## Bachelor's Thesis

Challenges and Roadblocks in Achieving Energy Security in Europe

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What is blocking the development of energy security in Europe?

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Public Governance across Borders

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## **Abstract**

European energy security serves as a vital pillar of European prosperity, exerting substantial influence on the region's economy and citizens' day-to-day lives. This paper undertakes an analytical exploration of the dynamics shaping European energy security, invoking the theoretical frameworks of liberal intergovernmentalism, neofunctionalism, and liberalism, with a particular emphasis on the former two. Three hypotheses are proposed to ascertain the extent to which facets of liberal intergovernmentalism and neofunctionalism can elucidate the evolution or obstruction of European energy security. The first two hypotheses, rooted in liberal intergovernmental theory, investigate the impacts of domestic lobbying on the determination of national energy interests and assess the implications of national interests and power relationships on intergovernmental negotiations, respectively. The third hypothesis, deriving from neofunctionalist theory, scrutinizes the role and potency of supranational European institutions, along with the consequences of their reinforcement, on the integration of European nations in the energy sector. The findings reveal a potent influence of domestic lobbying on a country's energy interests, yet these cannot be wholly attributed to this factor alone. It was also discerned that intergovernmental negotiations within the EU are considerably swayed and even impeded by national interests. Thus, it is incorrect to attribute the stagnation of European energy security's further development to supranational institutions; rather, the blame falls on member states' blockades, which hinder and obstruct collective energy sector initiatives.

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#### 1. Introduction

"Secure, sustainable and competitive energy is of fundamental importance to the EU's economy, industry and citizens and a core goal of EU policy." 1

The energy sector is a critical infrastructure that underpins the economic and social wellbeing of Europe. In recent years, the issue of energy security has emerged as a key concern for policymakers, industry leaders, and the public, as Europe seeks to reduce its dependence on imported energy sources, ensure a stable and secure energy supply, and transition to a low-carbon energy system. "The IEA defines energy security as the uninterrupted availability of energy sources at an affordable price."2This implies that both availability and affordability are variables upon which energy security depends. It is worth noting that both variables are closely interlinked, as availability, for example, can be impeded by a lack of affordability. Availability can also be constrained by terrorist attacks on critical infrastructures and cyberattacks. In my bachelor's thesis, I will mainly focus on energy security in Europe, which relates to access to resources at affordable prices, and hence, secure access to energy at affordable prices. Despite significant investments and policy efforts aimed at achieving energy security in the region, the issue remains a challenge, and a deeper understanding of the factors that are blocking progress is needed. The investigative query, "What is blocking the development of energy security in Europe?", constitutes a crucial and contemporary examination that strives to discern the fundamental components contributing to the energy security challenge in the region. The question is particularly relevant in the current context of increasing geopolitical tensions, rising energy demand, and climate change, which are creating new challenges and opportunities for the energy sector in Europe. The importance of the topic of energy security in Europe cannot be overstated, as it has significant implications for the region's economic competitiveness, environmental sustainability, and social well-being. A secure and reliable energy supply is essential for maintaining the functioning of critical infrastructure, such as transportation networks, hospitals, and communication systems, and for supporting key economic sectors, such as manufacturing, agriculture, and services. Considering these challenges and opportunities, understanding the factors that are blocking progress towards achieving energy security in Europe is essential for developing evidence-based policy recommendations and strategies that can address these challenges effectively. A study of all European countries would go beyond the scope, which is why I will focus on the two most powerful countries of the EU and conduct case studies of the two countries Germany and France. The Franco-German cooperation at the EU level is

<sup>&</sup>lt;sup>1</sup> (ŠEFČOVIČ, 2011)

<sup>&</sup>lt;sup>2</sup> (Agency, 2023)

considered the engine of the EU, which is why the case studies of both countries can contribute to solving the blockade to the further development of energy security in Europe through their influence within the EU. This leads to the knowledge gap of the topic, what policies and instruments have been successful to improve energy security in Europe, and what factors have influenced the success or failure of these policies. Furthermore, another knowledge gap is how secure the energy supply of the different countries is in comparison and how exactly this can be assessed. I will try to close this knowledge gap by analyzing exactly how secure the energy supply of the two countries and Germany is and to which factors this is linked. Furthermore, I will give an outlook into the future and try to define what will secure Europe's energy security in the future and finally, at the end of my work, I will answer the research question and make policy recommendations that will optimize the further development of Europe's energy security.

#### 2. Theoretical Framework

It is essential to study the subject from many theoretical vantage points in order to comprehend the obstacles preventing the expansion of energy security in Europe. The three main frameworks examined in this study are liberal intergovernmentalism, liberalism, and neofunctionalism. These viewpoints shed light on the institutional effects, internal politics, power dynamics, and collective activities that affect Europe's energy security.

Liberal intergovernmentalism emphasizes how decisions and discussions impacted by national politics and domestic politics may obstruct energy security. Obstacles can be caused by power imbalances between governments and divergent internal agendas. Neofunctionalism places a strong emphasis on the function of European institutions and the growth of a cohesive internal energy market. It looks at the beneficial ripple effects of greater market integration and collaboration. Liberalism places a strong emphasis on internal market integration, market competition, and liberalization.

The upcoming section will delve into each theoretical perspective, in a concise manner. It will provide an overview of the key concepts and insights offered by each perspective in relation to energy security in Europe. The focus will be on understanding the role of domestic politics, power dynamics, regional integration, and the influence of liberal economic policies on energy security. By examining these perspectives, the research aims to gain a comprehensive

understanding of the challenges and potential solutions for enhancing energy security in Europe.

#### 2.1 Liberal Intergovernmentalism:

Liberal intergovernmentalism offers important insights into the elements preventing the growth of energy security in Europe. The theory places a strong emphasis on the value of intergovernmental negotiations and judgments shaped by domestic politics and national interests. In the context of liberal intergovernmentalism, various domestic actors, including interest groups, political institutions, and individuals, play a vital role in determining a state's preferences. As stated by Milner, "these actors' influences at the domestic level often translate into the international sphere, guiding the course of negotiations and policy-making."<sup>3</sup>

By analyzing these negotiations in detail, the "winset" can be identified, the range of acceptable outcomes that domestic interest groups are willing to accept. According to Moravcsik, liberal intergovernmentalism recognizes that states are driven by a mix of economic, political, and strategic interests, and that they use international institutions and negotiations to promote their national interests<sup>4</sup>.

There is also a significant role played by the power relations between states. Blockages can arise when domestic policies are incompatible and potential rivalries exist. A blockade is more likely to occur when power differences are minor.

Liberal intergovernmentalism can assist explain the causes of Germany and France's divergent energy goals and their effects on energy security since both are seen as significant and strong nations in Europe. Nuclear energy has historically been a major source of reliance for France, who sees it as a crucial part of its future energy balance. Germany, on the other hand, has switched more and more toward renewable energy, and this year it completely phased out nuclear energy by shutting down its final three nuclear power reactors. Conflicts and disputes between the two nations are possible as a result of these divergent energy priorities, particularly when it comes to the course of EU energy

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<sup>&</sup>lt;sup>3</sup> (Millner, 2020)

<sup>&</sup>lt;sup>4</sup> (Moravcisk, 1993)

policy. Different energy objectives and interests may cause stalemates and obstructions in the European energy security process.

The reliance on non-state players, such as business groups, non-governmental organizations, and civil society, in shaping states' preferences and influencing political results is another feature of liberal intergovernmentalism. The liberal intergovernmental perceptions emphasizes negotiations and interactions while acknowledging the significance of domestic politics, economic interests, and the role of non-state players in influencing political decisions. It recognizes the use of international organizations and agreements by member nations to further a range of economic, political, and strategic objectives.

Liberal intergovernmentalism further demonstrates the significance of power dynamics between nations. Incompatible internal policies and interest conflicts are more frequent and result in blockades when power disparities are minimal. Germany may ignore its influence over other EU members and aggressively pursue its energy interests since it has a robust economy. On the other hand, a nation like France that has comparable might may likewise defend its own interests. These national mismatches may cause friction and disputes over energy policy, impeding the advancement of energy security in Europe.

For instance, the nuclear energy policy of France and the nuclear phase-out in Germany provide a specific illustration of the effects of liberal intergovernmentalism in negotiations about energy security. Nuclear energy has a long history in France, which views it as a reliable and affordable source of power. Germany, on the other hand, has made a firm decision to phase out nuclear energy and rely more and more on renewable energy sources, especially in the wake of the Fukushima accident. Conflicts and tensions between the two nations are a result of these divergent perspectives, notably with regard to the future of EU energy policy.

Negotiations and decisions at the European level heavily depend on national interests and priorities in the energy sector. Liberal intergovernmentalism can also aid in comprehending the challenges and hindrances to increasing energy security in Europe. The factors that lead to disagreements and deadlocks in energy policy may be determined by looking at internal discussions and interests as well

as power dynamics between nations. This knowledge can aid in the development of solutions that support and improve energy security in Europe.

In conclusion, liberal intergovernmentalism demonstrates that fundamental determinants of the development of energy security in Europe are internal discussions, power dynamics, and disparate energy interests amongst nations. A detailed examination of these elements offers a better comprehension of obstacles and disputes in energy policy and can suggest solutions. Energy security advancements may be made by encouraging improved member state coordination and collaboration.

#### 2.2 Neofunctionalism:

Neofunctionalism, as a theoretical perspective, gives insightful explanations of how energy security has evolved in Europe. Drawing from the insights of Ernst B. Haas, it proposes that integration in one sector, such as energy, can create pressure for further integration in related sectors<sup>5</sup>. Neofunctionalism, in contrast to liberal intergovernmentalism, adopts a different strategy to achieve energy security and highlights the significance of regional factors as well as European institutions like the European Commission and the European Parliament.

The emphasis on integration and cooperation between European institutions and member states is one of the key features of neofunctionalism. The idea emphasizes the significance of developing an integrated energy internal market with the goals of fostering competition, removing trade obstacles, and enhancing member state collaboration. This integrated market, as Haas suggested, can promote the free movement of capital, investments, and infrastructure development, enhancing Europe's overall energy security.

Neofunctionalism further emphasizes the importance of spillover effects in advancing energy security, a concept highlighted by Haas<sup>6</sup>. Spillover effects describe how political decisions and behaviors extend into other policy spheres. Positive spillover effects occur in the context of

<sup>&</sup>lt;sup>5</sup> (Haas, 1958)

<sup>&</sup>lt;sup>6</sup> (Haas, 1958)

energy supply security when collaboration and integration within the energy internal market result in increased supply security and resilience. When uniform standards and crisis management strategies are used, for instance, the stability and dependability of the energy supply may be improved, improving energy security throughout Europe.

Neofunctionalism provides a contrasting perspective to liberal intergovernmentalism, particularly in terms of the approach to achieving energy security. Neofunctionalism places an emphasis on the significance of supranational institutions and further policy integration, in contrast to liberal intergovernmentalism, which stresses discussions and decision-making among states based on domestic politics and national interests. It sees the development of an integrated energy internal market as a crucial step towards improving energy security.

Additionally, according to neofunctionalism, member states may work together more effectively and become increasingly dependent on one another to attain energy security. It recognizes that concerns relating to energy transcend national boundaries and need for collaborative efforts to effectively solve them. European nations may cooperate to address shared issues and guarantee a safer and more sustainable energy future by pooling resources, exchanging knowledge, and coordinating actions.

In summary, neofunctionalism provides a theoretical framework that explains the development of energy security in Europe. Neofunctionalism sheds light on how energy security can be achieved through improved cooperation and integration by focusing on the function of European institutions, the development of an integrated internal energy market and the possible positive spillover effects. This view contrasts with liberal intergovernmentalism, which places more emphasis on discussions between nations and their respective national interests. The focus on supranational institutions and collective action in neofunctionalism makes it a useful paradigm for understanding possible pathways to energy security within the EU.

#### 2.3 Liberalism:

The theory of liberalism is crucial for understanding politics and how it affects other spheres, such as the security of the energy supply. Liberalism places a strong emphasis on the value of free markets, individual liberty, and little government involvement in the economy. The liberal focus on free markets and the absence of government action can be perceived as a barrier to the discussion of energy security in Europe and might potentially hinder relevant attempts to address these challenges. As Larry Hughes discusses in his work "The four 'R's of energy security", a liberal economic policy can foster trade and competition in the energy industry. However, Hughes also warns that this liberal economic policy might make countries more vulnerable to supply disruptions, especially during times of crisis, as it may not provide sufficient robustness, redundancy, or resilience in energy systems<sup>7</sup>.

The idea of energy security, which frequently necessitates actions like assuring domestic supply and diversifying energy sources, could be argued to be at odds with liberalism's emphasis on trade and interdependence. Furthermore energy corporations might be influenced by the profit-driven character of liberal economic systems to prioritize short-term gains over long-term objectives for energy security. These competing interests illustrate the complex relationship between liberalism and energy security and highlight the need for careful management of these issues.

## 3. Hypotheses

The following section presents the formulated hypotheses and explains their significance for the research.

## 3.1 Hypothesis 1

H1: If the boundaries between political office and economic office become blurred, then lobbying influence on political decisions increases.

Liberal intergovernmentalism underscores the role of domestic politics in shaping international negotiations and decisions. According to this theory, governmental preferences in international negotiations stem from domestic bargaining among various actors, including lobbyists and economic interests. Consequently, the hypothesis focuses on the boundaries between politics and economics within nation-states.

<sup>&</sup>lt;sup>7</sup> (Hughes, 2009)

## 3.2 Hypothesis 2

H3: If different national energy interests are strongly pronounced and power relations are balanced within EU member states, then this can lead to blockades in the introduction of new legislative initiatives, regulations, and directives at the EU level.

The theory of liberal intergovernmentalism suggests that national preferences and relative power balances shape the negotiation outcomes. Within the context of this theory, the third hypothesis is critical to the topic of energy security in Europe, as it provides a model for how diverging national energy interests and power balances can obstruct the development and implementation of EU-wide energy policies. Thus, by examining this hypothesis, the validity of liberal intergovernmentalism in relation to the EU's energy policy can be tested.

## 3.3 Hypothesis 3

H3: If supranational institutions within the EU are empowered to shape and enforce energy policy, then the development and integration of energy security across member states may be significantly accelerated.

This hypothesis aligns with the neofunctionalist theory, which highlights the role of supranational institutions, like the European Commission, in fostering integration among member states. In the context of energy security, the hypothesis suggests that if these institutions are empowered, the advancement of energy security across the EU can be notably accelerated. This proposition allows me to test the influence of neofunctionalism in shaping EU energy policy.

#### 4. Research Design

As a researcher interested in energy security in Europe, I will employ a mixed-method approach to analyze various data sources. My research design encompasses and qualitative content analyses, welcher eine comparative analysis vorauss geht in order to gain comprehensive insights.

For the comparative analysis, I will examine and compare the energy and electricity mix of Germany and France. I will collect data representing the shares of different energy sources in both countries. This comparative analysis will allow me to quantify the differences and similarities in energy preferences between the two countries and draw conclusions about their dependencies on specific energy sources and suppliers.

Furthermore, I have collected data from Official Documents, Public Statements, and Academic Sources. These documents serve as the basis for my qualitative analysis. Using the ATLAS.ti software, I have created categories and codes assigned to different themes, which in turn are linked to my hypotheses and the research question.

With these codes, I conducted a qualitative content analysis to systematically examine the contents of the documents and identify relevant themes, patterns, and connections. This qualitative analysis allows me to capture the policies and strategies in the field of energy security more comprehensively and interpret their impacts.

The results of my comparative and qualitative content analyses will enable me to draw conclusions and formulate policy recommendations. I will examine factors that impede the advancement of energy security in Europe and identify aspects that may also contribute to its progress. In my research, my primary focus will be on the theories of Liberal Intergovernmentalism and Neofunctionalism to interpret and understand energy policies on national and European levels, using Liberalism as a reference theory to provide a broader perspective.

The emphasis on Liberal Intergovernmentalism and Neofunctionalism enables a meticulous exploration of how national preferences and supranational entities drive the EU's energy policies, while the reference to Liberalism contributes to comprehending the influence of broader economic and political liberties in these dynamics.

This approach will enable me to investigate the processes influencing Europe's energy security. The insights gained could contribute to enhancing European energy security and form the basis for potential policy recommendations.

#### 4.1 Data collection

In this study, I will utilize triangulation for data collection to enhance the validity, reliability, and consistency of the research findings. Triangulation will involve the use of three distinct data sources: Official Documents, Public Statements, and Academic Sources. As I will employ a mixed-methods approach, triangulation offers the benefit of enriching the qualitative content analysis drawn from various papers, regulations, and laws pertinent to energy security at the EU level, as well as within Germany and France.

Official Documents: These will primarily consist of policy documents, laws, and regulations from the EU, and from the governments and parliaments of France and Germany. The analysis of these documents will provide an in-depth understanding of the current state of energy policies and regulations at the national and supranational levels. This may include scrutinizing the text of regulations, directives, policy papers, and enacted laws related to energy security.

Public Statements: In order to capture the discourse and rhetoric surrounding energy security, I will analyze public statements made by key actors. This could include speeches, press releases, interviews, and statements on official websites of relevant government ministries, or from key individuals involved in shaping energy policy. These public statements can offer insights into the political intent, priorities, and positioning of the key stakeholders in the energy security discussion.

Academic Sources: These will form the basis of a comprehensive literature review, focusing on scholarly works related to energy security in Europe. The literature review will summarize the existing theories, concepts, debates, and challenges in the field. It will include articles from academic journals, books, research reports, and other scholarly publications. This approach will provide a theoretical backdrop against which the findings from the official documents and public statements can be contextualized and understood.

Together, these three data sources will allow me to gain a comprehensive perspective on energy security in Europe, and to analyze the patterns and mechanisms influencing its development.

#### 4.2 Data Analysis:

The analysis of domestic lobbying and EU lobbying involved a rigorous approach to data analysis, adhering to established scientific principles. To ensure the validity and reliability of the findings, a systematic categorization framework was applied.

The first category, "Lobbying Actors," was devised to distinguish between various actors involved in the lobbying process. Within this category, companies and lobbying organizations were assigned code A1, while (former) politicians were designated code A2. This categorization allowed for a comprehensive understanding of the diverse range of actors exerting influence in domestic and EU politics.

The second category, "Lobbying Strategies," aimed to capture the different approaches employed by lobbyists to achieve their objectives. This encompassed media campaigns and framing techniques, identified by code B1, as well as personal meetings and briefings, represented by code B2. Additionally, the use of financial rewards and job offers by lobbyists was assigned code B3. By employing these codes, the study systematically analyzed and examined the specific strategies employed in lobbying activities.

The third category, "Lobby Influence on Domestic and EU Politics," aimed to explore the impact of lobbying on domestic energy policy formulation and the shaping of national energy positions. Within this category, successful agenda setting and framing were assigned code C1, while the successful influencing of political positions and decisions was denoted by code C2. At the EU level, the study also examined the successful agenda setting and framing (code C11) as well as the successful influencing of political positions and decisions (code C21). The application of these codes facilitated a comprehensive analysis of lobbying's influence on both domestic and EU politics.

Moving on to the examination of Liberal Intergovernmentalism within the European energy sector, the fourth category delved into key aspects and dynamics. Intergovernmental negotiations were assigned code D1, national interests were represented by code D2, and power relations were denoted by code D3. The utilization of these codes enabled an in-depth investigation into the role of Liberal Intergovernmentalism and its implications for decision-making processes and policy outcomes within the European energy sector.

Similarly, within the context of Neofunctionalism, the fifth category provided a lens to explore its influence within the European energy sector. This involved investigating policy harmonization (code E1), recognizing the important role of the EU Commission (code E2), and understanding the influence of EU legislation (code E3). These codes facilitated an examination of the concepts and implications of Neofunctionalism for policy coordination and integration in the European energy sector.

By adhering to this systematic categorization framework and applying the corresponding codes, the study ensured a comprehensive and scientific analysis of the data sources. This approach allowed for the robust exploration of the influence of lobbying on domestic politics, as well as a detailed examination of the key aspects of Liberal Intergovernmentalism and Neofunctionalism within the European energy sector.

## 5. Comparison between Germanys and France's Energy mixes

The following comparative analysis explores the energy and electricity mixes of Germany and France to assess national energy interests, dependencies, and energy security implications. Germany, currently transitioning to more renewable sources, is still significantly reliant on fossil fuels, highlighting the role of energy diversification for security. France, on the other hand, demonstrates distinct energy dynamics, with a significant contribution from nuclear power and different dependencies. Understanding these countries' energy landscapes is crucial to grasp the challenges and opportunities they face and their influence on EU-level energy discussions.

#### 5.1 German energy mix

According to the facts presented for 2021, coal and coal products accounted for 36 % of the German energy mix and were thus the largest energy source in the German energy mix in percentage terms. This was followed by natural gas, which contributed 27% to the German energy mix and is expected to continue to play an important role in the German energy mix in the coming years, in contrast to coal and oil. Crude oil and petroleum products accounted for 15 % of the German energy mix. Thus, fossil fuels accounted for 78% of the German energy mix in 2021. The remaining 22 per cent of

<sup>&</sup>lt;sup>8</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>9</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>10</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

Germany's energy mix can be broken down as follows: 16 percent<sup>11</sup> comes from renewable energies, which are generated by biomass, wind energy, solar energy and water energy. The remaining 6 percent<sup>12</sup> of Germany's energy mix comes from nuclear energy, but due to the 19th amendment of the Nuclear Energy Act<sup>13</sup>, the last three nuclear reactors in Germany were shut down on 15 April 2023, marking the end of 66 years of nuclear power plant operation in Germany.

## 5.2 German electricity mix

In 2021, Germany fed 517.7 billion kilowatt hours of electricity from domestic production into its electricity grids and imported an additional 51.7 billion kilowatt hours from abroad, but 70.3 billion kilowatt hours of electricity were also exported from Germany to other countries.<sup>14</sup>

In the German electricity mix, the distribution of energy sources is significantly different from the German energy mix, with fossil fuels accounting for less than half of the energy sources and renewables accounting for the largest percentage of energy sources in the German electricity mix. Renewable energies accounted for 42 percent of the electricity mix in Germany in 2021. 15 The largest share of this was generated by wind power at 21.5 percent, while 8.7 percent was generated by photovoltaics, 5.8 percent by biogas and 3.6 percent by hydropower<sup>16</sup>. At 13 percent, the share of nuclear power in the German electricity mix is also significantly higher than in the energy mix<sup>17</sup>, but will not play a role in the future due to the shutdown of the last three nuclear power plants on 15 April 2023, unless it is replaced by imports, for example from France. The share of solid fossil fuels continues to play an important role in the German electricity mix with a share of 29 percent. Of the 29 per cent of solid fossil fuels, around 60 per cent is lignite, whose demand is almost exclusively covered by domestic production, and 40 per cent is hard coal, 100 per cent of which is imported. 18Oil and petroleum products play an insignificant role in the German electricity mix, accounting for about 1 percent.<sup>19</sup> In contrast, natural gas, as well as in the energy mix, is also important in the electricity mix and accounted for 15 per cent in 2021<sup>20</sup> and is expected to play an important role in the next few years due to the shifts in the energy market triggered by the war in Ukraine in connection with the German energy transition. Due to the lack of Russian gas, Germany was forced to find a quick solution and manages to complete three floating LNG terminals within 10 months and plans more, so

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<sup>&</sup>lt;sup>11</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>12</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>13</sup> (Bundesministerium-der-Justiz, 2022)

<sup>&</sup>lt;sup>14</sup> (Statistisches-Bundesamt, destatis, 2022)

<sup>&</sup>lt;sup>15</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>16</sup> (Statistisches-Bundesamt, destatis, 2022)

<sup>&</sup>lt;sup>17</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>18</sup> (Statistisches-Bundesamt, destatis, 2022)

<sup>&</sup>lt;sup>19</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>20</sup> (European-Commission, Germany Energy Snapshot 2022, 2022)

that in the winter of 2023/2024 about one third of the current gas imports can be covered by the floating LNG terminals<sup>21</sup>.

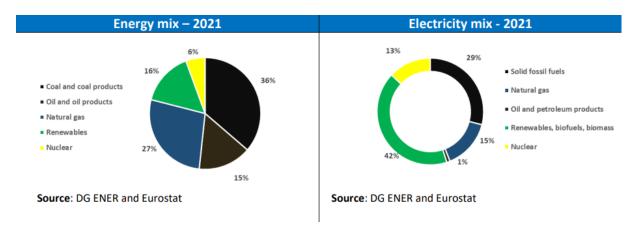


Figure 1: Germany Energy Snapshot 2021 (European Commission, 2022)

#### 5.3 Germany's dependence on energy imports

As already explained, in recent decades and also in 2021, coal as an energy source accounted for the proportionally largest share of Germany's energy and electricity mix. In Germany, lignite and hard coal are used to generate electricity; almost 100% of the demand for lignite is covered by domestic mining (insert source), in contrast to the generation of electricity from hard coal, which has no longer been mined in Germany since 2018 and therefore has to be imported. In 2021, Germany imported 32 387 227 tons of hard coal, of which 18 339 774 came from Russia<sup>22</sup>.

Oil as an energy source is even more dependent on imports, because although oil is produced in Germany, the amount produced only covers about two percent of consumption in Germany. In 2021, about 1.8 million tons of crude oil<sup>23</sup> were produced in Germany, which compares to an imported crude oil volume of 81,403 million tons from abroad, of which Russia was by far the largest supplier with 27,741 million tons, followed by the USA with 10,173 million tons<sup>24</sup>.

These figures also illustrate, in relation to the fossil fuel oil, the heavy dependence on imports from abroad and from Russia in particular. This is no different when looking at the figures for domestic production of natural gas and imports. In Germany, 4.5 billion cubic metres<sup>25</sup> of natural gas were

<sup>&</sup>lt;sup>21</sup> (ZDF, 2023)

<sup>&</sup>lt;sup>22</sup> (Statistisches-Bundesamt, destatis, 2023)

<sup>&</sup>lt;sup>23</sup> (BVEG(Bundesverband Erdgas, 2023)

<sup>&</sup>lt;sup>24</sup> (Bundesamt-für-Wirtschaft-und-Ausfuhrontrollen, 2022)

<sup>&</sup>lt;sup>25</sup> (Statista-Research-Department, Erdgasförderung in Deutschland in den Jahren 1970 bis 2021, 2023)

extracted in 2021, which is equivalent to an imported amount of natural gas of 84. 808 billion cubic metres, of which 55.443 billion cubic metres were imported from Russia in 2021<sup>26</sup>. In summary, fossil fuels accounted for 78% of the German energy mix in 2021 and due to the low domestic production volumes, the majority of fossil fuels were imported from abroad. In particular, it should be noted that Russia was the largest importer of all three energy sources (coal, oil, gas). The greatest dependence on Russia was in the case of gas, where about 65.33 per cent of imports came from Russia. The dependence on Russia was only slightly lower in the case of stone oil, 100 percent of which was imported as of 2019 and of which approximately 57.33 percent of imports came from Russia. The lowest dependency on Russia was for oil, although there was also a serious dependency on Russia, with approximately 34.06 per cent of imports coming from Russia.

#### 5.4 French energy mix

The French energy mix differs significantly from the German energy mix, particularly in terms of coal and nuclear power. In 2021, only 4 percent of France's energy came from coal and coal derivatives<sup>27</sup>. Consequently, coal plays a minor role in France's energy supply. The phase-out of coal was already a decided matter in France, and by the end of 2022, the last five coal-fired power plants were planned to go offline. However, due to the energy crisis triggered by the war in Ukraine, this did not happen, and the power plants remained operational. Some previously decommissioned coal-fired power plants were also reactivated due to issues with electricity generation in nuclear power plants, thus contributing to France's energy security.

On the other hand, oil and oil products have a far more significant role in the French energy mix, contributing 17 percent of the French energy mix<sup>28</sup>.

Natural gas is indeed an important energy source and accounts for 19% of the French energy mix<sup>29</sup>. France, unlike Germany, already had 4 LNG terminals located in Fos sur Mer, Montoir de Bretagne, and Dunkerque before the outbreak of the war in Ukraine, of which the two terminals in Fos sur Mer are studying expansion possibilities, as natural gas is expected to continue to make an important contribution to the French energy mix in the future, alongside nuclear power and renewables<sup>30</sup>.

<sup>&</sup>lt;sup>26</sup> (Statista-Research-Department, Vergleich der aus Russland importierten Gasmenge mit den gesamten deutschen Gasimporten von 2011 bis 2021, 2023)

<sup>&</sup>lt;sup>27</sup> (European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>28</sup> (European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>29</sup> (European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>30</sup> (IEA, 2022)

Renewable energy accounted for 14 percent of the French energy mix in 2021<sup>31</sup>, of which the largest share of renewable energy was generated by wood combustion, contributing 35.1 percent, followed by hydropower at 16.3 percent, wind power at 10.3 percent, and solar power at only 4.2 percent. The remaining portion of renewable energy was produced by heat pumps, biofuels, biogas, recycling, and other sources<sup>32</sup>.

## 5.5 French electricity mix

The French electricity mix is significantly less dependent on fossil fuels compared to the German energy mix, with solid fossil fuels contributing a mere 1 percent, while natural gas accounts for 7 percent<sup>33</sup>. Oil and petroleum products play a minor role, constituting just 1 percent<sup>34</sup>. In contrast, renewable energy sources, including biomass and biofuels, make up 23 percent<sup>35</sup>, reflecting the country's focus on sustainability. However, it is nuclear power that dominates the mix, representing a substantial 68 percent<sup>36</sup>. France has reduced its reliance on solid fossil fuels, aligning with its commitment to cleaner energy sources. Natural gas still holds an important share and is considered a relatively cleaner alternative. Oil and petroleum products have become less significant, reflecting a reduced dependency. Renewable energy sources have gained importance, contributing to nearly a quarter of the electricity mix. This diversification underscores France's efforts to embrace sustainable and environmentally friendly energy production. Nuclear power remains the primary energy source, with a commanding share of 68 percent. France's nuclear infrastructure and plans for modernization highlight its pivotal role in meeting energy demands and ensuring stability. The government views nuclear power as crucial for energy security and achieving climate goals.

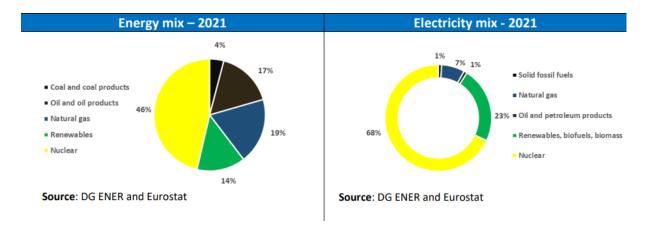


Figure 2: France Energy Snapshot 2021(European Commission, 2022)

<sup>&</sup>lt;sup>31</sup> (European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>32</sup> (Janine-Eguienta, 2022)

<sup>33 (</sup>European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>34</sup> (European-Commission, France Energy Snapshot 2022, 2022)

<sup>35 (</sup>European-Commission, France Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>36</sup> (European-Commission, France Energy Snapshot 2022, 2022)

#### 5.6 France's dependence on energy imports

France's high dependence on nuclear energy, on the other hand, makes it relatively independent of fossil fuels and foreign imports of them compared to Germany. Nevertheless, there is definitely still a strong dependence on fossil fuels, especially in the French energy mix, as they accounted for 40 percent of it in 2021. France is also dependent on foreign imports in the nuclear energy sector, as the uranium it needs is imported, with Niger being the largest supplier.<sup>37</sup>In the electricity sector, nuclear energy and renewables play a much larger role and fossil fuels only account for about 9 per cent of the French energy mix, so there is no strong dependence here. Natural gas is the most consumed fossil fuel in France, but in 2017 the country announced that it would stop exploring and producing new oil and gas fields. This means that no new concessions for exploration and production will be issued on French territory and that the last ones will expire in 2040. However, this is of little importance for the country, which only covers about 1 per cent of its gas consumption through domestic production and imports the rest<sup>38</sup>.

The dependency on gas imports is therefore certainly given, but France has managed to diversify its gas imports to a large extent compared to Germany. In 2020, France's largest gas importer was Norway, who supplied 36 percent of France's gas imports. Russia followed with 17 percent, followed by Algeria and the Netherlands with 8 percent each<sup>39</sup>.

The list of the largest gas importers clearly shows that France has succeeded in diversifying its gas imports and is only more dependent on Norwegian gas imports, which play a significant role in the French gas market with over a third of gas imports.

<sup>&</sup>lt;sup>37</sup> (department, 2022)

<sup>&</sup>lt;sup>38</sup> (Schubert, 2017)

<sup>&</sup>lt;sup>39</sup> (Sédillot, 2022)

## **6.Content Analysis**

In the following, the influence of lobbying on energy policy in Germany and France is examined. It analyses how lobbying activities influence both the national policies of the two countries and shape the overall energy policy of the European Union. Through a comparative analysis of the energy and electricity mixes in Germany and France, the codes I have created and the use of the Atlas.ti software, the dynamics of lobbying in the energy sector are made transparent and their impact on policy decisions is illustrated. First, it will be clarified what exactly is meant by lobbying, focusing on the influence of lobbying in Germany and France on domestic politics. The various lobbying actors and their strategies and tactics are examined, with a special focus on the influence of these dynamics on political decisions and political debates. In the next section, the lobbying strategies in the two countries are analysed, with a special focus on the strategy of "framing", which proved to be particularly successful in my research. In particular, the influence of the energy industry on public opinion and political decisions will be discussed. This is followed by an analysis of national energy interests and current energy priorities in Germany and France. These are examined on the basis of the energy and electricity mixes of the two countries as well as current political processes and energy legislation. The influence of these national energy interests and power relations on EU legislation is examined in the next section using examples. Particular attention is paid to the dynamics that can lead to blockages in the introduction of new legislative initiatives, regulations and directives at the EU level. Finally, the formulated hypotheses are either accepted or rejected on the basis of the research conducted.

## 6.1 Influence of lobbying in Germany and France on domestic policy

In the following, I will analyse the influence of lobbying in the energy sector in Germany and France in more detail and explain their strategies for influencing political decisions and social opinions.

## 6.1.2 Definition of Lobbying

First, however, it must be clarified what exactly is meant by lobbying. An exact definition of lobbying is difficult, as there are many different forms of lobbying that cannot be reduced to an allencompassing definition. Nevertheless, there are some characteristics that can be found in many definitions of "lobbying". These include "exerting influence, obtaining information and exchanging information", as different definitions agree on.<sup>40</sup> Among these terms, "influence" seems to be the central element, as lobbying is essentially about influencing decisions that directly or indirectly affect

<sup>&</sup>lt;sup>40</sup> (Griesser, 2014)

oneself or the party one represents. However, the way in which these decisions are influenced depends on the particular lobbying strategies. In this context, lobbying can be understood as a dynamic process in which different interest groups try to incorporate their perspectives and interests into political decision-making. In the energy sector, these are the large energy companies in Germany and France and their interest groups, which are among the most powerful lobbying organisations in both countries.

#### 6.1.3 Lobbying Actors

The interaction between the energy industry and politics can be very close in some cases, as the example of the "nuclear phase-out" in Germany in 2000 shows. In this context, Walter Hohlefelder and Gerald Hennenhöfer, who had both previously headed the "Reactor Safety" department at the Federal Environment Ministry, were key figures in the negotiations on behalf of E.ON. After serving as Germany's highest nuclear regulators, they moved into senior positions at the companies that later merged to form E.ON (A1).<sup>41</sup>

This transition from public office to private-sector positions and vice versa, often referred to as the "revolving door effect", is a common tactic in lobbying (B3). "The term "revolving door" refers to the movement of high-level employees from public-sector jobs to private-sector jobs and vice versa." (Kenton, W.)<sup>42</sup> This allows companies to efficiently represent their interests by using the expertise and contacts of their representatives from their time in politics.

The specific case of Hohlefelder and Hennenhöfer can be described as the Revolving Doors Act and illustrates the proximity and good relations between politics and the energy industry. After moving to the energy industry, both played a central role in the drafting of the nuclear phase-out agreement and were presumably able to use their good contacts in politics. The negotiated contract was basically only confirmed by the members of the Bundestag.<sup>43</sup> This illustrates how effective such lobbying tactics can be in shaping political positions and decisions.

In this instance, the intersection of the codes "former-politicians" (under "Lobbying Actors") and "financial rewards/job offers" (under "Lobbying Strategies") significantly impacted the "successfully influencing political positions and decisions" code (within "Lobby influence on domestic politics"). Essentially, leveraging political connections and offering lucrative employment opportunities enabled energy companies to effectively sway critical domestic decisions, such as the nuclear phase-out.

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<sup>&</sup>lt;sup>41</sup> (control, Lobbypedia, 2023)

<sup>&</sup>lt;sup>42</sup> (Kenton, Revolving Door: Definition in Business and Government, kein Datum)

<sup>&</sup>lt;sup>43</sup> (control, Lobbypedia, 2023)

In France, the systemic intertwining of politics and business plays a critical role in shaping and influencing key decisions. This relationship has its roots in the country's elite educational institutions which not only serve as academic centers, but also as the breeding ground for establishing these crucial ties.

Students at high-profile universities such as the Ecoles des Mines, Ecole Polytechnique, and Sciences Po study together, forming early connections that transcend their academic life. These are the future civil servants and the employees of energy-related industries, who "will easily switch from the private to the public sector during their professional career and vice-versa."<sup>44</sup> (Kenton,2022)

France's elitist education system often fosters the "revolving door" phenomenon and promotes a strong interaction between politics and business. This can be seen in the career of Edouard Philippe, former prime minister (2017-2020) and current mayor of Le Havre, who has close ties to the nuclear energy sector. Philippe's tenure as head of public affairs at Areva, a leading French nuclear group, overlapped with his role as deputy mayor of Le Havre from 2007 to 2010. This dual involvement highlights the integration of the public and private sectors in France. The French Nuclear Energy Observatory described Philippe as a "nuclear energy lobbyist" and stressed that he had lobbied for an Areva offshore project during his term as mayor. His connection to Areva and subsequent scrutiny by the High Authority for Transparency in Public Life (HATVP) underline the intertwining of politics and industry in France. 45

The synergy between the energy sector and politics serves as a crucial lobbying tool for the energy industry, enabling direct and indirect influence on political decisions. The interplay of "Lobbying Actors" and "Lobby Influence on domestic politics" categories, as illustrated in French instances, reveals that (former) politicians significantly impact energy policy outcomes. While the influence of politicians on policy decisions is expected, the pronounced linkage between politics and the energy sector—facilitated by the "revolving doors effect"—necessitates special consideration. This analysis underscores the need for policy interventions aimed at curbing the revolving door phenomenon between politics and industry.

#### **6.1.4 Lobbying Strategies**

However, public arguments are also needed to legitimise decisions that do not correspond to the public opinion or to influence public opinion in favour of the own interests. In my research, the

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<sup>&</sup>lt;sup>44</sup> (Kenton, Revolving Door: Definition in Business and Government, kein Datum)

<sup>45 (</sup>Lecerf, 2018)

strategy of "framing" proved to be particularly successful for the energy industry in both Germany and France.""Framing" or "frames" are used in political communication to set the interpretive framework with deliberate formulations on a certain topic." (Deckwirth.C, Katzemich.N,2023)<sup>46</sup> In Germany, the gas lobby in particular is very keen to promote gas as a "bridge technology" and "green gas". The aim behind this is to give gas a reputation as a green energy carrier and, above all, to present it as a transition technology towards climate neutrality and which cannot be dispensed with without endangering the country's energy security. The gas lobby has been very successful in this in recent years. "The gas industry has used misleading framing to present gas as a "clean energy source" and "bridging technology". Expensive campaigns by specially engaged lobby agencies have contributed to this. Important political decision-makers such as former Economics Minister Peter Altmaier have adopted this framing and aligned their energy policy with it: Billions have been invested in gas infrastructure in Germany in recent years."(Deckwirth.C, Katzemich.N,2023)<sup>47</sup>

In France, the "framing" can be observed above all in the nuclear energy sector, where the nuclear lobby is trying very hard to establish nuclear energy as a "green, sustainable energy". The purpose of this is to ensure that nuclear energy continues to play a role in France in the future and is promoted accordingly as a sustainable, climate-friendly energy due to its low CO2 emissions. However, part of the background to nuclear energy in France is that nuclear energy is still strongly supported by the French population and it is part of the French understanding of energy that people in France are proud of the national nuclear program and that support can almost be seen as a patriotic act.

According to a study carried out by the French survey and market research institute IFOP in September 2022, a significant 75 percent of French citizens support nuclear energy. Meanwhile, a mere 6 percent fully reject it.<sup>48</sup> Nevertheless, the voices for more renewable energies are also getting louder in France and in 2015, Francois Holland's socialist government passed the French Energy transition Law, which provided for the reduction of nuclear energy from 75 per cent to 50 per cent by 2025 as well as closures of nuclear power plants.<sup>49</sup> The massive lobbying by the nuclear lobby triggered by this law ensured, among other things, that an amendment to the law in 2019 postponed the reduction to 50 percent by 2035. Emanuel Macron, who initially followed in the footsteps of the previous government when he took office in 2017 and arranged for the closure of the Fesselheim nuclear power plant and 12 others between 2025 and 2035, made a turnaround in his presidential election campaign in 2021 and initiated the "Rennessaince" of nuclear power in France, which was

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<sup>46 (</sup>Christina Deckwirth, 2023)

<sup>&</sup>lt;sup>47</sup> (Christina Deckwirth, 2023)

<sup>&</sup>lt;sup>48</sup> (Martine, 2023)

<sup>&</sup>lt;sup>49</sup> (Rüdinger, 2014)

loudly applauded by the nuclear industry.<sup>50</sup> During the election campaign, he announced his intention to expand the operation of French nuclear power plants and build six new EPR-25 reactors by 2050, with the first to be operational in 2035. This radical reorientation of his energy policy was prompted by the war in Ukraine and the resulting reduction in gas supplies, as well as the obsolescence of France's nuclear fleet. The Elysée Palace underpinned this newly introduced strategy and declared that there are currently no plans to close nuclear power plants. In 2023, the 50 percent mark for nuclear energy in the energy mix is to be reassessed in the course of the parliamentary debate on multi-year energy planning.<sup>51</sup> What is certain is that in the reassessment of the future of nuclear energy, its lobby will be at the table and will very likely have a strong influence on further political action in the national energy sector and the country's energy security.

The thorough analysis of energy policy decisions highlights the effective use of "Media Campaigns/Framing" within "Lobbying Strategies", especially in Germany, where gas was successfully framed as a green energy source. This strategy shows a strong relation to "successful agenda setting/framing" and "successfully influencing political positions and decisions". For instance, former German Economics Minister Peter Altmaier's adoption of gas lobby's framing led to substantial investments. Contrastingly in France, despite some framing campaigns supporting nuclear industry, the effort isn't as pronounced as in Germany, due to existing public support for nuclear power. However, the "revolving door" effect, exacerbated by France's elite universities, embeds stronger ties between politics and business than in Germany. Hence, in the French context, the strategy "financial rewards/job offers" is more related to "successful agenda setting/framing" and "successfully influencing political positions and decisions".

## 6.2 Development of energy interests and current energy priorities

In the following, I will first define the national energy policy interests of the two countries Germany and France and analyse how they influence the EU's energy policy and are themselves influenced by the EU. I will also analyse the role of national energy interests in intergovernmental negotiations and how these interests may block intergovernmental energy decisions or how compromises can be found. Based on my comparative analysis of the energy and electricity mixes of Germany and France, as well as the analysis of energy-related laws and current political processes in both countries, the following national interests in the energy sector can be identified.

<sup>50</sup> (Rüdinger, 2014)

<sup>&</sup>lt;sup>51</sup> (Martine, 2023)

## **6.2.1** Energy interests of Germany

In Germany, the last three remaining nuclear power plants were taken off the grid on 15 April 2023 due to the amendment of Article 19 of the Atomic Energy Act<sup>52</sup>, which is why Germany, unlike France, no longer has a national interest in nuclear energy and also opposes the designation of nuclear energy as a green sustainable energy source. Coal as an energy source is also being phased out in Germany, although it has been an important part of the German energy mix for decades and accounted for the largest share of the German energy mix in 2021, at 36 percent<sup>53</sup>. Nevertheless, in 2020, with the "Coal phase-out Act"54, it was decided to phase out coal and coal-fired power generation by 2038; in addition, it was agreed in the coalition agreement of the German government in 2021 that the phase-out should "ideally" be completed by 2030. (Quelle) As a result, nuclear energy and energy from coal are no longer among Germany's national interests; instead, the focus is mainly on renewable energies, which are to make up 40 to 45 percent of the German electricity mix by 2025 and 80 percent by 2030. This should contribute to the German government's goal of greenhouse gasneutral electricity generation by 2045<sup>55</sup>. In addition to renewables, Germany has a national interest in gas as an energy source and argues that it is important as a medium-term solution to secure the energy transition and repeatedly insists in negotiations that without new gas-fired power plants the coal phase-out in 2030 is in danger. In addition, there have been billions of euros invested in the expansion of the German gas infrastructure in recent years, which contrasts with compensation payments from nuclear and coal-fired power plant operators for the early shutdown. This illustrates the German interest in gas also in the future and is triggered by the gas crisis due to the war in Ukraine by the first construction of LNG terminals on the German coast. 56

## 6.2.2 Energy interests of France

France's energy interests are clearly dominated by a focus on nuclear energy, which accounted for about 70 per cent of the French electricity mix and about half of the energy mix in 2021. The one-third reduction in nuclear energy agreed in the 2015 French energy law was all but dissolved by the Macron government elected in 2022, and a "renaissance" of nuclear energy was announced with plans to build six new nuclear power plants by 2050.<sup>57</sup> In addition to nuclear energy in France, however, the expansion of renewable energies is also to be promoted in the future. To facilitate this, the French National Assembly passed a law on 10 March 2023 to accelerate the expansion of

<sup>&</sup>lt;sup>52</sup> (Bundesministerium-der-Justiz, 2022)

<sup>53 (</sup>European-Commission, Germany Energy Snapshot 2022, 2022)

<sup>&</sup>lt;sup>54</sup> (Justiz, 2020)

<sup>55 (</sup>Bundesregierung, 2023)

<sup>&</sup>lt;sup>56</sup> (ZDF, 2023)

<sup>&</sup>lt;sup>57</sup> (Martine, 2023)

renewable energies.<sup>58</sup> "I want renewable projects to be realised twice as fast."<sup>59</sup>(Macron,2022) stressed Macron.

However, France's national energy interests do not stand in each other's way here; the promotion and rapid expansion of renewable energies is intended to contribute to strengthening the country's energy security, as the first of the newly planned nuclear power plants will presumably not be connected to the grid until after 2035, and France's nuclear park is old and in some cases only half of the nuclear power plants are not functioning due to maintenance or safety deficiencies. In addition to nuclear power and renewable energies, gas is also one of the national energy policy interests in France as well as in Germany, and there are plans to include gas in the French energy mix in the medium term. In contrast to Germany, however, I would classify the importance of gas in the French energy mix as medium, whereas gas will have a high importance in Germany.

In summary, the national energy policy interests of the two countries can be summarized as follows. In Germany, renewable energies are very important in the long term and gas is very important in the medium term. Coal, which is currently still the largest energy supplier in the German energy mix, is of great importance for the country's energy security in the short term. On the other hand, nuclear energy has a very high long-term significance in France, renewable energies have a high long-term significance and gas a medium-term significance.

## **6.3 EU Taxonomy Act**

The most recent example of the EU's energy taxation efforts is a good illustration of the failure of further development in the energy sector due to differing energy interests between states.

"The EU Taxonomy Act of the European Union is a cornerstone of the EU's sustainable finance framework and an important market transparency tool that helps direct investments to the economic activities most needed for the transition, in line with the European Green Deal objectives." (European Commission, 2023)<sup>60</sup>

The negotiations on the framework conditions and the determination of which energies are classified as green and sustainable and thus receive tax advantages and greater investment incentives turned out to be quite difficult and reflected the different national energy interests, especially between Germany and France, and the resulting blockades. Germany supported the inclusion of fossil gas in the EU taxonomy, which was initially not welcomed by France, among other things to strengthen its

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<sup>&</sup>lt;sup>58</sup> (France, 2022)

<sup>&</sup>lt;sup>59</sup> (Macron, 2022)

<sup>&</sup>lt;sup>60</sup> (Commission, 2023)

negotiating position, as France demanded the inclusion of nuclear energy in the EU taxonomy, which was rejected by Germany.<sup>61</sup>

The German government announced in January 2022 "In the view of the German government, nuclear energy is not sustainable. We therefore reject its inclusion in the delegated act under the Taxonomy Regulation. Severe accidents with large-scale, transboundary and long-term hazards to humans and the environment cannot be ruled out (so-called residual risk)."(BMWK,2022)<sup>62</sup> Prior to this, in November 2021, the French Senate had expressed itself as follows: "The exclusion of nuclear power from the taxonomy would jeopardise the achievement of the environmental objectives of the European Union and the Member States enshrined in the Green Deal, which in particular require significant investment ."(Gremillet,Daniel.2021)<sup>63</sup>During the deliberations pertaining to the integration of gas and nuclear energy into the European Taxonomy Act, the distinctive energy objectives of the European Union's most populous and influential nations came into contrast. Notably, France was adept at constructing a powerful alliance of Member States favoring nuclear energy as a significant element in their respective energy transition plans. This pro-nuclear faction included the Czech Republic, Poland, Hungary, Slovakia, Slovenia, Romania, and France themselves. All these countries publicly advocated for the EU Commission to recognize nuclear power in the Act, as they contemplated the establishment of new nuclear facilities.<sup>64</sup>

Simultaneously, the push for the endorsement of fossil gas saw considerable backing from numerous EU Member States, such as Slovakia, Czechia, Bulgaria, Romania, Poland, Malta, Greece, Cyprus, and Hungary. These nations viewed gas as an essential resource to phase out their existing coal-fired power stations. Conversely, the nations opposing the integration of gas — Austria, Denmark, Ireland, Luxembourg, and Spain — faced hurdles in their efforts to push back, due to a potential exchange of support between the eastern Member States favoring nuclear energy and those advocating for the inclusion of gas.<sup>65</sup>

In this context, France's stance played a crucial role. At the outset, the French government seemed to object to the endorsement of gas. However, their opposition gradually diminished as negotiations progressed. Upon being challenged by a French delegate, the French government eventually had to declare its endorsement for a "science-based" integration of gas in May 2021.<sup>66</sup>

<sup>61</sup> (Schreiber, 2021)

<sup>&</sup>lt;sup>62</sup> (BMWK, 2022)

<sup>&</sup>lt;sup>63</sup> (Daniel Gremillet, 2021)

<sup>&</sup>lt;sup>64</sup> (Schreiber, 2021)

<sup>65 (</sup>Schreiber, 2021)

<sup>&</sup>lt;sup>66</sup> (Schreiber, 2021)

This evolution in France's position hinted at a strategic compromise between the factions favoring nuclear and gas. To ensure backing for nuclear power from states also invested in gas, France relinquished its opposition to the inclusion of gas in the EU taxonomy. This notable compromise is underlining the complex dynamics of national energy objectives within the European Union and the impact of power relations between the member states.

The result of this intergovernmental negotiation on the inclusion of gas and nuclear energy, which was influenced not only by state interests but also by the gas lobby and the nuclear lobby, was the "Complementary Delegated Act on climate change mitigation and adaptation covering certain gas and nuclear activities." This finally established the inclusion of gas and nuclear energy in the EU Taxonomy, "the Complementary Delegated Act is a pragmatic proposal to ensure that private investments in gas and nuclear, needed for our energy transition, meet strict criteria." (Mairead McGuinness, 2022)<sup>67</sup>

Nuclear and gas are described as "bridging technologies" that are necessary to achieve the climate targets and ensure the transition to renewable energy. The inclusion of both energy sources as transitional energy sources was a major achievement for Germany and France as well as lobbies of both energy sources, which contributed significantly to the inclusion of both energy sources in the EU taxonomy.

Between January 2020 and May 2021, EU lobbying was intensively carried out by the gas and nuclear lobbies. Here, the gas lobby was significantly larger and more active, with 182 gas-related entities spending between €64.9 and €78.4 million annually, and 776 staff or 402.6 full-time equivalents. During this period, it held 323 meetings with EU officials, which is an average of more than one meeting every two days. It is interesting to note that 27 of these meetings (about 8%) were on topics such as EU taxonomy or sustainable finance strategies.<sup>68</sup>

In comparison, the nuclear lobby at EU level was smaller but also showed remarkable activities. In 2021, it consisted of 27 organisations that spent between €6.3 and €7.9 million annually on lobbying. They deployed a total of 119 people, equivalent to 60.1 full-time equivalents, to advance their nuclear agenda. Between January 2020 and May 2021, they held a total of 44 meetings with the EU Commission, which is an average of one meeting every eleven days. Of these meetings, nine were dedicated to EU taxonomy or sustainable finance strategies.<sup>69</sup>

<sup>69</sup> (Schreiber, 2021)

<sup>&</sup>lt;sup>67</sup> (McGuinness, 2022)

<sup>&</sup>lt;sup>68</sup> (Schreiber, 2021)

The intensity of lobbying, especially in the drafting of the European Taxonomy Act, clearly shows the commitment of both groups to advance their interests at the EU level. The efforts of the lobbying organisations, as well as the national energy interests of the countries of Germany and France, have resulted in both energies being included in the EU Taxonomy as transitional energies, which has caused great consternation among environmental and climate organisations. In particular, the classification of gas as a fossil fuel into a sustainable, green energy source caused great consternation among environmental organisations and led Greenpeace to file a complaint with the European Court of Justice against the EU Commission and its EU Taxonomy Act on 18 April 2023.<sup>70</sup>

The creation of the EU Taxonomy Act reveals the interplay between lobbying and state dynamics. Prominent actors, including companies and former politicians, leveraged strategies such as media campaigns, personal meetings, and potential job offers to frame gas and nuclear energy as 'green'. These successful lobbying efforts significantly shaped political positions and decisions, both domestically and at the EU level. The Act's development embodies the concept of 'Liberal Intergovernmentalism' where 'intergovernmental negotiations' driven by 'national interests' took precedence, highlighting the existing 'power relations' within the EU. While the Act aimed for 'policy harmonization' across the EU, the 'EU Commission' had a limited role. Despite the Commission's initial proposal, the Act was ultimately shaped by member states' interests, pointing to the constraints on 'supranational institutions' and the potency of national actors. This case underscores the significant influence of national states and lobbying actors in the formation of EU legislation.

## 6.4 Influence of National Energy Interests and Power Relations in EU Legislation

In this analysis, I will delve into the intricate dynamics of the European Union's legislative process, focusing on how national interests and power relations among member states can influence and potentially block new legislative initiatives. Through a series of case studies, I will explore how these factors have shaped various decisions within the energy sector.

The European Union legislation is a complex process that requires the involvement of several institutions. The European Commission has the sole right to initiate legislative proposals, which are then considered and acted upon by the European Parliament and the Council of the European Union. The EU Member States have considerable influence on the legislative process and can represent their national interests and influence the negotiations. Blockages in EU legislation are possible if a Member State or an alliance of Member States gathers sufficient support to prevent the qualified majority of 55% of Member States representing 65% of the EU population required for a decision.

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<sup>&</sup>lt;sup>70</sup> (Bayonna, 2023)

Moreover, in sensitive areas such as foreign policy, taxation or the admission of new member states, where unanimity is required, a single state or alliance can effectively impose a blockage.<sup>71</sup>

A current example of this dynamic is the blockage by France and some allied states against the adoption of the EU directive on the expansion of renewable energies. France wants to emphasise the role of nuclear power as "green energy" more strongly in the directive. This move is unusual as France had initially agreed at working level and then formed a coalition to block the law in the final vote. The blockage arose from the different national energy interests of EU member states. France has a strong nuclear energy industry and wants to use it as part of its strategy to meet climate targets. Germany, on the other hand, rejects the classification of nuclear power as "green energy" and focuses more on renewable energies such as wind and solar power.<sup>72</sup>

A similar example is Germany's blockade, led by Transport Minister Volker Wissing, against the law banning new combustion engines. Germany pushed through that after 2035, vehicles with combustion engines may continue to be registered that fill up with climate-neutral fuels.

These examples show how intergovernmental negotiations can proceed with balanced power relations. Each member state has the right to represent its interests and influence negotiations. As soon as a country or an alliance of countries has a sufficient majority, this can be used to block laws or directives. As a result, domestic politics and national energy interests strongly influence negotiations at the EU level and play an important role in the balance of power in intergovernmental negotiations, as political initiatives at the EU level concerning the energy sector can be blocked by national energy interests.

Another example where different national interests blocked a supranational proposal of the EU Commission was the energy taxation dispute in 2011.

"In 2011, a proposal to revise Directive 2003/96/EC - a directive that overhauled the EU's approach to energy taxation - was put forward by the Commission. The proposal called for the incorporation of a CO2 element into the EU's energy tax structure. The aim was to extend carbon pricing across the entire European economy, particularly in sectors not covered by the EU Emission Trading System, thus providing a consistent carbon price signal across the Union.

Moreover, it was suggested that taxation on energy products should be linked to their energy content and that the system for tax reductions and exemptions should be simplified. However, gaining consensus among the Member States on the principal components of the proposal, especially the CO2-based tax component, proved to be unattainable.

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<sup>&</sup>lt;sup>71</sup> (Commission, The European Union, what it is and what it does, 2022)

<sup>&</sup>lt;sup>72</sup> (Kira Taylor, 2023)

As a result, in 2015, the Commission chose to withdraw its proposal. This meant that the outdated 2003 framework remained in place."(European Commission,2019)<sup>73</sup>The blockage resulting from disagreements among the member states underlines the complexity of achieving consensus within the European Union, particularly when it comes to energy interests, which can vary significantly from one country to another. Different energy preferences of powerful countries can easily lead to blockages in decision-making processes, since majorities have to be formed in which smaller countries without allies have very limited influence.

#### 7. Acceptance or Rejection of the Hypotheses:

H1: If the boundaries between political office and economic office become blurred, then lobbying influence on political decisions increases.

The "revolving door effect" explains the close links between politics and business. These close ties can create dependency relationships, which in turn increase the influence on each other. Based on liberal intergovernmentalism, these close ties can have an impact on national interests and thus also on transnational negotiating positions. In order to prevent the influence of the economy on politics, longer pauses would be needed between a change of the two areas.

H2: If different national energy interests are strongly pronounced and power relations are balanced within EU member states, then this can lead to blockades in the introduction of new legislative initiatives, regulations, and directives at the EU level.

Based on the evidence presented, it is clear that pronounced national energy interests and balanced power relations among EU member states can indeed lead to blockades in the introduction of new legislative initiatives, regulations, and directives at the EU level. The strong national energy interests are evident in the actions of countries like France and Germany. France's push to emphasize the role of nuclear power as "green energy" in the EU directive on the expansion of renewable energies, and Germany's opposition to this classification, are clear demonstrations of these interests. The balanced power relations are demonstrated by the fact that each member state has the right to represent its interests and influence negotiations. When a country or an alliance of countries has a sufficient majority, they can use this to block laws or directives. Several instances of blockades in the introduction of new legislative initiatives, regulations, and directives at the EU level have been observed. For example, France and some allied states were able to block the adoption of the EU

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<sup>&</sup>lt;sup>73</sup> (Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL AND THE COUNCIL A more efficient and democratic decision making in EU energy and climate policy, 2019)

directive on the expansion of renewable energies. Similarly, Germany led a blockade against the law banning new combustion engines. Therefore, the hypothesis is supported by the evidence presented. The pronounced national energy interests and balanced power relations among EU member states can and do lead to blockades in the introduction of new legislative initiatives, regulations, and directives at the EU level.

H3: If supranational institutions within the EU are empowered to shape and enforce energy policy, then the development and integration of energy security across member states may be significantly accelerated.

The development of European energy security is influenced by national energy interests and power dynamics among member states. While supranational institutions like the EU Commission play an important role, they lack the power to resolve blockades by member states. Therefore, a balanced consideration of national energy interests and effective intergovernmental cooperation are necessary to make progress towards energy security. Strengthening supranational institutions in the energy sector would likely promote further development of energy security, but the likelihood of this occurring is not very high. Additionally, fostering European energy production and storage, with supranational institutions having more authority, could contribute to the advancement of European energy security.

#### 8. Conclusion

This research focused on the hurdles to advancing energy security within Europe, with particular emphasis on Germany and France, the two largest EU countries. Key actors in the energy sector, wielding direct or indirect influence over negotiations on energy sector progress, were the study's primary concern. Notably, the study targeted domestic lobby actors within both countries and lobby actors at the EU level, aiming to map out their influence on national and EU energy policy interests.

Analyzing the relationships and mutual influence among these actors illuminated the inner workings of energy policy and helped gauge each actor's significance. The research employed a range of data sources: Official Documents, Public Statements, and Academic Sources. These diverse sources offered insight into national energy security interests and aspirations at both the national and EU levels. Moreover, public statements from politicians and media reports on energy policy debates allowed the analysis of individual political actors' interests and the alignment of these interests with public opinion.

The study revealed that energy companies and their lobby associations significantly shape national policies in Germany and France. This influence is primarily wielded through the involvement of current or former politicians, either steering political discourse subtly from behind the scenes or publicly adopting the companies and lobby groups' framing.

Interestingly, these lobbies also managed to extend their influence to the EU level, ensuring the inclusion of gas and nuclear energy in the EU Taxonomy. This influence manifests both indirectly through national lobbying influence and resultant national energy interests, and directly through lobbying representation in Brussels.

The International Energy Agency (IEA) defines energy security as a balance of secure supply and affordable prices, a definition that does not inherently exclude fossil fuels and nuclear energy. However, the EU's vision for future energy security deviates from this perspective, prioritizing decarbonization strategies and a strong focus on renewable energy.

The study's comparative analysis underscored the dependencies of resource importers like France and Germany, revealing that secure supply cannot be ensured with fossil and nuclear energy mixes due to resource scarcity. For instance, France imports uranium from unstable countries such as Niger and Kazakhstan. Furthermore, the long-term competitiveness of fossil fuel energy prices pales in comparison to renewable energy sources, suggesting that secure supply and affordable prices are not assured in the medium to long term.

As such, Europe's energy security hinges on the rapid and coordinated expansion of renewable energies, a development hampered by national interests in fossil and nuclear energy sources, as well as lobbying activities. Neofunctionalism, which assigns significance to supranational institutions, falls short in explaining the future development of European energy security given these findings.

This underscores the need for energy security to be reimagined for the future, with a stronger focus on renewable energy sources and the factors contributing to their accelerated adoption. The research suggests a future definition of energy security that emphasizes the importance of swift, coordinated expansion of renewable energy sources, affordable prices, and the reduction of dependency on fossil and nuclear energy sources.

In light of these findings, the research proposes several policy recommendations for the advancement of European energy security. These include stricter laws to limit the revolving door

effect between politics and the energy industry, reduced influence of energy lobbies at the EU level, and a more supranational approach to European energy policy, emphasizing central energy production and storage mechanisms.

The constraints of this research primarily stem from the inherent intricacy of the subject matter, the energy sector and lobbying, which inevitably introduces an element of subjectivity in interpreting the findings. Moreover, the selection and availability of resources can potentially shape the depth and breadth of the analysis conducted. Significantly, the temporal dimension of this research constitutes a key limitation. Given the swiftly evolving landscape of the energy industry, the dynamics explored in this study are likely to shift over time, which may impact the continued applicability of these findings. Thus, this research provides an informed base for understanding the interplay between national interests, lobbying influences, and energy policy. However, it is imperative that subsequent research endeavors account for the mutable nature of the energy sector, adapting their investigations accordingly.

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