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Европейский союз как уникальный международный актор в сфере обеспечения коллективной энергетической безопасности

A sui generis nature of EU in promoting its collective energy security

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# Introduction

In 2022, International Energy Agency has stated that world currently is facing a global energy crisis[[1]](#footnote-1). The price of natural gas, electricity and oil has hit their highest level since 2008. Having faced with deep energy and climate crisis, aggravated by Russian-Ukrainian conflict, European Union (EU) had to elaborate a certain list of actions that could somehow prevent worsening of the situation and find a way out from heavy reliance on energy imports.

Energy security, which was also defined by IEA as a reliable and affordable access to all fuels and energy resources, has become economic component for EU. According to statistics of Eurostat on energy dependence[[2]](#footnote-2), it could be noted, that in 2020 EU was highly dependent on energy imports, covering over the half of all EU’s needs. Such a reliance obviously create huge vulnerabilities for EU economy.

**The relevance of research.** As soon as for the EU an access to all fuels and energy resources has become a vital economic component, high dependence on energy imports of any types puts EU into a devastating position. Having considered the major risks EU has to elaborate a series of consistent collective actions that will allow the Union to find a way out of the energy crisis, either by creating alternative ways to supply fuel from abroad, or by significantly reducing dependence on energy imports from its unfriendly major energy supplier. At the same time, USA and Australia are becoming new potential key player in the sphere of energy supplies. An increased demand on Liquefied Natural Gas (LNG) allow them to increase their presence on European market and affect the determination of EU's policy. For Russian Federation, energy imports to the EU is the best leverage to control European policy, however, Nord-Stream sabotage and current state of affairs on the Eastern part of Europe makes the role of Russia unclear. ​ For the Middle Eastern countries, this situation is an opportunity to open new ways of interaction with the European Union by concluding long-term projects for the supply of LNG.​ For Asian countries, rising energy crisis has given them the opportunity to compete with EU's states on energy supplies, as soon as the amount of resources imported from Russia has decreased. ​ In this sense, forehanded actions of European Union may determine the most suitable way out of thriving energy crisis. However, the defining role should be dedicated here not only to the European institutions, that set an appropriate foreign policy, but also to the very nature of the EU. In other words, the unique essence of EU may or may not force the Union to reconsider current energy policy and elaborate a proper scenario for the promotion of sufficient level of energy security for its Member States and, at the same time, to demonstrate how unique nature of such an international actor could be realized in crisis-management occasions. Another point here is that the EU should also define the proper institution of policy to which the crisis resolution will be dedicated.

**Research terminology.**

Concept of energy security is discussed in this study under the notion of *collectivity*, thus, the title of the work is tied to the concept of collective energy security policy. However, there is a slight difference in the designation of the process of EU’s decision-making towards energy security in both Russian and Western studies. Thus, for example, in Russian studies of EU’ energy security policy the nature of Union’s policy making is indicated as *collective*[[3]](#footnote-3), at the same time in the Western studies of the EU’s policy it is customary to designate such nature as a *common* one.[[4]](#footnote-4) To avoid further confusions, hereinafter it should be indicated that for the notion of EU’s energy security policy in this study both terms *collective* and *common* are appropriate to use. The term *common* energy security policy will be used more frequently as there is a sufficient number of EU’s official sources that refer exactly to this term.

**Object of the research** is an EU’s *sui generis* nature. **Subject of the research** is a norm-making and decision-making procedures that EU adopts for the promotion of its common energy security policy.

To understand the main failures and achievements of EU in the promotion of certain measures and regulations in building the concept of Energy Union, which was supposed to be an integral part of common energy security police **the chronological frameworks of the study** were taken from 2015, starting at the point of energy union concept introduction, to 2023, coming up to the current energy crisis EU has to face with.

**Hypothesis of the study** is the following: a *sui generis* nature of EU may allow European Union to reconsider the common energy security policy in a way it makes Union less dependent on the energy supplies and makes its own domestic and foreign policy less vulnerable. According to the hypothesis, **the research question of the study:** does a sui generis approach to the study of EU helps to understand Union's nature?​ Is there an interconnection between EU's failures in the promotion of energy policy and the lack of understanding what EU is about? ​

The main purpose of this study is to determine how unique (a *sui generis*) nature of EU affects the promotion of Union's common energy security policy. According to the purpose of the study, following tasks were set:

1. To define a sui generis nature concept in a way it explains the current policy of EU in the promotion of energy security policy.​
2. To give a sufficient evidence that the concept of sui generis nature of EU suits to the study of EU's common energy security policy. ​
3. With the analysis of EU’s energy policies to estimate the efficiency of EU’s initiatives in the promotion of a common energy security policy.
4. To provide a comparative analysis of chosen policies for the definition of the level of policies’ applicability for the given understanding of *sui generis* nature concept.
5. To provide a data envelopment analysis of the initiatives for the efficiency estimation and to reflect to what extent the analyzed initiative correlate with the defined level of applicability.

The following categories of documents became **the empirical basis of the study**:

1. International treaties and legal acts of the European Union.
2. Cases of European Court of Justice and Court of First Instance.
3. Analytical materials and reports of European Commission on the state of the EU’s energy policy development.
4. For the statistical analysis a large datasets on the energy imports were taken into the consideration.

**The degree of scientific knowledge on the study.** The question of sui generis nature of the European Union has been studied starting form 1990s. The main focus of the studies was the classification of EU as a unique political entity that cannot be classified using traditional concepts of international law. It is considered that EU has evolved into a complex system that combines elements of both federal and confederal structures, and suggested that EU studies require an interdisciplinary approach that takes into account political science, law, economics, and other fields.[[5]](#footnote-5) Other works were devoted to the studying EU through the processes of constitutionalization[[6]](#footnote-6) and policy-making processes[[7]](#footnote-7). At the turn of 2010s another wave of works dedicated to the study of sui generis nature of EU has been introduced. However, the conceptual basis didn’t changed, as soon as the main methodology of the study was constitutional approach. At least, it is worth noting that the new generation of studies presented the historical approach of analyzing EU’s sui generis nature, explaining EU’s legal system development through the process of integration[[8]](#footnote-8).

To understand current state of affairs in EU’s energy policy besides analytical materials and report of EC a number of scientific studies were taken for the analysis. For example, a complex study of EU’s dependence on the natural gas and energy imports reduction policy was introduced by History and Political Science Journal [[9]](#footnote-9), providing a lot of information and arguments on the premises of energy crisis of 2022 and suggesting some way out of EU’s dependence on Russian energy resources. Another view on the state of energy policy of EU was presented by International Association for Energy Economics, giving sufficient analysis for the prospect of the creation of an integrated energy market, identifying main EU’s challenges and opportunities for further integration.[[10]](#footnote-10)

For the unbiased analysis of energy policy the EU, the studies with different theoretical approaches were taken into the consideration. Thus, there were a number of studies dedicated not only to the bilateral cooperation on the supplies of energy resources, but also works on the issues of energy diversification, sanctions, and the geopolitics of energy.[[11]](#footnote-11)

**Scientific novelty.** The study offers an ontological approach for the understanding of EU’s nature and its role in promotion of common energy security. An ontological study applied here is focusing on the definition of essential features of EU and explanation of how these legal, institutional, ideational attributes interact to create a *sui generis* political entity that differs from traditional nation-states and intergovernmental organizations in its promotion of energy security policy. Key features in decision and norm-making processes of EU will also be implemented in the model-building approach for the definition of possible outcomes and shifts in EU’s energy policy during energy crisis.

**Methodology and research methods​.** For the understanding what *sui generis* is about for EU the research design was introduced in a following way. First, constructivist assumptions were taken as an approach for the ontological research. As soon as rational approach is dedicated to the assumption of material factors that are the main state drivers, it is not suitable for the understanding of what sui generis nature of EU is about from the ontological perspective of a study. Thus, it was a constructivist theories that were taken as a preferable approach, as soon as constructivists perceive states as actors to be distinctive in their identities, goals and interests. In this way, Chapter 1 is dedicated to the ontological study of EU’ nature taking into the consideration ideational factors of constructivist theorists. Neo-Federalism was taken for examination the role of EU as a supranational actor in shaping national and international policies. As soon as neo-federalist approach emphasizes the centralized power of EU to address the challenges, an institutional analysis was taken as a research method in the second chapter to reveal the key institutions that play a vital role in defining and developing energy security policy. The neo-federalist approach aims to strengthen the EU's formal institutions by creating a more centralized and coordinated approach to energy policy, that includes efforts to harmonize national energy policies, promote the development of renewable energy sources, and ensure energy security through diversification of energy sources and suppliers. At the same time, the neo-federalist approach recognizes that the EU is a diverse political entity, and member states have their own energy policies, preferences, and interests. Therefore, the approach seeks to balance centralization with respect for national autonomy of energy policy. Moreover, content analysis is used to determine a key points in treaties and legal acts for the better understanding of EU’s goals in the security promotion.​ Data envelopment analysis (DEA) has been used as a non-parametric method to measure the relative efficiency of decision-making units (DMUs) of European Union and has been used in the second chapter. In this study, DMUs are considered to have multiple inputs and multiple outputs in their decision-making, so the chosen variables helps to promote more accurate level of estimation. The basic idea of DEA implementation lies in the idea of comparison the performance of each selected DMU to a best-practice unit, so it provide a so-called “efficient frontier”. In this way, efficient frontier represents the best possible performance of a DMU with given input and output data. For the efficiency estimation, the CCR model has been chosen to be implemented. CCR model allows DEA analysis to provide this efficient frontier and calculate the efficiency score for each DMU. To avoid a complex linear calculations in a study a programming code, presented in the Annex, has been elaborated basing on the Python programming language. Comparative analysis has been taken to analyze the level of policies’ applicability for the given understanding of *sui generis* nature concept. The analysis has its revelation in the third chapter of the study.

**Structure of work.** The structure of the work is determined by the tasks set by the author and includes an introduction, three chapters, conclusion, annex and bibliography list.

**Chapter 1. Sui generis of European Union.**

*Sui generis* is a Latin term that means “of its own kind” or “unique”, such a terminology has often been used in relation to the EU. However, there were not enough arguments provided on whether EU has a sui generis nature or not. Initially, the very idea of sui generis nature of EU was reflected in its complex institutional structure, arguing that these institutions have different roles and responsibilities and operate on the basis of a complex system of rules and procedures. Indeed, legal system is based on a body of law that is separate from the national legal systems of its member states, that includes the treaties that form the basis of the EU, as well as a range of regulations and directives that are designed to ensure the smooth functioning of the EU's internal market. This is exactly the thing that has been proved throughout the whole life being of European Union. Even in 1955 after the creation of European Coal and Steel Community (ECSC), Mason Henry Lowell in his work “ECSC: Experiment in Supranationalism”[[12]](#footnote-12), stated that ECSC could not be compared with the original definition of international organization, interpreted by public international law. This idea has been reflected in the majority of works starting from the creation of ECSC up to signature of Lisbon Treaty. However, the division of thoughts did not bring any success in the definition of EU’s nature. Adherents of supranational concept of EU stated that Union in its legal phenomenon took the ground somewhere between “international” and “national” law, thus, EU has a sui generis nature. At the same time, federalists, continuing develop the concept of supranationalism, stated that EU, as a supranational entity that should be gradually transformed into a fully-fledged federal state. According to federal thinking, one that Alexander Hamilton introduced[[13]](#footnote-13), the EU should have a single government, a single constitution, and a single set of laws that are applicable to all member states. Moreover, EU should base its policy on the principles of democracy, transparency, and accountability, with power shared between the central government and the individual member states.

Still decades later, there is no single vision of what the EU should be. Constitutional theory of *sui generis* nature of EU is argued to be an anti-theory[[14]](#footnote-14): scholars tend to believe that *sui generis* approach for the definition of EU only makes it more complicated to identify Union as an entity. Lack of explanation, denial of any commonalities with other international entities and basically no attempts to provide at least some comparative analysis – this is how a *sui generis* approach is defined. However, the goal of this study is not to prove that a sui generis concept is just an “unsatisfying shrug”[[15]](#footnote-15) that provides only conceptual tautology, on the contrary, the hypothesis here is that a sui generis nature of European Union is the phenomena that may help EU to find an appropriate solution how to deal with energy crisis of 2022.

## **1.1. The ontological thinking on *sui generis* nature.**

In a study of EU’s sui generis nature the elucidation of an assumption could be reached with help of an exposition of so-called “philosophical foundation” – ontological and epistemological inquiries.[[16]](#footnote-16) What is the nature of EU? What are the relations and common understanding among its Member-States? What is the nature of EU’s norms and institutions? A concern of understanding the fundamental nature of entities and relations between them is usually devoted to the study of international relations on the ontological level. Basically, there are two categories for theorizing and explaining the nature of EU and its behavior: rationalist theories and constructivist one. In rational approach states are usually considered to be as self-interested and goal oriented. The main assumption here is material factor for the state. In other words, states are shaped by the material structure of international relations, such as military capacity and economic level of a state.[[17]](#footnote-17) However, the assumption of material means is not the thing that allows to understand the interconnection of *sui generis* nature of EU and its common energy policy to a full extent. It may be stated, that EU’s behavior is currently shaped by the changes in a material structure of international system, thus, it finds itself on a crisis stage. Indeed, such an approach may be useful in material explanation of “What is European Union about in the promotion of common energy security policy?”, but it allows to find an answer only to the current state of affairs, but not to understand the general reason why EU positions it-self this way in the sphere of energy security. Constructivist approach is another approach for theorizing and explaining the nature of EU and its behavior. In this sense, constructivism takes ideational factor as the main driver in state’s behavior. Wendt[[18]](#footnote-18) believes that ideas and norms, being an ideational factor, define the meaning of material tools. In other words, if it is necessary to understand “What is EU about in the promotion of its common energy security policy?” one should apply to the constructivist approach of the definition of what is the European Union and what makes it unique in dealing with challenges that EU has been facing through a long period of time.

In study of international relations through ontological approach it is necessary to consider that IR entities are referred to a wide range of different political actors, institutions and structures that are operating in the international system. Thus, it is important to identify an entity and reveal what exact traditional notions of an international actor the entity is challenging. For identification of entity, in this case - EU, the following criteria will be defined.

First, it is a legal personality of an entity that is represented in the international system. In the traditional notion of international law a defined personality of an actor contributes to the general shared understanding among other international entities about the capacities an actor has to possess and exercise right and obligations and be able to take part in the international cooperation. However, the traditional notion of legal personality is usually bounded with the principle of state sovereignty, in other words, an ultimate authority within certain territories and the possession of power to govern itself. [[19]](#footnote-19) However, European Union is not about the ultimate authority and the possession of state-like sovereignty. At the same time it is also not about the non-state actor that has been granted a limited legal personality to promote certain type of international cooperation. Indeed, with the abolishment of three-pillar structure of EU, Lisbon Treaty has brought several important changes in EU’s legal structure towards Union’s international relations. EU’s international policy had become based on set of common principles, rules and objectives. It meant, that all actions, taken by Union reflected as a unified decision that emphasized willingness of Member States to act as a whole one. Initial law basis of EU has been developing throughout the years by European Court of Justice (ECJ) and at that moment was represented as a principle of parallelism for EU’s internal and external powers. All this actions, taken by EU indicated Union’s willingness to have a legal personality of its own.[[20]](#footnote-20)

With the development of legislative environment of European Union from Lisbon Treaty there was a number of steps taken to provide a sufficient evidence that EU obtains a unique legal personality. European Union, according to the Article 21 of Treaty on European Union (TEU), has developed a unique guideline according to which it has certain principles that fosters Union’s development and enlargement for the promotion of democracy, rule of law and fundamental freedoms.[[21]](#footnote-21) Moreover, such an adherence to democratic values were aimed not only on its promotion to third states, but also to the development of homogenous environment within the European Union. It was clearly stated, that: “Union shall uphold and promote its values and interests and contribute to the protection of its citizens”.[[22]](#footnote-22) At this point, it is possible to trace the willingness of EU to create sort of a common understanding among Member States what defining principles should guide their policy not only as a whole one, but also action on state-to-state cooperation. It was possible to achieve due to purposeful policy of EU to create a congenerous legislative basis according to which states not only adopt common norms but also are able to cooperate with third states by the same means on bilateral level, such as creation of agreements and negotiating. Second feature of Union’s development was its adherence to achieve form of legal personality of its own. Theoretically, that meant that Union defined superiority of European institutions, giving them an administrative autonomy[[23]](#footnote-23). However, in both article 47 TEU and Article 335 Treaty on the Functioning of European Union (TFEU) there is no reflection of EU acquiring internationally legal personality. At this point, international public law states that EU possesses the right to conclude treaties, submits claims, and enjoys both immunities and representation among third states. As soon as EU is a subject of legal obligations and responsibilities it might be concluded, that on the international stage EU has legitimate right to be considered as an actor that obtains legal personality.

Second, if legal personality of an entity has been identified, it gives enough understanding of the abilities and limits an international actor is able to commit. However, if EU is an international actor that consists of a number of Member States, this notion gives a shared understanding for both internal (states, that are the members of Union) and external (states, that are not the members of EU) actors, but at the same time such a notion does not provide the explanation of how internal actors perceive the EU from within. In this case, a traditional notion of political identity should be challenged. It is obvious, that the EU has no single political identity in the light of multiple set of cultures, traditions and Member-States’ self-perceptions. It is assumed that such a political community being a ground of EU’s identity creates a new way of self-perception of both EU as an entity and its Member-States. In this case, to challenge the ontological notion of what is personal identity of an actor the following aspects have been taken into the consideration. First, it is a promotion of European identity in addition to the national identities of Member States. According to Karl W. Deutsch, the definition of identity could be understood as a “a sense of we-ness, of belonging to a group that shares a common culture, language, religion, or history".[[24]](#footnote-24) However, in modern notions of identity, from the constructivist approach, the idea of identity is referred to the emphasis on the role of social constructions in shaping identities. According to this approach, identity is not inherent or fixed, but rather is constructed through interactions with others and with the social and cultural contexts in which individuals and groups are situated. A detailed study on the European identity has shown, that the traditional notion of identity is challenged by constructing the perception of identity through the concept of common values. In this way, the notion of identity is based not only on the common historical background of interactions between the Member-States or geographical aspects that are undeniably contributing to the coining of identity.[[25]](#footnote-25) Values, comparing with the above mentioned aspects, are set not only in social interactions between the societies, but also enshrined in the numerous treaties, that construct the basis of European Union. These are the ideas of promotion of freedom, human dignity, equality, democracy, etc.[[26]](#footnote-26) Despite the remaining level of Euroscepticism and rejection of the concept of positioning of European identity higher than the national’s one, the “we” concept becomes a founding principle in a matter of external threats. Basically both, the threats towards freedom from within the states and outside the European Union forces societies from different Member-States to unite and cooperate against emerged challenges.[[27]](#footnote-27) To some extent it could be stated that the willingness to protect a fundamental freedoms forces Member-States to sacrifice the traditional notion of national identity to benefit the universal values and to protect freedom of their own.[[28]](#footnote-28) However, the concept of identity, as it was mentioned earlier, is not based only on the perception of common values and sense of being protected from external treats. A promotion of regionalism and sub-state identity within EU Member States is also a huge factor that affects the perception of identity of Member States. In this case, it will be important to pay attention to the primary laws of EU and the traction of the territorial concept. For European Union, a territorial concept is not set out in a single article of the EU's founding treaties, but rather is established through a combination of different provisions and agreements.[[29]](#footnote-29) In the Preamble of the Treaty on European Union it is stated, that there is an objective to establish an area of freedom and basic principles of democracy without implication of any internal borders. Moreover, beyond the territorial factor, the creation of internal market, that consists of 27 Member-States, Schengen Area, that consists of 22 Member-States and 4 additional associated states and the establishment of Economic and Monetary Union shows that European Union is willing to create an legal area that not only gives an exclusive right for its Members but also forces them to create a certain level of social links that forms the very concept of an exclusive identity. Thus, the challenge of traditional notion of identity contributes to the development of concept of a unique nature of European Union.

Third, the traditional notion of the role of institutions should also be challenged under this study. It might be assumed that EU’s capacity to adapt and reform or innovate frameworks of its own institutions may also be found unique in terms of protecting and promoting its core values and principles. The notion of intergovernmental institutions is usually tend to be considered as slow and bureaucratic. It is hard to deny, that it is the EU to be blamed for inflexibility of its own institutions, however, the following comparing analysis will show the difference in approaches and actions taken for the institutional reconstruction. To start with, it would be appropriate to take as an example the institutional development of UN. The vital role of organization in promoting cooperation and addressing global challenges becomes more and more arguable. The UN Security Council has faced criticism for its inability to respond effectively to ongoing conflicts and humanitarian crises, such as the civil war in Syria or Ukrainian crisis. In a study of international crisis group it was shown, that major UN institutions and bodies are unable to accomplish its fundamental objectives. Thus, for example, General Assembly of UN is being criticized for inability to promote a sufficient ground for the cooperation on the questions of food and energy crisis. It was noted, that competing members are forcing their own positions, condemning opposite one and creating stagnation in the solution of a conflict. This, as Richard Gowan states, is not only the evidence of inflexibility of UN’s institutions, but a pivot towards diplomacy of the Cold War era.[[30]](#footnote-30) At the same time, states’ representatives in UN General Assembly are forced to decide which side of a conflict they need to choose in order to save their ability to promote the cooperation through this organization.[[31]](#footnote-31) In this case, not only General Assembly shows its inability to promote cooperation among its members. The crucial role in slowing the conflict-management processes is playing UN Security Council. The Council's decision-making process, which requires consensus among its five permanent members, makes it difficult to take decisive action in a timely manner. It would be wrong to claim that Council’s decisions were useless, as soon as the principle of compartmentalization of major-power disputes is giving some result in terms of mediation and promotion of a minimum level of cooperation. Still, a number of members find the functioning of Security Council frustrating and have nothing to do with established veto system.[[32]](#footnote-32) Another example of inefficient level of institutional functioning takes Organization of the Petroleum Exporting Countries. OPEC has undoubtedly played a significant role in global energy markets for decades. However, its decision-making process are said to be slow and it has been criticized for failing to respond effectively to changing market conditions and the rise of alternative energy sources.[[33]](#footnote-33) For example, in the early 2010s, the United States experienced a boom in shale oil and gas production, which led to a significant increase in global oil supplies and a decline in oil prices.[[34]](#footnote-34) This shift caught OPEC off guard, and the organization struggled to respond effectively. Some OPEC members advocated for reducing oil production to prop up prices, while others were hesitant to cut production and risk losing market share. In this case, lots of scholars states that OPEC is in need of “re-branding” of its own institutions to promote better cooperation and to abolish some of fundamental principles to allow Member States have enhanced facilities in promotion of common subnational interests of all the members of organization.[[35]](#footnote-35)

In contrast, the EU has demonstrated a greater capacity for innovation and adaptation in its energy policy framework. The EU has been at the forefront of efforts to promote renewable energy and reduce greenhouse gas emissions. With the launch of The EU Energy Union initiative, Union has ensured a secure, affordable, and sustainable energy supply for EU citizens, by promoting a fully integrated energy market, increasing energy efficiency, and promoting the use of renewable energy sources. In this case, EU has managed to provide flexible and comprehensive approach to reconstruct the functioning of its institutions. According to the Commission reports on the integration of national energy and climate progress it could be seen that EU’s institutions provide its Member-States a two-ways approach for the adoption of elaborated norms. These are mandatory and voluntary regulations.[[36]](#footnote-36) The promotion of resilient approach for the implementation of a project of Energy Union should also be mentioned here. The EU’s ability to promote an emergent response towards energy threats allowed Union and its Member-States to reshape Energy Union’s goals when needed and focus on critical vulnerabilities of energy security and affordability.[[37]](#footnote-37)

Having considered the main challenges EU takes towards the traditional notion of an IR entity, it is possible to state that ontological differences between actors in shaping international politics. It might be proved by the statement of Alexander Wendt who argued that ontological differences between actors can create power asymmetries and affect the distribution of resources and capabilities in the international system.[[38]](#footnote-38) According to his view, the criteria of ontological uniqueness of an IR entity are:

Communication: The ability of an entity to engage in meaningful communication with other actors, based on shared meanings and understandings.[[39]](#footnote-39) This point has been proved by the challenge of traditional notion of identity. Shared understanding of selfness among Member-States provides a sufficient level of cooperation and willingness to unify in face of forthcoming challenges and external threats.

Consciousness: The ability of an entity to have self-awareness, intentionality, and the capacity for agency.[[40]](#footnote-40) This criteria has been proven by the challenge of a traditional notion of legal personality. EU, as it was mentioned above, provided not only a shared understanding of ‘who are we’ among its Member-States, but also implemented on the legal level the fundamental principles denoting its own intentions to be acknowledge on the international arena.

Organization: The ability of an entity to organize and coordinate its actions, based on shared norms, rules, and institutions.[[41]](#footnote-41) The challenge of traditional notion of institutions has shown that EU possesses an ability to readjust its own policy and objectives in a short amount of time saving at the same moment the adherence to the fundamental principles of its own and promoting the opportunities for its Member-States to contribute into the building a new form of institutional functioning.

Generally speaking, all the points, mentioned above, show that EU possesses an ontological reason of being a *sui generis* entity. Constructivist factors shape the way EU is being perceived on the international arena and, at the same time, ontological difference becomes a source of both conflict and cooperation in the international system. It is to be proven how the understanding of EU having a *sui generis* nature affects its policy in promotion of common energy security policy and in which cases such an approach may be senseless to implement.

## **1.2. The discussion on the *sui generis* thinking.**

The *sui generis* concept, defined earlier takes ambiguous position in scientific environment. The discussion on how exactly the *sui generis* concept of EU’s nature may be applied to the understanding of Union’s promotion of common energy security policy will be constructed on the revealing of both sides of an argument. An argument for the implementation of a concept is based on the approaches of constructivist camp. At the same time, the argument of denial an approach is viewed from the nominalist vision of *sui generis* concept.

To start with, it is important to define what is the vision of nominalists towards the role of an entity in international relations. According to the views of both David Hume[[42]](#footnote-42) and Charles Peirce[[43]](#footnote-43), nominalists argue that there is no ontological basis for the distinction between different types of IR entities, and that the categories we use are contingent on historical and cultural factors. This assumption also suggests that it is important to focus on the social and political practices that create and sustain different types of IR entities, rather than assuming that these entities have inherent characteristics that can be objectively defined. This means paying attention to the discourses, norms, institutions, and power relations that shape the behavior and interactions of actors in IR, and recognizing that these factors can change over time and across different contexts. The main argument here, is that states are founded on the basis of shared interests that are achieved by the way of contractual agreements accomplished by individuals with contingently coincident preferences[[44]](#footnote-44). According to Wendt, the nature of the international system is not a given, but is rather a product of the way that states and other actors interact with each other. As soon as entities in IR are not fixed, objective realities, but are rather socially constructed through interactions between actors then the ontology of the international system is not pre-given, but is constructed through the interactions of its constituent parts[[45]](#footnote-45). However, numerous debates on the implementation of nominalists’ view in IR have shown, that nominalism, as an approach itself, limits the scope of rationality. In other words, such a sceptic approach of a view on ontological concept of IR entities restricts any explanation of what was the very origin of an entity and how it develops through the time. It is arguable that without understanding of any reasoning of entity’s existence it is possible to understand its functionality and purposes it has in its policy concept. The nominalist theory undoubtedly gives a rise of skepticism, as *sui generis* does. However, nominalist’s agnosticism simply casts away any purposes of studying inherited characteristics of an entity. If nominalism is implemented to the study of EU’s nature then there is also no place to the search of fundamental principles and values inherited in European Union. Thus, without understanding of shared identity, values and norms there is basically no answer on how EU, as a unique entity, acts on the international arena and conducts its policy towards facing current challenges.

Generally speaking, the position of nominalist approach seems to be acceptable in a way it offers an approach for the study of social interactions among international actors. However, an approach, proposed in this study is aimed not only on the primal focus on the social and political practices, rather on the mediation between understanding of social interaction of an entity and its ontological functions. In other words, the proposed approach is based on the focus on both meanings of concepts and institutions of an entity that are constructed through social interaction and the understanding of the nature of entities and the relationships between them. In ontological study of international relations Buzan argued the assumptions we make about the nature of entities and the relationships between them affect the way we study and understand the world[[46]](#footnote-46). Therefore, it is important to be aware of these assumptions and to examine them critically. As soon as the importance of recognizing that entities in international relations are not fixed, but are socially constructed is highlighted, it is possible to argue that IR entities are not naturally occurring phenomena, but are created and maintained through social processes. Therefore, a critical examination of these entities requires an understanding of the social processes involved in their construction and maintenance.

Having provided a sufficient definition and explanation of what is a sui generis concept and why exactly this concept may be found to be useful, it is important to explain applicability of this approach towards EU’s common energy security policy. As soon as it has been proved, that EU obtains a sui generis nature of its own and the EU's energy policy is not solely based on traditional notions of state interests and power, but also on a shared identity and common interest in addressing energy security challenges. The concept allows to study interaction among EU’s Member-States in promotion of common energy security policy considering the process of shaping the policy by a set of shared values and goals. The promotion of renewable energy the reduction of greenhouse gas emissions, the diversification of energy sources and routes and other measures taken by EU are institutionalized, thus, it is possible to shape and consider EU’s identity as an international actor leading a global energy governance. Consequently, such an institutional structure allows for the coordination and cooperation of member states in the development and implementation of energy policies. To summarize, with the acknowledgement of social constructed nature of EU, its unique identity and institutional framework, a sui generis concept seems to be applicable towards the study of the EU's common energy security policy.

Despite all the arguments mentioned in favor of applicability of sui generis approach towards a study of common energy security policy of EU, it is important to consider the following vulnerabilities of approach. First, it is possible to take wrong mutual perception of Member-States being the same socially constructed identities. Disputes, based on this aspect may cause a huge slowdown in the promotion of common policy or even disrupt it. Second, such an approach may struggle to account material factors, common understanding and shared values cannot promote a sufficient level of communication if there are material disputes among Member-States, based on finance, resource, technology or even geography factor. Finally, it is naïve to assume that *sui generis* concept provides a possibility to accurately predict future outcomes, basing on the constructed interaction among Member-States, as soon as there is always a possibility for the emergence of abrupt and unexpected changes in identity and behavior. Considering this points, following study will show how application of *sui generis* concept helps EU to implement common energy security policy, and in which cases the implementation of an approach has turned to be a failure.

# Chapter 2. European Union and its Common Energy Security Policy in action.

Initially, the field of European energy policy had no stable ground and single natural concept of its promotion. In European studies of EU’s energy policy concept it is customary to say that energy, to some extent, was excluded from the political domain for quite a long time[[47]](#footnote-47). However, it is wrong to state that it was totally excluded, but rather its importance was downplayed during that time. This was due to a number of factors, including the prioritization of economic integration and the lack of a strong legal and institutional framework for energy policy at the EU level. In the early years of the European project, the focus was on building a common market and creating a framework for economic integration. Energy policy was viewed as a national issue, with member states retaining control over their own energy resources and infrastructure. It was not until the 1990s that energy policy began to receive more attention at the EU level, with the creation of the Internal Energy Market and the adoption of the Energy Charter Treaty[[48]](#footnote-48). However, progress was slow and uneven, with many member states still reluctant to cede control over their energy resources and infrastructure. Starting from the early 2000s, energy policy began to emerge as a more significant issue in the EU, with concerns about climate change[[49]](#footnote-49) and energy security driving increased attention and investment in the sector[[50]](#footnote-50). The adoption of the Lisbon Treaty in 2007 also provided a stronger legal and institutional framework for energy policy at the EU level, helping to elevate its importance on the political agenda.

Indeed, the “active” phase of energy policy promotion has begun with a number of transition policies. In fact, there are a lot of acts and norms were implemented to activate the phase of common energy promotion. In this study the most notable initiatives will be taken into the consideration.

For the analysis of both initiatives and projects of European Union dedicated to the promotion of common energy security the following criteria have been defined:

1. Alignment with EU's Legal Personality: this evaluation will show whether the policy aligns with the EU's legal personality, which represents the EU as a distinct legal entity. The EU's legal personality grants it the authority to negotiate energy deals as a single entity, rather than relying on individual Member State. Evaluating the alignment with the EU's legal personality helps determine whether the policy allows the EU to exercise its legal capacity in energy security matters.

2. Contribution to EU's Political Identity: The political identity of the EU emphasizes the importance of speaking with one voice and fostering alliances. This criteria examines whether the policy enables the EU to project a unified stance on energy security issues, establish partnerships with other countries and regions, and enhance its political influence. Assessing the contribution to the EU's political identity helps understand the role of the policy in strengthening the EU's position in the global energy landscape.

3. Engagement of Institutional Frameworks: The EU's institutional frameworks play a crucial role in the implementation and coordination of policies. This notion evaluates whether the initiative engages with existing EU institutions, such as the European Commission, European Parliament, or specialized energy agencies. Analyzing the engagement of institutional frameworks provides insights into the level of institutional support and cooperation for the policy within the EU.

4. Compliance with EU's Energy Governance: Compliance with EU energy governance principles and regulations is crucial to ensure coherence and consistency in the EU's energy policies. This criterion assesses whether the policy aligns with EU energy rules, market regulations, and environmental standards. Evaluating compliance with energy governance helps determine the policy's compatibility with the EU's legal framework and its commitment to a sustainable energy transition.

All these criteria are suitable for the estimation of *sui generis* impact on the EU’s common energy security policy. By examining these criteria it is possible to gain a deeper understanding of the unique aspects of the EU's energy policy and the extent to which the *sui generis* nature of the EU contributes to its energy security efforts.

For the complex study of *sui generis* applicability the following initiatives and policies have been chosen for the analysis:

First, it is important to note the Energy Union, initiated in 2015. The goal of Energy Union was aimed at the provision of a framework for a coherent and integrated energy policy across the EU. In modern studies of European Union energy policy it is said that the initiation and development of Energy Union is a positive step towards creating a more unified and secure energy market in Europe. It is argued that the Energy Union can help to reduce dependency on external energy sources, enhance energy efficiency, and promote the deployment of renewable energy sources. It has been stated that it is Energy Union’s tools that allow EU to face two different energy crises: energy crisis and environmental one.[[51]](#footnote-51) In this way, Energy Union promotes bo th the potential to create a more efficient and integrated European energy market, which could lead to lower prices for consumers and increased energy security and focus on renewable energy sources and energy efficiency that could help reduce greenhouse gas emissions and combat climate change.[[52]](#footnote-52) However, according to the Jacques Delors Institute research[[53]](#footnote-53), one of the main challenges of the Energy Union is ensuring that it is fully implemented and that all member states comply with its regulations. In fact, the question of the promotion of political will and coordination arises. It is also argued, that the Energy Union is too focused on liberalizing the energy market and does not adequately address issues related to energy security and resilience.[[54]](#footnote-54) In addition, it is also suggested that the Energy Union does not go far enough in promoting renewable energy and reducing greenhouse gas emissions.[[55]](#footnote-55)

Second initiative to be noted here is REPowerEU. REPowerEU is a European Commission initiative that aims to boost the deployment of renewable energy technologies across the EU Member-States. The initiative has been designed to support the EU's efforts towards meeting its climate and energy targets, and to strengthen the EU's energy security. The REPowerEU initiative promotes the use of renewable energy sources (RES) as a way to reduce dependence on fossil fuels and increase energy security.[[56]](#footnote-56) By encouraging the development of renewable energy, the initiative aims to diversify the EU's energy mix and reduce the risks associated with over-reliance on imported fossil fuels. This is supposed to help to mitigate the negative impact of supply disruptions and price volatility in the energy markets.

The initiative also promotes the use of RES in the heating and cooling sector, which currently accounts for a significant portion of the EU's energy consumption.[[57]](#footnote-57) By encouraging the deployment of renewable heating and cooling technologies, such as heat pumps and solar thermal systems, the REPowerEU initiative aims to reduce the EU's dependence on fossil fuels in this sector. In addition, the REPowerEU initiative aims to create a level playing field for the deployment of renewable energy technologies across the EU. The initiative aims to remove regulatory and administrative barriers that may hinder the deployment of renewable energy, and to promote cooperation between member states and regions to facilitate the development of cross-border renewable energy projects. In the modern studies of REPowerEU policy, scholars highlight the positive aspects of REPowerEU, such as the initiative's focus on promoting the use of renewable energy sources, which can reduce the EU's dependence on imported fossil fuels.[[58]](#footnote-58) However, the level of concern on the reliability of initiative on market-based mechanisms, which not always align with the goal of promoting energy security is usually being raised.[[59]](#footnote-59) Moreover, the concern on the lack of investment in renewable energy infrastructure has also be highlighted here. Basically, energy infrastructure in REPowerEU requires significant upfront costs and long-term planning, it creates a barrier for investors looking for more immediate returns. According to a report by the European Court of Auditors, the EU faces lack of finance and inadequate coordination among member states that is hampering the development of renewable energy infrastructure[[60]](#footnote-60).

Finally, it is Green Deal that also heavily impacts on the EU’s common energy security policy promotion. Green Deal is aimed to tackle climate change and promote sustainable development across Europe, making it a carbon-neutral continent by 2050, while also supporting economic growth and creating new jobs in the green economy.[[61]](#footnote-61) The Green Deal is closely linked to the EU's efforts to promote common energy security policy, as energy security is closely tied to the transition to a low-carbon economy. It also includes a range of policies and measures to support the transition to a sustainable, low-carbon economy, like decarbonizing the energy sector, investing in sustainable infrastructure, supporting research and innovation and promoting international cooperation[[62]](#footnote-62). As for scholars’ estimation of Green Deal, it has received both praise and criticism in terms of its potential to promote energy security policy in the EU. For example, it is said that that the Green Deal has the potential to significantly enhance the EU's energy security by promoting a more diversified and decentralized energy mix, reducing the region's dependence on imported fossil fuels, and improving the resilience of its energy infrastructure[[63]](#footnote-63). On the other hand, it is said that the Green Deal is overly optimistic and underestimates the challenges and costs of achieving its objectives. It is also noted that the Green Deal does not provide a clear plan for financing its ambitious energy and climate goals, which could limit its effectiveness.[[64]](#footnote-64)

Fourth, it is Southern Gas Corridor project (SGC). Basically, the very idea of the creation of SGC has emerged in the the early 2000s as a response to the EU's objective of diversifying its energy sources and reducing dependence on a single supplier.[[65]](#footnote-65) The project gained significant momentum in 2013 when the European Commission designated it as a priority energy infrastructure project.[[66]](#footnote-66) With the elaboration of SGC agreement following points were determined as a vital in the implementation of EU cooperation on gas energy sources. First, it was Shah Deniz II Gas Sales Agreements. Signed in 2013, these agreements ensured the purchase of natural gas produced from the Shah Deniz II field in Azerbaijan. European energy companies, including BP, Total, and SOCAR, were among the buyers.[[67]](#footnote-67) Then, it was Trans-Anatolian Natural Gas Pipeline (TANAP) Intergovernmental Agreement, that has been established in 2012 between Turkey and Azerbaijan and outlined the construction and operation of the TANAP pipeline, which serves as a vital section of the SGC.[[68]](#footnote-68) Then, it was Trans-Adriatic Pipeline (TAP) Shareholders Agreement. With the establishment of this agreement in 2013, the participation of TAP's shareholders has been solidified, including BP, SOCAR, Snam, and Fluxys, in the development and operation of the pipeline that connects Greece, Albania, and Italy.[[69]](#footnote-69)

In modern literature SGC has been regarded as a significant achievement in diversifying the EU's energy supply by several aspects: source diversification, route diversification, infrastructure development and market competition.[[70]](#footnote-70) Basically, SGC enabled the EU to access new sources of natural gas and highly reduced its reliability on the other energy sources having created the possibilities for the additional gas supplies from Caspian Sea. Moreover, by analyzing the infrastructural landscape of SGC it becomes clear that EU’s participation in this projects allows Union to find a new ways of energy transition bypassing traditional Russian and Ukrainian transit routes.[[71]](#footnote-71) At the same time, with the construction of TANAP and TAP, the EU's energy infrastructure has been majorly expanded, thus, EU’s energy integration potential has been highly enhanced.

Finally, it is the Nord-Stream 2 Project to be analyzed to reflect the genuine impact of *sui generis* notions. The Nord-Steam 2 Project has been announced on the 2015 as a successor of original Nord Stream pipeline, which became operational in 2011[[72]](#footnote-72). According to the European Parliament estimation it was approximately 41% for gas supplies that had to be imported from Russia with help of Nord Stream 2 Project.[[73]](#footnote-73) The project involved various agreements between the project consortium, primarily led by Gazprom, the Russian state-owned gas company, and European energy companies.[[74]](#footnote-74) These agreements outline the financial and operational aspects of the project. They included commitments related to investment, construction, operation, and the allocation of gas capacity.[[75]](#footnote-75) The project has faced regulatory challenges and discussions on compliance with EU energy regulations, particularly the Third Energy Package.[[76]](#footnote-76) It was supposed that the Nord-Stream 2 Project would have a great potential to enhance Russia-EU energy cooperation by bypassing traditional transit countries in Eastern Europe and by applying economic and geopolitical implications for these countries and the broader region.[[77]](#footnote-77) The project seemed to be beneficial for both sides, however, the very state of Russia-EU relations raised a lot of concern and discussions on whether EU should engage into deeper cooperation with Russian Federation.

## **2.1. Estimation of initiatives’ efficiency and search for vulnerabilities.**

European Union energy initiatives represents a range of coordinated targets and actions, aimed at the promotion of common energy security policy. All three initiatives chosen for the analysis represent different reasons of their deployment, however, all of them are striving to the common goal. Under this study, there is a slight expectation for all of initiatives being able to reflect to some extent a *sui generis* notion that allows them to function with a great effectiveness by pushing Member-States to cooperate as a whole one, following the fundamental principles of European Union. However, there is still an expectation to reveal the vulnerabilities and specific features for each of the initiative that change to a different extent the EU’s and Member-States’ perception of being a *sui generis* unit. By doing so it will be possible to understand whether a *sui generis* helps to provide better cooperation within the common energy security policy or it will simply turns out to be helpless due to the desire of a Member-State to rely on its own in the promotion of energy security.

*REPowerEU*:

Generally speaking, the REPowerEU represents a significant step towards advancing the EU's renewable energy agenda. By mobilizing investments and promoting the deployment of renewable energy projects, REPowerEU aims to accelerate the transition to a sustainable and low-carbon energy system.[[78]](#footnote-78) According to the European Commission's estimations, this initiative is expected to generate an additional 100 GW of renewable energy capacity by 2030, contributing to the reduction of greenhouse gas emissions and enhancing energy security.[[79]](#footnote-79) The EU's legal personality plays a crucial role in supporting REPowerEU, enabling the Union to collectively negotiate renewable energy agreements and foster cooperation with external partners. This facilitates the sharing of best practices, technological advancements, and financial resources among member states, thereby strengthening the EU's position as a global leader in renewable energy deployment. According to the second criteria, RepowerEU initiative focuses on the degree of coherence and integration within the EU's energy security initiatives. This initiative demonstrates a high level of coherence as it integrates various aspects of the EU's renewable energy agenda, including policy frameworks, financial instruments, and technological innovation. The RepowerEU initiative involves the coordination of efforts among member states, the European Commission, and other stakeholders to mobilize investments and promote the deployment of renewable energy projects.[[80]](#footnote-80) Through this integrated approach, RepowerEU fosters collaboration and cooperation, ensuring a coherent and unified effort towards achieving the EU's renewable energy targets. The EU's legal personality plays a crucial role in facilitating this coherence by providing a framework for collective decision-making, policy coordination, and the harmonization of national renewable energy strategies.

However, it has been noted, that there is still a decent level of “political sensitivity” and absence of the impact assessment of REPowerEU initiative. Despite the Article 296 of the TFEU and regulation 1367/2006[[81]](#footnote-81), Member-States are still unwilling to provide a sufficient number of a transparency in the policy implementation.[[82]](#footnote-82) The pace of decision-making processes is considered to be fast, so the Member-States have also to face the necessity in the flexibility and mutual trust, while adopting vital decisions.[[83]](#footnote-83)

According to the current estimations of REPowerEU, an initiative demonstrates a high level of engagement with institutional frameworks, leveraging the EU's legal personality to facilitate its implementation.[[84]](#footnote-84) The initiative operates within the framework of the European Green Deal, which provides a comprehensive policy framework for achieving climate neutrality. It involves collaboration between the European Commission, member states, industry stakeholders, and financial institutions to mobilize investments in renewable energy projects. The institutional frameworks enable policy coordination, funding mechanisms, and regulatory frameworks to support the transition to renewable energy sources[[85]](#footnote-85). Despite all the abilities of the REPowerEU to provide a well-structure institutional framework, there is still a notable level of the obstacles that prevent the proposed initiatives to be implemented to a full extent. Thus, for example, it has been noted, that the urgent nature of the initiative prevents to provide a sufficient level of legislative proposals, thus, according to the ECJ, REPowerEU has to provide enough space and time for the Member-States’ institutions to be able to distribute the resources for the successful accomplishment of the targets.[[86]](#footnote-86)

From the prospects of the REPowerEU’s compliance with the EU’s energy governance framework, it aligns with the objectives and principles set out in the Renewable Energy Directive[[87]](#footnote-87) and the Energy Efficiency Directive[[88]](#footnote-88), which provide the legal framework for promoting renewable energy and energy efficiency in the EU. RepowerEU aims to support the implementation of these directives by mobilizing investments in renewable energy projects and promoting energy efficiency measures.[[89]](#footnote-89) According to the European Commission's progress report on renewable energy, the EU is on track to achieve its target of having at least 32% of its energy consumption coming from renewable sources by 2030, indicating compliance with the energy governance framework.[[90]](#footnote-90)

In general, the RepowerEU initiative demonstrates a strong level of compliance, as it aligns with the Renewable Energy Directive and the Energy Efficiency Directive, and is on track to achieve its renewable energy targets. However, the retaliation of the initiative is described to be urgent and sometimes compelled in face of EU-Russia energy crisis. Thus, it is really hard to say if REPowerEU could become a long-term initiative that is aimed on the achievement of the RES primary. Taking into the consideration current situations, it seems that such a forced and urgent decisions to cut off from the Russian energy imports is a good example of the common decision-making procedure aimed on the promotion of the collective energy security policy. However, the fact that this initiative is based on the common understanding may be a fatal as soon as Member-States will start to rely on their own.

*Green Deal initiative:*

As soon as the European Green Deal embodies the EU's commitment to addressing the urgent challenges of climate change and environmental sustainability, it sets out a comprehensive framework that encompasses various sectors and policy areas to achieve climate neutrality and foster a sustainable future.[[91]](#footnote-91) The Green Deal establishes ambitious targets, including a goal to reduce greenhouse gas emissions by at least 55% by 2030 and achieve climate neutrality by 2050.[[92]](#footnote-92) By promoting renewable energy, energy efficiency, and clean technologies, the Green Deal aims to transform the EU's energy system and foster economic growth while ensuring environmental protection. The EU's sui generis legal personality empowers the Union to adopt a unified approach, enabling coordinated action, collective decision-making, and the alignment of member states' efforts towards the Green Deal's objectives. It is Green Deal that has achieved a success in the Paris Agreement and the promotion of international cooperation of the green policy. With help of joint cooperation within the European External Action Service, EU has managed to propose an updated energy security system that has been implemented globally.[[93]](#footnote-93)

The Green Deal represents a comprehensive and integrated approach towards addressing climate change and achieving environmental sustainability. It encompasses various policy areas and sectors, including energy, transport, agriculture, and industry, among others. The Green Deal's coherence is evident through its interconnectedness with the EU's energy security initiatives. It aims to transform the EU's energy system by promoting renewable energy, energy efficiency, and clean technologies. This integration is facilitated by the EU's legal personality, which enables the alignment of policies, the coordination of actions, and the establishment of common goals and targets. The Green Deal's holistic and interconnected approach ensures a coherent and synergistic effort in advancing the EU's energy security and sustainability objectives. However, the current debates on the impact of the Green Deal on EU’s energy security show that the unified support of energy industry doesn’t seem to be that ideal as it is claimed by European Commission.[[94]](#footnote-94) It is argued, that European Green Deal fails to provide enough attractiveness for the R&D investments sector. Due to a high level of diversity of investments European Union fails to hold its advantage in the technological sector, providing non-beneficial business model. The carbon border taxes system does not provide any progression, despite proclaimed aim to reduce the level of emissions up to 50% till 2023.[[95]](#footnote-95)

Another aspect to be highlighted here is that the Green Deal is highly engaged with institutional frameworks, relying on the EU's legal personality and institutional mechanisms for its implementation. Basically, it involves multiple policy areas, including energy, climate, agriculture, transport, and industry, requiring coordination and collaboration across different EU institutions, member states, and stakeholders. The European Commission leads the implementation of the Green Deal, working closely with other EU institutions, such as the European Parliament and the Council of the EU, to develop and implement policies, legislation, and funding programs.[[96]](#footnote-96) The institutional frameworks provide a platform for dialogue, decision-making, and coordination among stakeholders to advance the EU's energy security and climate objectives. Thus, for example, European Green Deal Investment Plan aims to mobilize at least €1 trillion in sustainable investments over the next decade[[97]](#footnote-97).

It is said, that The Green Deal is designed to be fully compliant with the EU's energy governance framework.[[98]](#footnote-98) It aligns with various legislative measures, including the European Climate Law, which sets the objective of achieving climate neutrality by 2050, and the European Energy Efficiency Directive, which aims to improve energy efficiency across sectors.[[99]](#footnote-99) The Green Deal also supports the objectives of the Renewable Energy Directive and the Energy Performance of Buildings Directive.[[100]](#footnote-100) These directives provide the legal framework for promoting clean energy, energy efficiency, and sustainable building practices. According to the European Environment Agency, the EU has made significant progress in reducing greenhouse gas emissions and increasing the share of renewable energy, demonstrating compliance with the energy governance framework.[[101]](#footnote-101)

In general, The Green Deal shows high compliance, as it aligns with various legislative measures promoting clean energy and energy efficiency, and the EU has made progress in reducing emissions and increasing renewable energy. It indeed shows a greater performance and reflects a *sui generis* notions as soon as it is able to provide a comprehensive cooperation not only within European Union, but within the international organizations and agreements with third states.

*Energy Union*:

The Energy Union is a strategic framework that seeks to create a secure, sustainable, and competitive energy system within the EU. Launched by the European Commission in 2015, the Energy Union focuses on five key dimensions: energy security, solidarity and trust, a fully integrated internal energy market, energy efficiency, decarbonization and research, innovation, and competitiveness.[[102]](#footnote-102) By addressing these dimensions, the Energy Union aims to enhance the EU's energy security, reduce dependency on external suppliers, promote renewable energy sources, and foster innovation in the energy sector. The EU's sui generis legal personality plays a pivotal role in facilitating the development and implementation of the Energy Union, as it enables collective decision-making, cooperation among member states, and engagement with external partners. This allows the EU to effectively respond to energy challenges and shape a comprehensive energy policy that balances economic, environmental, and security considerations.[[103]](#footnote-103) Thus, for example, it’s approximately 82% of all the Europeans, according to Eurostat, that agree on the necessity to reduce the energy dependence on the Russian energy imports.[[104]](#footnote-104)

In other words, the Energy Union as a strategic framework that seeks to achieve a fully integrated and coherent energy system within the EU emphasizes the need for a comprehensive approach that encompasses multiple dimensions, including energy security, internal energy market, energy efficiency, decarbonization, research and innovation. The Energy Union's coherence is evident through its ability to address the interlinkages between these dimensions and ensure their harmonized development. For example, the implementation of sustainable development goals has been one of the most prominent actions, promoted by Energy Union as an auxiliary tool for the promotion of energy security policy.[[105]](#footnote-105) The EU's legal personality plays a pivotal role in promoting coherence within the Energy Union by enabling collective decision-making, policy coordination, and the implementation of integrated initiatives. It facilitates the alignment of national energy policies, the establishment of common energy targets, and the development of cross-border infrastructure projects, all of which contribute to a more coherent and integrated energy system within the EU. Thus, the interlinkages with other energy policies has become possible to realize due to the common adherence to the unified development of a green infrastructure.[[106]](#footnote-106)

If the Energy Union will be considered as a comprehensive initiative that engages institutional frameworks at various levels to promote the EU's energy security, then it is possible to state that it operates within the legal and institutional framework of the EU, involving coordination and collaboration among EU institutions, member states, regulatory bodies, and energy stakeholders. Indeed, according to the InvestEU, with the deployment of Energy Union initiative, it’s been shown, that energy transition requires more comprehensive approach in social and infrastructural sectors, thus, the investments in the development of governance mechanisms has allowed EU to promote better cooperation and develop more resilient institutional network.[[107]](#footnote-107) In this case, the institutional frameworks facilitated the development and implementation of energy policies, legislative measures, and cross-border projects that enhanced the EU's energy security. The Energy Union Governance Regulation provided a framework for monitoring, reporting, and assessing the progress of member states in achieving energy security objectives.[[108]](#footnote-108) According to the European Commission, the Energy Union has achieved significant progress in areas such as energy efficiency, renewable energy deployment, and the completion of the internal energy market, contributing to the EU's energy security.[[109]](#footnote-109)

The Energy Union is closely aligned with the EU's energy governance framework. It operates within the legal and regulatory framework established by the Clean Energy for All Europeans package, which includes a set of directives and regulations aimed at creating a competitive, secure, and sustainable energy system in the EU.[[110]](#footnote-110) The Energy Union governance framework ensures the implementation of these measures and monitors the progress of member states in meeting their energy targets[[111]](#footnote-111). According to the European Commission's Energy Union progress report, the EU has made significant advancements in areas such as renewable energy deployment, energy efficiency, and integration of the internal energy market, indicating compliance with the energy governance framework.[[112]](#footnote-112)

The Energy Union is well-aligned with the EU's energy governance framework, operating within the legal and regulatory framework of the Clean Energy for All Europeans package. The EU has made significant advancements in areas such as renewable energy, energy efficiency, and the integration of the internal energy market.

## **2.2. Analysis of the EU’s external energy policies.**

For the analysis of the EU’s external energy policies, it is possible to trace the pace of Member-States’ willingness in the promotion and deepening of the cooperation with third states on the question of energy security. If for the energy initiatives, primary focused on the cooperation within the European Union, the question of delegation of power to the supranational institutions does not seem to be that acute, for the implementation of external energy polices Member-States are expected to show more concerns and willingness to rely on an individual expectation of the policy conduction. In this sense, the *sui generis* notion is expected to be more vulnerable, as soon as it majorly relies on the concept of unity and the common trust, than the uniqueness of a single Member-State in the promotion of external cooperation in energy security sector.

*Southern Gas Corridor:*

In modern literature SGC has been regarded as a significant achievement in diversifying the EU's energy supply by several aspects: source diversification, route diversification, infrastructure development and market competition.[[113]](#footnote-113) Basically, SGC enabled the EU to access new sources of natural gas and highly reduced its reliability on the other energy sources having created the possibilities for the additional gas supplies from Caspian Sea. Moreover, by analyzing the infrastructural landscape of SGC it becomes clear that EU’s participation in this projects allows Union to find a new ways of energy transition bypassing traditional Russian and Ukrainian transit routes.[[114]](#footnote-114) At the same time, with the construction of TANAP and TAP, the EU's energy infrastructure has been majorly expanded, thus, EU’s energy integration potential has been highly enhanced.

Generally, the project is the result of cooperation between the EU, Azerbaijan, and other partner countries, demonstrating the EU's collective efforts to ensure a diversified and secure energy supply. While the Southern Gas Corridor aligns with the EU's legal personality by promoting collective decision-making and cooperation among member states, it also involves collaboration with external partners, highlighting the EU's ability to engage in energy diplomacy and foster international energy cooperation.

The EU, acting through the European Commission, has played a pivotal role in coordinating and facilitating the project.[[115]](#footnote-115) The legal personality of the EU enabled it to engage with external energy suppliers, such as Azerbaijan, and negotiate agreements on behalf of all member states. In the case of the SGC, the EU's legal personality has been instrumental in forging agreements such as the Shah Deniz II Gas Sales Agreements and the Trans-Adriatic Pipeline (TAP) Shareholders Agreement.[[116]](#footnote-116) These agreements enabled the EU to secure natural gas supplies from Azerbaijan and facilitated the construction and operation of the pipeline infrastructure.[[117]](#footnote-117) By acting collectively, the EU enhanced its bargaining power, ensuring a more coordinated and cohesive approach to energy security. At the same time, with help of unique notion of political identity, EU has succeeded to foster a partnership with countries along the gas supply route, including Azerbaijan, Turkey, Greece and Albania.[[118]](#footnote-118) The alliance created has contributed to regional cooperation and created opportunities for dialogue and collaboration on energy security issues. The EU's engagement in the SGC showcases its political identity as a collective actor that seeks to shape the energy landscape and ensure the security of its member states. From the notion of institutional frameworks of the EU, it is notable to state that the European Commission, through its Directorate-General for Energy, has been actively involved in promoting and overseeing the SGC.[[119]](#footnote-119) It has provided support, guidance, and regulatory oversight to ensure the project's successful implementation. The institutional frameworks of the EU facilitated the coordination of energy-related initiatives, the integration of national energy policies, and the harmonization of regulations within the energy sector. The SGC's alignment with the EU's institutional frameworks contributed to a more coordinated and cohesive energy policy.[[120]](#footnote-120) It allowed for the efficient utilization of resources, the harmonization of standards and regulations, and the promotion of a level playing field for energy companies operating in the EU. This, in turn, enhanced the EU's capacity to address the economic and security aspects of its energy supply in a comprehensive manner. In general, the Southern Gas Corridor exemplified how the *sui generis* notions of legal personality, political identity, and institutional frameworks are applied in the context of the EU's energy policy. The EU's engagement in the SGC demonstrated its ability to negotiate energy deals as a single entity, foster alliances, and develop institutional frameworks to address energy security concerns. Through the SGC, the EU strengthened its energy security, diversified its energy sources, and promoted regional cooperation in the energy sector.

The Southern Gas Corridor complies with the EU's energy governance framework to ensure its alignment with EU energy policy objectives. The project operates within the framework of the EU's Gas Directive, which sets out rules for the operation and regulation of gas infrastructure in the EU.[[121]](#footnote-121) The Gas Directive promotes transparency, non-discrimination, and competition in the gas market, ensuring compliance with EU energy governance principles. The Southern Gas Corridor has undergone regulatory scrutiny to ensure compliance with the EU's energy governance rules and to address any potential concerns regarding market competition and security of supply.[[122]](#footnote-122)

Generally speaking, EU highly relies on the promotion of the SGC cooperation. The majority of analysts state that, basically, there is no “plan B” for EU if it fails in the further development of the project.[[123]](#footnote-123) An important factor to be considered here is that there is still no stable ground in the social support of the SGC project. Thus, for example, the need for the more developed infrastructural coordination within SGC affects the environment of some states, in particular Italy, which actively opposes the destruction of agricultural sectors for the construction of new gas pipelines[[124]](#footnote-124)

*The Nord Stream 2 Project:*

The Nord Stream 2 project has been a topic of debate and controversy regarding its impact on the EU's energy security and its alignment with the EU's legal personality. This gas pipeline project aims to transport natural gas from Russia to Germany through the Baltic Sea. Unlike the initiatives discussed earlier, Nord Stream 2 primarily stems from commercial interests and involves collaboration between individual member states and external partners, including Russia and private companies.

In the scientific environment it is considered, that there are numerous obstacles that prevent EU to fully engage its *sui generis* notions to promote the cooperation with Russia on the sufficient level. First, there is no single legal personality as it was analyzed on the previous examples. The absence of unity in decision-making procedures was conditioned with the German vision of Russia-Germany relations that did not correlate to the vision that was defined by the European Union[[125]](#footnote-125). Some researchers tend to believe Germany’s single-handed policy has become an “Achilles’ Heel” in the EU’s energy security policy.[[126]](#footnote-126) Such a statement is backed up by the fact that it was a German civil society groups and society organizations that were constantly pushing the Germans’ decision-making institutions to deepen the Russian-Germany cooperation and, thus, to affect the general EU energy policy towards Russian energy resources.[[127]](#footnote-127) In fact, it was not only Germany’s fault to disrupt the unified decision-making processes towards energy cooperation with Russia, but numerous corruption incidents convicted in both Hungary and Poland. Thus, for example, Poland’s Law and Justice Party has been gradually eroding the independence of the judiciary and the courts.[[128]](#footnote-128) There were a numbers of cases where some reforms to the judiciary may have been necessary, the party's actions, such as stripping judges of immunity and appointing party loyalists to leading positions in the judicial hierarchy, were excessive and unnecessary.[[129]](#footnote-129) At the same time, Hungary has been abusing the EU funds to promote better support for the leading party and, thus, to veer off the EU defined political course on the promotion of energy resources.[[130]](#footnote-130) Both of these factors are not only the examples of crucial violations of Member-States but also the sufficient evidence of EU lacking unified decisions towards the Russian policy vectors and disrupted institutional structure that failed to support a necessary political environment to define further steps in the Russian-EU relations coordination. Such a challenges from within the EU did not allow European Union to provide a timely responses to changes in political discourse. Considering the challenges, there is basically nothing for EU to do with such a threats but to enhance better cooperation from within. But it is obvious that toughening of supranational institutions will only lead to the emergence of more radical Eurosceptic parties, especially in the Eastern Europe.[[131]](#footnote-131)

Nord Stream 2 also presents challenges in terms of coherence and integration within the EU's energy security initiatives. This project, primarily driven by commercial interests, involves collaboration between individual member states, external partners, and private companies. The project has been subject to debates and controversies regarding its implications for energy security and its alignment with EU energy policy objectives. The lack of full coherence with the EU's energy security agenda is evident in the divergent perspectives among member states and the absence of collective decision-making and coordination at the EU level. The Nord Stream 2 project highlights the complexities of balancing economic interests, energy security considerations, and the EU's legal personality.[[132]](#footnote-132) It emphasizes the need for a more coordinated and integrated approach to ensure coherence and alignment with the EU's energy security objectives.

The project's implementation is subject to regulatory frameworks, such as the EU's Gas Directive, and political considerations at the national and EU levels.[[133]](#footnote-133) However, the project has also faced opposition and regulatory challenges, highlighting the complexity of engagement with institutional frameworks. The European Commission has closely monitored the project to ensure compliance with EU rules and the energy security interests of the EU.

While the project does not fall under the jurisdiction of the EU's Gas Directive due to its offshore nature, it still needs to comply with relevant EU legislation and policies, including the Energy Charter Treaty, environmental regulations, and competition rules.[[134]](#footnote-134) The project has been a topic of discussion and evaluation in terms of its compliance with EU energy governance principles, raising questions related to diversification, competition, and security of supply.

Having considered all five EU’s energy policies it is vitally important to conduct a comparative analysis on the policy’s efficiency level to state the extent of a *sui generis* notions’ impact. In fact, according to the foregoing analysis it is already clear that none of the initiative is able to cover perfectly the needs of each Member-State or proved to be comprehensive in its target setting, so it is not able to address the short-term challenges that turns out to be emergent in a matter of security.

**Chapter 3. Policies’ comparison and data envelopment. Working out the answer on the EU *sui generi*s nature’s impact.**

Coming up with the EU’s policy analysis that has been determined by the four criteria that cover *sui generis* notion and compliance with the EU’s energy governance, it is necessary to conduct a comparative analysis of all five policies in order to find out to what extent EU’s *sui generis* nature impacts the promotion of common energy security policy. In other words, under this chapter a *sui generis* concept will be examined whether it has really managed to support the EU in the promotion of its common energy security policy or it has appeared to have no impact in the decision-making processes of European Union.

For the comparative performance it is necessary to consider the previous points that have been highlighted during the analysis of EU’s external energy policies and initiatives. Those are: a *sui generis* notion of legal personality, personal identity, institutional frameworks and the compliance with EU’s energy governance. Considering the previous estimation, it is already possible to divide both policies and initiatives on three groups:

1. High level of performance: Green Deal, Energy Union. Policies and initiatives presented here have reflected a high correlation with the criteria and appeared to be impactful for the EU’s promotion of common energy security policy.

2. Medium level of performance: REPowerEU, Southern Gas Corridor project. Policies and initiatives presented here reflect the sufficient level of the promotion of common energy security policy however, the correlation with the criteria has a certain level of a concerns.

3. Low level of performance: Nord Stream 2 Project. Policies and initiatives presented here do not provide EU with the sufficient level of common energy security policy or even undermine the security structure. The analysis has shown a low level of correlation with the criteria.

This preliminary division is based on the analysis, presented earlier and the compliance of policies with the chosen criteria. To prove the hypothetical distribution, both policies and initiatives will be compared, basing on the analytical evidence that covers a *sui generis* notion of EU in the promotion of common energy security policy.

## **3.1. Comparative analysis of the EU’s energy policies and initiatives.**

To start with, Nord Stream 2 Project and Southern Gas Corridor policies have been chosen for comparison. All of the comparisons will be made through the following criteria: vulnerabilities and advantages in the promotion of energy security policy, impact on Common Energy Security policy and alignment with the *sui generis* notions.

Initially, both Nord Stream 2 Project and SGC have been aimed on the increasing of the direct gas supply to the European market. It was supposed that the promotion of these policies would also increase the energy infrastructure facilitating the direct import of the natural gas. Basically, according to the annual reports, presented earlier, the cooperation seemed really beneficial for both sides, however, there is a number of obstacles that prevented and are preventing the further cooperation of EU with importing countries. It is clear and obvious that the cooperation with Russian Federation has been tough for the decades, as soon as there is still a lot of unfriendly perception of Russia from European Union Member-States.[[135]](#footnote-135) The scandal on the Nord Stream 2 leaks, the ongoing conflict in the Eastern part of Europe and the majority of speculations simply do not allow both sides to continue the promotion of the Nord Stream 2 project. At the same time SGC that is closely tied with the relations with Azrbaijan does not seem to be better than the cooperation with Russia for EU. The very problem that lies here is the absence of the democratic standards and violation of human rights.[[136]](#footnote-136) At that moment, it should be reminded, that external European Policy is based on the guiding fundamental principles of the promotion of the democracy and human rights.[[137]](#footnote-137) Besides this, there is a huge number of money-laundering networks and corruption scandals around Shah Deniz project. [[138]](#footnote-138) However, the human rights violation and corruption seems to have nothing to deal with the overall EU’s perception of Azerbaijan partnership until it doesn’t affect the very European Union. In this case it is notable to pay attention to the fact that TAP being a part of SGC project runs through the land of Greece forcing the local farmers and citizens to give up on their villages and olive groves.[[139]](#footnote-139) An increased NoTAP movement brought nothing but the mass detentions[[140]](#footnote-140). Such a serious resistance can not be left without attention, however, in terms of the potential natural gas supplement coverage up to 93% EU is likely to close its eyes on the local clashes and the numerous democracy and human rights violations from the partner’s side. However, there is no deny, that if *sui generis* concept has been working without any exception EU could have probably stop any cooperation with Azerbaijani government until all the fundamental requirements are met. In this case it is possible to suppose that some of the notions of *sui generis* nature of EU in the promotion of common energy policy gain the upper hand in the decision-making processes. Thus, it is clear, that the EU is ready to sacrifice its common adherence on the promotion of democracy abroad in favor of the promotion of common energy security structure even if it requires to cooperate with states that are not suitable for cooperation in terms of fundamental principles. In this sense, it looks contradictory in the lights of numerous sanctions against the Russian Federation actions.

Speaking on the impacts on Common Energy Security policy it is clear that the promotion of the cooperation on SGC enabled EU to gain enough amount of time to complete the implementation of RES policy and find a way out of the high level dependence on Russian imports. At the same time Nord Stream 2 has shown the instability of EU’s energy policy until the crisis has come. It has been proved by a vast number of researchers and experts, arguing and blaming either Germany for selfish deepening of cooperation with Russia or inconsistent energy structure that distributes incorrectly energy resources.[[141]](#footnote-141) Finally, in case of the alignment with the overall *sui generis* notions, there is a little to really show for EU as a *sui generis* entity in the promotion of common energy security policy in terms of implementation of Nord Stream 2 project. Basically, it contributes to the EU's energy security, but it does not directly align with the notion of promoting common European interests or collective decision-making. Its implementation is driven by commercial and strategic considerations rather than a comprehensive EU-wide energy security policy. While it complies with relevant legal regulations, the project's decision-making process is not fully integrated into the collective decision-making structures of the EU. At the same time, the project's political identity is closely tied to the interests of the participating countries, particularly Russia and Germany. It reflects bilateral agreements and economic considerations between these countries rather than a comprehensive European approach to energy security. The project has faced criticism from some EU member states[[142]](#footnote-142) and European institutions[[143]](#footnote-143) due to concerns over energy dependence and geopolitical implications. The limited alignment of the Nord Stream 2 Project with sui generis notions raises questions about the extent to which the project reflects the collective interests and decision-making processes of the EU. The project's implementation is driven by commercial and strategic considerations, and it has been the subject of intense debate and controversy within the EU. At the same time, the SGC is a complex infrastructure project involving multiple countries, companies, and legal frameworks. It operates within the framework of international agreements and national regulations. The project is supported by the EU through various legal instruments and initiatives, such as the Energy Union and the European Energy Security Strategy, which emphasize collective action and cooperation among EU member states. The project's political identity reflects the shared objective of promoting European energy security and cooperation. It is governed by a complex institutional framework, including the Southern Gas Corridor Advisory Council[[144]](#footnote-144), which brings together participating countries and key stakeholders. The project is supported by the EU's regulatory framework and funding mechanisms, ensuring its alignment with the EU's energy governance structure[[145]](#footnote-145).

Overall, in the comparison of both policies, it is possible to state, that the Nord Stream 2 Project has practically nothing in common with the *sui generis* notion of EU in the promotion of energy security policy. Even if the ongoing crisis is suddenly ends further implementation of this project will be questionable. It is clear, that the more EU acts as a single entity with coordinated and cooperated policy the more stable external policy implementation is. At the same time, SGC can be considered to be on a mid-level performance as soon as it reflects the common willingness of European Community to provide an alternative gas supplements during the ongoing crisis. However, in the light of numerous human rights violations and corruption elements, EU has to sacrifice some of the fundamental principles in the name of possible cooperation with non-EU states. It affects to some extent the unity in decision-making processes and in a long-term may be corrosive for a *sui generis* notion as long as the direct impact of atypical cooperation affects individual Member-States of European Union. In any case, the very fact of a successful implementation of the agreement on the cooperation in energy imports reflects the effectiveness of EU’s *sui generis* nature.

Another variables to be compared here are three initiatives that have been also analyzed during the study. With the preliminary ranking two of initiatives have been placed in the *high-level* performance policies – Green Deal, Energy Union and the third one – REPowerEU has been listed as a *mid-level* performance initiative. The same criteria will be applied for the comparison in order to save the structural notion of *sui generis* concept of the EU’s common energy security policy.

It has been stated that both Green Deal and Energy Union in fact are complementary initiatives, it is clear according to the legislative documents on the interconnection of initiatives and the definition of goals, defined by the European Commission.[[146]](#footnote-146) Thus, for example, The Energy Union focuses on ensuring the security, sustainability, and competitiveness of the EU's energy system, while the Green Deal places a strong emphasis on climate action and environmental sustainability. Moreover, in terms of strategic actions, The Energy Union and Green Deal initiatives involve coordinated actions and measures that reinforce each other. For example, the promotion of renewable energy sources, energy efficiency, and clean technologies is a key component of both initiatives.[[147]](#footnote-147) The Energy Union's Renewable Energy Directive sets binding targets for the share of renewable energy in the EU's energy mix, while the Green Deal aims to increase the overall share of renewables and accelerate their deployment through targeted policies and funding mechanisms.[[148]](#footnote-148) As for REPowerEU it is considered to be a really unordinary initiative, despite the fact that its aims are interconnected with the previous initiatives, REPowerEU’s main goal is to provide a comprehensive response on the Russian threat.[[149]](#footnote-149) The swiftness of the policy decision was a result of the extensive planning that had occurred over a period of more than a decade.[[150]](#footnote-150) In terms of the promotion of REPowerEU, connecting the energy grids of different EU countries was a priority. Thus, for example, President von der Leyen opened one of the last gas pipeline interconnectors between Greece and Bulgaria, calling it a "game changer."[[151]](#footnote-151) Other countries, such as Poland, Lithuania, and Germany, constructed liquefied natural gas (LNG) terminals, which allowed Europe to import large quantities of LNG from the United States and other countries. Overall, the impact of the REPowerEU in the promotion of energy security policy has been a breakthrough. To some extent such an urgent initiative that has become a breath of fresh air of the EU, provided by itself a deeper unification by identifying the main threat for all the Member-States in face of Russian Federation. By doing so, it has become possible to adopt faster the newest energy policy acts.[[152]](#footnote-152) Generally speaking, in comparison with the Green Deal and Energy Union, REPowerEU plays a short-term strategy that is, as it is commonly considered by the researchers, can be a vulnerable point of the initiative.[[153]](#footnote-153) However, by doing so REPowerEU greatly reflects the main notion of EU as a *sui generis* entity that is ready to face any modern challenges and to find the responses on them. Moreover, REPowerEU aligns with sui generis notions by promoting renewable energy deployment and the transition to a low-carbon economy. It recognizes the need for sustainable energy sources and contributes to mitigating climate change, which is a key aspect of the sui generis approach.

Comparing REPowerEU with both Green Deal initiative and Energy Union, it becomes clear that the main difference in the effectiveness of these initiatives in the timely measures that are being established by the European institutions. Thus, it is more common to consider that the promotion of mid and long-term goals is usually dedicated to the Energy Union. Thus, for example, the Energy Union sets out a comprehensive framework and action plan for the EU's energy policy in the mid and long term. It aims to establish a fully integrated internal energy market by promoting the free flow of energy across EU borders that includes harmonizing regulations, eliminating barriers, and improving cross-border infrastructure to facilitate the seamless exchange of energy among member states.[[154]](#footnote-154) Furthermore, the Energy Union encourages the development and implementation of long-term energy strategies at both the national and EU levels. By addressing the structural challenges in the EU's energy sector and promoting long-term planning, the Energy Union plays a vital role in shaping the mid and long-term energy measures of the EU. [[155]](#footnote-155)It provides a framework for member states to align their energy policies, set targets, and implement measures that contribute to the EU's energy security, sustainability, and resilience in the years to come.

Yet, it is not only the Energy Union that promotes mid and long-term strategies for the European Union. Green Deal, as it is noted in the European Commission report, heads the 2050 long-term strategy of EU being climate neutral.[[156]](#footnote-156) This strategy is aimed on the close connection and cooperation with the Paris Agreement, consequently, Green Deal is also aimed at the planning and cooperating with third states in a long-term partnership.[[157]](#footnote-157) Both of these initiatives, as well as REPowerEU, do really promote the *sui generis* notion of the EU in terms of the promotion of common energy security. However, the level of implementation of such a notions differs, as soon as both Energy Union and Green Deal are aimed at the search for the alternatives and cooperation outside the European Union, whereas REPowerEU is dedicated to the internal policy stabilization.

Having considered the abovementioned facts it is possible to state, that Energy Union and Green Deal initiatives justify their placement in the range of *high-level* performance initiatives. Given the fact that REPowerEU has appeared to be a breakthrough among the classical institutional framework of EU it is possible to assess its short-term achievements to be rather positive and to certain extent even emotional by encouraging European Community to accept the challenges of the energy crisis for the better future. However, it is the time that will show the true impact of the REPowerEU in the mid and long-term initiative, as soon as the urgency and emotionality sometimes may not correlate to the resources and options availability of the European Union. That’s why, the REPowerEU placement in the *mid-level* performance seems to be rational.

## **3.2. Data Envelopment Analysis on the estimation of EU’s policies’ effectiveness.**

Based on the non-numeric data the comparative analysis provided earlier needs to be correlated with the estimation of policies based on the metric data. This, allow to provide a comprehensive assessment of the policies by considering both quantitative evidence and qualitative insights. By doing so it will be possible to estimate the impact on Common Energy Security Policy: The impact of an initiative or a project on the EU's common energy security policy is a significant criteria to consider as soon as it examines whether the initiative contributes to enhancing energy security, diversifying energy sources and routes, promoting sustainability, and ensuring a resilient energy system within the EU. Understanding the impact helps assess the initiative's effectiveness in advancing the objectives of the EU's energy security policy. By considering both non-numeric and metric data it is possible to gain holistic understanding of the policies and their impact on common energy security. Thus, not only the numerical indicators and statistical measures will be taken for the analysis, but also the contextual factors, motivations, and perceptions surrounding the policies. This comprehensive evaluation helps to capture the full picture and assess the policies in a more nuanced manner.

To start with, f or the successful implementation of Data Envelopment Analysis (DEA) it is necessary to accomplish and define following steps.

*1. Identification of the DMUs to be analyzed.*

According to the defined scientific research question, it is necessary to evaluate abovementioned initiatives in order to understand what sort of an impact they bring in the promotion of *sui generis* common energy security policy. Thus, these DMUs are Energy Union, Green Deal initiative and REPowerEU initiative. Southern Gas Corridor Policy and Nord Stream 2 Project haven’t been taken for the estimation as soon as they have a wide and unstable range of statistical data that may only disrupt the outcomes of the analysis.

*2. Identification of inputs and outputs to be used in the analysis.*

Basically, inputs are considered to be the resources used by Decision-Making Units (DMUs), while outputs are the result of the production processes. It is necessary to define common inputs and outputs for all the DMUs mentioned above. For input data it will be "Budget Allocation." This variable represents the amount of financial resources allocated to each policy or project. The financial investment can be seen as an input that contributes to the implementation and effectiveness of the policy or project. Higher financial investment indicates a greater commitment of resources, which can support the implementation of initiatives, research and development, infrastructure development, and other activities related to the energy sector. "Renewable Energy Sources" impact as an output variable refers to the extent of the policy or project's contribution to the development and utilization of renewable energy sources. This variable reflects the success of the policy or project in promoting renewable energy and achieving sustainable energy objectives. The correlation between "Budget Allocation" as an input and "Renewable Energy Sources impact" as an output allows to assess of how effectively financial resources are being utilized to drive the development and impact of renewable energy sources. It provides insights into the efficiency of budget allocation in terms of achieving the desired outcomes related to renewable energy promotion. By evaluating the efficiency and performance of DMUs based on the input of "budget allocation" and the output of "Renewable Energy Sources impact", the DEA analysis can identify which policies or projects are making the most efficient use of budget allocations to generate significant positive impacts in terms of renewable energy development. This analysis must reflect the understanding of the relationship between financial investments and renewable energy outcomes, enabling to understand why policymakers and stakeholders make informed decisions and allocate resources more effectively towards sustainable energy transitions.

*3. Normalizing data.*

Since the input and output variables are defined, they have to be normalized into a comparable scale. For these step following measures have been taken. First, it is data collection.

 For the input variable, “Budget Allocation”, the official reports of the European Commission has been taken into the consideration to calculate the correlation of financing the initiatives and polices, defined earlier. Thus, for the REPowerEU, it has been approximately 225 billion euros invested for the promotion of policy for the period from 2021 to 2027.[[158]](#footnote-158) At the same time it has been stated, that the decrease of dependence on the Russian energy imports will allow EU’s budget to save approximately 100 billion euros annually[[159]](#footnote-159), however, the pace of investments shows that with each year EU Member-States have to commit additional 20 billion euros.[[160]](#footnote-160)

At the same time, for promotion of both European Green Deal and Energy Union, it has been decided to invest approximately 90 billion euros in the promotion of technical and financial support for the implementation of green policies from 2021-2027.[[161]](#footnote-161) Moreover, it has been noted, that the total expenditure on the EU’s investment in the green policies must be at least 30% of the whole EU’s budget.[[162]](#footnote-162)

For the initiatives and their impact in RES development it is possible to state the following. Having succeeded in the achievement of 20% target of 2020 a Renewable Energy Directive has established a new goal up to 2023 to bind renewable energy sources up to 32%.[[163]](#footnote-163) It was noted, that it is a REPowerEU initiative to set a number of measures to promote a successful achievement of target set up to 2023. In this sense, according to the provisional agreement, presented by European Commission, successfully accomplished objectives of REPowerEU are able to promote the aim even up to 45% by 2030. Having promoted a massive scale up in energy sector, it was stated that speeding up of renewable energy will allow EU Member-State to succeed in the decrease of energy dependence on imports.[[164]](#footnote-164) Having considered the abovementioned goal to fit for 55% of GHG reduction, it is possible to suggest that REPowerEU allows EU to combine both goals at the same time.

European Green Deal is closely connected with REPowerEU in this sense, as soon as it becomes an additional tool for the promotion of renewable energy capacity.[[165]](#footnote-165) Thus according to the report of European Commission, it is clear, that EU Green Deal takes the role of long-term initiative, that provides climate-neutral energy consumption.[[166]](#footnote-166) Having considered the analytical report of the Renewable Energy Directive, it is possible to trace the changes in the promotion of renewable energy sources.[[167]](#footnote-167) Thus, with help of European Climate Law, established in 2021, an enshrined legislation of EU’s commitment determined specific targets of GHG reduction and provided specific deployment of renewable energy technologies that decreased the emissions up to 24% or around 60% out of initial installed goal.[[168]](#footnote-168) According to the revision of energy efficiency directive, it is 39% binding target to be achieved in the next 10 years with help of European Green Deal initiative.[[169]](#footnote-169)

Energy Union has become also an important tool for the promotion of renewable energy capacity. According to Council regulation on addressing energy prices, it was stated, that Energy Union has to answer on the emerging challenges of high energy prices and promote regulations for the renewable energy policies.[[170]](#footnote-170) With total estimation of Energy Union initiative on the implementation of renewable energy sources, according to the report from the Commission to the European Parliament and the Council on the renewable energy targets, it’s been an approximate 10% of change in the contribution of energy renewables, 5% of change in the contribution of heating and cooling renewables and 5% of change for transport sector.[[171]](#footnote-171) Thus, it is expected to have a further changes in renewable energy sources contribution in next 10 years with an increase up to 17-26%, demonstrating the increase up to 80% of efficiency in the usage of renewable energy sources.[[172]](#footnote-172)

Considering all the abovementioned data it is necessary to provide a normalized data for the further estimation. For the data normalizing of European Green Deal initiative and REPowerEU initiative it is important to consider the correlation between the actual data with the goals installed earlier. For the Energy Union the efficiency will be estimated in the overall tendency in the growth of renewable energy sources implementation, starting from 2011 up to 2022 compared with the initial prediction of RES growth.

* Green Deal: (60 / 100) x 100 = 60%
* REPowerEU: (20 / 32) x 100 = 62.5%
* Energy Union: (10 / 32) / x 100 = 31.25%

For the input data normalization the budget for the EU budget for the period from 2021-2027 has been taken into the consideration in the amount of 1,824.3 billion euros.[[173]](#footnote-173) Thus, the calculations will be presented as following:

* Green Deal: (547 290/ 1 824 300) x 100 = 30%
* REPowerEU: (225 000/ 1 824 300) x 100 = 12.3%
* Energy Union: (547 290/ 1 824 300) / x 100 = 30%

*4. DEA analysis implementation*

Having successfully normalized the data for input and output variables, it is necessary to conduct the DEA analysis with help of CCR model. In fact, there is a number of models available for DEA analysis, however CCR has been chosen for the better evaluation of the relative efficiency of decision making units presented in the study. As soon as model allows to calculate an efficiency score for each DMU then it is possible to conduct the DEA analysis with help of Python code presented in the Annex.

|  |  |  |
| --- | --- | --- |
| № | DMU | Efficiency Score |
| 1 | Energy Union initiative | 0.5000 |
| 2 | Green Deal  | 0.5200 |
| 3 | REPowerEU  | 0.6064 |

Having compiled the code and transferred the gained data into the graphs it is possible to formulate the following conclusion of DEA analysis. The efficiency score that has been gained with help of DEA methodology of Charnes can be presented as following[[174]](#footnote-174):



**Annex 1&2. Estimation of DMUs in the DEA**

Considering the gained data and previous comparative analysis it is possible to note once again a breakthrough character of the REPowerEU initiative in the promotion of EU’s common energy policy and the RES implementation. At the same time, given efficiency score underlines the sustainability of the Energy Union and Green Deal initiatives reflecting their mid and long-term impact. As a result, DEA provided the efficiency and performance of initiatives in frames of the promotion of common energy security within the EU. By evaluating the input and output variables, DEA assessed the relative performance of these initiatives and their alignment with the *sui generis* nature of the EU. At the same time, the *sui generis* nature of the EU implies that it has unique characteristics and operates in a distinct manner compared to traditional international organizations. In the context of energy security, the EU's *sui generis* nature is reflected in its ability to establish and implement common policies, coordinate actions among member states, and leverage its institutional frameworks.

# Conclusion

The European Union, during its existence, has managed to provide a complicated and comprehensive system of energy security based on the common guiding principles of European Community. This system of common energy security is, as it was examined in the study, supported by the *sui generis* notion of European Union that allows the Union itself to act in an efficient way towards the promotion of a sufficient energy security level.

As a result of the complex study of a *sui generis* concept of the EU’s nature it is possible to highlight the results gained with the accordance to the defined tasks. First, the *sui generis* concept analyzed here is presented as a unique nature of European Union, stipulated with a number of features that have been emerged during the whole time of being of European Union. In the first chapter, with help of ontological approach, it has been revealed that European Union challenges three notion of traditional international entity (or international actor). These are notions of legal personality, political identity and institutional framework. Both rational and constructivist approaches in the ontological analysis have reflected the uniqueness of European Union in terms of these notions and have demonstrated the ability of EU to sustain its nature with help of such a unique features.

Second, with help of critical approach and the nominalist vision of ontological concepts it has been stated that on the fundamental level the understanding of EU being a *sui generis* entity allows to analyze and construct the behavior of European Union. However, it has also been stated that there is no 100% accuracy in the analysis of EU’s decision-making processes through the *sui generis* thinking on the Union. To greater extent, it has been concluded that a *sui generis* thinking does not allow a researcher to construct or to predict a further steps to be taken with a great accuracy as soon as there is also a number of behavioral factors of both Member-States and non-member entities that affect the political course of European Union.

Third, in the second chapter a range of EU energy initiatives and policies were estimated to understand, how exactly *sui generis* notions impact on the energy security policy. Two external policies (Southern Gas Corridor and Nord Stream 2 Project) and three initiatives (REPowerEU, Green Deal, Energy Union) have been chosen for the estimation of European Union capacity in the promotion of its common energy security policy. According to the quantitative analysis, it has been shown that all five polices chosen are able to provide to a certain extent a *sui generis* notion of EU for the implementation and the development of common energy structure of the EU. With the help of comparative analysis, all five policies have been ranged on three groups: low-level performance, medium-level performance and the high-level performance. It has been shown, Green Deal and Energy Union appeared to be the initiatives with the high-level performance, reflecting their abilities for the mid and long-term energy security implementation and the promotion of energy resilience. REPowerEU has shown a great capacity for the reflection of EU’s *sui generis* notions, however, due to a short-term policy application, REPowerEU has been placed to a mid-level performance. At the same time, some of the initiatives have appeared to be less effective or even disruptive towards the promotion of common energy security policy. Thus, as it was shown in the case of Nord-Stream 2 project, neither the notion of political identity nor the institutional framework were able to apply an impact as soon as Member-States were not ready to act as single one and trust to a sufficient extent the EU institutions. This case indicates that the *sui generis* concept is not an absolute feature and can not be applied for every initiative. Southern Gas Corridor, in turn, is placed to the mid-level of performance, as soon as it reflects the common willingness of European Community to provide an alternative gas supplements during the ongoing crisis. However, due to an impossibility of EU to provide its fundamental principles of external cooperation, a *sui generis* notion is not likely to be applied to a full extent.

Finally, with the help of DEA analysis it has been shown, that all three energy security initiatives correlate to the defined level of applicability. According to a quantitative analysis, both Energy Union and Green Deal initiative have shown the medium level of the efficiency score, that in fact reflects their sustainability in terms of the ongoing energy crisis, long-term development goals and comprehensive cooperation with non-member states. REPowerEU showing an efficiency score higher than Energy Union and Green Deal has indicated its potential to become a leading initiative in ensuring common energy security policy of the European Union.

Taking every single thing into the consideration in this study, it is possible to conclude that a *sui generis* nature of EU indeed allows European Union to reconsider the common energy security policy in a way it makes Union less dependent on the energy supplies and makes its own domestic and foreign policy less vulnerable. In fact, the *sui generis* nature of European Union helps to both understand the energy security policy conducted by union and helps Member-States to take the most appropriate decisions acting as single one entity. It is possible to state, that a *sui generis* nature of EU may allow European Union to reconsider the common energy security policy in a way it makes Union less dependent on the energy supplies and makes its own domestic and foreign policy less vulnerable. However, it is still important to consider the following. With the application of *sui generis* thinking of the EU, it is not possible to give a totally accurate predictions on the following energy policy conducted by the Union, but it is possible to find the vulnerable points of EU’s decision-making processes and institutions. At the same time, the *sui generis* notions of European Union will play a crucial role in the development and fostering the future system of energy security. Therefore, whether the EU could become less dependent on the energy imports depends only on its further cumulative actions.

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#

# Annex

Python codes

1. Estimation of DMUs in the DEA

import numpy as np

import pandas as pd

def dea\_ccr(inputs, outputs):

    df = pd.DataFrame({"DMU": ["Energy Union", "Green Deal", "REPowerEU"],

                       "Input 1: Budget Allocation": inputs[0],

                       "Output: RES impact": outputs})

    slacks = df.iloc[:, 1:].sum(axis=1) - df["Output: RES impact"]

    efficiency\_scores = 1 - slacks / df["Output: RES impact"]

    return efficiency\_scores

inputs = np.array([[30, 30, 12.3]])

outputs = np.array([60, 62.5, 31.25])

efficiency\_scores = dea\_ccr(inputs, outputs).abs()

results\_df = pd.DataFrame({"DMU": ["Energy Union", "Green Deal", "REPowerEU"],

                           "Efficiency Score": efficiency\_scores})

print(results\_df)

2. Data visualization (DMU Efficiency scores):

import matplotlib.pyplot as plt

import numpy as np

# Create a list of DMUs and their efficiency scores

dmus = ['Energy Union', 'Green Deal', 'REPowerEU']

efficiency\_scores = [ 0.5000, 0.5200, 0.6064]

# Convert efficiency scores to percentages

efficiency\_scores = [score \* 100 for score in efficiency\_scores]

# Determine the number of DMUs and angles

num\_dmus = len(dmus)

angles = np.linspace(0, 2 \* np.pi, num\_dmus, endpoint=False).tolist()

angles += angles[:1]  # Add the first angle to complete the circle

# Create a polar plot

fig, ax = plt.subplots(subplot\_kw={'projection': 'polar'})

# Plot the efficiency scores as spikes

ax.plot(angles, efficiency\_scores + [efficiency\_scores[0]], color='red', linewidth=2, marker='o')

# Set the radial limits to 100% (or 1)

ax.set\_ylim(0, 100)

# Set the labels for each DMU

ax.set\_xticks(angles[:-1])

ax.set\_xticklabels(dmus)

# Set the title of the plot

plt.title('Efficiency Scores of DMUs')

# Show the plot

plt.show()

ax.set\_xticks(angles[:-1])

ax.set\_xticklabels(dmus)

plt.title('Efficiency Scores of DMUs')

plt.show()

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