

**The Norwegian Paradox of Oil and Gas Legacy versus Climate
Ambitions - Expert Opinions in the Public Discourse**



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Mille Marie Isaksen Lillemoen

Student number: 261021

Supervisor: Thomas Sattich
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Preface and Acknowledgements

During my bachelor's studies, I was happy to learn more about how the topics of energy and climate intersect with politics and the field of political science. This, paired with working in the energy industry outside of my studies, provided an interesting balance, with academic background on the one hand and a practical and rapidly changing industry landscape on the other. In this thesis, I want to explore an issue that I kept feeling conflicted about - can Norway produce oil and gas while claiming to be a sustainability pioneer? I understand that there are many different ways to answer this question, from more technical approaches to geopolitical ones. It is the latter I wanted to research further. Can Norway emerge as a geopolitical winner of the energy transition?

While writing this thesis, Russia invaded Ukraine, throwing Europe into an energy crisis, but even more grave is the human rights violations and war crimes against the Ukrainian people. With the most compassion, I hope this thesis is a small contribution to highlighting how important global collaboration is for a democratic, sustainable and peaceful world.

Lastly, I would like to thank my supervisor Thomas Sattich for keeping up with my many ideas and thoughts and helping me structure them. I have both been inspired and learned a lot from our conversations.

Mille Marie Isaksen Lillemoen, May 11, 2022.

Abstract

The goal of this thesis is to highlight the Norwegian paradox of being a sustainability advocate and an oil producer at the same time. This paradoxical position is facing an increasing amount of pressure. In 2019 the European Green Deal was set in motion, and in 2022 Russia invaded Ukraine, altering the geopolitical playing field in Europe. With these recent developments in mind, the thesis maps out the Norwegian debate on Norway's role in the energy transition, using essays written by Norwegian experts as empirical. I find that there is no consensus among Norwegian experts in clarifying the Norwegian paradox by deciding on the Norwegian role in the energy transition. This is strange considering the theories on the geopolitics of the energy transition are clear in the forecasted decline of petrostates. The Norwegian experts also highlight collaboration with the EU as key. The European Green Deal and its implications for Norway are examined, and a Norwegian short-term focus versus a long-term European plan is discussed. More research on the transitional phase itself might be necessary to assist Norwegian decision-makers in deciding on a strategy in time to emerge as relevant following the energy transition.

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1. Introduction

When the world's decision-makers gathered in Glasgow for the 2021 COP26 event, a looming climate tragedy was at the top of the agenda. Norway, the humanitarian giant, sustainable front runner, and hydrocarbon exporter, sent its delegation to present its interests and contributions to the negotiations. Yet, while advocating for new climate ambitions and strengthening its national emission reduction targets (Norway in the UN, 2020), Norway continues its plans for further oil exports. Can a country advocate for emission reductions while still being a player in one of the most emission-intense industries harming the planet?

The International Climate Action Network seems to disagree. On COP26's second day, Norway was awarded "Fossil of the day" - aimed at "*countries who are the best at being the worst and doing the most to do the least*" (Climate Action Network International, n.d.). This is a blow to the nation that fought for a role in the United Nations Security Council, naming climate change one of its four main priorities (Regjeringen, 2020). The Norwegian paradox and its implications are increasingly being discussed in foreign media and organizations as the pressure to solve the climate crisis increases. In 2017 The New York Times called Norway out on its role as a climate leader and oil giant (Sengupta, 2017). An OECD report published in April 2022 also points out how Norway will not accomplish its domestic emission reduction goals at the current pace while problematizing state subsidies to the oil and gas industry (OECD, 2022).

What has previously been Norway's admission ticket to discussions on the international arena, its domestic oil fortune and high standing reputation, will not necessarily be the same in the near future. Initiatives like the European Green Deal force Norway to revisit its position in the European context through the EEA agreement. Pressure also involves the nature of energy investments. Being a long-term game, current investments point the way for activities over the next decades (Bazilian et al., 2019, p. 2).

While writing this thesis, a war broke out in Europe. With Russia's invasion of Ukraine, a new dimension has been added to the previous assumptions and discussions on Norwegian energy export and EU integration. Energy security has been moved to the top of the agenda, and it is being discussed how Norway can best aid Europe in its current energy crisis.

With this backdrop, my thesis will answer the research question; *What role do Norwegian experts suggest that Norway should have in the green transition, and what geopolitical implications follow?* To achieve this, I will look into the following sub-questions

- *Why is Norway in a paradoxical position?*
- *What positions do Norwegian energy experts take in the paradox?*
- *What does the geopolitics of the energy transition imply for Norway?*

Through theories on the geopolitics of the energy transition, I wish to explore what consequences the paradoxical position entails for Norway's role in the international community and the energy transition. A collection of chronicles written by Norwegian experts found in the public discourse will make up my empirical. This will be used to discuss what geopolitical consequences Norway is facing based on the expert discussion in the country.

This paper is divided into six sections. First, I present the theoretical framework, including geopolitical theories on the energy transition. Secondly, I establish the Norwegian prerequisites for the above-mentioned discussions and politics. Thirdly I will disclose and debate my methodology. In the fourth section, I will perform an empirical analysis of the public expert discourse in Norway on the energy transition before I discuss my findings. Fifth, in my discussions, I aim to connect my empirical findings to my theoretical background and establish what implications Norway faces in taking or not taking a clear position in the European energy transition. Lastly, I will conclude the thesis.

2. Theory and concepts

There are usually several ways to describe a phenomenon or concept. Therefore, before tackling the research question at hand, it is useful to establish definitions of concepts used in the thesis.

A growing amount of literature is studying the energy transition from a geopolitical angle (Vakulchuk et al., 2020, p. 1). In this section, I will define the energy transition and review the literature on the geopolitics of the energy transition, which will be used further on in the discussion.

2.1. The geopolitics of the energy transition - existing literature review

The International Renewable Energy Agency (IRENA) defines the energy transition as a “transformation of the global energy sector from fossil-based to zero-carbon by the second half of this century” (IRENA, n.d.). IRENA is an important actor in the discussion on the geopolitics of the energy transition, as the organization uses a geopolitical approach in much of its output. When discussing the energy transition, it mainly refers to renewables taking over fossil fuels. Motivated by the need to limit climate change by reducing energy-related CO₂ emissions, the transition to renewable energy can secure 90% of the global required carbon reductions (IRENA, n.d.). Furthermore, the International Energy Agency emphasizes how the energy transition is a global challenge, where countries have vastly different starting points (IEA, n.d.). The transition includes changes within a country and between nations and regions (Bridge et al., 2013, p. 332), making it interesting to look at the implication of the energy transition on geopolitics.

Energy is more than its revenue. It is also an important asset in international powerplay and geopolitics. Previous research on energy geopolitics has mostly been oil and gas-focused (Scholten et al., 2020, p. 1). Fossil fuels and renewable energy are different in nature, and the energy transition's influence on energy security policies is still uncertain (Scholten et al., 2020, p. 2).

The definition of geopolitics has evolved from classic geopolitics being a “deterministic causal relationship between geography and international affairs, focused on the permanent rivalry, territorial expansion and military strategies of imperial powers” (Overland, 2019, p. 36) to critical geopolitics, emerging around the 1990s (Vakulchuk et al., 2020, p. 2) as scholars investigate geopolitics as a political and cultural practice (Dalby & O Tuthail, 1998, p. i). In other words, geopolitics has evolved from being a manifestation of the reality of world politics (Dalby & O Tuthail, 1998, p. i) to it being able to change over time depending on the development of politics, technology, and economics (Vakulchuk et al., 2020, p. 2). This thesis aims to use a conventional definition relating to the energy transition; it involves “great power competition over access to strategic locations and natural resources” (Overland, 2015, p. 3517).

2.1.1. Level of conflict and peace

Two main camps of perspectives can be identified in the existing literature, according to Vakulchuk et al. (2020), consistent with other contributions. Some scholars argue that the deployment of renewables will renew the level of conflict seen with fossil fuel dominating the energy supply, while the other camp argues that it will reduce the global level of conflict (Vakulchuk et al., 2020, p. 3). Arguments for the first camp include that interrupted energy supplies and geopolitical instability in producing countries will remain and that trade wars would replace petroleum wars. Renewables will merely substitute fossils (Rothkopf, 2009). On the more radical side, Pitron (2018) argues that the new dependence on rare materials could be even more dramatic than the current oil dependence and introduces the possibility of increased cyber-attacks (Vakulchuk et al., 2020, p. 4). Scholten et al. (2020) moderate this view, pointing to different tools like recycling and continued material and technology development to mitigate such a scenario (Scholten et al., 2020, p. 2). In a constructivist, critical contribution to the geopolitics of renewables, Overland (2019) also makes a case for technological development and recycling of critical materials while adding a dimension of cyclical “boom-and-bust” market tendency, leading companies to overinvest and secure supply (Overland, 2019, p. 37).

The second camp argues that renewable energy creates fewer geopolitical motivations for conflict between states, being harder to control, cut supply or manipulate the price of (Vakulchuk et al., 2020, p. 4). Scholten et al. (2020) define a shift “towards less

oligopolistic global markets”. Renewables are abundant and have greater geographical distribution than fossil fuels (Scholten et al., 2020, p. 2). Shifting from external to internal energy supply will also create energy independence (Vakulchuk et al., 2020, p. 4), and the pros and cons previously associated with being an importer or exporter are blurred (Scholten et al., 2020, p. 2). International relationships will become more symmetrical, with countries becoming both producers and consumers. Trading goes both ways and creates more stable connections between states (Overland, 2019, p. 38). Going back to the topic of cybersecurity, Overland reminds us that the risk associated with the digitalization of energy systems is not new and that decentralized energy systems can even be more resilient to hacking (Overland, 2019, p. 38), indicating that renewable energy systems cannot be weaponized in the same degree as fossil fuels. Referring to the conventional definition of geopolitics, “access to strategic locations and natural resources” becomes more attainable with renewables.

2.1.2. Winners and losers in the energy transition

Defining the winners and losers of the energy transition is no easy task (Vakulchuk et al., 2020, p. 6). The geopolitical power previously granted to petrostates through their geography loses relevance when moving towards a low-carbon society. There is an expected shift in existing power structures, with more symmetrical power-trading relations. An emphasis is made on the transitional impact on energy importers versus exporters (O’Sullivan et al., 2017). The OECD states that exporters risk having stranded assets leading to a weaker economy as fossil fuels are phased out (Baron & Fischer, 2015, p. 3). Countries that achieve industrial leadership in clean technology have a chance to emerge as winners (Vakulchuk et al., 2020, p. 5). Ultimately, it is the energy importers that are said to drive the transition as they can improve their balance of importing or exporting energy (Goldthau et al., 2019).

There is a lack of methodological explanation on how countries become either winners or losers of the energy transition. Instead, there exists a simple dichotomy where “advanced renewable energy leaders” are winners and “traditional fossil fuel exporters will lose out” (Vakulchuk et al., 2020, p. 5-6). Although petrostates will have a hard time becoming “winners,” they benefit in relevance from somewhat adapting to the transition, making their economies less fossil-dependent (Vakulchuk et al., 2020, p. 6). The complete energy transition does not allow for hydrocarbons by definition (Vakulchuk et al., 2020, p. 6).

Energy importers are likely to improve their independence and gain geopolitical advantages. However, Goldthau & Westphal (2019) adds nuance to the future predictions on petrostates. In contrast to widely accepted assumptions, they argue that some petrostates may gain new market shares, benefiting from carbon-intensive exports as the western and transformation-ambitious countries phase out hydrocarbon production (Goldthau & Westphal, 2019, p. 279-282).

It is, however, unclear precisely what countries will emerge as industrial leaders (Sattich & Huang, forthcoming). Norway falls into the category of complicated cases, standing to lose substantial revenue from fossil fuel exports while at the same time having more capital to adapt to the energy transition than other petrostates (Proedrou, 2018). Rich and fast-decarbonizing states like Norway will need to tackle a dual challenge; quickly creating new energy systems to ensure the transition benefits and balancing the geopolitical consequences of ridding their energy system of fossil fuels (Goldthau & Westphal, 2019, p. 282).

2.1.3. International relations outside of energy

No doubt, the energy transition will affect more than energy relations, and Overland (2019) points to how it is the decline of fossil fuels that will alter international relations, not the renewable take-over (Vakulchuk et al., 2020, p. 5), further highlighting the role of petrostates. The literature introduces democratization as an implication of the transition as researchers see renewable energy systems as less asymmetrical. The characteristics of management, use, and distribution of renewables involve more democratic practices. Democratization is assumed to lead to greater geopolitical stability, and so is the economic redistribution following the transition (Sweijts et al. 2014, p. 15). The issue of polarity in the world order is also relevant, and a new distribution of geopolitical power, either distributed among a few leaders or many countries, is expected (Vakulchuk et al., 2020, p. 7). Other scholars build on this line of thought and suggest greater multipolarity (Vakulchuk et al., 2020, p. 7).

An interesting finding is literature on regional collaboration, suggesting regionalization through energy systems and grid communities (Vakulchuk et al., 2020, p. 7). Due to the nature of electricity transmission, previous global networks involving shipping and pipelines are likely replaced by regional super-grids (Scholten et al., 2020, p. 2-4).

It is important to mention that most research in this field is based on the finished transition to renewable energy and that few contributions include reflections on the transitional phase itself. The only conclusion included from this phase is the decline of petrostates (Vakulchuk et al., 2020, p. 5). Lastly, this field of research is still maturing, and there is an apparent lack of distinction between geopolitics in the finished energy transition and where we are today, still in the transitional phase (Vakulchuk et al., 2020, p. 8).

This existing research on the energy transition paints a clear picture of a changing geopolitical landscape, where states that want to stay relevant in the new energy systems need to adapt. Petrostates are given a clear indication of their dramatic future unless they strive to transition. Literature in the field provides a recipe for what Norway needs to do to become a winner or even just “relevant” after the energy transition is completed. The next chapter will lay out what state Norway is in right now, making up the prerequisites for following this recipe.

3. Norwegian prerequisites - the Norwegian paradox

To understand why Norway still finds itself in such a paradoxical position, continuing oil and gas production while working to combat climate change, I will establish the Norwegian prerequisites for making decisions in the energy transformation. This will help navigate the discussion introduced later.

3.1. Norway's self-image and political realities

Political realism in the Norwegian context includes both economic and political fossil fuel dominance (Ryggvik & Kristoffersen, 2015). However, Norway portrays itself as a humanitarian giant and sustainability frontrunner in its foreign work. Going back to the Norwegian presence at COP26 in Glasgow, Prime Minister Støres's speech to the delegates speaks volumes about what Norway chooses to address when presenting itself.

In addition to announcing its domestic carbon emission reduction goal of 55% by 2030, Støre declared that Norway would double its contribution to the USD 100 billion climate financing target in the Paris agreement, covering 1,6 percent of the goal amount. He further highlights how Norway wishes to help developing countries fund a renewable transition and that Norway will “*support investments that can help phase out coal and other fossil sources*” (Støre, 2021). This is paradoxical, considering that the same government handed out 53 production licenses on the Norwegian Continental Shelf two months later, allowing for more exploration and production of oil and gas (Norwegian Petroleum Directorate, 2022a). It is also worth emphasizing that the Norwegian emission reduction goal only includes domestic oil production, not the actual use of petroleum products.

Even though the environmental and economic risk connected to oil and gas production has become more apparent, Norwegian petroleum production has not changed much (Bang & Lahn, p. 1007, 2019). In Norway, climate and environment, and energy are decoupled and treated as separate issues on a governmental level, with two separate ministries (Bang & Lahn, p. 1001-1002, 2019). In their programs, almost none of the political parties in the Norwegian parliament include shutting down oil and gas production in the near future (NRK, n.d.). Instead, the larger parties emphasize a more immediate economic aspect. They argue that jobs in the petroleum industry and the Norwegian economy are more crucial at the moment than carbon risk (Bang & Lahn, p. 1003, 2019), and points to

investing in new ventures, while still securing jobs and revenue. Further in his speech, Støre explains that Norway is taking the lead in ocean-based solutions, mentioning CCS, hydrogen, offshore wind, el-mobility, and green shipping (Støre, 2021). The Norwegian ambition includes exporting green technology to other countries creating new economic opportunities and negative emission technology that allows fossil fuels to remain in the global energy mix longer and aid hard-to-mitigate sectors such as steel and cement production (Sognæs & Peters, 2020).

Hovden & Lindseth (2004) present two main discourses in Norwegian climate politics, with one building on national action and domestic greenhouse gas (GHG) reduction and the other more complex “thinking globally” discourse focusing on Kyoto mechanisms (Hovden & Lindseth, 2004, p. 77). The international climate regime allowed Norway to meet relatively ambitious climate targets through international carbon trading, placing GHG responsibility on demand rather than production. However, this decoupling strategy is under attack, as activists call for a managed decline in Norwegian petroleum production (Bang & Lahn, p. 1002, 2019). In the context of this thesis, the “thinking globally” discourse translates to Norway further aligning with the EU and its Green Deal.

As domestic climate policy is increasingly becoming a source of international influence, granting geopolitical clout (Oberthür & Dupont, 2021, p. 1106), Norway might need to revisit its political realities if it wishes to upkeep its reputation as a climate front-runner.

3.2. The Norwegian energy industry, domestic demand, and exports

As of March 2022, hydropower covers 87% of total power consumption domestically in Norway, and the remaining percentages are primarily covered by wind power (SSB, 2022). In other words, Norway exports most of its oil and gas products, making up 42% of all Norwegian export value. With a revenue amounting to 272 billion NOK (2021) and 200 000 people employed in the sector (2019), quitting oil production is a political decision with severe implications of immediate effect (Norwegian Petroleum Directorate, 2022b).

Norwegian petroleum exports supply 2% of the global crude demand and approximately 3% of natural gas demand. Norway covers 20-25% of EU gas demand and plays a key role in Europe transitioning from coal to natural gas. The biggest gas supplier to the EU is Russia producing 40% of EU gas consumption (IEA, 2022). It is estimated that two-thirds of Norway's natural gas resources are yet to be produced (Norwegian Petroleum Directorate, 2022b).

3.3. Geographic position and relationship with the EU

Geography represents external conditions for politics and collaboration with other states, with geographic placement at the core (Østerud, 2014, p. 249). Norway borders Sweden, Finland, and Russia in the East. The remaining coastline borders the Barents Sea, Norwegian Sea, North Sea, and Skagerrak (Regjeringen, 2015). Its territory on the Norwegian Continental Shelf includes massive hydrocarbon reserves. This has also provided Norway with another tool in its geostrategic positioning. While part of the Scandinavian community, Norway also has a valuable position in the Arctic, making it an important player for several Russian and American interests. Its geographical position reflects its strategic realities, balancing different political interests while still mainly being part of the European community. Norway is a part of several alliances, such as NATO (NATO, 2020) and the UN (UN, n.d.). Due to the Paris Agreement, the EEA agreement and the Schengen agreement, all changes in the EU's operations will affect Norway (Sending et al., 2021, p. 4).

The relationship between the EU and Norway is an important and complex one. Norway is not an EU member like its neighboring Scandinavian countries. Through the EFTA and EEA agreement, Norway and its citizens still gain access to the EU's internal market. This is also the primary purpose of the EEA agreement (Regjeringen, 2021a). The parties in the EEA agreement commit to the free movement of goods, persons, services, and capital, with equal regulation throughout the European Economic Area (Agreement on the European Economic Area, 1994). This semi-integration into the EU system allows Norway to keep certain policy areas outside the EU jurisdiction, including hydrocarbon production, fishing, and agriculture (Regjeringen, 2021a). Historically, the Norwegian population has been split in wanting full EU membership. In the 1972 and 1994 referendums, the public voted against EU membership (Stortinget, 2018). By signing the EEA agreement as an EFTA

country in 1992, Norway entered a happy medium, even if skeptics did not count on the agreement to be anything other than temporary (Sverdrup, 2019).

While the EEA agreement is mainly perceived as beneficial for Norway, its influence on EU decisions is limited. It is in the preparatory stage that Norway can impact the EU Commission's proposals for new legislation to be embedded in the EEA agreement, not during votation (Regjeringen, 2021a). This absence of power over the legislation has been a topic of discussion as long as Norway's membership. We are on the inside economically but politically on the outside of the union (Godal, 2019, p. 343).

Regardless, the EEA membership has brought Norway closer to Europe, and European values are more often than not in line with Norwegian values. The collaboration with different European countries has given substantial results in climate and environmental policy. On a more general level, the EEA agreement has and still is a secure foundation for the Norwegian economy, allowing Norway to focus its foreign policy on other target areas such as climate and environment (Godal, 2019, p. 348).

Through the EEA agreement, the European Green Deal stands to both change and put further pressure on Norway's domestic energy transition strategy and its relationship with the EU.

4. The European Green Deal

The European Green Deal (EGD) is the European Union's game plan for the green transition that markets, businesses, and societies are currently undergoing to adapt to climate changes while still seeing economic growth (European Commission, n.d.).

European Commission President Ursula Von der Leyen has placed the energy transition at the top of the European agenda, and some scholars argue that the EU has shifted to a more strategic approach from a previous liberal one, with an increased focus on geopolitics (Siddi & Kustova, 2021). The EGD will inevitably impact geopolitics, also outside of the member states, as global markets, oil and gas producing countries around the EU, European energy security, and trade patterns are affected by the plan (Leonard et al., 2021, p. 1). Among other fossil suppliers, Norway will lose its primary export market due to the EGD, although EU oil and gas imports are expected to stay the same for a minimum of one decade (Leonard et al., 2021, p. 2-5). The EU is likely to push for multilateral agreements to ensure its EGD standards are exported and keep the European market competitive (Leonard et al., 2021, p. 2).

Oberthür & Dupont (2021) point to a persistent EU in pursuit of global climate strategy leadership (Oberthür & Dupont, 2021, p. 1095). The level of credibility in this leadership position has increased as the union leads by example in the EGD (Oberthür & Dupont, 2021, p. 1105).

The EGD is further backed by an astronomic goal of at least 1 trillion euros to be invested privately and publicly (European Commission, p. 1, 2020). Even in times of crisis, the EU protects its internal market and the EGD, exemplified by the additional grants to EU countries to keep up the progress in the transition while dealing with the demanding pandemic, in line with the “do no harm” to climate goals principle (Abnett, 2020). The EGD also implies a new framework for economic activities performed in the EU (EU Taxonomy Info, n.d.). Central to the EGD, the Taxonomy defines sustainable activity for businesses in the EU. The goal is to incentivize green activity and make sustainability a competitive advantage.

Saving the climate while still having a booming economy should be the perfect solution. However, the EGD has been designed to be disruptive, changing business models. A petrostate like Norway will face new challenges in keeping its revenue and staying a part of the European energy market. The EU's neighboring countries will only be able to benefit from the EGD if they adapt to and align with the new energy market resulting from the EGDs efforts (Leonard et al., 2021, p. 5).

Referring to the relationship between the EU and Norway, the EGD brings several changes that interfere with existing conflicts in Norwegian politics regarding the EEA agreement and Norwegian sovereignty. The EGD also implies new regulations with a big impact on Norway. Increased emission costs, grants for new environmentally friendly technology, and bureaucratic challenges related to implementation are changes Norway needs to deal with. The EGD is likely to rush forward the "tipping point" where the risk of continued oil and gas production is larger for Norway than the possible benefits (Sending et al., 2021, p. 4). It is also likely that EU member countries that historically have been Norwegian allies will alter their view on energy politics as the EGD progresses, distancing their interests from the Norwegian ones (Sending et al., 2021, p. 5).

4.1. New developments following the Russian invasion of Ukraine

The recent invasion of Ukraine alters the geostrategic prerequisites for gas imports and intensifies the EU's immediate need for gas from other sources. The story of Russia, Ukraine, and gas has been nothing but easy; the energy crises in 2006 and 2009 proved how gas could be weaponized as a foreign policy tool (Overland, 2019), (Stegen, 2011).

As for the progress of the EGD, concerns have been raised following the Russian invasion, but analysts even predict a wramp up of the transition as a more likely outcome rather than halted acceleration (Alvik, 2022). The EU plans to substantially reduce general hydrocarbon imports by 2030. Even before the invasion, Russia faced the risk that the EU would switch to other suppliers with a smaller carbon footprint in their production, like Saudi Arabia (Leonard et al., 2021, p. 11). Now, after this dramatic invasion, it is clear for Europe that it needs to completely move away from Russian gas to ensure access to energy supply.

As mentioned in chapter 2.2., energy security has greater potential with renewables. Discussions on energy independence and the perceptions of energy security can lead to an accelerated transition to renewable energy, as seen in Lithuania (Sattich et al., 2022). In fact, in April, Lithuania announced it would be the first EU member to stop Russian gas imports (Sattich et al., 2022, p. 10). The rest of the EU wants to do the same, and fortunately, the EGDs' longer-term goals fit with the EU energy security ambition (Delbeke, 2022).

But for the short term EU is looking for other suppliers of the gas they need for electricity and heating (Delbeke, 2022). This includes turning to Norway, which answered by increasing gas exports, replacing almost ten percent of the Russian supply by the end of 2022 (Valderhaug, 2022). These developments sparked new discussions on Norway as an energy supplier in Europe. As we will see in the empirical, there are camps advocating for this energy to be both fossil and renewable. The invasion may also have another implication for Norway, shifting the public discussion back to focusing on oil and gas because of the immediate need to replace Russian supply. This would be at the expense of discussing Norway's potential as a green battery for Europe in the long term.

The discussion on Norwegian EU membership has also gotten a new life after the Russian invasion, where Europe acted more united than expected, with the EU at the front. The EU's position on geopolitics has become more strategic, and Norway risks being left behind if it does not evolve its strategic position while the EU is.

5. Methodology

This thesis explores Norway's position in the energy transition, based on the ongoing public expert discourse, and what consequences follow. Are there clear camps in the Norwegian debate, and if so, what are they characterized by?

I have chosen a qualitative approach, exploring ideas and opinions rather than numbers and statistics.

5.1. Data collection

To collect data on the public debate, I have chosen to sample different essays or “chronicles” written by Norwegian experts. A chronicle is a way for the author to present their opinions or contribution to an ongoing societal debate (Engan, 2018). This way of contributing to public discussions has become more available with newspapers moving online, allowing readers to access expert opinions with a simple online search.

I define an expert as a person that, with their capacity, either at work or in organizational life, has insight into the topic of the energy transition. This is also in line with what is usually defined as a chronicler (Engan, 2018). I have specifically searched for scientists, professors, and industry professionals to make up my expert opinions.

Credible, national online news media like Aftenposten, Dagens Næringsliv, NRK, and E24 have published several chronicles regarding Norway and the energy transition. In many ways, the public agenda is defined by the media reality, telling readers what to think about (Croteau & Hoynes, 2018, p. 307). Studies have also shown how people conform based on group expectations (Croteau & Hoynes, 2018, p. 309). The experts writing chronicles on the energy transition and the editors publishing them play an important part in how the public perceives the issue and its gravity. The chronicles published are viewed as relevant to the public discussion by the editor.

Just like most qualitative sampling, I have been purposeful in my sampling (Miles & Huberman 1994, p. 27). My sampling type has been a combination of “stratified purposeful,” facilitating comparisons and illustrating subgroups and “criterion,” where all sample cases meet some criterion. The applied criteria were the authors' expert role, the text belonging to the chronicle genre, and the chronicle being published by a significant and national Norwegian media outlet. Combining these two sampling methods allowed the identification of camps in the Norwegian discourse, and the criterion dimension quality assures the author through verification of their expert opinion (Miles & Huberman, 1994, p. 28).

Due to limited resources and time to collect data for this thesis, looking for expert opinions online proved to be an effective method. As the public debate on the energy transition is dynamic, I wish to present an updated outlook and have chosen to include data from the last five years. Hence, all contributions are published after the beginning of 2017. I decided to limit the sample to ten contributions.

During my literature review, I used search engines like Oria or Google Scholar to identify relevant and peer-reviewed contributions. However, this method would not work in my search for chronicles. This thesis goes beyond what has previously been written. To locate different chronicles, I entered different keywords into Google. As the contributions were written in Norwegian, so were the following keywords: “kronikk”, “norge”, “grønt skifte”, “eus grønne giv”, “sluttdato olje”, “norsk paradoks”, “olje og miljø”, “olje og gass i det grønne skiftet”. I then sampled the most relevant chronicles to the research question by applying my criteria.

5.2. Data analysis

To analyze my data, I performed a qualitative content analysis. With this method, the researcher reduces the text volume collected, identifies categories, and seeks an understanding of the content (Bengtsson, 2016, p. 9).

During my step of decontextualization (Bengtsson, 2016, p. 11), I allowed some flexibility in the coding because I did not know beforehand what the different opinion camps in the Norwegian public energy transition debate would be. As I began breaking the chronicles down into smaller meaning units (Bengtsson, 2016, p. 11), it became clear that the experts were not united in their opinion. I went back for my recontextualization (Bengtsson, 2016, p. 12) after gaining an overview of my material and further coded the chronicles, finding similarities and differences. I reduced my meaning units to three main categories (Bengtsson, 2016, p. 12) that covered the Norwegian expert positions in the Norwegian paradox in the energy transition;

1) Those who clearly define an opinion that Norway benefits from remaining an oil and gas exporter in the energy transition

2) Those who clearly define an opinion that Norway benefits from transitioning away from oil and gas at a rapid pace to secure a relevant role in the transition

3) Those who do not take a clear position on this question while still discussing the energy transition

When categorizing the chronicles, I replaced them a few times and went back to ensure that the categories were precise. The fact that I had a third category for those who did not present a clear opinion also helped in making sure the categories covered the opinion spectrum. I then summarized key findings from the different chronicles. Providing a summary of each chronicle provides transparency and allows the reader to follow my line of thought, increasing reliability.

5.3. Methodology discussion

My method's biggest weakness is the ability to confirm that the discourse is accurately depicted because of my limited capacity to find and read everything written on the topic and the lack of similar research using chronicles. This obstacle was faced by continuously looking for new contributions until May 5th, 2022 and going back as I gathered more information on the topics, leading to the research evolving as new essays were published. The findings did, in other words, change somewhat throughout the writing, but I still found the three categories presented to be relevant and applicable.

As more chronicles are published, the search results making up the sample will develop, and the discussion might shift or change. It is both a strength and weakness that my knowledge as a researcher affects what chronicles I did find relevant. My background information from my studies in political science allows me to recognize experts and key actors, but a potential bias is always a risk (Bengtsson, 2016, p. 8).

Regarding reliability, "there is always a risk that different researchers draw dissimilar conclusions from the same data" (Bengtsson, 2016, p. 11). However, my research process is transparent, the sources are openly available, and the description of the different chronicles leading to my categorization is included in the thesis. This makes it likely that the results would be the same if another researcher performed the study.

Regarding validity, my method has directly measured what my research question set out to answer. In the trade-off between using first-hand sources or a big sample as my empirical, I found using the chronicles, which are first-hand sources of expert opinions, to be the best option to ensure validity. The content analysis performed placed them in relevant categories, with categorization following the data. In other words, validity is ensured, and the results proved generalizable to other chronicles I did not have enough room to include in this analysis.

Efforts to further ensure both validity and reliability, like another researcher performing the same analysis (Bengtsson, 2016, p. 11), were not available. In collaboration with my supervisor, however, I performed a peer-debriefing to some degree, discussing the different

categories and coding of the data and the results. This tested that my findings were reasonable (Bengtsson, 2016, p. 13).

In sum, I found my method to help answer my research question, and it was a good way of depicting a part of the Norwegian public discourse.

6. Empirical Analysis

This part of the thesis will highlight the Norwegian debates around the energy transition empirically. By studying chronicles from the last five years on the topic of Norway, its role internationally, and in the energy transition, the most common positions in Norwegian energy discourses will be established. What role do Norwegian experts suggest that Norway should have in the green transition and the world?

In an effort to systematize, Table 1 was created. Three different categories reflecting different positions in the Norwegian paradox and discussion are applied to the empirical material.

1. *“Norway is better off continuing oil and gas production.”*
2. *“Norway should act now and phase out oil and gas production to gain the upper hand in the energy transition.”*
3. *No clear position on the Norwegian paradox*

Table 1 - Expert chronicles on Norway in the energy transition - sorted by opinion-category

Date	Author*	Title	Media outlet	Category, position in the Norwegian Paradox	Position on European collaboration
17.03.2022	Øystein Noreng (Professor emeritus, Handelshøyskolen BI)	<i>Norsk gass til Europa</i>	Dagsavisen	1	Norway should help Europe become independent from Russia using Norwegian gas
23.12.2020	Kristin Færøvik (Managing Director, Lundin Energy Norge)	<i>Norsk sokkel har en rolle i lavutslipp-samfunnet</i>	E24	1	Norway should help secure a stable energy supply to Europe, creating geopolitical stability
10.04.2022	Klaus Mohn (Rector and professor, University of Stavanger)	<i>"Lykkeland" sesong 8 kan bli et sørgelig kapittel</i>	Aftenposten	2	Does not mention Europe specifically but presents the opportunity that Norway could stay an international energy actor if it transitions
16.10.2017	Anita Krohn Traaseth (Managing Director, Innovasjon Norge)	<i>Slik kan Norge komme ut av strutseposisjonen og inn i ledertøya</i>	Aftenposten	2	Does not mention Europe specifically, but highlights what impression Norway leaves the international community with
19.09.2021	Paul Hagen Beaumont (Senior scientist, NUPI), Cedric de Coning (Scientist, NUPI) & Elisabeth Rosvold (Senior scientist, NUPI)	<i>Hvis ikke Norge går i bresjen for en grønn omstilling, hvem da?</i>	Aftenposten	2	Does not mention Europe specifically, but presents the opportunity for Norway to become a credible leader in the global climate efforts
23.03.2022	Anders Elverhøy (Geologist, professor emeritus), Øystein Hov (Meteorologist, professor emeritus), Stein B. Jensen (Dr.ing.), Kåre Vøllan (Cand.real.)	<i>Innlegg: Norsk elkrafteksport til Europa kan bli mer foss enn "musepiss"</i>	Dagens Næringsliv	2	Norway is better off supplying Europe with renewable power than natural gas
07.02.2021	Erik Solheim (previous leader of UN Environment)	<i>Regjeringen er fullstendig passiv overfor EU</i>	Dagens Næringsliv	3	Europe is the answer to issues of climate, economics, democracy, and geopolitics
13.01.2019	Eirik Wærness (Director and Chief Economist in Equinor)	<i>Ny fornybar energi kan endre maktforhold mellom stater</i>	Aftenposten	3	Establishes that being Europe's second-largest supplier of gas affects our relationships with other countries
15.03.2022	Erik Solheim (previous leader of UN Environment)	<i>Det er EU og ikke Nato som avgjør Norges fremtid</i>	Dagens Næringsliv	3	Norway as an energy powerhouse has an impact on Europe's security
31.03.2022	Jon Nicolaisen (Social economist, Civita)	<i>Norge må bidra til å løse Europas energikrise</i>	Dagens Næringsliv	3	Norway does not benefit from reducing power exports to Europe and by collaborating with Europe in the energy transition

*Note that the role and/or company/organization the author is listed with here, reflects the author's position at the time of publication, as presented in the published article.

6.1. 1) “Norway is better off continuing oil and gas production”

This first category is characterized by an opinion that Norway will benefit from and should continue oil and gas production as a part of its energy transition.

In her chronicle “Norsk sokkel har en rolle i lavutslipp-samfunnet”, Managing Director of Lundin Kristin Færøvik argues that the continued development of Norway as a petrostate is vital in the green transition. She highlights how the Norwegian oil and gas industry is set out to be carbon-neutral while also admitting to the dilemma of most emissions stemming from the usage of petroleum, not production. She argues that the Norwegian supply if cut, will be replaced by countries with higher production emissions, lower HSE standards, and less democratic governance. Therefore, global climate efforts are better served using Norwegian oil and gas. Even though this chronicle was written in 2020, she addresses the need for European energy independence from Russia, where Norwegian hydrocarbons can create geopolitical stability (Færøvik, 2020).

Professor Øystein Noreng reflects on the geopolitical role of Norwegian oil and gas following the Russian invasion. He argues that Norway should ramp up its gas exports to Europe because it replaces coal and creates revenue for Norway while also offering importing countries cheaper and more short-traveled gas supply. Lastly, he states that Norway can contribute to the energy security of Europe (Noreng, 2022).

None of these suggest that we should not bet on renewables in addition to oil and gas, and the paradox remains - Norway's climate contribution is its low-emission oil production. The authors in this category are a scholar at BI, and an industry leader stating that she represents a broad Norwegian energy industry. This category did not have as many clear contributions as expected, considering the political reality in Norway on continued oil and gas production.

6.2. 2) “Norway should act now and phase out oil and gas production to gain an upper hand in the energy transition”

This category includes contributions where the author clearly argues that Norway should phase out oil production in the nearest future to gain the upper hand in the energy transition.

Scientists at NUPI present a new opportunity for Norway, becoming the first petrostate to successfully phase out oil and gas, generating commercial, diplomatic and political gain - domestically and internationally. They mention how the Norwegian paradox has been challenged by foreign media - the Norwegian reputation is under pressure. They argue that taking a leadership position as a petrostate in the green transition can become a commercial opportunity where Norway can assist other countries in their transition. In essence, this chronicle asks the question: if Norway, as one of the wealthiest countries in the world, cannot transition, who can? The time to choose what role to take is soon up, and the current middle way is not a viable option (Beaumont et al., 2021).

Klaus Mohn, Rector at the University of Stavanger, states that “all extraction and use of fossil fuels must end” in a chronicle where he argues that a transition away from oil and gas can ensure that Norway stays an international energy player. He problematizes that research shows how regions with natural resources, like oil, struggle to keep up activity and employment when resource extraction stops. This is especially true in the case of coal, and Mohn draws a possible parallel to petrostates while also mentioning that resting on natural resources can halt innovation (Mohn, 2022).

Another angle to the discussion on energy supply to Europe following the Russian invasion is presented in a chronicle by three different Norwegian scholars. Both a climate crisis and a security crisis entails the need to phase out hydrocarbons in favor of renewable energy - fast. They argue that Norway providing wind power instead of gas will benefit Europe the most while also replacing the need for Russian gas imports, making Norway a continued, considerable energy provider in Europe (Elverhøi et al., 2022).

Following a New York Times article on the Norwegian Paradox, then Head of Innovation Norway Anita Krohn Traaseth wrote a chronicle asking the question if Norway can be a credible pioneer for clean energy and the UN Sustainable Development Goals while also

exporting CO₂. She advocates that Norway should explain to the world that it is transitioning and be transparent that oil will not be a viable energy solution for Norway or the world. With Norway adjusting its self-image and addressing its paradoxical position to the world, it can transition its economy and become a transitional leader (Traaseth, 2017).

In contrast to those arguing for continued oil and gas production, the authors in this category are categorical. Norwegian oil and gas production needs to be phased out in the near future and is the only way Norway can stay a credible energy actor. Authors here include scientists, a university representative, and a Norwegian industry leader.

6.3. 3) No clear opinion on the Norwegian paradox

This third and last category encompasses chronicles without a clearly defined position in the Norwegian paradox.

Concerned with providing Europe with as much energy as possible, Jon Nicolaisen in Civita published a chronicle arguing that both gas and renewable power are needed to free Europe from Russian dependence. The European heating market is gas-based and does not currently have a renewable alternative. Nicolaisen pressed how this ramp-up of Norwegian renewable power should be viable in the long run, advocating for an expansion of hydropower and onshore wind. With this, he also states the need for power cables connecting Norway and Europe, strengthening the European power system and accelerating the energy transition in Norway. Lastly, he subtly raises the question of whether Norway should be on the inside of EU decisions regarding the energy transition in Europe, implying a possible EU membership, as energy politics has become security politics (Nicolaisen, 2022).

Erik Solheim, former Leader of UN Environment, names Europe as the solution to Norwegian problems. He mentions a range of potential industry projects fueling the idea of Norway as a green battery for Europe, dependent on Europe to secure a market. The solution for saving democracy and in global geopolitics is Europe. Solheim draws a picture of a changing geopolitical landscape, where Norway is stronger in a united Europe. He finishes by emphasizing that Norway needs the EU way more than the EU needs Norway and that the time for this “long-distance relationship” is over (Solheim, 2021). I coded this

contribution as category three since halting oil and gas production is not mentioned. However, the strong integration into the EU mentioned makes this contribution lean more towards category two than one.

With the ongoing war in Europe and a story of an increasingly multipolar world as a backdrop, Solheim discusses Norway's role in Europe in a second chronicle. He argues that the EU is the driver of Norwegian climate and environmental policy and that membership would fully utilize the EU as Norway's "green force". Solheim names Norway as important for European security while the EU also emerges as the up-and-coming security guarantor for Europe, replacing NATO. However, his contribution does not speak for or against either renewables or oil and gas as the main role for Norway in the transition. However, his position is that Norway should further join the EU's green plans (Solheim, 2022).

Lastly, focusing on the geopolitics of the energy transition, Director and Chief Economist in Equinor Eirik Wærness writes a chronicle highlighting the conflict-reducing effects of renewable energy implementation. Being one of the world's largest energy exporters, second-largest gas exporter to Europe, and the following oil fortune in the Pension Fund affect Norway's relationships with other states and its position in the global scene. Building on a report from IRENA, he states Norway is one of the energy-exporting countries that will face challenges due to its economy relying heavily on fossils, but it is also one of these countries most prepared for the energy transition and in taking a leadership role in exporting renewables. He concludes that countries and companies wanting to shape the energy future have major possibilities as renewable energy takes over the energy mix (Wærness, 2019). Although Wærness highlights the geopolitical opportunities in the energy transition, he does not mention if Norway should quit hydrocarbon exports, which are at the core of Equinors operations.

6.4. Summary of empirical findings

The Russian invasion of Ukraine sparked a new wave of chronicles, adding arguments to the debate. There is no clear consensus among Norwegian experts or expert groups based on the sampled chronicles. Out of the ten contributions, two belong in the camp advocating for continued Norwegian oil and gas production, four argue that Norway benefits from phasing out oil and gas, and four do not take a clear position. This finding is consistent with the background information on the Norwegian paradox in the energy transition, and the experts simply reflect the indecisiveness presented in the paradox. I was, however, surprised that there were not more clear advocates for continued oil and gas production, as this is such a big part of Norwegian political reality. Here, the public discussion and the political situation differ.

Another finding is a majority of the contributions mention Norway's relationship with Europe or the EU. This supports the importance of the union and European relations in the Norwegian public debate. This has also been further actualized after the Russian invasion.

7. Discussion; The geopolitical consequences of the Norwegian indecisiveness

Norway's prerequisites in the energy transition give insight into why the paradox exists. A combination of a fossil-dependent economy and labor market shaping the political reality and alliances and international commitments to the climate cause have left Norway in a tricky position. Norwegian experts disagree on what role Norway should take.

This chapter will answer the final sub-question of this thesis; *What does the geopolitics of the energy transition imply for Norway?*

7.1. The EU is leading the transition

Almost all the chronicles mentioned Norway's relationship with the EU as important to its geopolitical position. One of the top priorities for the EGD is hydrogen, and Norway is best equipped in Europe for managing CCS and converting natural gas to hydrogen, launching Norway into new markets adapted to the EGD.

With the EU growing its energy system capacity making it more independent from external imports, Norway will lose its main export market of hydrocarbons. It is risky for Norway to stay outside of this system, producing oil and gas while the EU moves on. The literature points to a growing importance of regional alliances, where the EU is dominating in Europe. This leads experts to argue that Norway will be strengthened by aligning itself with the EU's Green Deal.

Although the Russian invasion of Ukraine has provided a new urgency for energy security, backing a short-term perspective, analysts suggest that this urgency will actually accelerate the European Energy transition and EGD efforts. The European search for energy security and Russian independence will likely lead the EU to renewables, like in Lithuania.

7.2. New Norwegian realities

The existing literature on the energy transition also establishes Norway and other petrostates as at risk of losing relevance and having stranded assets leading to weaker economies. However, it also presents the possibility of overturning this looming faith if they adapt to the transition and achieve leadership in clean technology. Fossil fuel exporters lose geopolitical power as their previous importers become self-sufficient, and the possible new hydrocarbon ventures presented by Goldthau & Westphal (2019) do not apply to Norway. Instead, Norway is a complicated case in a unique position. Its enormous revenue from fossil exports also means that the country has funds to fuel a more comprehensive transition than other states. The same goes for technological competence and knowledge gained from petroleum activity, which can be transferred to transitional skills.

According to the OECD, Norway will not be able to reach its targets at the current pace, risking decreased credibility as a climate front runner when it is not even reaching its domestic emission targets. Making a conscious decision to go with the EGD and complete the energy transition could reduce this risk. Norway will need to couple its energy and environmental policy to be able to use and implement the EGD, requiring a restructuring of the Norwegian establishment in these policy areas (Sending et al., 2021).

The potential for more GHG emissions stemming from Norwegian resources is substantial as $\frac{2}{3}$ of hydrocarbon reserves remain. The Norwegian transition is a matter of timing. Literature suggests that if petrostates like Norway want to stay relevant and turn over their economy in time to still be a player in the European market, they are in a hurry.

7.3. Long term European thinking versus a short-term Norwegian perspective

Overall, the existing research suggests that renewable energy taking over the energy mix will lead to greater global stability and less conflict. In the short-term, replacing the Russian gas supply to Europe is favorable, according to several experts. Kragseth and Meling argued that Norwegian replacing coal and creating European independence from Russia has to come first, especially considering the EU is estimated to keep gas consumption at the same levels for the next decade. Norwegian political realities are currently focused on the short term and risk being so concerned with stability, predictability and business as usual that the country and its industry will not be able to catch up with the European community later on. The timing of the Norwegian transition and decisions made in the near future will determine to what degree Norway's reputation and relationships will be affected.

From a long-term perspective, literature suggests Norway could gain a role as a credible climate frontrunner by helping the EU rid its energy system of fossil fuel dependence. This involves Norway phasing out oil and gas production. With coal exiting the European energy mix, gas will be the next target for emission reduction, creating a false, short-term sense of security for Norway. Norway is in a rush to renew its license to operate in the international community. By not aligning itself with European plans, it is, in a way betting against the EU, which might damage the inevitable relationship with the union.

The research in the field does not look into the transitional phase itself, which is where Norway is now and the context where the chronicles are written. This might help explain why consensus on Norway's role in the transition is hard to reach, as the road towards the finished transition is still uncertain. However, both the theories on the finished energy transition and the transitional phase are clear in the forecasted decline of the petrostates. According to the empirical findings, the Norwegian debate does not seem to have accepted this, as the paradox remains. This confusion in the transitional phase may cause the Norwegian short-sightedness, as experts are trying to figure out what exactly is best for Norway in the transitional phase.

8. Conclusion

This paper explored the Norwegian prerequisites making up the Norwegian paradox of being a hydrocarbon producer while advocating for the climate and different theoretical approaches to the geopolitics of the energy transition. I have collected and presented different opinions making up a sample of the Norwegian expert discourse on Norway's role in the energy transition proving a continued indecisiveness.

In conclusion, the economic and geopolitical risks associated with Norway's oil and gas production have grown larger and more alarming over the years, while the political reality in Norway has remained the same. Norwegian experts discuss the implications of different strategies, and many advocate for Norway to phase out oil and gas production to pursue new and green ventures to prepare its economy for a rapid shift in the energy mix. Many contributions advocate for a stronger focus on collaboration with the EU, further actualized by the war in Ukraine. However, this is still not the consensus in the expert discourse, and the Norwegian paradox remains. Regardless, the time for this indecisiveness might be up as the rest of Europe moves on with the transition. All indicators point to a Norwegian industry transition if it is to stay relevant as an energy nation.

More research on the transitional stage itself and the consequences of choices made in this phase might assist Norwegian decision-makers in relieving the country from the tense, paradoxical position it finds itself in. Norway once mobilized both in skill and investments against all odds to succeed as a petrostate. Now is the time for a similar mobilization, according to theories on the geopolitics of the energy transition and as mentioned by some Norwegian experts presented in this thesis.

Bibliography

Abnett, K. (2020, July 17). 'If not Europe, who else?' EU under pressure to secure green recovery at crunch summit. *Reuters*. Retrieved April 15, 2022 from

<https://www.reuters.com/article/us-eu-summit-climatechange-idUSKCN24I0YZ>

Agreement on the European Economic Area, January 3, 1994. Updated August 1, 2016.

Retrieved February 27, from <https://www.efta.int/media/documents/legal-texts/eea/the-eea-agreement/Main%20Text%20of%20the%20Agreement/EEAAgreement.pdf>

Alvik, S. (2022, April). The Ukraine war will not derail Europe's energy transition. *DNV*.

Retrieved April 28, 2022 from <https://www.dnv.com/feature/the-ukraine-war-will-not-derail-europes-energy-transition.html>

Bang, G. & Lahn, B. (2020). From oil as welfare to oil as risk? Norwegian petroleum resource governance and climate policy. *Climate Policy*, 20(8), 997-1009, DOI: 10.1080/14693062.2019.1692774

Baron, R. & Fischer, D. (2015). Divestment and Stranded Assets in the Low-carbon Transition (Background paper for the 32nd Round Table on Sustainable Development, 28 October 2015, OECD Headquarters, Paris). *OECD*.

Bazilian, M., Bradshaw, M., Gabriel, J., Goldthau, A. & Westphal, K. (2019). Scenarios of the energy transition: Drivers, consequences, and implications for geopolitics. *Wires Climate Change*, 11 (2), 1-7. <https://doi.org/10.1002/wcc.625>

Beaumont, P. H., de Coning, C. & Rosvold, E. (2021, September 19). Hvis ikke Norge går i bresjen for en grønn omstilling, hvem da?. *Aftenposten*.

<https://www.aftenposten.no/meninger/debatt/i/a7jLnM/hvis-ikke-norge-gaar-i-bresjen-for-en-groenn-omstilling-hvem-da>

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>

Bridge, G., Bouzarovski, S., Bradshaw, M. & Eyre, N. (2013). Geographies of the energy transition: Space, place and the low-carbon economy. *Energy Policy*, 53, 331-340.

<https://doi.org/10.1016/j.enpol.2012.10.066>

Climate Action Network International. (n.d.). Fossil of the day at COP26. Retrieved February 14, 2022 from <https://climatenetwork.org/cop26/fossil-of-the-day-at-cop26/>

Croteau, W. & Hoynes, D. (2018). *Media/Society: Technology, Industries, Content, and Users* (6th ed.). Sage Publications, Inc.

Dalby, S., & O Tuathail, G. (1998). *Rethinking Geopolitics*. Routledge

Delbeke, J. (2022, March 24). The impact of the war in Ukraine on Europe's climate and energy policy. *Euronews*. Retrieved May 05, 2022 from <https://www.euronews.com/green/2022/03/24/what-is-the-impact-of-the-war-in-ukraine-on-europe-s-climate-and-energy-policy>

Elverhøi, A., Øystein, H. Jensen, S. B. & Vollan, K. (2022, March 23). Innlegg: Norsk elkrafteksport til Europa kan bli mer foss enn "musepiss". *Dagens Næringsliv*. <https://www.dn.no/innlegg/krafteksport/vindkraft/kraftkabler/innlegg-norsk-elkrafteksport-til-europa-kan-bli-mer-foss-enn-musepiss/2-1-1189203>

Engan, O. (2018, January 3). Fagartikkel: Kronikken og kommentaren. *NDLA*. Retrieved February 12, 2022 from <https://ndla.no/nb/subject:1:94dfe81f-9e11-45fc-ab5a-fba63784d48e/topic:2:103867/topic:2:103870/resource:1:99436>

EU Taxonomy Info.(n.d.). EU Taxonomy Overview. Retrieved April 15, 2022 from <https://eu-taxonomy.info/info/eu-taxonomy-overview>

European Commission. (2020). Communication from the commission to the european parliament, the council, the european economic and social committee and the committee of the regions: Sustainable Europe Investment Plan, European Green Deal Investment Plan. Retrieved March 18, 2022 from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0021&from=EN>

European Commission. (n.d.). Delivering the European Green Deal. Retrieved May 05, 2022 from https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

Færøvik, Kristin (2020, December 23). Norsk sokkel har en rolle i lavutslipp-samfunnet. *E24*.
<https://e24.no/det-groenne-skiftet/i/rgzLkm/norsk-sokkel-har-en-rolle-i-lavutslipp-samfunnet>

Godal, B. T. (2019). EØS - et tilbakeblikk. *Internasjonal Politikk*, 77(4), 341-349.
<https://doi.org/10.23865/intpol.v77.1980>

Goldthau, A. & Westphal, K. (2019). Why the Global Energy Transition Does Not Mean the End of the Petrostate. *Global Policy*, 10 (2), 279-283. <https://doi.org/10.1111/1758-5899.12649>

Goldthau, A., Westphal, K., Bazilian, M. & Bradshaw, M. (2019). How the energy transition will reshape geopolitics. *Nature*, 569 (May), 29–31.

Hovden, E. & Lindseth, G. (2004). Discourses in Norwegian Climate Policy: National Action or Thinking Globally. *Political Studies*, 52(1), 63-81.
<https://doi.org/10.1111/j.1467-9248.2004.00464.x>

IEA (n.d.). Energy transitions. Retrieved March 23, 2022 from <https://www.iea.org/topics/energy-transitions>

IEA (2022, March 03). How Europe can cut natural gas imports from Russia significantly within a year. Retrieved May 05, 2022 from <https://www.iea.org/news/how-europe-can-cut-natural-gas-imports-from-russia-significantly-within-a-year>

IRENA (n.d.). Energy Transition. Retrieved March 23, 2022 from <https://www.irena.org/energytransition>

Leonard, M., Pisani-Ferry, J., Shapiro, J., Tagliapietra, S. & Wolf, G. (2021). The geopolitics of the European Green Deal. *Policy Contribution*, 4. Bruegel.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Sage Publications.

Mohn, K. (2022, April 10). “Lykkeland” sesong 8 kan bli eit sørgelig kapittel. *Aftenposten*. <https://www.aftenposten.no/meninger/kommentar/i/v5j28B/lykkeland-sesong-8-kan-bli-eit-soergelig-kapittel>

NATO. (2020, August 31). NATO Member Countries. Retrieved April 13, 2022 from https://www.nato.int/cps/en/natohq/nato_countries.htm

Nicolaisen, J. (2022, March 31). Kronikk: Norge må bidra til å løse Europas energikrise. *Dagens Næringsliv*. Retrieved April 28, 2022 from <https://www.dn.no/kronikk/energi/fornybar-energi/vindkraft/kronikk-norge-ma-bidra-til-a-lose-europas-energi-2-1-1191876>

Noreng, Øystein (2022, March 17). Norsk gass til Europa. *Dagsavisen*. <https://www.dagsavisen.no/debatt/2022/03/17/norsk-gass-til-europa/>

Norway in the UN (2020, March 7). Briefing on COP26. Retrieved February 20, 2022 from <https://www.norway.no/en/missions/UN/statements/other-statements/2020/briefing-on-cop26/>

Norwegian Petroleum Directorate. (2022a, January 18). APA 2021. Retrieved March 27, 2022 from <https://www.npd.no/en/facts/production-licences/licensing-rounds/apa-2021/>

Norwegian Petroleum Directorate. (2022b, March 25). Exports of oil and gas. Retrieved May 4, 2022 from

<https://www.norskpetroleum.no/en/production-and-exports/exports-of-oil-and-gas/>

NRK. (n.d.). Partiguident: Olje. Retrieved May 4, 2022 from

<https://www.nrk.no/valg/2021/partiguident/nb/tema/olje/>

OECD (2022), OECD Environmental Performance Reviews: Norway 2022, OECD Environmental Performance Reviews, *OECD Publishing*.

<https://doi.org/10.1787/59e71c13-en>.

O'Sullivan, M., Overland, I., Sandalow, D., Begg, H., Behrens, A., Bhatiya, N., Clark, A., Cremer, T., Elkind, J., Fessier, M., Nakagawa, M., Seol, M., Soyly, C. & Vakulchuk, R. (2017). The Geopolitics of Renewable Energy. *Harvard University, Columbia University & the Norwegian Institute of International Affairs*. <https://dx.doi.org/10.2139/ssrn.2998305>

Overland, I. (2015). Chapter 30: Future Petroleum Geopolitics: Consequences of Climate Policy and Unconventional Oil and Gas. In J. Yan (Eds.), *Handbook of Clean Energy Systems*. (Vol 6, p. 3517-3544). John Wiley & Sons, Ltd.

Overland, I. (2019). The geopolitics of renewable energy: Debunking four emerging myths. *Energy Research and Social Science*, 49, 36-40.

<https://doi.org/10.1016/j.erss.2018.10.018>

Proedrou, F. (2018). Geopolitics and development in a steady-state world. *Energy Policy and Security under Climate Change* (1.edition). Palgrave Macmillan Cham.

Regjeringen. (2015, March 10). Seas and coastlines - the need to safeguard species diversity. Retrieved April 13, 2022 from <https://www.regjeringen.no/en/topics/climate-and-environment/biodiversity/innsiktsartikler-naturmangfold/hav-og-kyst/id2076396/>

Regjeringen. (2020, September 10). The Security Council: Norway's priorities. Retrieved March 6, 2022 from https://www.regjeringen.no/en/topics/foreign-affairs/the-un/unsc_priorities/id2701066/

Regjeringen. (2021a, March 31). What the EEA Agreement covers. Retrieved March 14, 2022 from <https://www.regjeringen.no/en/topics/european-policy/eos/agreement/id685024/>

Rothkopf, D. (2009). Is a Green World a Safer World? A guide to the coming green geopolitical crises. *Foreign Policy*. Retrieved May 4, 2022 from <https://foreignpolicy.com/2009/08/22/is-a-green-world-a-safer-world/>

Ryggvik, H. and Kristoffersen, B. (2015). Heating Up and Cooling Down the Petrostate: The Norwegian Experience. In: H. Ryggvik and B. Kristoffersen (eds.), *Ending the Fossil Fuel Era*. The MIT Press, pp. 249-275.

Sattich, T. and Huang, S. (forthcoming) Industrial Competition – Who is Winning the Renewable Energy race? In D. Scholten (ed.) *Handbook on the Geopolitics of the Energy Transition* (Edgar Elgar, accepted).

Sattich, T., Morgan, R. & Moe, E. (2022). Searching for energy independence, finding renewables? Energy security perceptions and renewable energy policy in Lithuania. *Political Geography*, 96. <https://doi.org/10.1016/j.polgeo.2022.102656>

Scholten, D., Bazilian, M., Overland, I. & Westphal, K. (2020). The geopolitics of renewables: New board, new game. *Energy Policy*, 138, 1-6. <https://doi.org/10.1016/j.enpol.2019.111059>

Sending, O.J., Bang, G., Melchior, A., Spets, A. Svendsen, Ø., Sverdrup, U. & Øverland, I. (2021). EUs grønne giv - implikasjoner for norsk europapolitikk (Rapport 7/2021). *Norsk Utenrikspolitisk Institutt*.

Sengupta, S. (2017, June 17). Both Climate Leader and Oil Giant? A Norwegian Paradox. *The New York Times*.

<https://www.nytimes.com/2017/06/17/world/europe/norway-climate-oil.html>

Siddi, M. & Kustova I. (2021). From a liberal to a strategic actor: the evolution of the EU's approach to international energy governance. *Journal of European Public Policy*, 28 (7), 1076-1094. <https://doi.org/10.1080/13501763.2021.1918219>

Sognæs, I. & Peters, G. (2020, January 14). Carbon Capture and Storage is necessary to keep global warming below 2°C. *Cicero*. Retrieved May 4, 2022 from <https://cicero.oslo.no/no/posts/nyheter/carbon-capture-and-storage-is-necessary-to-keep-global-warming-below-2c>

Solheim, E. (2021, February 07). Kronikk: Regjeringen er fullstendig passiv overfor EU. *Dagens Næringsliv*. <https://www.dn.no/globalt/eu/aker/statkraft/kronikk-regjeringen-er-fullstendig-passiv-overfor-eu/2-1-957211>

Solheim, E. (2022, March 15). Kronikk: Det er EU og ikke Nato som avgjør Norges fremtid. *Dagens Næringsliv*. <https://www.dn.no/globalt/ukraina/nato/eu/kronikk-det-er-eu-og-ikke-nato-som-avgjor-norges-fremtid/2-1-1182405>

SSB. (2022, April 22). Elektrisitet. Retrieved May 4, 2022 from <https://www.ssb.no/energi-og-industri/energi/statistikk/elektrisitet>

Stegen, K. S. (2011): Deconstructing the “energy weapon”: Russia’s threat to Europe as a case study. *Energy Policy*, 39 (10), 6505-6513. <https://doi.org/10.1016/j.enpol.2011.07.051>

Stortinget. (2018, April 11). Folkeavstemninger. Retrieved March 14, 2022 from <https://www.stortinget.no/no/Stortinget-og-demokratiet/Storting-og-regjering/Folkestyret/Folkeavstemninger/>

Støre, J. G. (2021, November 2). Statement at the UN Climate Change Conference in Glasgow. *Regjeringen*. Retrieved March 27, 2022 from <https://www.regjeringen.no/en/aktuelt/statement-at-the-un-climate-change-conference-in-glasgow/id2882242/>

Sverdrup, U. (2019, November 28). 25 år med EØS-avtalen. *NUPI*. Retrieved March 14, 2022 from <https://www.nupi.no/Skole/HHD-Artikler/2019/25-aar-med-EOES-avtalen>

Sweijts, T., de Ridder, M., de Jong, S., Oosterveld, W., Frinking, E., Auping, W., Coelho R., Bylappa, J. & Ilko, I. (2014). *Time to wake up: The Geopolitics of EY 2030 Climate and Energy Policies*. The Hague Centre for Strategic Studies (HCSS).

Traaseth, A. K. (2017, October 17). Slik kan Norge komme ut av strutseposisjonen og inn i ledertrøya. *Aftenposten*.

<https://www.aftenposten.no/meninger/debatt/i/odAQ7/slik-kan-norge-komme-ut-av-strutseposisjonen-og-inn-i-ledertroeya-anita-krohn-traaseth>

UN. (n.d.). Member States. Retrieved April 13, 2022 from <https://www.un.org/en/about-us/member-states#gotoN>

Vakulchuk, R., Overland, I. & Scholten, D. (2020). *Renewable and Sustainable Energy Reviews*, 122, 1-12. <https://doi.org/10.1016/j.rser.2019.109547>

Valderhaug, R. (2022, March 21). Norge kan erstatte nær 10 prosent av den russiske gassen til EU alt i år. *E24*. Retrieved May 05, 2022 from <https://e24.no/olje-og-energi/i/0G7XwA/norge-kan-erstatte-naer-10-prosent-av-den-russiske-gassen-til-eu-alt-i-aar>

Wærness, E. (2019). Ny fornybar energi kan endre maktforhold mellom stater. *Aftenposten*. Retrieved April 27, 2022 from <https://www.aftenposten.no/meninger/kronikk/i/71aq9w/ny-fornybar-energi-kan-endre-maktforhold-mellom-stater-eirik-waerness>

Østerud, Ø. (2014). *Statsvitenskap* (5.utg). Universitetsforlaget.