

Accelerating the Green Transition Through Energy Security

Master Thesis by: Mathias Kvia

Master in Energy, Environment and Society

Department of Media and Social Sciences

Candidate Number: 238664

July 6th. 2023

FACULTY OF SOCIAL SCIENCES MASTER'S THESIS

Study programme: Master in Energy,	Semester: Spring 2023	
Environment and Society (MEES)		
Author: Mathias Kvia		
Supervisor at UiS: Thomas Michael Sattich		
Thesis title: Accelerating the Green Transition Through Energy Security		
Credits (ECTS): 30		
Keywords: Europe, Ukraine, Russia,	Pages: 52	
Renewables, Energy, Energy Security, Multi-		
Level Perspective, Green Transition, Policy,		
Change, Opportunity, EU, Politics,		
Securitization,		
	Stavanger, 6th of July	

Abstract

Climate change is an ever-looming threat, and as the war in Ukraine rages on, climate change is not necessarily on the top of everyone's mind. However, is there a way to combine these things? Can war increase the use of renewables? Before us we find a scenario where Russia holds a fossil fuelled energy weapon aimed at Europe, and how is Europe to respond to this? The hypothesis of this thesis is that Europe might pivot towards renewables as a means of making Russia's weapon null and void. Renewables achieves both the invalidation of Russian imported energy, as well as security for the European energy sector by making Europe independent when it comes to their energy needs. Additionally, phasing out fossil fuels in favour of renewables puts the EU in a prime position to combat climate change and live up to the targets it has set for the future.

Acknowledgements

First of all, I would very much like to express an enormous amount of gratitude to my family and friends for believing in me and supporting me throughout my master's degree. (Even when I did not deserve it)

I would also like to give an acknowledgement to my thesis supervisor Associate Professor Thomas Sattich at University of Stavanger, his lectures are what inspired this master thesis.

I also want to give a special thanks to my grandmother encouraging words and for being there in times of need.

Lastly, I also want to thank my good friends Harket and Zepsy for their support and motivating words throughout the writing process.

- Mathias Kvia

Stavanger, 2023

List of Figures

Figure 1. European Union Energy Dependence (LU & Alexander) (2022)	15
Figure 2. The "pendulum" of (de-)securitisation and (de-) politicisation in energy policy.	(Heinrich &
Szulecki) 2018, p. 44	23
Figure 3. The Multi-Level Perspective (Geels & Schot) (2007), p 401	25
Figure 4. NATO Smart Energy, (NATO) (2022)	43
Figure 5. The Energy Weapon (Stegen Smth) (2011)	46
Figure 6. Average monthly electricity wholesale prices in selected countries in the Europ	ean Union
(EU) from January 2020 to March 2023 (Statista) (2023)	47
Figure 7. Diversification of the EU Energy (European Commission) (2023)	49
Figure 8. Energy Changes in the EU (European Commission) (2023)	49
Figure 9. EU Electricity Generation 2023 (Jones) (2023)	
Figure 10. EU Electricity Generation 2021 (Eurostat) (2022)	
Figure 11. EU Gas Storage 22-23 (EU Commission) (2023)	52
List of Tables	
Table 1 Brief Description of Informants	37

Table of Contents

1.	. Background & Introduction	7
2.	. Literature overview	8
	2.1 Introductory Literature	9
	2.2 Theory Literature	9
	2.3 Methods Literature	11
	2.4 Discussion Literature	12
3.	. Theory	13
	3.1 The Concepts of Geopolitics, Energy Dependence, and Energy Security	13
	3.2 The Copenhagen School Theory of Securitization	17
	3.2 Key elements of Securitization	17
	3.3 Securitization and Social Constructs	18
	3.4 Criticism of the Copenhagen School Theory of Securitization	20
	3.4 The Multi-Level Perspective	25
	3.5 Elements of the Multi-Level Perspective	26
	3.6 Levels of the Multi-Level Perspective	26
	3.7 Criticism and Response of the MLP	28
4.	Methods & Strategy	31
	4.1 Research Goal	31
	4.2 Logic of Inquiry	32
5.	. Research Design	33
	5.1 Data Collection	34
	5.2 Interviews	35
	5.2 Data Security	36
	5.3 Informants	37
	5.4 Discourse analysis	38
	5.5 Research Quality	39
6.	. Results & Discussion	40
	6.1 Interview findings	40
	6.2 European Energy Discourse	41
	6.3 NATO	42
	6.4 The European Union	47
7.	. Conclusion	57
R	eferences	59

1. Background & Introduction

Karl Popper once said: *Knowledge does not start from perceptions or observations or the collection of data or facts, but it starts, rather, from problems* (Popper, 1976, p 88). The primary problem before us today is climate change, and its strained entanglement with energy. Ever since the first spark of human controlled fire flew into the night sky, energy has been a useful tool for humanity and as time marched on energy became an ever more contested valued resource. Throughout history humanity have undergone several energy transitions, from basic fire all the way up to our current fossil fuel regime. Some scholars such as Paul Crutzen has even gone so far as to call the current time in history "The Anthropocene" this meaning "the age of man" and is used an as unofficial unit of geological time to showcase how much of an impact humanity have had on the planets climate and ecosystems (Crutzen, 2022).

As humanity finds itself in the Anthropocene, energy is still as highly valued as ever and plays a major part in the geopolitical landscape, that is the politics employed by nations and international actors on the international stage. As the geopolitical stage is set, some nations are naturally well endowed with energy, some especially well with fossil fuel energy. While nations who are not naturally blessed with excess energy, will have to come up with other strategies as a means of obtaining the needed amounts of energy.

The European Union finds itself in a position where fossil fuel sources are right outside its perimeter, such as the North Sea, the Ural Mountains and Siberia, the eastern Mediterranean, and the Persian Gulf however, these resources are not inside its borders. The largest natural gas field that does exist within the European Union is the Groningen field in The Netherlands for decades this field was used to power The Netherlands and large parts of Europe, however, the extraction of the field caused subsidence, meaning the ground sank at and around the field, this phenomenon was also accompanied by earthquakes. These earthquakes damaged houses and cause locals to protest the field. This eventually led to the Dutch government's decision to close the field and have it completely shut down by 2022 (Irvine, 2021). This means that the European Union in terms of the current energy regime is critically dependant on outside sources of Energy.

Europe largely chose to use Russian fossil fuels to meet their demands for energy. The reason for this decision can be understood through a view of history. During the of the cold war the Europeans selected to walk the path of "Détente" politics when interacting with the Soviet Union. This was meant to deescalate and reduce tensions between the proverbial east and west. This essentially involved cooperation and trade between Europe and the Soviet Union, in particular Europe would purchase Energy in the form of gas and oil. In later years this created a situation of asymmetrical dependency, meaning that Europe needed Russia more than Russia needed Europe. This further raised the issue of security around energy in Europe. One of the people that raised concerns around this is Karen Stegen Smith. She wrote in her 2011 paper "Deconstructing the "energy weapon": Russia's threat to Europe as case study" (Smith Stegen, 2011) that Russia might possess what she called an "energy weapon". This weapon is something Smith Stegen said could be wielded against Europe in order to pressure Europe for concessions which might benefit the Russian federation. As the events of 2022 and 2023 have unfolded and Europe has experienced the effects of the energy weapon, the European energy landscape is a little unstable and somewhat in disarray, this is where there might be a window of opportunity for renewables to play a larger part in European energy and European energy security.

This thesis aims to investigate if renewables are becoming securitized in the EU and if so, how the EU uses this as a push towards the green transition. The primary subject of study in this thesis is the European Union, alongside NATO. The thesis will highlight and unveil policies and strategies within the European Union and NATO regarding energy security, energy sovereignty and renewables.

2. Literature overview

The aim of this chapter of the thesis is to put relevant academic literature into perspective and briefly explain what the literature does for the thesis. First there will be a literature overview of the works used in the preliminary part of the thesis. Secondly the theoretical part of the thesis, followed by one for the literature used during the research strategy & Method chapter.

Lastly there will be an overview of the academic literature used in the discussion chapter of the thesis.

2.1 Introductory Literature

Crutzen's writing on the Anthropocene is used to showcase how much of an impact some scholars believe humanity has had on the planet and its environment.

Crutzen, P. J. (2022). Paul J. Crutzen and the Anthropocene: A New Epoch in Earth's History (S. Benner, G. Lax, U. Pöschl, J. Lelieveld, H. G. Brauch, K. Töpfer, & J. Renn, Eds.). Springer.

Irvine's work is briefly used to highlight the reasons for shutting down the Groningen gas field.

Irvine, A. (2021). Subsidence, Groningen, and the future of gas production in The Netherlands. TROVE Global.

Smith Stegen's work is used in the introductory part of the thesis to put the current security issue surrounding energy into perspective.

Smith Stegen, K. (2011). Deconstructing the "energy weapon": Russia's threat to Europe as case study. Energy Policy, 39(10), 6505–6513

2.2 Theory Literature

Austvik's work alongside that of Högselius is used to discuss and display the complexities of geopolitics and how it relates to energy security.

Austvik, O. G. (2018). Concepts of Geopolitics and Energy Security. International Association for Energy Economics.

Högselius, P. (2019). Energy and geopolitics. Routledge, Taylor & Francis Group.

Bazilian, Sovacool and Millers work together exhibit the intricacies of energy independence.

Bazilian, M., Sovacool, B., & Miller, M. (2013). Linking Energy Independence to Energy Security. IAEE Energy Forum.

Buzan, Wæver and Wilde's writings are in this chapter of the thesis used to discuss and showcase the Copenhagen school theory of securitization

Buzan, B. (1983). People, states, and fear: The national security problem in international relations. Wheatsheaf Books.

Buzan, B., Wæver, O., & Wilde, J. de. (1998). Security: A new framework for analysis. Lynne Rienner Pub.

Checkel plays a similar role to Wendt in this thesis as Checkel's work also serves as a way of expanding briefly upon social constructivism, which does prove fruitful for both major theories used in this thesis (the Copenhagen school theory of securitization, and the multilevel perspective.

Checkel, J. T. (1998). The constructivist turn in international relations theory. World Politics, 50(2), 324-348.

Driel & Schot is used as an example within the MLP's criticism section of this chapter.

Driel, H. V. (Hugo), & Schot, J. (2005). Radical Innovation as a Multilevel Process: Introducing Floating Grain Elevators in the Port of Rotterdam. Technology and Culture, 46(1), 51–76.

Geel's literature is specifically used in this chapter of the Thesis to explain, illustrate, and discuss the multi-level perspective theory.

Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. Environmental Innovation and Societal Transitions, 1(1), 24–40.

Geels, F. W. (2014). Regime Resistance against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective. Theory, Culture & Society, 31(5), 21–40.

Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. Research Policy, 36(3), 399–417.

Heinrich & Szulecki's Energy Securitisation: Applying the Copenhagen School's Framework to Energy, has been extremely helping in taking a look at and discussing the Copenhagen School's theory in a more modern view, Heinrich & Szulecki also invoke the help of other scholars in their work, I will not mention all of them here, however I have borrowed from them just as Heinrich & Szulecki did. (Of course, everything can be found in the reference list at the bottom of the thesis)

Heinrich, A., & Szulecki, K. (2018). Energy Securitisation: Applying the Copenhagen School's Framework to Energy. In K. Szulecki (Ed.), *Energy Security in Europe*. Springer International Publishing

Wendt's authorship on the social theory of international politics proves useful in briefly going through constructivism inside the context of international politics, as we can find inside the Copenhagen school theory.

Wendt, A. (1999). Social theory of international politics. Cambridge University Press.

2.3 Methods Literature

Blaike, Priest, Danemark, and Dey, all write about abductive logic of inquiry and their works have been invoked in this thesis to showcase and explain the reason for choosing the logic of abductive inquiry in this thesis.

Blaikie, N. W. H. (2000). Designing social research: The logic of anticipation. Polity Press.

Blaikie, N. W. H., & Priest, J. (2018). Designing social research: The logic of anticipation. Polity Press.

Dey, I. (1993). Qualitative data analysis: A user-friendly guide for social scientists. New York, NY: Routledge.

Danermark, B. (2012). Explaining society: An Introduction to critical realism in the social sciences. Taylor and Francis.

Maarten Hajer's writings is used to demonstrate and discuss what discourse analysis is and how it can be used.

Hajer, M. A. (1995). The politics of environmental discourse: Ecological modernization and the policy process. Clarendon Press; Oxford University Press.

2.4 Discussion Literature

The first part of the findings and discussion section concerns the interviews that were conducted during this thesis

The next section is mainly divided into two, with the first being NATO, and the 2nd being the EU. With major institutions such as these two, a lot of the data used (especially when the data is an analysis of how the institutions act regarding a specific setting or topic) will come from the institutions themselves. For example, the EU has 76 different institutions and bodies within it and a sure-fire way of knowing a website is one of the EU's is by checking if the web-address ends in "europa.eu" (European Union, 2023). Most of the data regarding the EU will have come from these kinds of websites and will be referenced as "European Commission", "European Union", or "European Council".

This will also often times be the case for NATO sources, as they themselves often have the best data on how they view the empirical world. It will appear simply as "NATO (year)". And as always there is full transparency in the references section of the thesis.

With this being said though, there are some sources from outside the EU and NATO data domains, however, this data is largely statistical and used to discuss energy, energy security, and renewables in relation to the EU and NATO

3. Theory

In this chapter of the thesis the theoretical approaches that has been used to better understand and frame the research questions will be thoroughly presented and discussed. This process will start off with presentation of the concepts of geopolitics and energy interdependence and dependence, the Copenhagen school theory of securitization followed by a brief introduction to social constructivism within the bounds of international relations. The latter part of this chapter concerns the multi-level perspective theory of transitions (the MLP). The overarching goal of this chapter is to give the reader a clear understanding of the theories that will later be used during the discussion chapter to put the findings into a theoretical framework.

3.1 The Concepts of Geopolitics, Energy Dependence, and Energy Security

As geopolitics, energy (inter)dependence, and energy security are crucial concepts to this thesis they warrant a broader explanation. Geopolitics was already briefly mentioned in the introductory part of this thesis, however, to give a grander explanation will follow from here.

What is geopolitics? This question has been answered in some different ways by scholars, for example Austvik describes geopolitics as "the study of how geography affects international relations, power, and vulnerabilities" (Austvik, 2018, p. 25). Furthermore, Swedish historian Högselius explains geopolitics as "the interaction between geographical factors, politics, and international relations" (Högselius, 2019, p. 7). This means there is a heavy emphasis on geography, however, power also plays a significant role in geopolitics, as Högselius goes on to mention, "the term has generally been linked to the "realism school" in international relations theory, where "spheres of interest", "rising powers", and "heartlands" alike were used by classic geopolitics analysts" (Högselius, 2019, p. 8). This "sphere of interest" has often been considered a realism perspective on geography were "great powers" such as, Russia, the U.S, China, and Europe has their given spheres of influence. Moreover this "game" of geopolitics has often been seen as a zero-sum game, meaning there is no winning unless someone else loses. This is perhaps why geopolitics can be used to discuss most war-like conflicts in the world.

These perceptions that geopolitics only involve a zero-sum game, has also been disputed, for example, scholars of the liberalist international relations view see geopolitics as more of a game of trade and ideas as opposed to the military might of a country, or the territory a country controls or keep dominion over. A small country can be a big global player, this would not be possible if the only measure was raw power or domination in spheres of influence. A prime example of this is Taiwan. The Taiwanese company TSMC is the world's most important manufacturer of semiconductors, which gives the country a strong global position, despite being a small island state. As a recent article stated: "With a market capitalization of almost half a trillion dollars, the company is the most valuable semiconductor company in the world, producing over 50% of the world's semiconductor chips according to Statista, and, as per the Financial Times, an astonishing 90% of the most advanced chips" (Erinfolami, 2022). The fact that Taiwan can attain this amount of geopolitical "capital" does not go over well with the "classical" geopolitics or realism. This more liberal version of geopolitics "concerned with political discourse among international actors resulting from all factors that determine the political and economic importance of a country's geographic location" (Austvik, 2018, p. 25) can be intertwined with interdependence much better. The idea here is that if country A has a surplus of, say oil, and country B has a surplus of monetary capital, then a trade might occur that benefits both countries. A gets monetary value and B gets energy. This is a fairly basic idea and more in line with a modern view of geopolitics where geoeconomics is also a significant factor. As for interdependence A and B will become reliant upon one another and therefore both stand to lose if a conflict were to arise between them, this means that the interdependence becomes a preventative force of conflict.

As for independence as opposed to interdependence independence can exist in various forms, but as for this thesis is concentred the focus will be on energy and therefore energy independence. Most scholars seem to agree that energy dependence does in fact not exist in a pure form (Bazilian et al., 2013). This seems to be quite accurate as there are very few countries at least in the European Union that does not rely on other countries for their energy needs. In order to help visualize this please look to the figure 1 below:

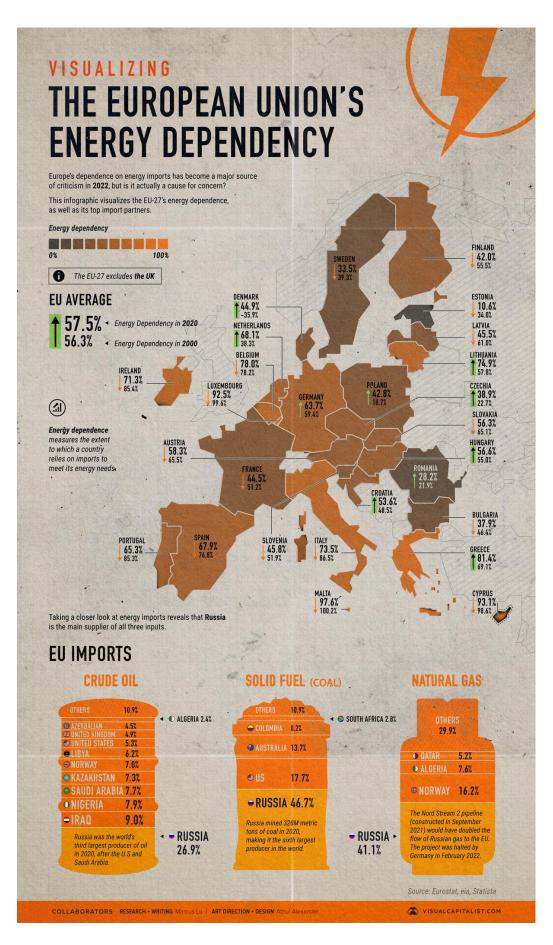


Figure 1. European Union Energy Dependence (LU & Alexander) (2022)

As this figure 1 shows, the European Union did in fact increased their energy dependency between the time of 2000 and 2020.

As Shirley Ann Jackson said in her 2009 speech at the John Hopkins University school for advanced International Studies: "Independence implies that we are able to `go it alone´, fully supplying our own needs. The term appeals, perhaps, to an aspect of the American psyche — but, it is an unfortunate misnomer. There IS no energy independence. Of the approximately 190 countries in the world, not one is energy independent — nor is likely to be any time soon. Energy Security, on the other hand, suggests the imperatives inherent in the interlinking of national security, global security, and climate security" (Jackson, 2009). This essentially means that talking about energy independence becomes redundant and energy security is what we should focus on instead.

This lastly brings us to the concept of energy security, the basic idea of energy security means that a country always has access to enough energy to satiate the basic facilities required for the country to operate. In practice this would mean that if a geopolitical crisis situation were to break out (such as a war) there will be energy for an energy secure country to still operate the basic facilities. This also harkens back to the idea of interdependence. The IEA defines energy security as: "the uninterrupted availability of energy sources at an affordable price. Energy security has many aspects: long-term energy security mainly deals with timely investments to supply energy in line with economic developments and environmental needs. On the other hand, short-term energy security focuses on the ability of the energy system to react promptly to sudden changes in the supply-demand balance" (IEA, 2023). As the IEA mentions, short-term energy security is primarily focused on keeping a country's energy system ready to react to sudden changes in supply and demand. A sudden change in supply and demand could be a reaction to a geopolitical crisis, however, long-term energy can also be a change in strategy in the face of a geopolitical crisis, such as moving towards renewables as opposed to fossil fuels. This also relates directly back to the research question of this thesis, which of course will be discussed in more detail later on. The next sub chapter will focus on how different actors can frame various topics as a security concern.

3.2 The Copenhagen School Theory of Securitization

Throughout the end of the 20th century scientists at the Copenhagen Peace Research Institute developed a range of influential and innovative studies regarding security concerns particularly for Europe. The arguments often related to worries regarding integration and migration as well as ethnical conflicts particularly in the Balkan region. Historically security has often been the task of the military, however these kinds of issues along with possible hostile non-military intentions from foreign states puts the topic of security in more intricate position whereas classical military and police forces cannot create security alone.

The Copenhagen school theory of securitization argues particularly that non-military factors can become a concern of security. The theory proclaims to have its origins in the book "People, States and Fear: The National Security Problem in International Relations" by Barry Buzan published in 1983 (Buzan, 1983). Later on, the theory has also become highly associated with academics Ole Wæver and Jaap de Wilde as they together with Buzan developed a new book by the name "Security: A New Framework for Analysis" (Buzan et al., 1998). In the 2nd book the theory is developed further into a framework which focuses more on the use of their theory within international relations. In this book the authors argue that security should indeed be seen as a discursive process as opposed to looking at whether a security threat is legitimate or not. This opens up the possibility of looking at how a problem is being is constructed as a threat. Which further unlocks the possibility of securitizing a topic and elevating it to the highest degree quickly through the use of discourse alone, meaning that a government can start discussing a topic, whether it be a political or non-political one as threat. Using discourse like this to elevate problems can also justify extraordinary measures to meet the threat.

3.2 Key elements of Securitization

In SANFFA (Security: A New Framework for Analysis) (Buzan et al., 1998) There are several key elements to the process of securitization.

1. **Referent Object**, this means the subject/topic or problem being securitized. Some examples of such topics could be environmental damage, terrorism, or public like such as pandemics.

- 2. **Securitizing Actor(s)**, This could be an organization or group, a lone entity or even a nation state. This entity would be the actor presenting the problem as a threat to security.
- 3. The Audience, this of course refers to the targeted audience that needs to be convinced or have their views changed that the problem is in fact a matter of security. This audience could be politicians, state leaders, or some form of interest groups with vested power surrounding the problem, but it could also be the population of a country or area.
- 4. **The Speech act** the speech act contains 3 sub criteria that the authors specifically mention in the book this include: 1. The actor must make an impact with their statement. 2. That there is in fact a threat against the survival of the topic being referenced. 3. That the statements do indeed justify extraordinary measures.
- 5. Securitization Context, this means the context surrounding the problem being securitized and ways it could possibly be influenced. This could be something along the lines of social norms or values as well as political perceptions and historical factors.

In the case of this thesis the topic in question is energy. The way in which such a topic may become a concern of security is often through the speech act, usually by politicians but in some cases by other actors such as people who work in/or are deeply invested in the industry. As this thesis argues, following the invasion of Ukraine energy has indeed become an issue of security. It is through the lens of this theory that the thesis sheds light on how securitization potentially opened the door for a push towards renewable energy as a means of securing the energy sector within European countries and the European union.

3.3 Securitization and Social Constructs

The speech act specifically goes hand in hand with another theory, being constructivism within international relations. The reason behind this is the fact that the speech act requires making an audience comprehend the threat of the problem being securitized, this means being

able to conjure a version of reality within the minds of the audience. This is specifically what constructivism within international relations aims to put into a theoretical perspective. This essentially breaks down to the understanding of/and the role played by ideas, norms, and social constructs in shaping behaviour of states and international actors. To provide a contrast to this one can look to more traditional theories within international relations such as realism and liberalism which primarily focus on factors such as economy and power.

Both authors Alexander Wendt and Jeffery T. Checkel discuss the constructivism approach to international relations in their respective works (1999) "Social Theory of International Politics" and (1998) "The constructivist turn in international relations theory". The role of constructivism as a theoretical approach in international relations can essentially be broken down into 4 key points.

1. Social construction of reality

Proponents of this theory such as Wendt and Checkel argue that the interaction between states and international actors are not solely dependent upon objective material factors such as oil, but rather they are also socially constructed through identity, beliefs, norms and ideas and these factors influence how international system of states and international actors operate around each other (Wendt, 1999) (Checkel, 1998).

2. Norms and institutions

Furthermore, the authors explain how norms and institutions help states and international actors interact with one another in a controlled environment such as the UN with given norms of how things are conducted. This provides a framework for states to follow for cooperation and interaction.

3. Identity and socialization

Checkel and Wendt both highlight the importance of identity when it comes to shaping how states behave. International actors and states both develop identities through a process of socialization. This is a process where values and norms are learned and adopted through existing in the international system. It is also important to note that all states have a national

identity going into the international stage, but as constructive argue, takes on a "international identity".

4. Change and agency

It was once said that *the only constant is change*, this is of course always true within international relations. States and international actors can change their behaviour, norms, ideas, and identities over time, this could arise in the form of a domestic election. This is perhaps best exemplified with Trump's America first policy. These kinds of changes can lead to upheaval in the international ecosystem. This is why constructivists such as Wendt and Checkel highlight change as an important factor within international relations.

As for this thesis elements of international relations constructivism can be beneficial when it comes to understanding how states have opted to behave in response to the ongoing Russo-Ukraine war. Wars can certainly cause major upheaval on the international stage. This approach will therefore help highlight how the EU along with the rest of Europe must reinvent itself as a more energy secure region.

3.4 Criticism of the Copenhagen School Theory of Securitization

As with any theory, the Copenhagen School Theory of Securitization also faced its fair share of critique. Heinrich & Szulecki (2018) writes about applying the Copenhagen School's framework to energy, which they address and discuss various critiques. I will include a lot of their work in this subchapter as they do a superb job, and it benefits this thesis to show transparency in the choices made for theory usage and this of course includes addressing weaknesses.

Holger Stritzel spoke for many critics of the theory when he wrote: "securitisation theory suffers 'from several internal tensions in the argument, an often too vague and undertheorised terminology and, in general, the fact that too much weight is put on the semantic side of the speech act articulation at the expense of its social and linguistic relatedness and sequentiality" (Stritzel, 2007, p. 358). What this essentially meant for the securitization theory was that was

often viewed more as a model or hypothesis as opposed to a fully developed theory (Heinrich & Szulecki, 2018). This has left scholars wanting and most critiques wishes to see further development in this theory. In particular a better definition of what "extra-ordinary" measures entail. As well as a better explanation for the overemphasis on the speech act methodology (Heinrich & Szulecki, 2018).

1. Extra-ordinary Measures

As for the extra-ordinary measure question, what is debated between critics is if there is a requirement for an extra-ordinary measure or event to take place in order for something, say energy, to become securitized. Must there be rule breaking to securitize something? Jörn Richert spoke about this in a conference where he said: "in its current form, the framework ignores securitizing moves – even if they result in referent objects conceived as being existentially threatened, and even if this insight provokes political action – as long as the occurring action does not break the rules that otherwise bind' or intend to break them (Richert, 2010, p. 12). This would exclude from the analysis measures that do not leave the 'normal' political process and are still embedded in the process of politicisation" (Richert, 2010, p. 11).

Empirical evidence (particularly in the energy and environmental sector) has indeed shown that there has been attempts at securing topics, however, these attempts have ended in measures that are part of an ordinary politics as opposed to extra-ordinary (Heinrich & Szulecki, 2018). As Heinrich and Szulecki put it: "The disjuncture between the securitised rhetoric and actual practices [...] indicates either a failure of the securitisation process or a failure of securitisation theory to account for what evoking "security" accomplishes" (Heinrich & Szulecki, 2018, p. 40).

Wæver does concede that the extra-ordinary measures might be harder to study, and he suggests it might be helpful "if the criteria to apply in specific instances is less the extra-ordinary nature of particular measures (because hard to make precise) but rather the threat construction as such and the argument about necessity. The extra-ordinary measures cannot be left out of the theory, but the focus of empirical investigations should be on the rhetorical

structure of statements more than on institutional history of particular measures" (Wæver, 2003, p. 27). To echo this Mark Salter, also suggest that ordinary measures, which of course do not break the rules of the regular political process, also qualify as a securitizing move as long as there is change in policy in either discourse, budgets or in actual policy, such as the granting of new executive powers or emergency executive powers (M. Salter, 2011). Caroline Kuzemko adds onto this by equating extra-ordinary measures as something that "breaks" with previous political practice. Essentially saying that a new way of simply perceiving something politically can also be an extra-ordinary measure. Lastly Heinrich & Szulecki highlights that in "following the suggestion made by Wæver and others, one can in fact expect 'extra-ordinary measures' to be quite common in the energy sector because energy has a long tradition of technocratic governance detached from public scrutiny or even awareness" (Heinrich & Szulecki, 2018, p. 40).

Having this in mind, in the context of this thesis the empirical data has been more focused on viewing the extra-ordinary measures as something that aims to change or disrupt political discourse regarding energy security.

Overemphasis on the Speech Act

The Copenhagen school theory of securitization has also faced criticism on the front of linguistics, with critics such as Hölger Stritzel saying "too much weight has been put on the semantic side of the speech act articulation at the expense of its social and linguistic relatedness and sequentiality" (Stritzel, 2007, p. 358). What Stirtzel is essentially saying here is that the "speech act" part of the theory puts a lot of focus on the actors, while factors such as the structure, that is the social context is being left out. That is, what can be spoken, who can speak, and what is being heard (Heinrich & Szulecki, 2018). This over emphasis of the speech act that Stritzel is showcasing here is further echoed in Mark Salter's words here he says that the speech act simply "does not match the complexity of contemporary social dynamics of security" (M. B. Salter, 2008, p. 324). One of the missing components that slips away from the theory when language is being focused on too heavily, is imagery. A lot can be expressed by the use of images and icons without relying on speech to communicate (Heinrich & Szulecki, 2018). To put it very bluntly, if a person is wearing a swastika on their clothing, the person is indeed sending a strong message without having to ever utter a word.

This is something that is completely foregone in the speech act, which is supposed to focus on what is being communicated by various actors. Images, bureaucratic practices, institutional mechanisms, and physical actions are being left out (Heinrich & Szulecki, 2018).

Wæver does recognize that extending the speech act logic is something that is possible (Wæver, 2003, p 28). This is something that is supported by a variety of scholars and "They propose a more complex, sociological methodology of analysing the process of securitisation, including discursive practices, context and power relations that are considered important to explain the emergence and origin of security problems" (Heinrich & Szulecki, 2018, p 43). Therefore, some simple rectifying in the methodology can alleviate the criticism hurled against the speech act. By opening up the methodology further, Heinrich & Szulecki mentions discourse analysis as an exemplary tool for securitization theory as it helps the researcher delve deeper "into the intersubjective structures of meaning that surround and condition an individual speech act" (Heinrich & Szulecki, 2018, p. 44). Another point to put forth by Heinrich & Szulecki is that securitization is about creating a kind of linguistic tension by moving a problem between areas of discourse, for example the discourse of security and the discourse of energy. Heinrich & Szulecki added a figure to highlight this dynamic in what they called "the pendulum of (de-)securitization and (de-)politicization" (Heinrich & Szulecki, 2018, p. 44).

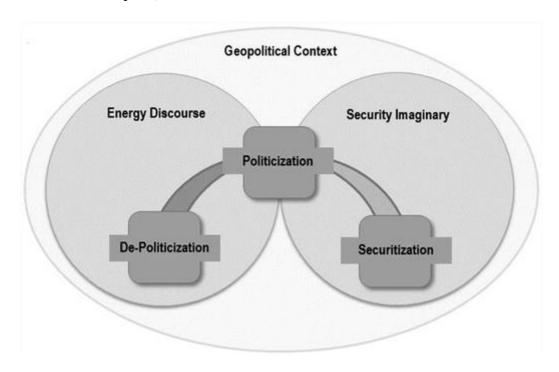


Figure 2. The "pendulum" of (de-)securitisation and (de-) politicisation in energy policy. (Heinrich & Szulecki) 2018, p. 44

What this critique of the speech act does for this thesis is that it gives a clearer view of what to keep in mind when conducting a discourse analysis regarding securitization, which is one of the primary ways of obtaining empirical data for this thesis.

Revision

The concepts of "riskification" and "security jargon" come up as valuable assets to Heinrich & Szulecki's revision of the theory. Olaf Corry is the person that came up with the concept of "riskification" he describes it like this: "A separate kind of speech act – 'riskification' – is identified based on a re-theorisation of what distinguishes 'risks' from 'threats'. It is argued that risk politics is not an instance of securitisation, but something distinct with its own advantages and dangers" (Corry, 2012 [Abstract]). This essentially gives securitization another layer of depth as distinctions can be made between the two ways of speech acts. For this thesis it can be beneficial to use the concept of riskification in addition to securitization as risk (in Heinrich & Szulecki's interpretation of Corry), is more focused on "the conditions of possibility (or constitutive causes) of harm promoting long-term precautionary governance" (Heinrich & Szulecki, 2018, p. 46).

As for the concept of "security jargon", it was developed by Itay Fischendler and David Katz in their 2013 work "The Use of "Security" Jargon in Sustainable Development Discourse: evidence from UN Commission on Sustainable Development". The primary idea of this concept is that highlights discourses were security threats or risks are mentioned, but here is no plan on how to deal with these issues. As Fischendler and Katz put it themselves: "Security language is simply used to communicate a sense of urgency in order to influence a discussion, gain media attention, avoid sceptical counterclaims, etc" (Fischhendler & Katz, 2013, p. 322, 333). Fischendler in his later works called it "tactical securitisation", which means "low politics issues are linked with high politics issues of national survival in order to raise the profile of the issue, increase public awareness, mobilise resources, and so on" (Fischhendler, 2015, p. 247). This also adds an additional layer in toolbox of the speech act. As for this thesis, being able to recognize social construction that does not necessarily lead to or at least contain a plan as securitization, should prove valuable when trying to make sense of the security language within European politics.

3.4 The Multi-Level Perspective

The multi-level perspective is a theory developed (MLP) by Professor Frank Geels. The primary goal of the theory is to understand technical transitions within an environmental perspective. There are 3 layers, or dimensions to the MLP in Geels own words regarding the 3 levels: "niches (the locus of radical innovations), sociotechnical regimes (the locus of established practices and associated rules that enable and constrain incumbent actors in relation to existing systems), and an exogenous socio-technical landscape" (Geels, 2014: 3). To better illustrate this the thesis will include an illustration taken from (Geels & Schot, 2007, p. 401)

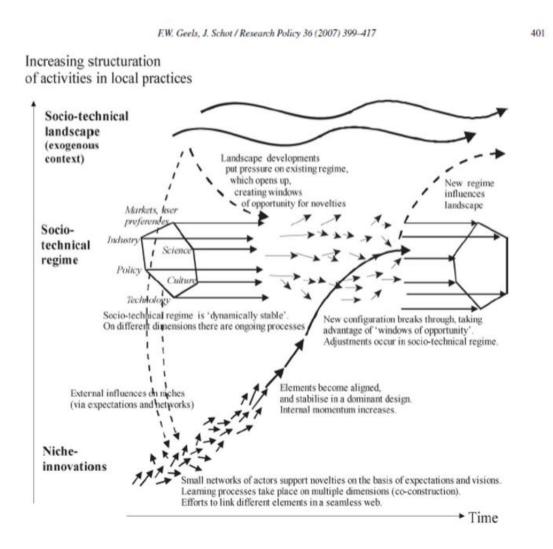


Figure 3. The Multi-Level Perspective (Geels & Schot) (2007), p 401

3.5 Elements of the Multi-Level Perspective

What makes the MLP is particularly adept at explain environmental and energy transitions is its multifaceted nature. The MLP addresses issues such as multi-dimensionality and coevolution this is of course a key element in the green transition as it requires a multitude of different technologies and approaches, especially on a national level as most countries are quite different and therefore require their own pathways to clean energy. This also ties into the multi-actor processes that the MLP addresses in terms of the existing actors within the regime level but also the outside influence of niche actors and landscape events. The MLP also addresses time and the long-term nature of an energy transition. This all ties together neatly to help shed light on how a transition takes place.

The MLP is considered to be a middle-range theory (Merton, 1968). This means that the MLP gracefully avoids the extremes of being a grandy theory such as for example Marxism. Another differing point between grand theory and the MLP is the emphasizes the MLP puts on interactions between theory and empirical research. This further indicates that despite being a quite encompassing theory the MLP still is not about abstract concepts such as "society" but rather puts its focus on concrete phenomena, this might seem a little counter intuitive as the MLP is broad in terms of including factors and actors on various levels within a given system. However, the MLPs primary goal is still to highlight concrete transitions within such as system (Geels, 2011). Additionally, the MLP is a process theory rather than a variance theory, this essentially boils down to the fact that the MLP explains outcomes in terms of events that happens in a given sequence, timing and event-chains. Whereas a variance theory would highlight variance in a dependant variable as an effect of a independent variable (Geels, 2011). To put this in a different way, the MLP looks at the outcome of events rather than at every variable and the effects on such a variable. The next part of the thesis dives deeper into the three levels of the MLP

3.6 Levels of the Multi-Level Perspective

The top level of the MLP is the socio-technical landscape. This landscape represents the wider context that the lower levels (regime & niches) find themselves within. The landscape exerts itself in various ways, such as nature in the form of natural catastrophes like earthquakes, forest fires, tsunamis and so forth. But this also includes overarching social factors such as

ideologies, norms, values, and economic trends, this could for example be the spread of a new form of social value that a niche actor could play into or a value that creates problems for the current regime (Geels, 2011). This means that the regime level and the niche level must play inside the confinements of the landscape as they cannot influence change in that landscape in a short time frame.

The next level of the MLP is the regime level. The regime is the larger structure of society that accounts for the current or existing socio-technical system. This means that the regime has a set "playbook" or a "way of doing things". This playbook usually contains several actors such as investors, scientists, politicians, users, and the market. But as mentioned prior a "way of doing things" also include factors such as shared beliefs, lifestyles, practices, policy, regulations, and institutional arrangements. This playbook or paradigm is what usually shifts with a successful transition. An example of such a paradigm shift could be in the shift from postal mail to email. At this point in time if one wishes to communicate something in one would usually choose email over postal mail. Whereas before this shift using postal mail was the go-to mechanism for long distance communication. However, such a shift does not occur over night. The regime often suffers from inertia, which means there is a lot of momentum invested into the current regime and thus makes the shift harder as well as the fact that several actors within the regime has a vested interest in keep the current regime running as usual in other words keeping up "business as usual" (Geels, 2011). For example, the amount of money invested into fossil fuel means the actors which invested this money has a vested interest in keeping the fossil fuel as the go-to source of energy.

The last level of the MLP covers the niches. The niches are smaller spaces, factors, and actors that try to bring about change. Geels describes niches as research & development laboratories, subsidised demonstration projects, or market niches where the users demand is very specific and there is a willingness from the user's side to support the emergence of innovation that the niches may provide. The niches hope their innovations or ideas might eventually make their way into the regime and sometimes even change or overthrow it. The following part of the thesis will look into the criticisms the MLP has faced.

3.7 Criticism and Response of the MLP

The MLP has also been criticized in a couple of ways, specifically 7. Geels addresses these criticisms in the "Multi-level perspective on transitions: Responses to seven criticisms" (Geels, 2011) paper. This thesis will briefly mention all 7 of them.

1. Agency

The critics have mentioned a lack of agency, especially regarding the role of politics. The thesis does mention *policy* above but not *politics*. This distinction is important as politics can be viewed as a way of achieving or moving towards policies. The MLP does not particularly investigate specific politics from actors in the regime, but rather only at the outcome of politics AKA policies. Geels responds that the MLP does in fact contain agency because the MLP is based on a crossover between social construction of technology (STS) and evolutionary economics. And therefore "it aims to bridge the social science divide between "materialist" and "idealist" theories"(Geels, 2011, p 29.). Geels does however agree that the MLP can be "enriched" and that there might be a larger room for agency in the form of politics (Geels, 2011).

2. Operationalization

The next criticism Geels addresses is operationalization and specification of regimes. This essentially boils down to how to set the boundaries between the different regimes. For example, a regime could be electricity grids, whereas another one could be global energy. The range between these two is quite immense and therefore can be hard to delineate properly. Geels' response to this is that the MLP does not tell one how broad or narrow a topic should be, this means that the scope of the given topic should be operationalized by the researcher for each different object of analysis (Geels, 2011). In terms of operationalization the MLP has faced criticism for portraying the regime as too homogenous or too monolithic. Geels does agree that this is most likely the case, especially when it comes to investigating niches and how they try to combat and make their mark on existing regimes (Geels, 2011).

3. Bottom-up Change

Following this criticism, the MLP has also been reprimanded for having a bias towards bottom-up change. This means it tends to have a special focus on niche innovations and their impact on regime change. This implies that top-down change, is left out to some extent. Geels agrees with this criticism and adds that "I think more explicit attention needs to be paid to ongoing processes at the regime and landscape level." (Geels, 2011, p 32.) Geels also mentions that there are more fruitful discussions to be had regarding a broader variety of transition models.

4. Heuristics

Onward the MLP faces disapproval in the heuristics sector, the critics asks what the MLP actually explains, this is addressed above as the MLP is indeed a process theory as opposed to a variance theory as well as a middle range theory, both these elements of the MLP addresses the heuristic goals of the MLP.

5. Methodology

Similarly, the MLP did also encounter criticism in the methodology department. Specifically in terms of data sources and the use of "uncritically accepted" understanding of historical socio-technical developments. Geels agrees that the methodological discussion of data sources is indeed underdeveloped and that there is a chance that he did in fact come to incorrect understandings in the secondary literature. Onwards he does however rebuke process theories tend to have encounter problems on the empirical side of things as they emphasise complex and multi-facetted dynamics. Geels ends with saying "the MLP should be not be reduced into a mechanical procedure by forcing it into a variance theory straightjacket" (Geels, 2011, p 36). This essentially means Geels would like the MLP to remain more of an open theory that can be used in different methodological settings.

6. Landscape as a residual category

The landscape level of the MLP as been criticised as more of a "residual" category within the MLP which accounts for a multitude of contextual influences. Essentially this means that the

landscape level is left as kind of a mix of a lot of different "things". Geels says this is a fair criticism. And that the landscape is open for more theoretical development (Geels, 2011).

Geels goes on to state that the landscape could become more dynamic, here he mentions the paper of Van Driel and Schot (Driel & Schot, 2005) where the authors presented 3 different understandings of the landscape dynamics. The first one is factors that does not change or in some cases changes very slowly, this could be factors such as the climate. Secondly there is external shocks, this could be in the form of wars or heavy price fluctuations. The third dynamic Van Driel and Schot categorize is long-term momentum in a certain direction, such as demographic changes (Geels, 2011).

Moreover, Geels expresses that more light could be shed on parts of the landscape that describe stabilizing effects rather than only on destabilizing ones. Often times the landscape tends to focus on factors that undermine a current regime such as climate change, wars or price hikes. Geels argues that stabilizing factors should be highlighted more to expand the role and importance of the landscape. Geels here uses car mobility to showcase how stabilizing factors can be understood. He presents globalization as a factor, this has increased connectivity and made people crave greater mobility as well as increase wealth such as households can afford to have multiple cars (Geels, 2011).

Lastly on the topic of landscape Geels suggests that academics could investigate the effect the regime has on the landscape as opposed to the usual, what effect is the landscape having on the regime? (Geels, 2011). A good example of such an inverse investigation could be climate change. The landscape's physical climate is surely having an effect on the regime (and niches!), however the regime, in particular the fossil fuel regime is having an effect on the landscape's physical climate.

7. Flat Versus Hierarchical

The last criticism hurled at the MLP is the potentially better use of flat "levels" as opposed to the MLP's hierarchical levels of landscape, regime, and niches. Geels answers back by saying that flat ontologies have fundamentally different assumptions and understandings of how a transition takes place. This means is somewhat hard to properly equate the two approaches to

transitions. Geels also mentions that flat ontological approaches might be a good alternative approach to the MLP. However, because such an ontology is more complex than the MLP this might lead to more accurate findings as well better generalization. Geels stipulated that the MLP at this stage might be more developed than some of the flat ontological approaches to transitions, especially in terms of expressing relevant mechanisms in recurrent patterns in transitions (Geels, 2011).

Despite the MLP's weaknesses this thesis will be using the MLP in order to better understand the potential for a green transition in Europe as a consequence of the ongoing Russo-Ukrainian war.

4. Methods & Strategy

This chapter of the thesis aims to explain which methods were used in developing the thesis as well as how the research design was built. Following this there will be a sub chapter on the logic of inquiry used in the thesis and a discussion of why this logic in particular was chosen. However, first the research goal will be addressed.

4.1 Research Goal

To reiterate, the goal of this thesis is to answer the question "Is the war in Ukraine accelerating the green transition?" With the sub question, "if it indeed turns out to that the war is accelerating the green transition, then in what way?" The hypothesis this thesis is operating with is that of the Russian energy weapon. Which says that due to Europe's dependence on Russian fossil fuel, Russia has a grip of power over European energy. This again, due to the war leads Europe to quickly transition away from Russian fossil fuel. This creates a window of opportunity for Europe to move towards more renewable energy sources. This also gives Europe greater energy security as renewables can usually be produced domestically.

To test this hypothesis this thesis will use qualitative methods. The reason for choosing this approach is that in order to understand a boarder trend such as a green transition, this thesis will both examine the discourse surrounding the increased use of renewables as well

interviews from individuals to get a clearer view of their perception of the transition. The thesis will also look policies regarding energy and energy security & sovereignty.

4.2 Logic of Inquiry

The logic of inquiry used in this thesis is an abductive one. The reason for choosing this logic is the fact that the abductive reasoning according to Blaikie and Priest, which to describe and understand social life in terms of social actors' meanings and motives (Blaikie & Priest, 2018). This fits well into the research question of this thesis as social actors in this sense will be the actors that largely control the energy sector in Europe as well as sectors' future. This could be politicians, CEOs, and the media as the media puts pressure on these actors, especially politicians. As the issue at hand wishes to understand what society through social actors, abductive logic fits better than inductive, deductive, and retroductive logic as these are more rigid in terms of reality constructivism. As Dey explains it abductive logic connects an observation to a theory or vice versa and this results in an interpretation or understanding (Dey, 1993). Dey also mentions that differences between induction and deduction in relation to abduction. Unlike induction, within abductive logic, theory works in cohesion with observation to create a understand of something specific rather than to only infer generalization. As for deduction, the results of an abductive does not follow logically from the premise, but rather abductive inquiries offers a possible interpretation rather than a strict logical conclusion (Dey, 1993).

According to Blaikie the starting point of the abductive logic is the social world and the actors within it that are being investigated and the way they construct and understand reality around themselves (Blaikie, 2000). In terms of this thesis this part will also focus on the actors of the energy sector, however, the public's perception of the war and its relation to energy is also a focal point when it comes to the utility of the green transition as window of opportunity due to the shift away from Russian fossil fuels. This perception will most likely be affected by how the media and politicians frame energy as a security problem along with how renewables tend to provide energy security as well as sovereignty.

Following this Blaikie suggests "the researcher should proceed to redescribe lay accounts of the social world in a scientific language" (Blaikie, 2000, p 77.). The way in which this should be done does not seem particularly clear, however, this thesis will try to describe meaning to the social world through the use of the MLP along with the Copenhagen school theory of securitization. This also fits well with what Danermark proposes in terms of abductive inference, as he sees part of abductive inference as "what meaning is given to something interpreted within a particular conceptual framework" (Danermark, 2012, p 80). One of the limitations of the abductive method according to Danermark is that there is no "fixed" criteria where one can find a definite way to validate the conclusion of an abductive logic of inquiry (Danermark, 2012). This means abductive reasoning cannot necessarily prove something in as strong of a way as one of the other logics of inquiry could. However, on the other hand a strength of the abductive logic is that it provides a way of understanding and reading the process in which we ascribe meaning to events in a larger context (Danermark, 2012). This again ties into the larger context of a green transition in Europe and how we can understand this process and ascribe meaning to it. The way in which Dey sums up abductive logic is "a matter of interpreting a phenomenon in terms of some theoretical frame of reference. (Which in the case of this thesis will be the multi-level perspective and the Copenhagen school of securitization) This can be one of several possible interpretations depending on the theory we adopt" (Dey, 1993, p 91.).

Lastly it is important to note that no one logic of inquiry is perfect. Blaikie's words of wisdom to researchers showcases this: "Because of their (logics of inquiry) deficiencies, researchers need to adopt a pragmatic attitude towards them" (Blaikie, 2000, p 25).

5. Research Design

Europe is an extremely large place, there is a lot of actors, stakeholders, experts and so on within this continent, and the energy sector is vast and immense. Empirically speaking, this makes data gathering quite hard, as there is a lot of "clutter" out there, meaning obtaining the "correct" or wanted data can prove hard. This makes the scope of this nearly impossible. This is why limitations must be added to make the project something possible to overcome. These limitations mean putting more focus into a few number of countries and extrapolating from there, possible larger trends. The last limiting factor is of course time. This thesis is indeed

limited to the spring of 2023, there is only so much information available about the topics at this given point in time. Likewise, there is only a frame of 6 months to complete this project.

There is a multitude of factors that goes into an energy transition, one of the main drivers tend to be efficiency. One of the primary problems with the current transition is that there is an economic and efficiency downturn while moving from fossil fuels to renewables. This means there is little motivation outside of the disastrous impacts of climate change, which have not yet fully shown itself. This means the regime and its inertia needs a bigger or rather, more pressing problem to spark the hasten the transition. This problem is energy security. During data collection this thesis looked for connections between transition of energy and energy security and how the Russo-Ukrainian war raises the issue of energy security for Europe.

5.1 Data Collection

This thesis uses two primary ways of acquiring data. The first one of the ways of data gathering that was employed during the construction of this thesis was interviewing. The interviews that were conducted focused on 3 primary topics when targeting interviewees. The first one is policy, the second energy, and lastly security. As mentioned earlier in the thesis, in order to properly get an understanding of the empirical world, to use the MLP, the landscape and regime in particular, information from experts was sought out. The topic of policy and energy somewhat merges together as a means of ascribing meaning to how the current regime and landscape functions regarding energy. The security topic differs slightly as the security topic is intertwined with the ongoing war in Europe and the securitization of energy.

The second way of data collection was through empirical reviews of existing literature and works, coupled with media news posts. This might sound like a bit of an odd duck combination. However, as the war in Ukraine is still on-going (and fresh academically speaking) and the energy landscape continues to change, having up to date information proved useful to discuss the thesis' hypothesis. This all essentially amounts to a discourse analysis in a Foucauldian fashion, as in the term discourse referring to institutionalized patterns of knowledge that become manifest in disciplinarian structures and function by connecting power and knowledge.

5.2 Interviews

The questions raised in the interviews were carefully constructed to gain data on the following topics:

- on the green transition in Europe
- energy security in Europe
- the link between them and the war in Ukraine.

These topics were a part of every interview; however, some interviewees could say more about certain aspects than others could and vice versa. This of course led to a productive data harvesting processes and solid insights into the empirical world of experts. The interviews were done semi-structured, meaning the interviewees had more freedom to express their thoughts and perspectives within the bounds of the thesis. Additionally, the questions were constructed in such a way as to make the interviewees feel relaxed and as if they were having more of an informal conversation, a way of doing this was to make use of open-ended questions. These kinds of questions let the interviewees speak more freely about the relevant topics and therefore enhance the interviews with more insight than I would have gotten have the interviews been stricter and more structured.

Topic 1: The green transition

A core tenet of this thesis is the green transition; therefore, it became clear that the interviews had to include questions surrounding this topic. The in this part of the interviews, the experts were asked questions related to the green transition itself and how the experts view their role in the transition. The following questions were used to steer the conversation in the interview towards solid answers:

- How long have you been in this field / working with renewables?
- What are your thoughts surrounding the green transition?
- Has your work changed in any way shape or form because of increased demand in the fields of renewables?
- To what degree do you personally play apart in the green transition?

Topic 2: Energy security & sovereignty

Another central part of the thesis' work consists of security, particularly energy security and sovereignty. This was reflected in the interviews through the use of the following questions:

- What is required to change public perception of green energy?
- Has the war, been a "wake up call" for energy security?
- What would you say is the general perception of energy pre and post Russia's invasion of Ukraine?

Topic 3: A possible link

The latter part of the interviews covered the linkage between the war in Ukraine, energy security and the green transition. These are the questions related to this:

- What are your thoughts surrounding the Russo-Ukrainian war?
- Do you believe there is a linkage between the Russo-Ukrainian war, energy security, and the green transition?
- What would this linkage be?
- Has there been any talk or emphasis on this linkage at your place of work / at your institution?
- Has your work changed in any way shape or form as a result of the ongoing war?
- How have you adapted to this/these changes?

5.2 Data Security

This thesis does not contain any sensitive information, this meant the management of data did not pan out as a major problem for the thesis. However, some measures were taken in order to fully secure the anonymity of interviewees. All interviewees received a letter of information and consent regarding the interview and all interviewees gave their consent to partake in the interviews. The data gathered from these interviews were coded and anonymized and stored locally on a hard drive disc (HDD). The one interview which took place through online communication took place over end-to-end encrypted channels, which essentially means there was no data from the interview stored online. As the people interviewed are all experts in the

field of policy, energy, or security, the interviewees will be referred to as "expert 1, expert 2, and so on.

5.3 Informants

To obtain accurate and updated information regarding topics of this thesis I interviewed 4 expert informants. These informants represent a varied and rich well of information regarding geopolitics, the energy transition, security, renewable energy, and energy in general. In the table below gives a limited amount of information on these experts while still keeping their anonymity.

Table 1. Brief Description of Informants

Informant	Brief Description of Informants
Number	
1	Expert 1 serves a large role in the education of the green transition and have published several works regarding this topic and aspects of it. This expert was useful in creating an overarching picture of the problems this thesis tries to tackle.
2	Expert 2 has a deeper understanding in the specificity of the technological aspect of certain forms of energy and served as a more of a technical wealth of information.
3	Expert 3 focuses more on the political aspect of the green transition and serves as a means of helping me understand where and what to look for when looking for signs of change in the MLP's regime level.
4	Expert 4 provides information on the security aspect of energy and how this connects to a potential change in the energy sector in Europe.

5.4 Discourse analysis

Elmer Eric Schattschneider once wrote: "All forms of political organization have a bias in favour of the exploitation of some kinds of conflict and the suppression of others because organization is the mobilisation of bias. Some issues are organized into politics while some are organized out" (Schattschneider, 1974, p 71). Schattschneider here perfectly highlights the way in which political discourse takes priority over one another. This is something quite relevant to the discussion of energy security and renewables. For example, in an energy security debate, does renewables take priority over fossil fuel when there is a need to secure a given country's energy sources? Renewables could yield more security in the long term, especially a diversified renewable grid. However, fossil fuels from one trading partner, might be faster if there are other trading partners out there. In this scenario there would be a discursive conflict between those in favour of renewables and those in favour of trading one source of fossil fuel for another.

Discourse analysis is largely about investigating what words, language and perhaps most importantly what "story" takes priority in the world of politics. As the topic of energy security and renewable energy is quite subjective, I believe this thesis benefits well by incorporating such an analysis. Specifically Hajer's discursive "argumentative approach" (Hajer, 1995). This entails looking at what is being said by whom to whom in a given context. This approach as Hajer himself put it: "looks at politics as a struggle for discursive hegemony in which actors try to secure support for their definition of reality framing" (Hajer, 1995, p 59). Hajer suggested 4 primary categories for a successful discourse analysis (Hajer, 1995):

- 1. Discursive context, this meaning the context of which the discourse is taking place, for example energy security within the context for renewable energy.
- 2. Actors and their social construction of reality, this meaning for example their beliefs, political attitudes.
- 3. Narratives, this meaning the social versions of reality that struggle with one another to be the "prevailing story" that will eventually be sold as the truth in the minds of the greatest number of important actors.

4. Discursive coalitions, this meaning a group of actors that share the same narrative or set of narratives concerning something in a given context, for example energy security and renewables.

Hajer further mentions that "discourse is a key role in processes of political change" (Hajer, 1995, p, 43). All of this should be sufficient proof that a discursive analysis and the categorical framework for such an analysis is warranted in a thesis that aims to investigate if indeed the war in Ukraine is accelerating the green transition in Europe.

5.5 Research Quality

In order to fully secure the quality of this research I believe it is important to highlight both strengths and weaknesses of various aspects of this thesis.

The topic of this thesis is quite relevant when it comes to the primary problem, which is climate change. To combat climate change, humanity must reduce its carbon emission and transition the energy sector over to low/zero emission regimes. This thesis highlights a possible European transition towards more renewable energy, as well as a deeper view of geopolitics surrounding energy. This means that the research conducted in this thesis hopefully can be used as a lens when looking at a grander picture of the green transition.

I have always been motivated to understand politics, society, and energy in a bigger picture. This thesis has given me exactly that. Of course, I am not an expert on any of these topics, due to this I have relied upon other research and information to provide a deeper understanding of the topics. This included doing a deep dive into white papers, reports, articles, peer-reviewed published works. However, to get a better understanding of real-time data I also looked to the media, especially the news, to obtain more accurate workings of what is happening quickly in the empirical world in relation to my research, this would be speeches, things said by government officials or other relevant stakeholders or news articles. With this being said, in the spirit of transparency I believe it is It is also important to highlight that the main use of an empirical article, paper, or news is data. Opinions and statements are not evidence in it of themselves unless they are coupled with empirical results. It is likewise

important to mention that people are imperfect and so are therefore their data can be too. Even experts (which have been a good source of data in this thesis) can be wrong. However, this thesis strives to build upon reliable and relevant data.

6. Results & Discussion

In this section of the thesis findings from the empirical data sources will be thoroughly investigated and discussed in the light of the problem statement, and theory section of the thesis. At first the data collected from interviews will be highlighted, followed by various other data sources such as articles, news, and peer reviewed research papers.

6.1 Interview findings

One of the most common significant words that were came up in the interviews was "change" nearly every interviewee agreed that "things are changing", however this saying can be rather murky and not necessarily clear in what objectives are changing. Most frequently the changing things were identified as the energy regime (per the MLP). That there is a time for renewables and that this time is nigh. Another thing that resonated throughout the interviewees was their desire to express that the war in Ukraine is in fact affecting a number of things in the world, but a major one is indeed the energy landscape of Europe. Most of the interviewees mention in particular the trade relationship between Europe and Russia and predicted even more change than what has already occurred in this relation.

Despite the talks of change and change in the European energy landscape, several interviewees pointed out that pivoting away from Russian gas and oil, does not necessarily mean that Europe will embrace renewable energy as the holy grail. What most of the interviewees concluded thus far was that the European energy landscape is changing and is changing in a major way as a consequence of the Russo-Ukrainian war, however whether not the war is in fact pushing Europe towards renewables is still too early to conclude. As one of the experts said, "We know that Europe is and has been moving towards renewables for some time now, even before the outbreak of the war, however if the war is accelerating the growth of renewables or if it is just renewables continuing as usual or seeing growth due to different factors is still up in the air". This resonates very well with the problem statement of the thesis,

my aim here is to clarify this issue at least to some extent, by discussing more of the data and results that was found when researching and gathering information for this thesis.

Another point of significant data that came out of the interviews was the lack of major elections in Europe during the first 6 months of the war in Ukraine, as this would most likely open the doors for populist rhetoric to take hold within the mind of the masses as the price of energy increased and the average Joe could feel the effects. Therefore, the lack of elections was a blessing in disguise for Ukraine as populist parties would likely put their own country(s) over standing firm together with Ukraine. Europe choose to have energy independence (from Russia) over energy security (while being under Russia's thumb energy wise). This is of course not something perhaps every citizen within Euro agreed to. As one of the interviewees put it "First the engineers controlled the energy sector, then the economists took over, and now energy is all politics, which makes things significantly harder to navigate and control". As seen with this politization of the energy sector, the media also plays a role in the green transition as they shape narratives given to the average citizen. This can of course come off as a double-edged sword as the media can easily be swayed to report in a given political direction or towards a given agenda.

The topic of also naturally came up during these interviews. Geopolitics has according to one of the interviewees seen an upsurge, especially after the war in Ukraine broke out within academia surrounding energy and renewables. Suddenly a variety, of actors showed interest in geopolitics surrounding in particular renewable energy, as the interviewee mentioned it is easier to get grants for research directed at geopolitics and geopolitics of renewables now, than prior to the war.

6.2 European Energy Discourse

The following subchapters will focus the discourse surrounding the geopolitics of energy in Europe. First there will be an analysis of how the topic of energy has become securitized by various actors across Europe, this will be done using the theory provided by the Copenhagen school of securitization along with the tools of discourse analysis. Additionally, the MLP will be used as a lens to view the discourse from a transitional view during discussion. This will be

divided into 2 sections, the first one will focus on how NATO perceive energy security and how it has change as an outcome of the war in Ukraine, following this the thesis will examine how energy has become more of a security issue for the European Union overtime and especially in the face of the ongoing war, and how the EU

6.3 NATO

The North Atlantic Treaty Organization, also known as NATO, is a military alliance this of course means security is already a topic of the utmost priority, however, it can be valuable to see how their language surrounding energy and renewables have changed in light of the European conflict in Ukraine.

Bucharest Summit

In July of 2022, 5 months after the Russian invasion of Ukraine, NATO updated their section on energy security, it contained the following: "Energy security is a vital element of resilience and has become more important due to emerging security challenges, such as the... energy crisis caused by Russia's actions, including its attack on Ukraine" (NATO, 2022). Whether this is a direct signal meant for governments across the global and perhaps Europe in particular, or if it's just "security jargon". Either way the language used is clearly communicating an energy crisis, and that securing energy is vital. However, on the other hand NATO has since 2008 taken on a role in energy security. This was agreed upon at the Bucharest Summit. This does indicate that even back in 2008 energy security's role in the geopolitical area was recognized by major actors such as NATO and the allies within it. The 48th bullet point in the deceleration is the one regarding energy security. Perhaps the most pertinent part is as following: "NATO will engage in the following fields: information and intelligence fusion and sharing; projecting stability; advancing international and regional cooperation; supporting consequence management; and supporting the protection of critical energy infrastructure. The Alliance will continue to consult on the most immediate risks in the field of energy security. We will ensure that NATO's endeavours add value and are fully coordinated and embedded within those of the international community, which features a number of organisations that are specialised in energy security" (NATO, 2008). This all mentions energy security in a variety of forms, however there is no particular mention of renewable energy as a strategy for energy security.

Smart Energy Team

As a follow-up of the Bucharest Summit, In January 2013, NATO's Smart Energy Team (SENT) started their operations. This subdivision of NATO is primarily focused on smart energy, such as renewables, energy efficiency, consumption reduction, energy storage, and new technologies (NATO, 2015) One of the main tasks of the SENT is to employ renewable into the battlefield and military, this is perhaps best exemplified in the following figure, where solar panels are utilized in a militaristic situation:



Figure 4. NATO Smart Energy, (NATO) (2022)

additionally, what this figure does, (from a securitization point of view) it conveys the speech act in the form of an image (as discussed about in the theory chapter) it couples renewables together with security, which potentially creates a link between them for the audience of NATOs energy security. Despite, renewables being used in a combat situation, is in essence renewable energy security. It is not what this thesis seeks to investigate. What is more interesting is NATO's recommendations to its allied nations regarding the use of renewable as a means of protecting themselves against asymmetrical energy trade relations. In SENT's 2015 report the team investigates a select few members countries and investigate their energy plans. In the report it is stated that most nations have a plan, however there is a lack of communication and cooperation between them, as most nations have been going at it by themselves (NATO, 2015). However, after having worked alongside NATO and it's SENT,

the smart energy team reported that the work "clearly indicate that there is desire and willingness for nations and international bodies to share knowledge and to collaborate toward smart energy. Initiatives at the political level in NATO HQ, such as the Green Defence Framework, further demonstrate the willingness to cooperate" (NATO, 2015, p. 14). As this report was published in 2015, it once again clearly indicates that NATO had a large interest in smart energy. Prior to the war in Ukraine. As NATO's head of Energy Security Section said in a 2014 interview "NATO cannot ignore the potential security implications of global energy developments" (NATO, 2014). This shows all highlights the importance of energy security and global energy developments in the eyes of NATO, however what lacks here is renewable as a *means* of defence in and of itself. The primary reasons behind the hypothesis of this thesis are of course that renewables provide energy security due to the fact that renewable energy often is sovereign, I.E produced domestically and therefore eliminates the threat of an "energy weapon".

A Change?

Having scoured through NATO's more recent publications and speeches, it is not until the 28th of June 2022 (This being several months after the invasion of Ukraine) that NATO chief Jens Stoltenberg in speech in Madrid, during the NATO Public Forum, recognized the Russian energy weapon. Stoltenberg's speech opened with the following statement: "The war in Ukraine shows the danger of being too dependent on commodities from authoritarian regimes. The way Russia is using energy as a weapon of coercion highlights the need to quickly wean off Russian oil and gas" (Binnur Donmez, 2022). Stoltenberg, first and foremost, spoke about diversifying suppliers, as opposed to diversifying the energy sector itself, he noted the dangers around green technologies, saying: "we must not swap one dependency for another. Lots of new green technologies and the air and earth minerals they require come from China. So we must diversify our energy sources and our suppliers" (Binnur Donmez, 2022). He did however, towards the end of the segment, Stoltenberg noted that "NATO should trade with China, he said the alliance has to be aware of the same risks of heavy dependence" (Binnur Donmez, 2022). This does somewhat indicate that NATO has taken increased interested in the energy weapon theory and in the idea that more diversity in the energy sector can increase energy security. Another place where this came to light was at a meeting held by the NATO Military Committee on June the 5th 2023. The meeting was on the topic of energy security. The following section came up as quite interesting as it entails an

energy security strategy that involves renewables: "The Military Representative for Azerbaijan, Colonel Aghaverdi Guliyev and Dr Esmira Jafarova provided some insights into country's energy security strategy and noted their efforts to diversify natural gas sources and routes, as well as export renewable energy resources (NATO, 2023). This may conceivably be the first time a NATO ally has specifically mentioned renewables as a direct part of their energy security strategy. Whereas Azerbaijan is not European country, it does like European countries, share a border with Russia. Whether this energy security plan is a product of the Russo-Ukrainian war is hard to discern but pivoting towards renewables certainly makes it harder for Russia to employ its energy weapon.

The MLP View

Taking a step back and looking at this NATO energy security evolution through the lens of the MLP. The landscape would be changing climate, NATO responds by setting up an innovative (niche) team (Smart Energy Team). This eventually leads to renewables being used in militaristic situations. This might not directly affect renewables being an overarching energy security strategy, but it does open the floodgates of renewables being in the conversation of energy security (the niche making its way into the regime). As a further change in the landscape with the Russian invasion of Ukraine. This resulted in the chief or NATO Jens Stoltenberg, recognizing the Russian energy weapon and the fact that diversification is needed. Here there is a different kind of effect in the MLP, the landscape (invasion of Ukraine) leads to change in regime (Stoltenberg highlighting the need to diversify away Russian fossil fuels).

Stoltenberg's Securitization

From a securitization point of view, Stoltenberg is employing the speech act when he expresses the need to diversify the energy sectors and move away from Russian fossil fuel energy as it is being used as weapon. Stoltenberg does also point out the importance of being mindful of moving entirely over to renewables as a good amount of the technology and material needed comes from China, this is essentially securitization in its purest form as Stoltenberg frames renewables as something important to energy security and how, and he then creates the imagine of a similar situation where an authoritarian regime weaponizes

energy trade to make their trading "partners" acquiesce on political and economic fronts. The energy weapon idea was already mentioned in the preliminary part of this thesis, but to once again illustrate the concept look to the following figure:



Figure 5. The Energy Weapon (Stegen Smth) (2011)

This imagine is very much what can be derived from Stoltenberg's language, and it is an imagine that quite accurately describes how Russia wields their energy weapon, however, despite price hikes and disruptions, (as seen in the figure 6) the energy weapon has not yielded a lot of concessions and acquiescence from European targets. How did Europe mitigate the consequences of the Russian energy weapon? And where did they pivot the energy sector? These questions are what will be discussed in the next subchapter of this thesis.

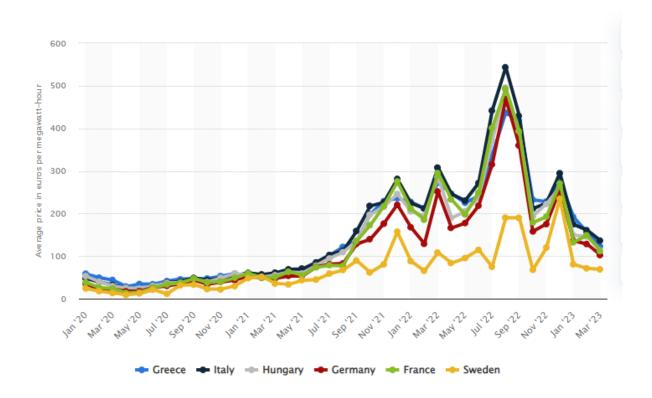


Figure 6. Average monthly electricity wholesale prices in selected countries in the European Union (EU) from January 2020 to March 2023 (Statista) (2023)

6.4 The European Union

The European has been one of the main institutions in the crosshairs of the Russian energy weapon. From here on I will follow a timeline of changes/meetings/points of importance from when the war broke out and up until today. Of course, there is too many meetings to cover everything that happens even things that are significant, however I will discuss the ones I find to be particularly important.

EU leaders call for emergency measures on energy - February 24th, 2022

February 24th eve of the Russian invasion of Ukraine, the European Council held a special meeting to address the situation arising within Ukraine. The council made a variety of demands to Russia regarding the ceasing of their activities in Ukraine. However how did they address the energy weapon? Following the meeting some remarks were made by President Charles Michel regarding the topic of security and energy: "I would like to illustrate: the need to be committed in the field of energy to reduce our dependency and to increase our capacity for strategic independence in this field....the situation also shows how much the discussion, in

progress for some years now, about the goal of building a Europe more focused on sovereignty or strategic autonomy, reveals its full significance when we are faced with the events we are witnessing today" (European Council, 2022). The language being used by President Charles Michel primarily achieves three things.

The 1st being it highlights the asymmetrical energy relationship that the European Union have with the rest of the world and especially Russia as shown in figure 1 (from earlier in the thesis). This being highlighted on the eve of the Russian invasion of Ukraine goes to show the importance of the asymmetrical relationship and how mindful the EU are of it.

The 2nd, it puts energy higher up on the security agenda, in other words President Charles Michel performs at speech act aimed at the public where there is emphasis of the EU having to as he said, "increase our own capacity for strategic independence".

The 3rd being a possible window of opportunity for renewables? President Chares Michel wanted an increase in the capacity of the European Union's energy for strategic independence" There is no specific indication on what this "increase" will be coming from, however this could be at least partly filled with renewable energy originating within the EU.

Energy ministers discuss energy market situation following Ukraine crisis - February 28th

In this meeting ministers came together to discuss the energy situation in the light of the Russian invasion of Ukraine. Barbara Pompili, French Minister for the Ecological Transition spoke out and had this to say: "In this unprecedented context of military operations on the EU's doorstep, we need to take action in three areas in the short term: we must provide practical support for Ukraine, strengthen the resilience of the European energy system, and manage future trends in energy prices. However, even if Russia were to halt its exports - something which is not on the agenda at present - there would be no immediate risk to the security of supply in the European Union. On the other hand, it is more important than ever to accelerate the green transition, in order to achieve our goals of Europe's energy independence and climate neutrality" (Council for the EU, 2022). Here Barbara Pomili indicates the need for the EU to manage future trends in energy prices. This again is a clear indication of securitization of energy, even though Pomili says there is no immediate risk to the EU if Russia where to halt it exports, it still frames energy as a security issue. Additionally, Pomili underscores the need to accelerate the green transition so that the EU can indeed become

energy independent. From the MLP point of view, Pomili is as a consequence of change in the landscape (Russian invasion of Ukraine) calling for niche innovations (renewables) to make their way into the current regime, in order to reduce dependency on outside sources of energy for the EU. Finally on the docket for the 28th of February meeting, "Ministers stressed the need to accelerate the transformation of our energy system to reduce our dependency on hydrocarbons. The Green Deal and the "Fit for 55%" legislative package will play a pivotal role in the achievement of this goal" (Council for the EU, 2022a). Once again there is an emphasis on moving away from fossil fuels and towards green energy, which further echoes Pomili's message.

Informal meeting of heads of state or government, Versailles – March 10-11th 2022

During this meeting what is called "the Versailles Declaration" were adopted. Here leaders agreed to a set of policies:

- Reducing the over reliance on fossil fuels
- Diversifying energy suppliers and routes, including for LNG
- Increasing energy efficiency
- Speeding up development of renewables and hydrogen
- Improving interconnections in the EU energy network

This deceleration and these points of agreement are important as they lay the groundwork for what would happen in May with the "RePowerEu plan"

The REPowerEU Plan

Affordable, secure, and sustainable energy for Europe – May 2022

This is the outcome of the Versailles declaration from the informal March meeting.

The achievements the EU made by working together for this plan include reductions in dependence on Russian fossil fuels. One of the things the EU manged to do when it comes to Russian energy depedency was replacing 80% of the Russian gas flowing in through the pipelines in Europe within the span of 8 months (European Commission, 2023). Along with

this achievement, The EU also diversified their imports more, especially when it comes to LNG (liquified natural gas), these achievements are highlighted in the following figures

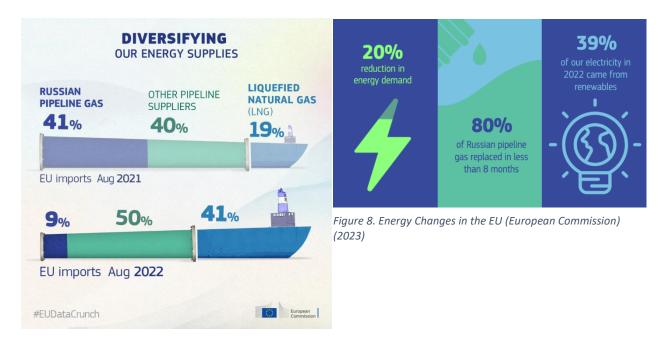


Figure 7. Diversification of the EU Energy (European Commission) (2023)

Additionally, the EU introduced a global cap on the gas and oil prices. As well as doubling the additional deployment of renewables (European Commission, 2023). As for securitization these achievements indicates that EU crafted strategies for energy security with renewables somewhat in mind, however as of today the EU is still heavily powered by fossil fuel energy. This shows that moving away from Russian energy, does not necessarily show a pivot towards renewables, despite the wishes by ministers such as Pomili to do so.

As of the 31st of January 2023, looked something more like what is shown on figure 9. Essentially fossil fuels are sitting at around 39% of the EU's electricity production. With coal and gas being largest contributes sitting at 16% and 20% respectively. Although the combination of wind and solar did together produce more electricity than any other single fuel source at 22% (Jones, 2023). Looking at this from the MLP view, did the change in landscape (war in Ukraine) change anything in the regime? (Energy generation sources) As per figure 10, fossil fuels still led the electricity generation in the EU in preliminary 2021 (a year prior to the change in landscape). However, compered to figure 9, it is clear that renewables have seen an increase in electricity production. Combining wind 15%, solar 7,3%, hydro 10%, bioenergy 6%, and other renewables at 0.2% leaves us at 38,5% of total energy production in 2023. This still means renewables are behind fossil fuels, however the gap is less than one

percent. Compering this to 2021 were renewables made up 37% of electricity generation (Moore, 2022). This means an increase of 1,5% happened in renewables output of electricity during 2022. Is this a massive shift in the energy regime? No it is not a massive increase, to help showcase this, in 2019 renewables made up 34% of electricity generation in EU (Moore, 2022). This essentially means renewables are on track to increase their electricity production by about 1,5% per year. This could mean renewables might take over fossil fuels in 2024, which could be a meaningful point for the energy regime, 1,5% per year is change, but it is not massive, and it shows how the current energy regime suffers from inertia.

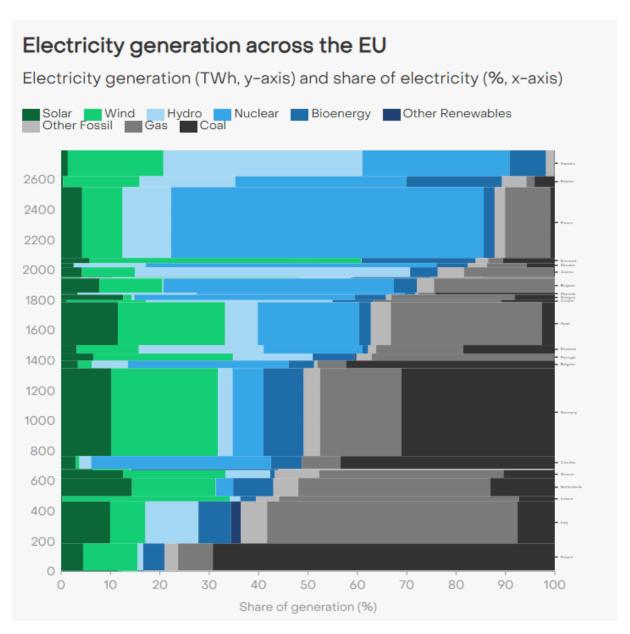


Figure 9. EU Electricity Generation 2023 (Jones) (2023)

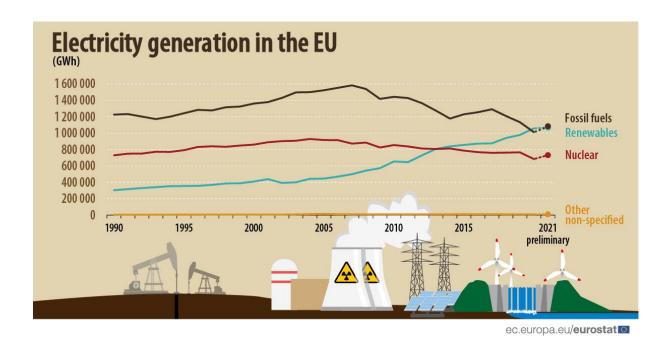


Figure 10. EU Electricity Generation 2021 (Eurostat) (2022)

In order to avoid blackouts for the European citizens the EU managed to get bids from 25 gas supplying companies, this meant the EU would ascertain more than 13,4 billion cubic meters of gas (bcm). This is enough gas to fill the EU's needs which is set to be at around 11,6 billion cubic meters of gas. This number was expressed by a joint demand of EU companies in accordance with the Aggregate EU mechanism (European Commission, 2023). An additional measure to counteract blackouts as agreed upon by member countries. This agreement meant gas storages were to be filled up prior to wintertime. The goal of the winter 2022-2023 was to be at around 80% storage capacity by the 1st of November 2022. This goal was already reached by July 2022, and during November 2022, the gas storages peaked at 96%. This is better visualized in figure 11. The target for the upcoming winter 2023-2024 is set to be at 90% storage capacity (European Commission, 2023). Furthermore, EU countries agreed to reduce their gas consumption by 15%, this goal was also exceeded as the period of August 2022 to March 2023 was categorized with an 18% drop in gas demand (European Commission, 2023). This goal eventually went from being voluntary to be formally adopted. This change happened on the 30th of March 2023 (Council for the EU, 2023).

As for securitization, these agreements and polices highlights the gas dependency of the EU, but also shows a willingness to reduce the dependency, not just dependency on Russian gas,

but on gas as a resource. The 18% reduction that was achieved sheds light on how energy has become a fixture of security in European politics. With respects to the MLP reduction in gas consumption shows how the regime's policies have been influenced and affect by the landscape level (war in Ukraine).

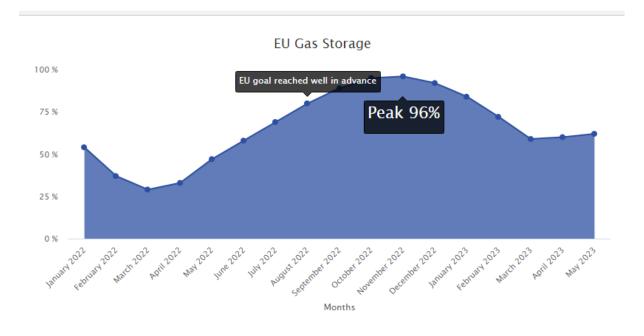


Figure 11. EU Gas Storage 22-23 (EU Commission) (2023)

The REPowerEU plan does not end without renewables. The European Commission had this to say about renewables:

- Good for the climate
- Good for EU's energy independence
- Good for the security of supply, and
- It creates jobs in the EU

(European Commission, 2023)

This does indeed reflect a lot of what renewables does for the EU, previously in the thesis the fact that nearly 40% of the EUs electricity generation comes from renewables were discussed, however the EU is not done here, by the end of 2023 the EU aims to replace an additional 12 billion cubic meter of gas with renewables. In March this year the EU also agreed upon strengthening legislation in such a way that the EU's biding target of 42,5% renewable capacity by 2030, would be replaced with a new goal of 45% renewable capacity (European

Commission, 2023). From the MLP point of view the EU certainly seems eager to pursue renewables as a strategy for energy security. The goal of 45% could be both a result of a changing landscape (in terms of climate change) or as a result of (war in Ukraine), whether it's caused by climate change or war is hard to properly ascertain as both are ongoing. However, deciding to go from 42,5% to 45% sends a powerful message (as a speech act) to the rest of the global society in terms of securing a future both from a changing planetary climate and an aggressive Russia.

REPowerEU: Commission steps up green transition away from Russian gas by accelerating renewables permitting – November 9th 2022

On the 20th and 21st of October 2022 the European council came together and called for an acceleration of the procedures required to deploy renewable energy within the EU. On the 9th of November that same year, this call for acceleration came alive. The reasoning given in the explanatory memorandum goes as follows: "The European Green Deal put renewable energy at the heart of the clean energy transition. The current international tensions following Russia's invasion of Ukraine, the overall geopolitical context and the very high energy prices have exacerbated the need to accelerate energy efficiency and the deployment of renewable energy in the Union with the objective to phase out EU's dependence on Russian fossil fuels" (Proposal for a COUNCIL REGULATION Laying down a Framework to Accelerate the Deployment of Renewable Energy, 2022). This proposal came as a follow up to the REPowerEU plan from May, as the energy crisis exacerbated its effects in Europe. The proposal came not only as something to appease industry, but also to help lift the burden the European citizens had to shoulder as inflation rates, electricity bills, social hardship rose, and purchasing power decreased. Specifically complex and lengthy administrative procedures were targeted to help renewables quickly setup and start producing energy (European Commission, 2022).

From a securitization perspective it is seems clear that the subject of renewable energy has become a point of interest in the security discourse, even so much as to cause "extraordinary measures" to be taken, in the form of law proposals. From a transitional point of view, the regime seems to be in some disarray as a consequence of the shifting landscape (war in

Ukraine) and this disarray might just be the opening the niche innovations need to further solidify their place in the energy regime.

A few more interesting statements came out this proposal Frans Timmermans, Executive Vice-President for the European Green Deal said: "Renewable energy is a triple win for Europeans: it is cheaper to produce, cleaner for our planet, and independent of Russian manipulation. This proposal is another step to fast-track the green transition and respond to the energy crisis started by Russia's war in Ukraine" (European Commission, 2022).

Additionally, Commissioner Kadri Simson said: "The EU is speeding up its renewable energy deployment... to effectively address high energy prices, ensure energy independence and achieve climate goals, we need to accelerate even more" (European Commission, 2022).

Both of these statements further exemplify how the EU is viewing renewables as a necessity both in terms of security and climate. From a transitional viewpoint Timmermans is framing renewables as a winner on two of the landscape areas (war in Ukraine/ climate change) as well as a winner in the regime area, while renewables themselves often are connected to the niche innovation level of the MLP. This means Timmermans is encapsulating renewables into everything that a successful transition needs. Simson doesn't necessarily frame renewables as well as Timmermans does in terms of transitional theory, however, her statement focuses primarily on the landscape levels, I.E addressing the issue of energy dependence as well as climate goals. From a securitization point of view, these statements of course were a part of the outcome of the extraordinary measure that were taken by the EU (REPowerEU proposal of Nov 9th, 2022). This does indeed further indicate that renewables are a topic of security within the European Union.

European Green Deal: EU agrees stronger legislation to accelerate the rollout of renewable energy – March 30th, 2023

On the 30th of March an agreement was reached between the European parliament and the Council of Europe, the result of this was briefly mentioned earlier this thesis, as the legislation that was agreed upon was the increase the EU's goal of renewables to 42,5% up from 32%. However what was not mentioned is that this is nearly a doubling the existing share of

renewable energy, and as mentioned prior the negotiators also agreed to set the goal post at 45% renewables by 2023, despite the legal obligation still being 42% (European Commission, 2023).

Kadri Simson, the commissioner for energy, had this to say about the agreement: "today's agreement, which is a milestone for our REPowerEU Plan and the European Green Deal. Renewables are key to Europe's climate neutrality goal and will enable us to secure our long-term energy sovereignty" (European Commission, 2023).

In addition to the words of Simson, Frans Timmermans, Executive Vice-President for the European Green Deal, chimed in for the occasion saying: "Renewable energy will power Europe's future, and contribute to our energy sovereignty by reducing fossil fuel imports" (European Commission, 2023).

Once again, these two actors commit to the speech act by mentioning how important renewable energy is for the European Union's energy security and moreover sovereignty. This once more reverberates through the regime level of the MLP as important actors applaud changes happening there as a result of both a war-torn MLP landscape as well as a warming one. (War in Ukraine, and climate change).

On the 17th of May 2023, the one-year anniversary of the REPowerEU plan, of Ursula von der Leyen, the President of the European Commission had this to say in her speech "Russia blackmailed us with threatening to cut the energy supply. We did not give in, we resisted" (European Commission, 2023). It does indeed seem like this is what happened. From a theoretical point of view, this resistance came in the form of a sharp securitization of the energy sector, with special weight put on the renewables sector. And from a transitional view point, Europe might have resisted the energy weapon, but the energy regime still had to bow to changes enforced by a changing landscape, both in terms of war and climate change.

7. Conclusion

I started out this thesis with the question "can the war in Ukraine somehow help the green transition?" Which led to become the research question ". This eventually evolved into the research question and purpose of "This thesis aims to investigate if renewables are becoming securitized in the EU and if so, how the EU uses this as a push towards the green transition" It has certainly been a journey to try and find an answer to this. I decided to wield the tools of discourse analysis as I waded through the muddy water of politics and policy with the guiding light of the MLP and the Copenhagen school's securitization. The two theories worked well together and espoused one another in ways that proved fruitful. They both operate on quite different levels, where as the MLP is a "grander" view of things and the Copenhagen school's securitization works on a more detailed level this made for a good mix and a healthy way of discerning the empirical world.

There are signs that point in the way of yes, the Russo-Ukrainian war has sped up the green, the EU wants to reduce reliance on Russian fossil fuels, or rather the EU *did* reduce their reliance on Russian fossil fuels. This, however, was not entirely on the wings of renewable energy, some of the fossil fuel coming from Russia were simply replaced by fossil fuel coming from other sources as shown by figure 7. However, actions such as the law proposal of November 9th by the European Commission, which came on the back of the energy crisis instigated by the Russian invasion of Ukraine, very clearly shows direct acceleration of the green transition as a result of the war in Ukraine. With this being said though, in truth, it is quite hard to answer if the war has accelerated the green transition, the primary reason is that they are both ongoing affairs. Green transition marches on as it has since it's inception, yes it has been gaining momentum in recent years, but if this comes down to consequences of economic downturn due to covid 19, the war in Ukraine, or perhaps more pressure from the public as the effects are climate change are making themselves known, is hard to say.

Technological transitions tend to happen slowly and the regime from a MLP point of view, does not really know it has changed until it looks backwards. By this I mean things are not always clear until time has blown away the winds of obscurity, there is time lag in academia and therefore, to my best knowledge I cannot say anything with a hundred percent certainty, however I would cautiously answer yes to the question I first asked myself when I set out with

this project "can the war in Ukraine somehow help the green transition?" And my assumptions are that this will become clearer over time.

References

Austvik, O. G. (2018). *Concepts of Geopolitics and Energy Security* (pp. 25–28). International Association for Energy Economics. https://www.iaee.org/documents/2018EnergyForum2qtr.pdf

Bazilian, M., Sovacool, B., & Miller, M. (2013). Linking Energy Independence to Energy Security. *IAEE Energy Forum*, 17–21.

Binnur Donmez, B. (2022, June 28). *Russia uses energy as weapon, diversifying suppliers a must: NATO chief.* https://www.aa.com.tr/en/europe/russia-uses-energy-as-weapon-diversifying-suppliers-a-must-nato-chief/2624838

Blaikie, N. W. H. (2000). Designing social research: The logic of anticipation. Polity Press.

Blaikie, N. W. H., & Priest, J. (2018). Designing social research: The logic of anticipation. Polity Press.

Buzan, B. (1983). *People, states, and fear: The national security problem in international relations*. Wheatsheaf Books.

Buzan, B., Wæver, O., & Wilde, J. de. (1998). *Security: A new framework for analysis*. Lynne Rienner Pub.

Checkel, J. T. (1998). The Constructive Turn in International Relations Theory. *World Politics*, *50*(2), 324–348. https://doi.org/10.1017/S0043887100008133

Corry, O. (2012). Securitisation and 'riskification': Second-order security and the politics of climate change. *Millennium*, 40(2), 235–258.

Council for the EU. (2022a). *Extraordinary TTE (Energy) Council Meeting Presidency Summary*. European Council for the EU. https://www.consilium.europa.eu/media/54571/en20220228-final-presidency-summary.pdf

Council for the EU. (2022b, February 28). *Transport, Telecommunications and Energy Council (Energy), 28 February 2022*. European Council Council of the European Union. https://www.consilium.europa.eu/en/meetings/tte/2022/02/28/

Council for the EU. (2023, March 30). *Council formally adopts 15% gas demand reduction target*. European Council Council of the European Union. https://www.consilium.europa.eu/en/press/press-releases/2023/03/30/council-formally-adopts-15-gas-demand-reduction-target/

Crutzen, P. J. (2022). *Paul J. Crutzen and the Anthropocene: A New Epoch in Earth's History* (S. Benner, G. Lax, U. Pöschl, J. Lelieveld, H. G. Brauch, K. Töpfer, & J. Renn, Eds.). Springer.

Danermark, B. (2012). *Explaining society: An Introduction to critical realism in the social sciences*. Taylor and Francis.

Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. New York, NY: Routledge.

Driel, H. V. (Hugo), & Schot, J. (2005). Radical Innovation as a Multilevel Process: Introducing Floating Grain Elevators in the Port of Rotterdam. *Technology and Culture*, *46*(1), 51–76. https://doi.org/10.1353/tech.2005.0011

Erinfolami, K. (2022, June 8). TSMC: The Most Important Tech Company You Never Heard Of. *MAKE USE OF*. https://www.makeuseof.com/tsmc-most-important-tech-company/

European Commission. (2022, November 9). *Commission steps up green transition away from Russian gas* [Text]. European Commission - European Commission. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6657

European Commission. (2023). *REPowerEU: Affordable, secure and sustainable energy for Europe*. European Commission. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

European Commission. (2023, March 30). European Green Deal: EU agrees stronger legislation to accelerate the rollout of renewable energy [Text]. European Commission - European Commission. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2061

European Council. (2022, February 24). *Special meeting of the European Council, 24 February 2022*. European Council of the European Union.

https://www.consilium.europa.eu/en/meetings/european-council/2022/02/24/

European Union. (2023). *EU institutions and bodies profiles | European Union*. European Union. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/search-all-eu-institutions-and-bodies_en

Fischhendler, I. (2015). The securitization of water discourse: Theoretical foundations, research gaps and objectives of the special issue. *International Environmental Agreements: Politics, Law and Economics*, 15, 245–255.

Fischhendler, I., & Katz, D. (2013). The use of "security" jargon in sustainable development discourse: Evidence from UN Commission on Sustainable Development. *International Environmental Agreements: Politics, Law and Economics*, *13*, 321–342.

Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1(1), 24–40. https://doi.org/10.1016/j.eist.2011.02.002

Geels, F. W. (2014). Regime Resistance against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective. *Theory, Culture & Society, 31*(5), 21–40. https://doi.org/10.1177/0263276414531627

Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, *36*(3), 399–417. https://doi.org/10.1016/j.respol.2007.01.003

Hajer, M. A. (1995). *The politics of environmental discourse: Ecological modernization and the policy process*. Clarendon Press; Oxford University Press.

Heinrich, A., & Szulecki, K. (2018). Energy Securitisation: Applying the Copenhagen School's Framework to Energy. In K. Szulecki (Ed.), *Energy Security in Europe* (pp. 33–59). Springer International Publishing. https://doi.org/10.1007/978-3-319-64964-1_2

Högselius, P. (2019). Energy and geopolitics. Routledge, Taylor & Francis Group.

IEA. (2023). Energy security Ensuring the uninterrupted availability of energy sources at an affordable price. International Energy Agency. https://www.iea.org/about/energy-security

Irvine, A. (2021). Subsidence, Groningen, and the future of gas production in The Netherlands. TROVE Global. https://www.1stsom.com/post/subsidence-groningen-and-the-future-for-gas-production-in-the-netherlands

Jackson, S. A. (2009, February). FROM RHETORIC TO REALITY: U.S. AND GLOBAL ENERGY SECURITY [Speech]. REMARKS AT JOHNS HOPKINS UNIVERSITY SCHOOL FOR ADVANCED INTERNATIONAL STUDIES, Washington DC. https://18thpresident.rpi.edu/speeches/2009/rhetoric-reality-us-and-global-energy-security

Jones, D. (2023, January 31). *European Electricity Review 2023*. Ember. https://emberclimate.org/insights/research/european-electricity-review-2023/

Merton, R. K. (2000). Social theory and social structure (Enlarged ed., [Nachdr.]). Free Press.

Moore, C. (2022, February 1). *European Electricity Review 2022*. Ember. https://emberclimate.org/insights/research/european-electricity-review-2022/

NATO. (2015a). SENT comprehensive report.

NATO. (2008, April 3). *Bucharest Summit Declaration*. NATO. https://www.nato.int/cps/en/natohq/official_texts_8443.htm

NATO. (2014, July 11). *Emerging security challenges debated at Global Media Forum*. NATO. https://www.nato.int/cps/en/natohq/news_111734.htm

NATO (Director). (2015b, June 26). What is NATO 'Smart Energy'? https://www.youtube.com/watch?v=ho9B0k5A8xQ

NATO. (2022, July 5). Energy security. NATO. https://www.nato.int/cps/en/natohq/topics_49208.htm

NATO. (2023, June 5). *NATO Allies and Partners discuss energy security*. NATO. https://www.nato.int/cps/en/natohq/news_215433.htm

Popper, K. R. (1976). Unended quest: An intellectual autobiography (Revised ed.). Fontana.

Proposal for a COUNCIL REGULATION laying down a framework to accelerate the deployment of renewable energy, COM/2022/591 final, Document 52022PC0591 (2022). https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0591&qid=1669020920010

Richert, J. (2010, September 9). State-Centric Not Only in Its Findings: How the Acquiescence Framework Is Still Held Hostage by Methodological Nationalism. SGIR 7th Pan-European International Relations Conference, Stockholm. https://www-researchgate-net.ezproxy.uis.no/profile/Joern-Richert/publication/267254989_State-Centric_not_only_in_its_Findings__How_the_Securitization_Framework_is_still_held_Hostage_by_Methodological_Nationalism/links/

_How_the_Securitization_Framework_is_still_held_Hostage_by_Methodological_Nationalism/links/56f1328708aec63f4c9b4c9f/State-Centric-not-only-in-its-Findings-How-the-Securitization-Framework-is-still-held-Hostage-by-Methodological-Nationalism.pdf

Salter, M. (2011). When securitization fails: The hard case of conter-terrorism programs. *Securitization Theory: How Security Problems Emerge and Dissolve*, 116–131.

Salter, M. B. (2008). Securitization and desecuritization: A dramaturgical analysis of the Canadian Air Transport Security Authority. *Journal of International Relations and Development*, *11*, 321–349.

Schattschneider, E. E. (1974). *The semisovereign people: A realist's view of democracy in America* (14 printing). Holt, Rinehart and Winston.

Smith Stegen, K. (2011). Deconstructing the "energy weapon": Russia's threat to Europe as case study. *Energy Policy*, *39*(10), 6505–6513. https://doi.org/10.1016/j.enpol.2011.07.051

Stritzel, H. (2007). Towards a Theory of Securitization: Copenhagen and Beyond. *European Journal of International Relations*, *13*(3), 357–383. https://doi.org/10.1177/1354066107080128

Wæver, O. (2003). Securitisation: Taking stock of a research programme in Security Studies. *Unpublished Draft*, 1, 36.

Wendt, A. (1999). *Social Theory of International Politics* (1st ed.). Cambridge University Press. https://doi.org/10.1017/CBO9780511612183