis of the EU response measures, it is interesting to point out a characteristic of the EU way of dealing with the crisis. Aside from the normal EU institutional work, a high number of extraordinary and emergency meetings took place to face the consequences of the crisis as and when they arose. The EU has held ten extraordinary or special Council meetings since the beginning of the crisis; 6 of which have been held by the Transport, Telecommunication and Energy Council to deal with the direct consequences of the crisis on the energy sector. These meetings were swift to be put into place, indeed the day after Putin's announcement of the special operation in Ukraine, a European Council meeting was held to give a single EU response to the event and to analyze the possible consequences of the event on the EU. Extraordinary meetings represent both the willingness and the necessity to coordinate to face the consequences of the crisis on such an interconnected system.

The European response to the crisis was a composite action which incorporated EU level measures and national level solutions. Member states have acted to tackle domestic issues which related to the peculiar characteristics of their energy, social and economic systems which, despite a possibly concerted EU response, required locally adapted decisions. In such sense, respecting the principle of subsidiary, the EU acted only in those fields in which an efficient response could be put in place only by a large actor such as the Union itself. Member states, on the other hand, have preferred locally adapted solutions to deal with peculiarly domestic problems in a quicker and more effective way. Such division of tasks does not imply the predominance of one actor over the other but merely reflects the "European way" of sharing powers.

When discussing EU and Member States' response, it is important to highlight the peculiarities of the measures chosen by Member States, which are characterized by a strong similarity among themselves. The similarity among Member States' measures is due to Member States themselves as well as to the EU Commission which, on the 13th of October 2021, issued Communication 2021/660 to provide a toolbox of authorized instruments to deal with energy prices in accordance with EU law.[54] As pointed out by Giovanni Sgaravatti et al. (Sgaravatti, et al. 2023) there was a substantial similarity among national fiscal policy responses. Evaluating national policies by considering seven types of fiscal measures[55] Sgaravatti et al. pointed out that all EU countries enacted business support measures making it the preferred and most diffused measure to deal with the crisis. Member states reached, at the same time, *quasi*-total agreement on reducing energy taxes/VAT, on regulating retail prices and on transfers to vulnerable groups as such measures were implemented by twenty-five of the twenty-seven countries.[56] Despite such high convergence, coordination among Member States should not be presumed as, in fact, national measures did not respond to a common European plan but, instead, represented individual attempts to face domestic issues which, while waiting for a European project, began moving toward the same direction.

Member states' measures were integrated by EU level ones which, being discussed since the beginning of the crisis, began to be enacted at the start of summer 2022. EU measures were a set of coordinated policies created to tackle specific energy crisis issues which were, then, inserted in the long-term plan of the REPowerEU in order to create a comprehensive response which could guarantee the EU energy safety and affordability. EU policies were concentrated on two main energy issues: actions to guarantee the security of gas supply and actions to reduce the impact of gas prices on the Union's economy. The EU enacted, firstly, a gas storage regulation aimed at guaranteeing a sufficient filling and an efficient sharing of gas reserves in order to avoid gas shortages during the 2023 winter and beyond. The second measure in a chronological order enacted a gas demand reduction regulation to avert the risk of energy supply shortages. Joint gas purchase measures, despite having been proposed already in 2021 were enacted only in October 2022. Joint gas purchases responded to the

[54] EU COM 2021/660 "Tackling rising energy prices: a toolbox for action and support"

[55] Sgaravatti et al. created an 8 points list in which the last element "other" considers those measures which were not sufficiently diffused to be evaluated. The list is composed by: 1- Reduced energy tax/VAT; 2- Retail price regulation; 3- Wholesale price regulation; 4- Transfers to vulnerable groups; 5- Mandate to State-owned firms; 6- Windfall profits tax; 7- Business Support; 8- Other

[56] Malta and Slovakia did not reduce energy taxes/VAT. Retail price regulations were not enacted by Finland and Ireland. Hungary and Malta did not make transfers to vulnerable people.

double need of ensuring gas security while keeping the price of gas at an affordable level. They made the EU an attractive partner for gas supplier, mostly in the LNG sector. The last measure enacted to reduce economic pressure on Member States was the introduction of a price cap on gas purchases which, enacted on the 19th of December 2022, was designed to prevent prices rising above 180 €/MWh.

Regulation EU 2022/1032 on gas storage was adopted by the EU on the 29th of June 2022, less than 3 months after its proposal. On the 23rd of March the Commission adopted a proposal on gas storage regulation[57] aimed at increasing EU resilience against gas flow disruptions by modifying Regulations EU 2017/1938[58] and EC 715/2009[59] which regulated both gas storage security and the rules of access to the network. The urgency of adopting a renewed gas storage regulation originated from the need to guarantee an increased level of security to the EU before the upcoming winter by not only specifying new gas storage targets but by ensuring a more effective system of gas transfers from those countries having large gas storages and those having none. The adopted version of the regulation revised storage targets and filling trajectories[60] which aimed to reach 85% filling capacity Union-wide while each Member States had a target of 80% filling for the year 2022, increased to 90% for subsequent years[61]. Those countries without any gas storage facilities had to organize their national market participants to guarantee, through the use of other countries' facilities, a minimum storage of 15% of their average annual consumption over the previous five years.
Regulation EU 2022/1032 does not only modify security standards, but also implies a larger series of changes which modify the existing relation both among Member States and among Member States and the EU. Regulation EU 2017/1938 established the principle of solidarity as the main instrument

[57] COM 2022/135: 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

[58] Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010

[59] Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005

[60] "Filling trajectory" means a series of intermediate targets for the underground gas storage facilities of each Member State (REG (EU) 2022/1032)

[61] Given the high level of gas prices at the moment of the adoption of the Regulation EU legislators took into account the peculiar condition of some Member States having a disproportionate gas storage capacity compared to their annual domestic consumption. The regulation, to tackle the point, imposed a minimum gas storage level of 35% of the average annual gas consumption over the previous five years.

to deal with energy crises. This principle was amended by Regulation EU 2022/1032 which, despite maintaining the principle, created a more structured response mechanism based on burden-sharing, infrastructure sharing and constant monitoring by EU agencies. In this way, Member States are invited to create a more interconnected network which does not only coordinate but becomes a partially common infrastructure[62] which, without depriving Member States of their property on the system, allows a European energy policy based on private agreements among national TSOs. Furthermore, an EU monitoring system was set up or reinforced in order to avoid the risk of local supply disruption. Member states were tasked with providing the EU with constant reports on filling trajectories, filling storage levels and future filling prospects. In this way, the Commission takes on the role of overseeing the general condition of the EU energy system. This system of checks and balances does not end with the Commission, which has to provide both the EU Parliament and the Council with an annual report on the state of the gas system and on the compliance of Member States with EU measures. Therefore, Regulation EU 2022/1032 set up a system of vertical and horizontal coordination in which horizontal coordination was left in the hands of single Member States which organized storage filling among themselves in order to prevent actions which could undermine the security of supply of other Member States or which could reduce the efficiency of the storage filling operations. Further cooperation was required in the process of assessment of the level of security of supply in order to allow an adequate analysis of the level of risk. Vertical coordination between the Commission and Member States was designed to guarantee an adequate monitoring of gas storage. In order to fulfil this task, the Commission made use of the Gas Coordination Group (GCG)[63] to which Member States had to constantly report. The combination of vertical and horizontal coordination was designed to allow the security of gas supply by ensuring the action's efficacy at all times and stages of the filling process.

Following the approval of the gas storage regulation and given the increased level of gas supply insecurity of the EU, since the start of summer 2022, further actions have been made to deal with the crisis. The Council recognized an inherent weakness in the crisis response measures provided by Regulation EU 2017/1938 mainly in the case of prolonged disruptions – more than 30 days crises-

[62] The partiality of the common infrastructure originates in the lack of a completely interconnected system which leaves some Member States without a connection to the wider EU gas system or just with the possibility of partial or reduced connections

[63] The Gas Coordination Group was set up by Regulation EU 2010/994 substituted by Regulation EU 2017/1938. The Gas Coordination Group is a permanent group led by DG-ENER which shall ensure the security of supply of the EU both during normal times and in periods of crisis. In the Gas Coordination Group are represented national authorities, consumer associations, industrial groups, ENTSOGs and ACER making it a truly representative advisory group of all energy related realities.

which could put the Union at risk because of the lack of a clear legal framework to coordinate Member States' action.[64] From such acknowledgment and from the worsening of the relationship with Russia, the Council began a normative effort centered on the creation of a voluntary gas reduction regulation which aimed to cut gas consumption Union-wide.

While gas storage regulation tackled the supply side of the gas market, Regulation EU 2022/1369 on demand reduction measures sought to limit Member States' gas consumption with targeted measures calibrated to not put further strain on fragile groups. Measures were articulated to promote a voluntary gas demand reduction and to create rules for a mandatory reduction in case of particular distress for the energy system. Voluntary gas reduction target was set at a 15% decrease of the average annual consumption based on the previous five years. This reduction target was limited in a timespan from the 1st of August 2022 to the 31st of March 2023. Member states agreed to extend the duration of the voluntary gas demand reduction through Regulation EU 2023/706 which, amending Regulation EU 2022/1369, prolonged the applicability timeframe to the 31st of March 2024. Art. 4 and Art 5 of Regulation EU 2022/1369 introduces a European mechanism of crisis management which, following the declaration of a "Union alert"[65], makes voluntary gas demand reduction mandatory, thereby maintaining the same 15% reduction target. The Council, in a spirit of reducing the distress created by the emergency measures, created exceptions to account for strategic national industries to not take into account the calculation of the 15% reduction and created an exception for the rule for those countries which lacked direct interconnections with the European energy system and were allowed to disapply the rule but, at the same time, were obliged to accelerate the process to create the infrastructures needed to connect the country.

Regulation EU 2022/1369 sets up new methods of coordination which are based on a regular coordination among risk groups[66] to which Member States participate. The Commission and GCG are, then, given the task of overviewing such risk groups in order to guarantee an overall coordination at EU level. Overall coordination by the Commission and the GCG is both passive, in the form of

[64] Council REGULATION (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas

[65] Art. 2 of Regulation EU 2022/1369 defines "Union alert" as "a Union-specific crisis level triggering a mandatory demand reduction, and which is not related to any of the crisis levels pursuant to Article 11(1) of Regulation (EU) 2017/1938" while Art.4 provides the procedures to declare a Union alert.

[66] Risk groups were established by Commission Delegated Regulation EU 2022/517 amending Regulation EU 2017/1938. Risk groups were created to simplify cooperation among Member States to which the same type of risk was associated. Four main areas of origin of risk were identified – Eastern gas supply risk group; North Sea gas supply risk group, North African gas supply risk group and South-East gas supply risk group – and 13 groups created. Each Member State participates in all the relevant risk groups necessary to coordinate its action with the other Member States.

receiving and monitoring risk group works and positions, and active as it is possible both for the Commission and the GCG to share advise or to gather risk groups to discuss potential risk or measures to be implemented.

It should be highlighted that Regulation EU 2022/1369 and the successive Regulation EU 2023/706 are emergency measures to deal with the energy crisis. The Council acts, in such sense, following Art. 122 TFEU which allows it to take extraordinary measures for a limited period of time. The use of art.122 TFEU grants primary relevance to the Council in managing the crisis as it becomes the institution's duty to declare the Union alert. At the same time, it should be noted that Commission is fundamentally important, becoming the leading figure in the emergency response by being involved in the proposal, implementation and monitoring of the measures adopted by Member States. Regulation EU 2022/1369, at the same time, encourages state-to-state coordination to deal with regional demand reduction measures but imposes the duty of a constant reporting to the Commission to avert the risk of uncoordinated regional measures. In such sense, the gas demand regulation reproposes a system of shared competences that rests both in Member States' hands as primary decision makers while EU institutions maintain a monitoring role and adopt Union-wide policies[67].

Planning gas storages and limiting demand increased security of supply without Russia but did not allow Member States to become the most favorite party on the free energy exchange market. The EU necessity to purchase larger LNG quantities in order to substitute the lack of pipeline gas in the short term posed a new threat not only to the Union but to the global energy market in general. EU Member States, being large energy consumers, modified the LNG supply-demand equilibrium risking causing a rise in price. (McWIlliams, et al. 2023) For such reason, the EU acted to pool Member States gas demand by promoting joint gas purchases which could have the double effect of making the EU a more attractive buyer compared to other countries while also maintaining prices low because of the large quantities of gas purchased.

The EU idea of pooling gas purchases anticipated the outbreak of the Ukrainian war as, as far back as October 2021, the Transport, Telecommunications and Energy Council asked the Commission to present proposals to tackle raising energy prices. Part of such proposals included voluntary joint gas purchases schemes. Such proposal remained latent until further requests for a concrete plan were presented by the European Council on the 21st of October 2022 and opened the way for a quick

[67] Regulation 2022/1369 recognizes that EU level policies can be more effective than national level one and gives the Commission the possibility to act under the principle of subsidiarity if Member State policies are not considered as sufficiently effective

legislative effort which led to the approval of Regulation EU 2022/2576[68] on the 19th of December 2022. As for Regulation EU 2022/1369, the Commission and the Council acted under Art. 122 TFEU to promote a market-based solution to increase the resilience of the EU through joint purchases which could reduce disparities among countries in the Union[69] and guarantee greater economic efficiency.
Regulation EU 2022/2576 set up a two-step mechanism in which demand is aggregated to allow the supplier to place their offers and then, in the second step, Member States can purchase those quantities offered by suppliers at the established price. The mechanism allows the EU to place large requests to the market in order to drive down prices while Member States are left with the freedom of buying individually or in a coordinated manner the requested quantities of gas. In the process, the Commission revests the role of mediator and, to carry out such task, a specific instrument was designed: the EU Energy Platform[70]. The EU Energy Platform was designed as a coordinating instrument not only among Member States but, also, with third parties both in the short term to pool and manage gas purchases and in the long run to promote coordinated joint purchases of more difficult energy sources such as hydrogen.
It should be highlighted that Regulation EU 2022/2576 could be defined as a solution of compromise between the European push towards a more integrated energy market and the traditional powers of the Member States. The joint gas purchase system seems a promising development but, at the same time, holds back on the usual Member States' prerogatives. In fact, participation in the joint gas purchase system remains voluntary and, even when participating, Member States can continue to conduct negotiations for other supplies from different partners. Furthermore, the final purchase of gas from the suppliers is in the hands of individual states which can deliberately choose to coordinate with others. Even with Regulation EU 2022/2576, solidarity remains the underlying principle of conduct among Member States while the Commission becomes a facilitator of the process and a

[68] Council REGULATION (EU) 2022/2576 of 19 December 2022 enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders

[69] Because of the necessity to deal with the open market EU Member States found themselves in very different positions with larger and richer Member States having a competitive advantage on the market. Smaller EU Member States security of supply could have been threatened by high prices and a higher risk of shortage if adequate gas quantities could not be found on the market.

[70] The EU Energy Platform was initiated in April 2022 by the European Council -and introduced in the REPowerEU plan in May 2022- to coordinate negotiations for energy supplies and avoid competition among EU Member States for the same gas supplies. The EU energy platform was designed to be an instrument to boost coordination not only by pooling gas purchases but, at the same time, by coordinating national European infrastructures to increase efficiency and identify weak points in the net to which direct future investments. To guarantee the efficacy of the Platform the governance board was set up to include not only EU and Member States representatives but, also, industrial advisory groups.

monitoring figure which, as is the case for gas demand reduction and gas storage filling, oversees the entire process and the health conditions of the EU energy system.
Furthermore, Regulation EU 2022/2576 takes up the solidarity mechanism provided by Regulation EU 2017/1938 and clarifies its use by specifying the criteria to be respected to enact it and the duties and rights of Member States in case of activation. The solidarity mechanism is envisaged to be an element of fundamental importance to avoid or limit situations of distress for Member States which can be activated only as a measure of last-resort and after failing to find any support by Member States. In such mechanism, the country activating the mechanism is requested to provide all the necessary information to guarantee a swift and effective response by other Member States while cooperation to increase efficacy is required from all the parties involved. Given the fact that, once activated, the solidarity mechanism allows for multiple parties to act in assistance of the country in distress, a coordinated action is fundamental. The Commission is requested to act in order to avoid unnecessary delays and disjointed actions. Regulation EU 2022/2576 facilitates this by requiring the Commission to create an interactive platform to guarantee that each request of solidarity can be matched by an adequate support from the other Member States.

The three abovementioned measures attracted a wide level of consensus among Member States and EU institutions. The situation proved to be very different when it came to price cap measures and market correction mechanisms. Regulation EU 2022/1854[71] on the establishment of a price cap on gas and other energy sources was the last measure implemented by the EU in order to face the 2022/23 winter and to avoid the economic risks connected to the energy crisis. In Regulation EU 2022/1854, the Council defines the situation in which the EU found itself as “extraordinary” with “extreme increase of retail gas and electricity prices”. This idea was confirmed by public opinion and by national governments which urged the implementation of price cap measures. Fifteen countries, including France, Italy, Spain and Belgium, requested that the Commission present a plan to implement the measure (Liboreiro e Koutsokosta, Energy crisis: 15 countries call for EU-wide price cap on all gas imports 2022) while, the remaining Member States were either neutral or opposed the measure. Among those against a price cap were Germany and the Commission which, since the beginning, showed a degree of hesitancy when evaluating potential threats originating from an unprecedented measure. The Commission maintained its reserves up to the point when, lobbied by the countries in favor of the measures, it proposed a diluted regulation with an unrealistically high price cap. The Commission's proposal presented on the 22nd of November 2022 set the price cap at

[71] COUNCIL REGULATION (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices

275 €/MWh (Liboreiro, Energy crisis: Brussels unveils first-ever EU cap on gas prices but only as 'last resort' 2022). Following negotiations, this fell to 180€/MWh.

Regulation EU 2022/1854 was the result of an institutional compromise, and it can be said to display all elements of such compromise. Regulation EU 2022/1854 creates a market correction mechanism which is designed to be an emergency measure with a redistributive objective. To activate the price cap on market revenues two conditions must be satisfied: there must be a high volatility from which "the month-ahead TTF price is 35€ higher than a reference price for LNG on global markets for the same three working days." (Council of the EU 2022) At the same time, the price must be higher than 180€/MWh. If activated, the price cap ceiling has a minimum duration of 20 days after which time it automatically deactivates. However, at the same time, the Commission is entitled to remove the price cap if, as a consequence of its activation, disruptions to supply or other extreme events occur. The Commission, following a series of criteria set by Regulation EU 2022/1854[72], is the only agent allowed to suspend the price cap mechanism. The emergency mechanism is designed to alleviate the economic burden on citizens. Member states were obliged, if the price cap was activated, to redistribute the surplus revenues originating from its application to the final consumers, prioritizing those most impacted. In such sense the EU, through Regulation EU 2022/1854, sets up a new economic mechanism to add to the, already, large quantity of funds allocated to mitigate the energy crisis effects on the population and on the economic system.[73]

The price cap mechanism presents a fundamental difference compared to the other Regulations adopted by the EU to tackle the energy crisis. In fact, Regulation EU 2022/1854 does not differentiate among more and less interconnected Member States' energy systems. Every EU country has to adopt and respect the market cap if it is activated. Regulation EU 2022/1854 provides an exception for Malta, Cyprus and the outmost regions of the EU[74] which, because of their lack of connection with the EU energy system and because of their unique features, are allowed to disapply the EU measures.

When analyzing Regulation EU 2022/1854, one last point is worth highlighting. Despite the centrality of the price cap mechanism, the focus of Regulation EU 2022/1854 is broader, comprising solidarity

[72] "The market correction mechanism will be suspended, notably if gas demand increases by 15% in a month or 10% in two months, LNG imports decrease significantly, or traded volume on the TTF drops significantly compared to the same period a year ago." (Regulation EU 2022/1854)

[73] 758 billion euros have been employed to reduce the crisis effects on consumers and to protect the more fragile classes union wide. (Sgaravatti, et al. 2023)

[74] Guadeloupe, French Guiana, Martinique, Réunion, Saint-Barthélemy, Saint-Martin, the Azores, Madeira and the Canary Islands (Art. 349 TFEU)

measures and electricity demand reduction targets. On the last point it is important to note that the Commission pushed, once again, for further integration as, while recognizing the freedom of action of Member States, it reaffirmed the duty to comply with the EU Strategy for Energy System integration that was presented by the Commission itself in 2020. Such element is key to analyzing the long-term perspective of the EU institutions which continue to work towards an integrated energy union and, at the same time, demonstrates an opening of Member States towards stronger European powers.

An analysis of the measures implemented by the EU to deal with the energy crisis could not be complete without a description of the REPowerEU plan which represented the most significant and overreaching European effort to deal with the energy crisis. The REPowerEU plan originates from the Versailles Declaration of the 11th of March 2022, through which Member States required the Commission to present a structured plan to "phase out our dependency on Russian gas, oil and coal imports as soon as possible"[75] while working towards the 2050 objective of climate neutrality. The Versailles Declaration did not only require a general effort from the Commission, but it also set out some specific objectives to be included in the REPowerEU plan, these objectives included improving diversification, efficiency, security of supply and, more importantly, Member States' request that the Commission complete and improve the European energy networks.

On the 18th of May 2022, the Commission presented Communication 2022/230[76] which outlined the REPowerEU plan. This plan, based on the Fit for 55 package, set out four main areas of action to reduce the EU dependence on Russian gas: save energy; diversify supplies; quickly substitute fossil fuels by accelerating Europe's clean energy transition and smartly combine investments and reforms. As it can be seen from such list, the REPowerEU plan set out the general objectives. These included not only the long-term elimination of Russian gas dependence but, also, short-term measures implemented to tackle the energy crisis, with a comprehensive effort. It should be highlighted that Communication 2022/230 provided only a general framework of action which was put in practice by single regulations -Regulation EU 2022/1032, Regulation EU 2022/1369, Regulation EU 2022/1854, Regulation EU 2022/2576- in the short term while long term measures were further discussed and were only later agreed in February 2023.

Communication 2022/230 presented the REPowerEU plan as a set of actions which "will structurally transform EU's energy system". Such Commission's objective is fundamental to understand the *ratio*

[75] Versailles Declaration of the 11th of March 2022

[76] COM (2022) 230 Final - 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

of the plan which did not consider overcoming the energy crisis as its final goal, but used it as a catalyst to accelerate the green transition process of the Union. In the introduction of Communication 2022/230, the Commission was careful to highlight the need for strong coordination and willingness to undertake joint actions. In such sense, the Commission takes up its natural role of EU coordinator and supervising body of Member States to reach the EU objectives, while keeping actions affordable at a national level.

REPowerEU plan encountered Union-wide support and enthusiasm. The plan, as already said, was proposed by Member States to the EU institutions through a non-European act meaning that, as it is customary under international law, unanimous consent was needed in order to agree the final text of the Versailles Declaration. Such support was confirmed by the European Parliament during the voting session of the Commission's proposal when it was approved with 471 votes to 40. (Moller-Nielsen 2022) The President of the EU Parliament, Metsola, when commenting on the approval of the proposal, defined it as a "potential game-changer"[77] both for its content and for the widespread agreement it lured. (Moller-Nielsen 2022) The REPowerEU plan did not only receive institutional support but, also, widespread popular support which was attested by the Eurobarometer data which affirmed that three out of four of those interviewed supported the plan. (SIR Agenzia D'Informazione 2023)

The implementation of the REPowerEU plan passed through Regulation EU 2023/435[78], which amending Regulation EU 2021/241 which had introduced the Recovery and Resilience Fund (RRF), allowed Member States to modify their existing plans. The REPowerEU was designed to be a chapter in the previously created set of reforms and investments of the RRF, increasing the importance of an energy chapter and allowing for a redefinition of the Member States' priorities. Such chapter had to concentrate on energy related measures following each Member State's priority. In such sense, under the Commission's supervision, Member States took responsibility for choosing and implementing national measures which followed the objectives set out by the REPowerEU plan, but which respected the peculiar priorities of the country.

Without going into the specific details of the measures enacted under the REPowerEU plan, it is worth mentioning that particular attention is devoted by the regulation to cross-national and multinational initiatives that benefit the Union and aim to increase cooperation and integration among

[77] Roberta Metsola, Brussels, 11th November 2022

[78] Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC

Member States. The Commission performs a fundamental role in such initiatives as it is one of the main promoters of cross-national initiatives as an instrument of increased integration while, also, having the responsibility of facilitating, coordinating, and managing such initiatives inside the EU legal framework. The above-mentioned measures are allocated at least 30% of the total funds of the REPowerEU chapter of each single state, demonstrating the substantial importance given to increasing coordination and cooperation in the energy field.

4.3 What changes in the modes of Energy Governance

In dealing with the energy crisis, the EU has used different methods to reach a wide range of simultaneous, and sometimes interconnected, objectives. The modes of energy governance employed by the Union have been very diverse by virtue of the subject matter and the results which were expected to be achieved. Such diversity has not precluded a comprehensive response but, rather, it has enhanced the European action by allowing different issues to be addressed with different measures, decided in different ways. This possibility has increased the flexibility and efficacy of the EU institutions allowing for a resolute and widely agreed crisis response.

In order to effectively understand the way in which the EU has dealt with the energy crisis it will be necessary to analyze the position of the various European institutions not only in a general way but, also, by considering each of the policies enacted. This need arises from the very different methods and legal basis adopted to enact each single policy.

The general trajectory to be followed by the EU after the outbreak of the Ukrainian war has been set up very quickly and at a very early stage, simultaneously or even in advance of the beginning of the energy crisis[79]. Such direction was given by Member States' representatives on three different occasions and in three different institutional arenas. On the 24th of February 2022, during a special meeting of the European Council, Member States agreed on an immediate and resolute response against Russian actions while requesting that the Commission begin a study on the threat level to the

[79] It can be affirmed that the EU moved beforehand compared to most of the energy crisis issues. The general plan to face the crisis was on the 11th of March 2022 in the Versailles informal meeting, at the time prices were rising but no other concern existed, just ten days earlier energy ministers reassured on the non-imminent risk for security of gas supply.

EU in the energy domain and of the level of preparedness of the energy systems. On the 28th of February 2022, an ordinary Council meeting of energy ministers evaluated immediate energy risks, recognizing none, and beginning talks on contingency measures.

It was on the 11th of March 2022 that the overall plan for EU energy action was presented. The Versailles meeting leading to the Versailles Declaration was an informal conference of EU heads of states and government which set the future objectives and necessities of the Union following the initial evolution of the war in Ukraine. The Versailles meeting was the chosen arena in which to conduct the European Council's role of agenda-setting. The choice of an informal meeting, which was conducted in the presence of the European Council President, served the purpose of reinforcing the importance of the content discussed and to be included in the final declaration. The final declaration, in fact, contained not only the road-ahead plan for energy crisis management but condemned, once again, Russian actions and demonstrated the Member States' willingness to proceed in a coordinated way when implementing future actions against Russia and protecting the Union.

The EU employed different methods to carry out the short-term and the medium-long term policies. Short-term measures passed through emergency legislation while more structural reforms were dealt with through ordinary legislation. At the same time EU institutions adopted two different procedures in relation to the content of the policy to be implemented.

In the implementation of short-term measures, focused on economic aspects, EU institutions adopted an unusual approach, which it used more and more from 2019 onwards, namely policy implementation under Art.122 TFEU. Such article allows for a special procedure for the implementation of emergency measures in case of severe supply disruptions or following exceptional occurrences. The text of Art. 122 (1) TFEU[80] has a broad scope, envisaging the general possibility of adopting economic measures deemed necessary to deal with supply disruptions. No limits are provided of the type of products which could trigger the use of the article, but particular attention has been given to energy which is the only product explicitly referenced by the article. Art. 122 (2) TFEU[81], providing for the implementation of similar emergency measures to grant financial

[80] "Without prejudice to any other procedures provided for in the Treaties, the Council, on a proposal from the Commission, may decide, in a spirit of solidarity between Member States, upon the measures appropriate to the economic situation, in particular if severe difficulties arise in the supply of certain products, notably in the area of energy."

[81] Where a Member State is in difficulties or is seriously threatened with severe difficulties caused by natural disasters or exceptional occurrences beyond its control, the Council, on a proposal from the Commission, may grant, under certain conditions, Union financial assistance to the Member State concerned. The President of the Council shall inform the European Parliament of the decision taken.

assistance to Member States in distress. The peculiarity of such article is that it allows for a faster procedure for the adoption of regulations which is based on the work of the Council following a proposal of the Commission. In Comma 1 of the article, the EU Parliament is divested of any role while in Comma 2, the Parliament shall only be informed by the President of the Council.

It is worth commenting on the use of Art. 122 TFEU. First, it is important to highlight that such article was hardly ever used in the history of the EU before 2013.[82] Before 2013, there were only eight regulations adopted pursuant to Art. 122 TFEU during the period 1993 to 2013, rising to fourteen over the past 10 years and making the procedure envisaged by the article one of the preferred ways to deal with crises. Such preference is rather easy to justify for EU institutions as it has a broad scope of application and allows for an accelerated decision-making procedure with very few limits. The second point worth mentioning is reflected by the only real limit to the applicability of the article: its emergency nature. Art. 122 TFEU envisages an emergency procedure which, therefore, has to produce emergency EU legislation. The emergency nature of the measure should be reflected both in the *ex-ante* conditions leading to its creation and in the provisions included in the text which should be coherent with an extraordinary action of the EU institutions.[83] Each of the regulations adopted by the Council under such article respected the condition of being temporary in nature even if one of the three[84], the only one which has expired, has already been extended for another year.

[82] For a matter of ease in the text no difference will be made between Art. 122 TFEU and its version in the previous treaties (Art. 100 Treaty of the European Community (TEC)). All the statistics before 2007 will refer to Art. 100 TEC while following the entry into force of the Lisbon Treaty statistics will be referred to Art. 122 TFEU.

[83] On the matter the European Court of Justice delivered a sentence in *Pringle* (Case C-370/12, Thomas Pringle v. Government of Ireland, Ireland and The Attorney General). In such case the Court was asked to rule on the applicability of Art. 122 TFEU as a legal basis for the creation of the European Stability Mechanism (ESM); in the response of the Court was ruled out such possibility as the ESM was designed to be a permanent mechanism not respecting the emergency characteristic of the measures implemented under the article which, therefore, shall be temporary in nature. (Schiavo 2013)

[84] On the 30th of March 2023 was adopted Council Regulation (EU) 2023/706 of 30 March 2023 amending Regulation (EU) 2022/1369 as regards prolonging the demand-reduction period for demand-reduction measures for gas and reinforcing the reporting and monitoring of their implementation.

Thirdly, it is necessary to highlight that, by virtue of its limited historical application, the use of Art. 122 TFEU has produced a series of academic analyses[85] and court cases[86] which have disputed its applicability in such a large set of policies and have tried to evaluate its limits and its consequences on the European institutional balance. It is important to highlight a recent evolution which is connected to the general skepticism around the use of Art. 122 TFEU. On the 9th of July 2022, the EU Parliament began actions to modify articles 29 and 48(7) Treaty of the European Union (TEU). After the beginning of the procedure, the special rapporteur Guy Verhofstadt welcomed committees' opinion, and two committees (Committee on the Budgets and the Budgetary Control Committee) have requested an amendment to Art. 122. TFEU's voting procedures in order to abolish the special procedure in favor of an ordinary one. (Duff 2023)

Regulation EU 2022/1369, Regulation EU 2022/1854 and Regulation EU 2022/2576 have all been based on Art. 122 TFEU which allows for the use of a non-legislative procedure for the approval of the regulations. The use of the non-legislative procedure shortened the process for the adoption of the texts and allowed the number of institutions involved to be reduced to just the Commission and the Council. Both Regulation EU 2022/1369 and Regulation EU 2022/1854 have been approved by the Council in four steps following the proposal by the Commission. While Regulation EU 2022/2576 took seven steps to approve[87]. Highlighting the number of steps for approval of the regulation helps clarify the strong level of consensus around the measures to be adopted at the EU level. Neither the text of Regulation EU 2022/1369 or Regulation EU 2576 have been amended during the process of its approval by the Council, making the text proposed by the Commission definitive. It is interesting to highlight that in both cases, political agreement on the text of the regulation was not reached during

[85] It is possible to identify a double trend in the academic world on the use of Art. 122 TFEU as a basis for EU action: on a side, part of the academia, mainly reflected by legal scholars, disputes the possibility of such a wide applicability of the article (Rajal 2022) (Marin e Münchmeyer 2023) while other scholars, mainly political science ones, have concentrated on the institutional change effects brought by its application arriving to define, as in the case of Merijn Chamon, the use of Art. 122 TFEU as a "paradigm change" for the EU (Chamon, The rise of Article 122 TFEU 2023)

[86] Two challenges have been presented in front of the European Court of Justice: a private initiative by ExxonMobil has challenged the applicability of Art. 122 TFEU as a legal basis for Regulation EU 2022/1856 (Case T-802/22) while the polish government has challenged Regulation EU 2022/1369 on gas demand reduction measures (Case C-675/22).

[87] The seven steps necessary for the approval of the regulation do not relate to issue content-related but to errors in the translation of the text which have required the Committee of the Permanent Representatives of the Governments of the Member States to the European Union (COREPER) to act twice to correct it (one time in the Spanish version and one time in the French one)

an ordinary Council meeting but during extraordinary meetings of the Energy Council. Thereby demonstrating the emergency level to which the enactment of the regulations was connected.

Regulation EU 2022/1854, despite presenting a short approval procedure, requires a deeper analysis of the political process leading to its proposal. The institutional discussion around the possibility of introducing a price cap on energy began soon after the outbreak of the crisis. On the 23rd of March, the Commission presented the European Council with the possibility of introducing the measure to limit the rise in gas prices (European Commission 2022). During its successive meeting, the European Council requested that the Commission and the Council begin discussing such possibility with energy stakeholders (European Council 2022) [88]. Following this moment, the proposal for the creation remained part of the general discussion at EU level and became a point of increasing interest for the European Council[89].

Such interest was not echoed by the Commission. The Commission displayed an aversion against the implementation of a price cap which was considered to be a measure which presented very relevant economic risks and which should be implemented as a last resort. (Abnett e Baczynska 2022) It should be highlighted that such position was matched and reinforced by a general confusion among Member States who had requested the measure. The Union was split among those supporting the introduction of a price cap[90] who sent a letter to the Commission to push it to act and those who pushed against it[91]. The situation was further complicated by the substantial disagreement over the type and level of the price cap to implement, as the Commission presented a price cap proposal with measures created to not be adopted[92]. (Messad 2022) The final text of the provision represented a double victory for the European Council (and as a consequence for Member States). It managed to

[88] On the point it is important to highlight that the Commission did not present a specific proposal for a price cap measure but presented a general proposal for economic measures to address high prices among which was, also, the possibility of a price cap. In the same way the European Council inserted the price cap among the measures to discuss between the Commission, the Council and energy stakeholders but did not present any particular favoritism for a price cap measure

[89] Initially price cap measures were inserted among the possible economic measures to be implemented by the EU, through time the European Council began to reiterate the request to the Commission to provide information on the feasibility of energy price caps. (European Council 2022)

[90] The introduction of a price cap was supported by the President of the European Council Charles Michel and by a strong core of fifteen Member States: Belgium, Bulgaria, Croatia, France, Greece, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Spain

[91] Germany, Sweden, Austria, Denmark and the Netherlands (Keating 2022)

[92] The proposal by the Commission presented unrealistically high prices for the enactment of the cap compared to the prices at which gas was traded at the time of the proposal.

encourage the Commission create the measure and increase its efficacy, driving down the price per Mwh at which the mechanism had to be triggered.

One final element that should be highlighted in relation to the above-mentioned regulations related to the level of consensus reached. All three regulations have been approved with a really high majority which, despite not being unanimous, represented almost all of the EU countries. Regulation EU 2022/1369 was approved with just two dissenting votes (Hungary and Poland). The same level of consensus was reached on Regulation EU 2022/1854 where only Poland and Slovakia voted against the approval of the regulation. It should be remembered that the Polish government has filed an action against the Council in relation to Regulation EU 2022/1369 arguing that Art. 122 TFEU does not constitute a valid legal basis to enact the regulation. Polish opposition against the two regulations is, therefore, both in relation to the procedure and the content. Polish authorities have accused the EU of trying to steal Member States' exclusive right to manage their energy sources by exploiting the energy crisis. (Tilles 2022)

Acts with more structural reforms (i.e., not temporary measures) have not followed the accelerated procedure under Art. 122 TFEU but have, instead, been approved through the ordinary legislative procedure. Only two regulations have been approved through such procedure to face the energy crisis: Regulation EU 2022/1032 on gas storage and Regulation EU 2023/435 on the creation of a REPowerEU plan.

A few elements should be highlighted here. First, both regulations were proposed by the Commission following a suggestion by Member States and were approved at the first reading stage. Such approval was obtained with large consensus from the Council which approved Regulation EU 2022/1032 unanimously. Regulation EU 2023/435, on the other hand, was approved with all countries voting in favor and three abstaining (Belgium, Poland, and Finland).

The second element worth highlighting relates to the legal basis of both regulations which find a commonality in Art. 194 (2) TFEU even if Regulation EU 2022/1032 uses it as its only legal basis. This is compared to Regulation EU 2023/435 which, by virtue of its greater complexity, resorts to a wide number of articles comprising both Art. 192 and 194 TFEU.

The third element which should be pointed out relates to the tendency of EU institutions to amend previous legislative texts rather than creating new ones. In this sense, following the outbreak of the Ukrainian crisis, the European effort was directed towards an improvement of the existing normative regime rather than towards the creation of new practices in the energy field. Such effort is consistent with the need to ensure a swift response to the ongoing crisis which has been guaranteed in both

cases. The gas storage regulation amendment of Regulation EU 2017/1938 has created a precise framework of cooperation to fill gas storages before 2022/23 winter. While, in terms of REPowerEU plan, the EU has managed to act in just one year to mobilize substantial quantities of resources to be for the near future.

The measures adopted have had the objective of tackling the crisis from various perspectives while, at the same time, trying to bring changes to practices in energy governance and to the competences of the various institutions. Each measure has created its own, peculiar, institutional relationship among the agents involved but overall, it is possible to notice a primacy of the three main actors: the European Council, the Commission and Member States.

The European Council has been a fundamental player in crisis management and, more precisely, in setting up Union priorities. The European Council is, normally, tasked with carrying out the agenda-setting of the EU. However, throughout the energy crisis, the European Council has gone beyond such duty and has taken a much more important role of supervisor of the crisis developments and, most of all, of other institutions' action. It has done this by intervening in the legislative process to reaffirm Member States' priorities. Crisis management has always seen, at least since the 2008 crisis, a fundamental importance of the European Council which is the favored forum of discussion and the place in which policies are decided and compromises are reached among Member States. (Lehne 2023) In such sense it can be affirmed that the European Council has not witnessed any substantial change in its role in crisis management, but instead has reconfirmed the importance of directly involving Member States in order to deal with crises in a timely and effective way and to reduce the centrifugal forces in the Union.

The Commission's role in handling the energy crisis displays all of the complexities related to its institutional role in the EU and to its historical importance in energy governance. The Commission has been a central player in dealing with the crisis in an all-around manner, adopting a significant role in each and every step of its management. The Commission has been fundamental in the creation of the policies to be implemented both in the study of the possibility and in creation of the text of the regulations to be adopted.
The European Council tasked the Commission with developing studies to increase the security of supply and to limit the economic damages of the crisis since the beginning (European Council 2022). At the same time, its active role in policy-making is related to the provisions of Art. 122 TFEU and

to the procedures of the ordinary legislative procedure which require the Commission to submit a proposal to begin the law-making process in other institutions.

The Commission shaped its energy policy proposals in order to be guaranteed a primary role in crisis management. Such role has been mostly focused on monitoring, coordinating and facilitating the actions of Member States, agencies and institutions. In each of the five regulations adopted, the Commission has emerged as the European coordinator for Member States' action. In doing so, it receives constant updates on the conditions of each national energy system and on the future plans of action. Coordination involves monitoring the implementation of actions as well as through real time information gathering from national governments and, also, from private energy players. Such role has been explicitly recognized in regulations' texts, but it should be highlighted that important differences arise in the level and relevance of Commission's coordination role.

While some regulations, such as Regulation EU 2022/1032 and Regulation EU 2022/1854, envisage coordination by the Commission as a necessary element to guarantee a uniform and effective application of the provisions union-wide, some others, such as Regulation EU 2022/1369 and even more importantly Regulation EU 2022/2576, make coordination at EU level the central element of the provision.

It is important to highlight the fundamental role revested by the Commission in the newly set up system of joint gas purchases. Being given the task to coordinate the acquisition of European gas, the Commission becomes a figure of outmost importance for the entire European gas market as it is empowered to understand Member States necessities and match them with the available supplies. It does this through European contracts to which Member States will be able to refer when individually purchasing gas. In such sense, the Commission becomes the champion of an initial outlook of change which might lead to a future reduction of Member States' prerogative in the choice of their energy mix in favor of more European solutions.

A further role which is assigned to the Commission is that of facilitator both at EU level and in the relationship among Member States. Energy crisis regulations task the Commission with the duty of simplifying and promoting cooperation between Member States in order to avoid market failures and situations of distress which could arise following supply disruptions. It should be highlighted that the role of facilitator attributed to the Commission is not essential for the conduct of Member States' relations, but it is envisaged as a possibility to simplify bilateral and multilateral actions, mostly in those cases in which an effective and timely response is required (such as in the case of activation of the solidarity mechanism by one Member State).

The Council has been the institution with the greatest level of change in the institutional dynamics intended in relative terms. If the Council has historically been a secondary actor in the development of energy policies since the beginning of the Ukrainian crisis, the situation has shifted in its favor making it a central figure for policy making and matching the powers prescribed by the Treaties with real decisional power.

The Council's growth of importance has been largely connected with the use of Art.122 TFEU which makes it the institutional arena in which decisions are taken. In the decision-making procedure of Art. 122 TFEU, large powers are attributed to the Council, whose action has very limited restraints. The increase in extraordinary energy Council meetings to deliberate on the Commission's proposals reflects the rising importance of the institution in managing the emergency crisis. It is worth highlighting that, even if the Council has been the institution tasked with the duty of carrying out the legislative process under Art. 122 TFEU, the Commission's text has been definitive or *quasi*-definitive every time. This demonstrates that both the European Council (as agenda setter and in its informal role of supervisor during policy-making) and the Commission (as the institution tasked with studying and proposing legislation) have maintained a predominance over the Council.

On the other hand, the role of the EU Parliament, as in every crisis (Lehne 2023), has taken a backfoot. The EU Parliament has not been included in the drafting of three out of the five regulations aimed at tackling the energy crisis, thereby watering down its role as co-legislator. Its role in relation to Regulation EU 2022/1032 and Regulation EU 2023/435 has, however, remained unchanged. In the drafting of the three regulations adopted under Art. 122 TFEU, the Parliament has not been involved because Art. 122 (1) TFEU, differently from Art. 122 (2) TFEU, does not even require the President of the Council to inform Parliament. As a result, the Parliament has been effectively excluded from the democratic institution.

In the context of energy, it is interesting to highlight the peculiar position expressed by the Parliament's members who have strongly backed more ambitious proposals on the use of renewable energy sources. (Vilches 2022) Such push has been evident in the amendments presented by the EU Parliament to the text of the REPowerEU which proposed accelerated procedures to install renewable energy systems. (European Parliament 2022)

An analysis of the energy crisis management would not be complete without pointing out the role and position of Member States in the application of EU regulations. Member states have been at the center of the crisis resolution mechanisms created by the EU. EU measures have created, each one in a different way, a system of coordinating the action of Member States who have retained most

of their freedom in the energy field. Member states' freedom has been limited by two main elements. First, all regulations have imposed the duty of 'sincere cooperation and solidarity' which requires Member States to act not only in consideration of their necessities but also to remember European and other members' interests. Such prescription is much stronger in those regulations such as Regulation EU 2022/1032 on gas storage and Regulation EU 2022/1369. Whereas Regulation EU 2022/1854 and Regulation EU 2022/2576 require further analysis. Regulation 2022/1854 sets up a very peculiar system of joint gas purchases which represents a perfect compromise between the desire of Member States to maintain their prerogative on the choice of energy mix and the desire and necessity to increase European coordination in the purchase of gas supplies in order to reduce the risks of disruptions. Regulation EU 2022/1854 manages to set up a hybrid system from which Member States can only obtain advantages and suffer the only limit that, if they decide to purchase gas from the joint gas supply contract, they have to respect the contractual conditions agreed by the Commission. It should be remembered that Member States' participation in the system of jointly purchasing gas is completely voluntary, therefore leaving their rights and prerogatives untouched. Regulation EU 2022/1854, on the other hand, represents a unicum compared to the other regulations as it imposes the mandatory duty of activating the price cap mechanism if certain conditions are met. In such sense Member States lose their ability both to activate and to choose the conditions and moment at which to activate the mechanism. Yet, at the same time, it should be highlighted that the mechanism was designed to be a measure of last-resort and encountered a *quasi*-total agreement of Member States in the prescriptions of the final text of the regulation.
The Member States' approach to crisis resolution has been that of a primacy both in policy implementation and in the EU institutional dialogue by virtue of the importance both of the European Council and of the Council in policymaking.

Two tendencies of the EU should be mentioned in order to clarify the position of European agencies and forums in the participation to the resolution of the energy crisis.
On the one hand, there has been a tendency to limit the reliance of the Union on such bodies as most of the coordinating and monitoring work has been delegated to the Commission which has been supported only by GCG for those matters concerning Regulation EU 2022/1032 and by ACER in the matters covered by Regulation EU 2022/2576. On the other side, the EU has been keen to propose and activate coordinating platforms to manage issues such as gas joint gas purchases and solidarity requests.

The combination of the need to respect Member States' prerogatives while carrying out the policymaking process in a timely way has favored an intergovernmental approach. Favoritism for intergovernmentalism is not new as it has been the usual way of conducting business in the energy sector.

However, in the management of the crisis, it has had unique applications. Emergency measures adopted under Art. 122 TFEU have followed an intergovernmental approach in which the decision-making process has been left to the European Council and the Council, while Parliament has been completely sidelined. Such intergovernmental approach, however, has been inserted in a supranational voting procedure as, even if decisions were taken exclusively by the Council, qualified majority voting (QMV) has been adopted. On the other hand, Regulations EU 2022/1032 and 2023/435, adopting an ordinary legislative procedure, have favored an intergovernmental method in a supranational decision-making process. Previously, the Council, voting through QMV, and the EU Parliament were the institutions tasked with carrying out the process. However, the European Council has had a strong impact in determining the policies to be adopted not only in a general manner but in its specific details.

A final mention should be made of the effects of the regulations adopted which have been designed to promote further integration of the EU. Despite not having created substantial changes in the level of integration, the regulatory framework adopted might lead, in the future, to further integration by virtue of the effects of the REPowerEU plan which has devoted a large quantity of its funds to European and multilateral energy projects. At the same time, even if the measures adopted have been temporary in nature, there seems to be an initial change in the methods with which Member States are dealing with the energy sector which might reduce their prerogatives in favor of a more European level management of the subject.

4.4 Conclusions

The EU mode of tackling the crisis has been very peculiar, also in light of the particular characteristics and of the complexity of the crisis itself. The EU has managed to gather all the necessary measures in a restricted number of regulations which, on the one hand, have modified previously existing ones in order to create more specific and effective provisions by filling the gaps in the more general approach to energy crises. While, on the other hand, specific regulations have mainly addressed the problem of energy prices and the risks related to disruptions of supply.

Member states have acted both individually and in a coordinated manner but the EU has created a united, comprehensive response to the crisis which has been possible because of two factors. First, a large consensus has existed, since the beginning of the crisis, on confronting it in a united manner through coordinated actions. Secondly, coordination has been the result of the Commission's ability to create an emergency legislation which prevented disjointed and contrasting Member States' action.

The EU response has concentrated both on short term, temporary measures and on long-term improvements to the security of supply. Short and long-term issues have been dealt with in two different ways which demonstrate the capacity of the Union to adapt. In order to deal with short term issues, mostly of economic nature, the EU has adopted emergency regulations under Art. 122 TFEU. Such regulations have been adopted through an accelerated procedure which has created temporary measures to deal with issues that are only crisis-related (rise in energy prices and short-term necessity of supply) in a timely way. On the other hand, the EU effort for the long term has followed the ordinary legislative path in order to create long standing legislation which, on the one hand, has filled the gaps in the emergency procedures for gas supply and storage (Regulation EU 2022/1032) and on the other hand has sped up the process of European green transition with the objective of reducing Union's dependence on foreign energy sources.

EU institutions have had very different roles in the management of the crisis which has seen a particular importance of the European Council, the Council and the Commission at different stages of policymaking and policy implementation. The European Council has been the key institution not only in agenda-setting but, also, in monitoring and giving a direction to policy making. Such intervention has been particularly clear in the creation of Regulation EU 2022/1854, establishing a

price cap mechanism, which has been particularly wanted by Member States even against the Commission's opinion.
The Commission and the Council have shared the stage in the process of emergency regulation policymaking (Art. 122 TFEU based regulations), while the EU Parliament has only participated in the ordinary legislative process which has led to the adoption of Regulation EU 2022/1032 and Regulation EU 2023/435. At the same time the Commission has increased the importance of its role of coordinating Member States' action and facilitating and monitoring which has made it the natural point of reference for policy implementation and guaranteeing a harmonious response to the crisis.

If EU institutions have been the fulcrum of coordination, Member States have been the protagonists of crisis management. EU policies have managed to create a system in which Member States could move without creating harm to other members, but they have maintained large freedom of action which has not been touched for the most part. Regulation EU 2022/1032 has increased cooperation in the management of gas storages in order to reduce the risk of supply shortages in member countries but has left Member States free to reciprocally organize themselves to ensure the achievement of EU security objectives. Regulation EU 2022/2576's system of joint gas purchases has been an important achievement for the EU which has managed to incentivize EU coordinated gas supply contracts for the benefit of Member States by lowering lower prices. At the same time, it should be remembered that Regulation EU 2022/2576 gives Member States full discretion both in the choice of participating in the gas purchase system in the demand aggregation phase and in the final purchase of gas under the contract stipulated. Regulation EU 2022/1369 and Regulation EU 2022/1854, on the other hand, create emergency mechanisms imposing, respectively, mandatory gas demand reduction measures and a compulsory gas price cap.

The EU response has adopted, therefore, two different modes of energy governance. EU action has been intergovernmental in nature in the process of adoption of emergency regulations under Art. 122 TFEU as the Parliament has not had much of a role. Despite the Commission being the institution tasked with the duty of proposing the regulation's text, the European Council and the Council have been the institutions in which decisions have been taken both in the *ex-ante* choice of the measures to adopt and in the practical evaluation and adoption of the final text. The second mode of energy governance has been that followed by the policymaking process of Regulations EU 2022/1032 and Regulation EU 2023/435 which, because of the ordinary legislative procedure, have theoretically followed a supranational mode, although it would be better defined as an intergovernmental mode in a supranational process. Such assessment originated from the European Council's ley role which,

instead of being limited to agenda-setting, saw it participate in the policy-making process by imposing its will and its priorities on the other European institutions.

In conclusion, the European mode of energy governance in the management of the energy crisis has not changed substantially from the usual methods of governance. The intergovernmental method has been the favored way of policymaking and such preference has been maintained even following the outbreak of the war in Ukraine. At the same time, Member States' prerogatives remained unaffected, even if the EU has managed to impose mandatory measures of gas demand reduction and energy price cap as last-resort mechanisms. The EU institutions' way of approaching the subject has not undergone any real change. The Commission has maintained its role of integration promotor while the European Council has remained the favored decision-making arena. The latter has become more important, at the expenses of the Parliament. This is as a result of the use of Art. 122 TFEU which, in any case, represents an emergency mechanism and therefore is only likely to bring temporary change rather than a permanent, structural shift in powers.

At the same time, it should be highlighted that, even if modes of governance have not undergone any substantial change, the energy crisis has favored an increase in the speed of European energy integration. This has been fostered by most of the regulations enacted and, most of all, by the REPowerEU plan which might bring, in the future, a fundamental change to the EU balance of powers and to the attitude of Member States, favoring a more European approach to a subject which has been distinctively national.

5. Conclusions

This thesis has sought to analyze the changes in the EU modes of energy governance following the outbreak of the war in Ukraine and in the light of the subsequent energy crisis. This analysis has aimed to identify any shift in the EU institution's role and balance of powers as a result of the crisis, and to ascertain whether the crisis has increased or reduced the level of European integration in the field of energy.

The history of energy integration in the EU has been characterized by a high degree of fragmentation and institutional competition among EU institutions and Member States. While EU integration began in the field of energy, energy has since been a sector underpinned by Member States' prerogative and a lack of formal powers and competences at the European institution level. The Commission has been the driving force of energy integration reaching, over time, a limited number of its objectives by promoting energy integration through the implementation of market measures. Since the early 90s, the energy field has been affected by a keener interest in protecting the environment and reducing pollution. This has led to the implementation of emission-reducing measures and to the creation of long-term plans to phase out fossil fuels. While the EU may have managed to tackle the environmental side, the same cannot be said of supply security which, until the introduction of the Lisbon Treaty, was a field of prerogative competence of Member States.

The Lisbon Treaty and the successive energy regulations marked the start of a process of change in the field which has seen EU institutions obtain formal competences through the introduction of specific energy chapter into the Treaty and shared legislative powers. Following the Treaty's enactment, and as a consequence of the Russo-Ukrainian crises of 2006, 2009 and 2014, the issue of supply security has become ever more pressing. As a result, the EU has begun distancing itself from Russia. Such effort has been mainly fostered by the Commission which has shown a particular concern for the EU's strong dependence on Russian gas. That being said, the same has been largely overlooked by Member States who have been keen not to let EU institutions interfere with their bilateral agreements and their freedom of choice in the energy sector. The institutional dynamics arising from the Lisbon Treaty have favored an intergovernmental method centered around the European Council and on the Commission. The former has become the institutional arena for effective decision-making, while the latter has maintained its historical role of promoting energy integration and has increased its involvement in coordinating and overseeing Member States' policies. Both the Council and the European Parliament, despite having formal decision-making powers, have

shown themselves to be secondary actors when it comes to policymaking. Despite the above, the Lisbon Treaty has notably done nothing to fetter Member States' prerogative powers.

At the outbreak of the war in Ukraine, the EU found itself in a precarious and weak position as a result of institutional fragmentation. The EU also lacked comprehensive energy legislation at the EU level because of the historical need for the EU to compromise with Member States, resulting in watered-down solutions. EU legislation on energy crisis management was mainly contained in Regulation EU 2017/1938, which provided for general rules which were difficult to apply. Furthermore, it should be noted that the war in Ukraine broke out following the difficult period of the Covid-19 pandemic when energy prices had risen, affecting Member States' economy. This weakness was further exacerbated by the EU's dependence on Russian gas. At the time the war broke out, Russia represented 40% of Europe's total imports of gas, 25% of which passed through Ukraine. Such dependence was accentuated by its unequal distribution, with the majority of gas going to Eastern European countries, followed by Germany and Italy, two of the Europe's largest countries.

The Russian invasion of Ukraine caught the EU by surprise despite it being the result of a long-lasting conflict with deep historical and cultural roots. The strong historical ties between Russia and Ukraine, as well as the significant number of people in Ukraine who identify with the Russian culture and who speak the language, led Russia to advance an agenda to take control of the Ukrainian territory. The Russo-Ukrainian dispute began with acts of political intromission by Russia, but then escalated, over time, into a series of crises which have impacted the energy sector and which reached their climax in 2014, and then 2022, with the full-scale invasion of Ukraine. The effects of such disputes have not only been felt by the Russia and Ukraine themselves but also by the EU which has suffered serious repercussions in terms of supply security (mostly as a consequence of the 2006 and 2009 energy disputes). The EU has responded to these two crises by focusing on preventing further disruptions. However, it previously lacked the incisiveness which it finally displayed in 2022. The 2014 invasion of Crimea marked the beginning of military operations in Ukraine and, *de facto,* the 2022 invasion by Russia represents a mere continuation, escalation and expansion of the war.

The Russian special operation across the Ukrainian territory has had devastating effects for the Ukrainian people. Yet it has also affected Russia's global reputation and standing and impacted the EU, which has been forced to reevaluate energy security. Following the outbreak of the war, the relationship between Russia and the EU deteriorated, with the latter (both Member States and institutions) vehemently condemning Russian actions. This is evidenced in the broad set of economic

sanctions aimed at weakening Russia's warfare capabilities and forcing its troops to retreat. As a result of taking such action, the EU was dragged into an energy crisis which has affected both supply security and energy prices. Prices have been the first to be affected, suffering a sudden increase in the exchange price of gas and volatility. The issue of supply security, despite being a concern since the outbreak of the war, has been used as a weapon by Russia since the beginning of May 2022 through a series of gas flow disruptions.

EU dependence on Russian gas caused a series of interrelated consequences which, while originating with the energy sector, have had an impact at both the economic and institutional level. The effect on supply security is that there is a real risk of severe disruptions to the gas flow. Such disruptions have risked undermining the reliability of the EU energy system by reducing supply which, in turn, has posed the risk of energy shortages in various EU regions. Furthermore, high energy prices have impacted European industries and households, raising the cost of living and causing a recession.

Member states and EU institutions have been forced to act both to avoid gas shortages and in order to shield consumers and prevent catastrophic damage to the economic system. The economic effects of the crisis have been mostly dealt with by Member States who have introduced national policies to reduce the economic pressure on industries and to support households in the face of rising inflation. Measures to mitigate against the risk to gas supplies and ballooning energy prices have, instead, been adopted at an EU level in order to avoid uncoordinated national efforts. The EU has enacted five regulations to tackle these two issues, three of which have been emergency measures while the last two represented a more structural effort with both short and long-term effects. Emergency regulations, enacted through the use of Art. 122 TFEU which expedites the legislative process, focused on the creation of a joint gas purchase system and on solidarity measures (Regulation 2022/2576), on the creation of a voluntary and mandatory gas demand reduction mechanism (Regulation EU 2022/1369) and, finally, on the creation of a price cap mechanism (Regulation EU 2022/1854). Regulation EU 2022/1032, on the other hand, provided both an emergency and structural response, promoting increased coordination among the EU gas storage systems in order to reduce the risk of disruptions to gas supplies for the 2022/23 winter and beyond. Regulation EU 2022/1032 is interesting because it amends Regulation EU 2017/1938, creating more specific European energy mechanisms which were already enshrined in the regulation. The last regulation enacted by the EU is the REPowerEU plan (Regulation EU 2023/435). This amended the RRF, introducing a chapter on energy in order to foster a more independent and greener Europe. REPowerEU plan set out both the

short term and long-term goals of the EU and funded Member States' energy projects with a particular focus on interstate and multistate initiatives.

The outbreak of the war in Ukraine not only impacted the energy and economic sectors but also affected EU institutions. This is the case even if the EU's response has shown a significant degree of continuity in the modes of energy governance and in the relevance of each single actor, with the exception of the Council whose importance has greatly increased.
The Council, in fact, rather than maintaining its secondary role in the pursuit of energy policies has, instead, seen its *de facto* powers become more aligned with its formal powers. The Council has gained importance in the overall policy making process, becoming a protagonist of the legislative process. Such shift has been the consequence of the use of Art. 122 TFEU which provides for emergency mechanisms, and which grants the Council full, autonomous policymaking powers. Therefore, the Council has finally managed to take on a more important role, even if the effects of the crisis on the institution should not be overestimated.

The European Council and the Commission, on the other hand, have continued to play an important role, as displayed by the considerable influence of the former on policymaking and by the fact that the Commission's legislative proposals have been adopted by the Council without major changes. Both the European Council and the Commission have maintained their historical role in energy governance. The European Council continues to be the forum for agenda setting and has maintained its influence over energy policy, favoring an intergovernmental mode of energy governance. The Commission, on the other hand, has continued to promote increased integration and supranationalism while retaining its role of proposing legislation and coordinating EU action. The Commission has not found much scope for maneuver in the management of the energy crisis as the European Council has been keen to make its voice heard and make its own decisions.
The best example of this is the creation of the European Council's promotion of the energy price cap mechanism, which the Commission opposed. The Commission, on the other hand, has succeeded in shaping emergency policies in order to increase its role of coordinating and overseeing policy. As a result, the Commission has been given a wide range of instruments to help it increase coordination among Member States and foster multicounty interactions and solutions.

If the intergovernmental bodies and the Commission have managed to play an active role in managing the energy crisis, the same thing cannot be said of the European Parliament which has been pushed to the sidelines. The European Parliament has lacked both the formal and *de facto* policy

making powers needed to create the emergency regulations enacted under Art. 122 TFEU. Indeed, it has only managed to influence policies with structural, long-term effects. The REPowerEU regulation is the only example of the European Parliament making its voice heard by amending the regulation's text in favor of a harsher approach.

The EU has not shown much interest in allowing EU agencies to participate in the resolution of the crisis, instead favoring the creation of coordination platforms. ACER has been the only agency to be given a role, being tasked with supporting the Commission with monitoring, information gathering and sharing. At the same time, EU institutions have been keen to create platforms to facilitate coordination among Member States and to protect against inefficient responses to the crisis as a result of a lack of information or cooperation.

When it comes to the management of the energy crisis, Member States have continued to play a central role. Member states have enjoyed *quasi*-total discretion to implement short-term policies aimed at tackling the economic consequences of the energy crisis and their action has demonstrated a large degree of spontaneous coordination.
The implementation of energy-related policies has been left to Member States, while the EU has created a framework of coordination and solidarity which aims to prevent intra-European competition over energy goods and uncoordinated and contradicting measures which could negatively impact the EU's ability to resolve the crisis. Member states' prerogative powers have not been affected by the measures adopted to face the energy crisis.
However, it should be highlighted that the EU has managed to impose two last-minute mandatory measures: the price cap mechanism and the mandatory reduction of gas demand. These two mechanisms were called for by the majority of Member States and have been designed to "not be used" except in the case of exceptional emergency circumstances. As such, while they have had a formal impact on the usual modes of energy governance, they have had no practical effect.

In conclusion, it can be affirmed that there have not been any substantial changes to the European Union modes of energy governance following the outbreak of the war in Ukraine, even if the policies implemented might lead, in the future, to an increased level of integration in the energy field. European institutions' powers have not changed, and institutional dynamics have continued almost unchanged.
It can be affirmed that EU institutions have favored an intergovernmental approach in a supranational decision-making procedure in which intergovernmental institutions have maintained a predominant

role in energy policy making, while the Commission has continued to be the reference point for policy monitoring, information sharing and coordination. Any changes to the institutional dynamics have mostly related to the use of emergency mechanism, such as the use of Art. 122 TFEU, and have only created temporary effects, rather than structural changes. The effects on the integration of the energy field, following the approval of Regulation EU 2022/1032 and Regulation 2023/435, are yet to be seen.

However, both regulations promote a strong degree of cooperation and financial support for inter-state and multi-state projects. As such, they may lead to an increase in integration as a consequence of the creation of a wider and more interconnected European infrastructure. It will only be possible to assess whether integration has increased in the long-term, and only once the REPowerEU projects have been completed. As such, a long-term research project is required in order to evaluate the consequences of the Russo-Ukrainian war on the EU, paying particular attention to the effects of increased coordination in creating energy projects and infrastructures.

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