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Does electrification of oil and gas justify Norway's fossil production? A narrative analysis of the debate on electrification of oil and gas

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Abstract

This thesis researches the debate on electrification of oil and gas production in Norway and relates the debate to global climate justice. The climate crisis makes it important to reduce climate emissions fast. The national climate goal of Norway is to reduce 55% of the before 2030, and the sector target for the oil and gas industry is 50% reduction in emissions from 2005-levels by 2030. Electrification of oil and gas operations is one of the measures that can be used to reach emissions reductions. However, this requires investments and electricity. Some actors worry that it prolongs the lifespan of the fossil industry, while others argue that it is the only way to reach the 2030 target. I explore this debate through perspectives from political ecology, and I conduct a narrative analysis, where I identify four narratives in the debate. These are identified based on 13 interviews with key actors from the political parties, environmental organizations and the oil and gas industry in Norway. The identified narratives are (1) The Development, not liquidation of the oil and gas industry-narrative, (2) The Liberal ecomodernism-narrative, (3) The Stop fossil fuels-narrative, and (4) the Electrification: too expensive and inefficient-narrative.

Key words: narrative analysis, political ecology, climate justice, Norwegian oil and gas production, electrification of oil and gas production

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Introduction

There is currently a global climate crisis, therefore global emissions must be reduced. Norway's climate goal for 2030 is to reduce 55% of the national emissions. About 25% of Norway's climate emissions come from the oil and gas sector, so to meet the target, emission reductions from the sector are needed. Electrification of oil and gas production is one emission measure for the oil and gas sector. Electrification of oil and gas is usage of electricity as the energy source on platforms, instead of or in addition to gas. The electricity comes from cables from land or wind turbines in the sea (Equinor, n.d. a). The first platform on the Norwegian Continental Shelf to be electrified, Troll A, got power cables from land in already in 1996 (Oljedirektoratet, 2020, p. 26). Currently about 45% of the total production of oil and gas at the Norwegian continental shelf is produced with electricity from the grid (Oljedirektoratet, 2020, p. 9). However, electrification of oil and gas operations are widely debated and there are disagreements on the global climate effect. Some argue that electrification is greenwashing of the oil and gas industry and that it leads to further path dependency of the industry. Others see electrification of oil and gas as the only way to meet the 2030-climate goals. The current energy crisis also influences the debate. To understand the debate, I use perspectives from political ecology and conduct a narrative analysis. I have identified four narratives: (1) The Development, not liquidation of the oil and gas industry-narrative, (2) The Liberal ecomodernism-narrative, (3) The Stop fossil fuels-narrative, and (4) The Electrification: too expensive and inefficient-narrative. The analysis is conducted based on interviews with 13 key actors in debate about electrification of oil and gas production. This includes 8 actors from political parties, 3 actors from environmental organisations and 2 actors from the oil and gas industry. I look at these narratives in relation to global climate justice.

Outline of the thesis

First, I will present my research objective and research questions. Secondly, I present the thematic background, where I give a contextual and thematic understanding for the debate on electrification of the oil and gas sector. Then I will present my theoretical framework, where I outline the theoretical approaches that are used in this thesis. After this I discuss and account for my choices in the research by presenting by the methodological framework. Then I will present my analysis, there I start by giving simplified positions of the actors in the debate, before I

present common stories in the debate, and then identify and explain four prominent narratives. Moreover, I also present how each narrative relates electrification to global climate justice. After this, I turn to the discussion and explore these narratives in relation to my research questions and my theoretical framework. Finally, I present some concluding remarks.

Research objectives and research questions

Research objectives

I wish to gain a greater understanding of the debate on the electrification of the oil and gas operations in Norway, as well as how different actors use and build up different narratives that affect the debate and views on the issue.

Research questions:

RQ 1: Which narratives affect views and policies on electrification of the oil and gas operations in Norway among actors from the political parties, climate organizations and the oil and gas industry?

Sub-RQ:

1.1 What are different actors' views on the electrification of Norwegian oil and gas operations and what are their main arguments?

RQ 2: How do actors view electrification of the oil and operations in relation to the debate about global climate justice?

Sub-RQ:

2.1 Do the actors view the electrification of oil and gas operations as greenwashing or an effective emission reduction measure?

2.2 Who are, according to the actors, the winners, and losers of the electrification of the oil and gas operations in Norway?

Thematic background

This chapter gives context and a thematic understanding of the debate about electrification of the oil and gas sector in Norway. First, I will give a short historical background on “the oil and gas adventure in Norway.” Then I briefly elaborate on the climate crisis and recent calls for action from the *IPCC*, as the climate crisis is the fundamental force behind the debate about electrification of the fossil sector. Further, I look at how Norway historically have advocated for resolving the climate crisis, while having a huge fossil industry. Then I look at Norway’s current climate targets, with a focus on the sector target for the oil and gas industry. After that I look more closely at the electrification of oil and gas. Lastly, I include the debate on the climate effect of electrification of oil and gas, which is part of a bigger debate about the climate effect of Norwegian oil and gas.

The oil and gas adventure of Norway

In 1969, American company Phillips Petroleum found Ekofisk, the biggest offshore petroleum field at the time. Ekofisk marked the start of the Norwegian oil and gas adventure. This new industry needed systems of rules and policies, with new institutions being built from scratch (Sæter, 2017, p. 15-16). The years from the late 60s until mid-70s were crucial. Policies that ensured a long-term oil policy were implemented, securing huge revenues for the Norwegian people (Sæter, 2017, p. 16). In 1971, the parliament decided on ten oil commandments (Stortinget, 2021). These were created based on the government’s principled views on good governance of the industry, with the goal being that extraction of natural resources on the Norwegian continental shelf would favour the entire society. There should be national management for all operations on the Norwegian continental shelf, and a state-owned oil company would be created, which would take care of the state’s business interests. The petroleum industry should accelerate new business activity in other sectors, while taking considerations to existing commercial activities (Stortinget, 2021). Demands for considerations of nature and the environment, as well as a moderation in the rate of extraction has been part of the industry from the beginning. This foundation makes our oil history stand out internationally, as it was particularly successful for the society (Sæter, 2017, p. 16).

When Knut Erik Mork concludes his chapter of how Norway became an oil nation in his book *Oljeeventyret som kom og gikk* [The oil adventure that came and went] (2020), he looks back at

how Norway, since 1969, have managed to develop and adapt the oil and gas industry. When the price of oil and gas have dropped, modern technologies and cost reductions have been implemented. Employers and employees have found solutions together, and the industry has had a constructive relationship with the government (Mork, 2020, p 126). Mork states that the essential characteristic of the Norwegian oil and gas industry is that it has been possible to build a huge oil sector in a small country, mainly based on domestic competence, without huge social conflicts (Mork, 2020, p 126). Related to this Mork put an emphasis on the importance of the Norwegian democracy. For about 20 years, the state has put enormous amounts of the oil revenues into *The Government Pension Fund Global*, which every year contributes into the national budget. However, Mork states, it remains to be seen whether the Norwegian oil nation will manage to shift to a green economy (Mork, 2020, p. 126-127). What is meant by a green economy can be discussed, but Mork seems to hint at the dilemma with meeting climate targets for a country so financially dependent on the oil and gas industry. This is what I want to look further into in this thesis by looking at the electrification of oil and gas. The measure seems to allow Norway to continue the oil and gas adventure, while reducing emissions from the sector.

The IPCC (2023) sixth assessment report

The reason for Norway needing to reform the oil and gas industry is the global climate and environmental crisis. The IPCC (2023) sixth assessment report states clearly, with high confidence, that human activity mainly through emissions of greenhouse gases, have caused global warming. The global surface temperature was in 2011-2020 1.1 degree Celsius above the levels in 1850-1900. Global GHGs continue to increase, with unequal historical and ongoing contributions. The greenhouse gas emissions come from unsustainable energy use, land use, land use change, lifestyles, and patterns of consumptions and production. Climate change, caused by humans, is already causing losses and damages to nature and people across the globe. People in vulnerable communities who have contributed the least to these changes are disproportionately affected (Lee et al., 2023, p.6).

The IPCC (2023) report also stresses the challenges of waiting with adaptation and mitigations action, as delay can cause: “the risk of cost escalation, lock-in of infrastructure, stranded assets, and reduced feasibility and effectiveness of adaptation and mitigation options (high confidence).” (Lee et al., 2023, p. 60). This is important in the discussion of how Norway should

decrease its emissions from the fossil production. Action is needed fast, so that the country's economy reduces its emissions. IPCC (2023) stressed that: “The continued installation of unabated fossil fuel infrastructure will ‘lock-in’ GHG emissions (high confidence)” With *unabated fossil fuels* the report refers to fossil fuels that are produced and used without reducing the amount of GHG emitted throughout the life cycle; for example, by capturing at least 90% CO₂ from power plants. (Lee et al., 2023, p. 60). It states that for us to limit global warming to 2 degrees or less we must leave a substantial part of the fossil fuel unburned (Lee et al., 2023, p. 60). It is however not stated clearly who should have the right to continue burning fossil fuels, and what countries should lead the transformation.

The IPCC (2023) report also emphasises the need to change our energy systems, with reduction in the overall fossil fuel use: “Rapid and deep reductions in GHG emissions require major energy system transitions (high confidence). Adaptation options can help reduce climate-related risks to the energy system (very high confidence). Net zero CO₂ energy systems entail: a substantial reduction in overall fossil fuel use, minimal use of unabated fossil fuels, and use of Carbon Capture and Storage in the remaining fossil fuel systems...” (Lee et al., 2023, p. 70). Action is needed. Our energy systems must transition from fossil fuels and the remaining fossil fuels needs to be produced and used with measure with minimal emissions.

Norway’s climate targets

Climate and environmental change are not new. In 1987, *Our Common Future*, also called the Brundtland report, was released. *Our common future* argued for a transition from fossil fuels to non-polluting energies and technologies. It advised to halve the use of fossil fuels during the next 30 to 40 years. Gro Harlem Brundtland led the work with the report. After delivering the report, it was her job to come back to Norway and put the big thoughts behind sustainable development into life. At the same time in Norway, the oil industry had just started to bring in great revenue (Sæter, 2017, p. 26).

Norway got the world's first environmental department in 1972, the same year as the creation of Statoil¹. However, the election in 1989 was the first election with a focus on climate policy (Sæter, 2017, p. 26). Brundtland’s government came with their first climate goal in 1989; called

¹ Statoil changed its name to Equinor in 2018. The company was created by the Norwegian state, today the Norwegian states owns 67% of Equinor.

the stabilisation goal. The goal was to stabilise the Norwegian emissions during the 90s or at least by the year 2000. The Conservative party was among the parties supporting even stricter goals and wanted the emissions to stay on 1989-levels (Sæter, 2017, p. 27). The issue, however, with the goals was that the policies could negatively affect Norwegian economic interests hugely, especially the growing oil industry. It would be impossible to develop the industry, while stabilising the CO₂-emissions (Sæter, 2017, p. 27).

Therefore, there was a shift in strategy. The stabilisation goal was abandoned. Instead, Norway argued for international cost-effectiveness, meaning it would be cheaper to mitigate climate change in low-cost countries rather than in high-cost countries such as Norway: It would be possible to do more for the environment with the same amount of money in low-cost countries. Following this narrative, an emissions trading system was the next step for cost-effective climate policy (Ihlen, 2007, p. 102).

Since the 2015 Paris climate agreement, there has been more pressure on national emissions reduction. Before the UN climate meeting in Egypt in 2022, Norway raised its nationally determined contribution, stating that the country will cut at least 55% of its emissions from 1990 levels before 2030 (Regjeringen, 2022). The reduction will be within Norway, not by buying climate quotas from the EU emission trading system. This was decided on in the government's policy platform "Hurdalsplattformen"² (Hurdalsplattformen, 2021, p. 29). The policy is called "the adaption goal"³ and got its name in the revised national budget in 2022 (Meld. St. 2. (2021 – 2022), p. 70).

Norway has targets for different sectors; including the oil and gas sector. In 2020, Equinor, The Norwegian Confederation of Trade Unions (LO) and The Confederation of Norwegian Enterprise (NHO) came together and made a common goal of reducing the sector's emissions with 40% compared to 2005-levels by 2030 (Haugan and Lorentzen, 2020). During the pandemic, the oil and gas industry got a tax relief, to secure jobs and activity in the industry. One of the terms of the relief was to strengthen the climate target for the sector to 50% reduction in emissions from 2005-levels by 2030 (Sættem et al., 2020).

² Hurdalsplattformen is the government's policy platform, negotiated between the Labor party and the Center party after the parliament election in 2021.

³ Translation of "omstillingsmålet".

Climate emissions in the oil and gas industry

About 25% of Norway's climate emissions come from the oil and gas sector, which had a 48% increase from 1990 to 2021. The emissions come from extraction of oil and gas on the continental shelf, processing of gas in land plants (Kollsnes, Kårstø, Nyhamna and Melkøya), and from loading, storage and transport of crude oil and other petroleum products. The majority of the sector's climate gas emissions is CO₂ from energy production, meaning emissions from gas turbines, which produce energy to operate oil and gas extraction, transporting gas in pipelines and processing gas on land (Miljødirektoratet, 2022). For Norway to meet its climate targets by 2030, emissions from the oil and gas industry must decrease.

Climate gas emissions from oil and gas had a sizeable increase from 1990 until around 2000 and have been quite stable since then. The development of emissions from the sector depends on the extent of activity in the sector, development of technologies, solutions for energy use in both new and existing fields, as well as on the land-based plants (Miljødirektoratet, 2022). The climate gas emissions from oil and gas exploration went down 8.1% from 2020 to 2021. The reason was, among other things, that the processing plant Hammerfest LNG was closed due to a fire in 2020. The production of Norwegian oil and gas had an increase in 2021, but the emissions did not increase at the same rate as before 2020, which was due to increased production on the Johan Sverdrup field, which produce with power cables from land (Miljødirektoratet, 2022).

Measures for decreasing emissions from the industry

According to the report *Kraft fra land til norsk sokkel Rapport 2020* [Power Cables from Land to Norwegian offshore oil and gas platforms report 2020] from the Norwegian Petroleum Directorate (2020) the main instrument for reducing emissions from the petroleum sector are economic measures; both climate quotas and CO₂-taxes. The sum from these adds up to a combined CO₂-price of about 700 NOK per ton of CO₂ in the petroleum sector. This sum is higher than for other businesses in Norway, and higher than in other countries with petroleum industries. These fees give the oil and gas companies in Norway a self-interest in decreasing their own emissions (Oljedirektoratet, 2020, p 9). When Norway reported to the UN climate convention in 2020 it was estimated that the avoided emissions from the CO₂-tax and climate quotas accounted for about seven-million-tons of CO₂. These avoided emissions come from more efficient gas turbines, other forms of energy efficiency, power cables from land and CO₂-

storage. This has contributed to fewer emissions per average produced unit in the Norwegian petroleum production, compared to the average for oil producing countries (Oljedirektoratet, 2020, p. 16).

Before rights holders can build out a discovered oil or gas field, they must deliver a development plan for the project, which must be approved by the oil and energy department. The development plan must contain information on how the rights holders will build and operate the field. As part of this development plan, the rights holders must also do an environmental impact assessment (Oljedirektoratet, 2020, p. 16). All new oil and gas operations must consider electrification to get an approved development plan.

Electrification of oil and gas production

Electrification of oil and gas production is usage of electricity as the energy source on platforms, instead of or in addition to gas. The electricity comes from cables from land or wind turbines in the sea (Equinor, n.d. a). Electrification of oil and gas installations is, according to Offshore Norge an important prerequisite for Norway to reach the climate goals (Offshore Norge, n.d. b). Oil and gas operations can either be partially or fully electrified. Most of the electrified oil and gas operations have electricity from cables from land, either directly from land to the operations, or via another platform.

Cables from land – 45% of the Norwegian continental shelf electrified

Troll A got power cables from land in 1996. Since then, several oil and gas fields have been facilitated with power cables from land. The fields Troll, Gjøa, Ormen Lange, Valhall, Goliat and Johan Sverdrup all have power cables with power directly from land. Vega is also producing with power from land, via cables Gjøa, and Hod via cables from Valhall. All these fields, except Valhall, got power from land from day one (Oljedirektoratet, 2020, p. 26). More recently Martin Linge also got cables from land. And the fields Edvard Grieg, Ivar Aasen, Gina Krog, Solveig, Hanz, Duva and Nova have gotten or will get power via another platform (Equinor, 2019), (Oljedirektoratet, 2020, p. 26). When all these fields produce with power cables from land about 45% of the total production of oil and gas at the Norwegian continental shelf are produced with electricity from the power grid (Oljedirektoratet, 2020, p. 9). The avoided emissions in Norway

from these oil and gas fields will every year account to about 3.2 million tons CO₂ (Oljedirektoratet, 2020, p. 11).

Hywind Tampen – offshore wind directly to the platforms

Hywind Tampen is the first offshore wind farm in the world to supply oil and gas platforms with electricity directly. Currently seven wind turbines are generating electricity, and when the windfarm is completed there will be 11 turbines. These will cover about 35% of the power demand for the *Snorre* and *Gullfaks* fields (Equinor, n. d. b). According to *Equinor*, the project will prevent emittance of 200,000 tonnes of CO₂ annually. At the same time as the project reduces emissions, it is seen as important for developing the offshore floating wind technology and industry (Equinor, n.d. b).

Trollvind – sea wind parks to the grid and back to the platforms.

In *The Hurdal platform*, the government's policy platform from 2021, it was stated that the electrification of oil and gas fields should continue, but that there must be enough renewable power for new and existing mainland industry. Therefore, more electrification of the oil and gas operations should come from sea wind parks or other renewable electricity sources on the continental shelf (Hurdalplattformen, 2021). *Trollvind* can be seen as a response from the oil and gas industry on the governments wishes. *Equinor*, with partners, applied for a 1 GW offshore wind farm near Bergen. They wanted to start producing in 2027 (Equinor, 2022). The energy from *Trollvind* would go to land, and then be sent back out to *Troll A, B and C*, and *Oseberg Feltcenter* and *Oseberg Sør*. The energy could also go to *Kollsnes* processing plant. If there was not enough wind, the operations could supplement with energy from the grid, when more than needed energy was produced the electricity could go to the power grid. Then the platforms could be fully electrified in contrast to the platforms electrified by the *Hywind Tampen* project. In May 2023 *Equinor* announced that they postpone further development of the *Trollvind* project, due to lacking technological development, high cost, inflation, and a too tight timeline for the project (Equinor, 2023).

Hammerfest LNG at Melkøya

Hammerfest LNG is a reception and processing facility for liquefied natural gas (LNG) at *Melkøya* in Northern Norway. *Hammerfest LNG* is one of the country's biggest point emissions,

so an electrification could reduce 850 000 tons CO₂-emission each year (Andersen, 2023). However, electrification of Hammerfest LNG is widely debated, as it would use most of the surplus electricity in the area. This could affect other industries and the power prices. For electrification one would also need a power line between Skidi and Hammerfest, which would negatively affect reindeer husbandry in the area (Andersen, 2023). NVE, the Norwegian Water Resources and Energy Directorate, has recommended the use of a sea cable, rather than a power line, because this would lead to less social conflict (Gilbrant et al., 2023). An alternative to electrification, could be the use of CCS (Andersen, 2023).

Conflicting views on electrification of oil and gas

For many years, the climate effect of the electrification of oil and gas has been debated. There is a relative agreement that electrification of the oil and gas industry leads to reduced emissions in Norway, but the oil and gas is still exported and burned. The gas used to operate the platforms, is additionally exported when the platforms are electrified.

A 2021 white paper from the Ministry of Petroleum and Energy to the parliament, stated that an effect of cables from land to oil and gas facilities is that the electricity demand increases and the export of gas increases. The climate effect of electrification on European and global emissions is therefore uncertain (Meld. St. 36. (2020-2021), p 155.) According to the same white paper, the effect on the European and global emissions from reductions in the emissions within the EU trading system will depend on which assumptions one includes in the models about future developments in the gas-, oil- and emission trading-markets, as well as European climate policy. Measures within the EU emission trading system, including cables from land, would probably contribute to emission reduction in European and global emissions, but the effect must be expected to be limited (Meld. St. 36. (2020-2021), p 155.)

In January 2023, *Thelma Consulting* released the report “Electrification of the oil and gas sector – does it have a global climate effect?” The report was ordered from *Offshore Norge*, which is an employer and industry organization for companies with activities related with the Norwegian continental shelf (Offshore Norge, n.d a). The project description stated that the report should investigate global emission effects of electrification. The report should investigate the relationship between physical changes and market changes caused by electrification of the oil and gas sector. *Thelma Consulting* found that electrification of oil and gas production is crucial

to meet Norwegian climate goals and that the measures also reduce European and global emissions (Thelma Consulting, 2023).

The Thelma Consulting-report is clear in its conclusions that electrification of Norwegian oil and gas installations reduces Norwegian, European, and global GHG emissions. Electrification of oil and gas offshore and at land plants account for about 20% of the required emission reductions needed to meet Norway's climate goal for 2030. The increased need for power will mainly be covered by new power plant capacity in Europe, which according to climate policy conditions and climate goals will have low or no emissions. The emissions from Norway's oil and gas production are part of the European emission trading system. Therefore, when the electrification projects decrease use of climate quotas, the surplus of quotas increases, and the prices in the European emission trading system decreases. This will increase the probability of deleting quotas, thereby tightening the emission trading system (Thelma Consulting, 2023, p. 1).

The main reason for global emission reduction, outside EU, caused by electrification of Norwegian oil and gas, is that Norwegian pipeline gas will displace gas production with higher climate emissions in the value chain. According to the report, electrification of Norwegian oil and gas will not lead to big carbon leakage effects, these would be small or possibly positive (Thelma Consulting, 2023, p. 1). Almost all the LNG from Norway is liquefied at Hammerfest LNG on Melkøya. Emissions related to shipment from Hammerfest LNG to central Europe are slightly more than twice as large as from Equinor's pipeline-gas deliveries. However, the emissions are smaller than from other LNG deliveries to Europe. The LNG from Hammerfest LNG is amounting to 8.3 gCO₂e/MJ for the whole value chain, this includes upstream, midstream and downstream emissions, including methane emissions as well (Thelma Consulting, 2023, p.43).

This report led to media debate. Asbjørn Torvanger is an economist studying climate economics and policy, who works at CICERO Centre for International Climate Research. Torvanger wrote a debate post in Stavanger Aftenblad, arguing that electrification still has an unsure climate effect. He reviews *Thelma Consulting's* report as interesting and useful, but states that the effect of electrification depends on what is included in the analysis. There is no design for what should be included in these types of analyses, which makes it possible to get different answers (Torvanger, 2023). Torvanger's main critique of the report's framework is that the analysis is too optimistic

on how fast Europe can drop the use of fossil energy in the power sector, as well as in the rest of society, especially when it comes to coal. Currently the European energy market increases coal production whenever there is a need for increased power supply. Because of Norway's connection to the European power market, increased electrification of the oil and gas facilities can lead to increased use of coal in the European market. Torvanger also criticizes how the report argues that more gas export to EU will give an additional climate effect, because the EU ETS will be tightened if coal is replaced with gas. This is not certain, as there are many factors affecting the trading system and the EU climate policy the next years (Torvanger, 2023). Torvanger argues that there are other climate measures for the petroleum industry, which more securely decreases climate emissions; according to him, the report should also have included other alternatives such as new and more efficient gas turbines or gas power plants with CCS. He also points out how Norway instead of electrification could buy quotas in the EU emissions trading system, as he thinks this would be cheaper and have a more secure climate effect (Torvanger, 2023).

The discussion has also been among representatives from political parties and environmental organisations. Ove Trellevik from the Conservative Party (Høyre) was one of many actors positive to the report from *Thelma Consulting*. He stated that the report proves what they have argued the entire time. Electrification of the Norwegian continental shelf is needed to meet Norway's climate goals, and it leads to decreased emissions outside Norway (Vikingstad, 2023). Terje Halleland, who represent the Progress Party (Fremskrittspartiet) in parliament, called the report a commissioned work. He stated that neither the industry, the government nor other supporters of electrification in the parliament, can escape how this measure is not really needed to achieve any of Norway's International climate commitments. He also stated that electrification increases the pressure on the power grid and results in higher power prices (Vikingstad, 2023). Sofie Marhaug, who represents the Red party (Rødt) in the parliament, was also negative to the report and stated that it is worth noticing how the petroleum industry only supported electrification when the measures became profitable for them. They used to argue that it had no climate effect, but now they argue the opposite (Vikingstad, 2023). Frode Pleym, the leader of Greenpeace, argued that the report is part of a massive and ongoing lobby campaign from the oil industry, to establish electrification of oil production as the only alternative to decrease Norwegian emissions. He stated that he fears the politicians allow themselves to be led, even

though the most secure way to reduce emissions is to shut down the most polluting fields (Nyhus, 2023). This debate has been mentioned by several of the people I have interviewed, and we will look closer at it in the analysis chapter.

Conflicting views on Norwegian oil and gas

The *Thelma Consulting* report, with the debate that followed, is not the only debate related to conflicting views on the global climate effect of Norwegian oil and gas. In February 2023 *Rystad Energy* released a report on behalf of the *Ministry of Petroleum and Energy*, stating that increased production on the Norwegian continental shelf can lead to reduced global climate gas emissions (Rystad Energy, 2023). Based on their framework they argue that oil production from the Norwegian continental shelf hardly affects global climate emissions at all, while increased gas production can contribute to significant reduction in global emissions (Rystad Energy, 2023, p. 2). One of their arguments is that Norwegian gas can reduce the use of coal in Europe. Coal is cheap and gives, in many cases, good security of supply. However, coal has twice the emissions of natural gas. Therefore, global emissions can be reduced by replacing coal with gas. Increasing the export of Norwegian pipeline gas can also free LNG to importers outside Europe. Another argument used in this report is that supply cuts in the market has little climate effect, while decreased demand have big climate effect (Rystad Energy, 2023, p 2).

In contrast, *Vista Analyse* released a report in April 2023, written on behalf of various climate organisations (WWF in Norway, Greenpeace in Norway, Friends of the Earth Norway and Nature and Youth – Young Friends of the Earth Norway). *Vista Analyse* (2023) concludes that increased Norwegian oil production gives a net increase in global emissions, no matter the scenario or time period, and state that their conclusions complement what scientists affiliated with SSB (Statistics Norway) concluded about net climate effects from reduced oil production. *Vista analyse* explicitly state that their conclusions differ from the *Rystad Energy* (2023)-report and point out that the different conclusions are caused by different assumptions around the response of markets, substitution, and emission intensities. They state that it is not possible to find an unequivocal answer with these types of analysis (Vista Analyse, 2023).

Sustainable oil and gas

According to Anne Karin Sæter (2017), the background of terms such as “clean oil production” and “climate friendly oil” is an idea that if the choice is between Norwegian energy and energy

from other countries, Norwegian energy pollute less. This argument has been used since the 1970s, but back then it was used about Norwegian hydropower. It was argued that clean hydropower would replace fossil energy abroad. Today these arguments are used about oil and gas, both by the industry and by politicians in favour of a Norwegian oil and gas industry (Sæter, 2017, p. 48). However, Sæter also points out that there are arguments backing this narrative. Norwegian authorities, together with the oil industry, have agreed on strict environmental requirements, and the industry has good routines for avoiding accidents and oil spills. The industry keeps finding solutions for less human and environmental damage (Sæter, 2017, p. 48-49). The awareness of climate is clear in the oil industry, especially during the last years. As the industry continually implements new measures, for example by making the gas turbines on the platforms more efficient or by using power cables from land. Sæter argues that it is intrinsically good to reduce negative effects on climate and the environment from the production of oil and gas, but she states; doing something for less damage on the environment and climate, is highly different from doing something that is good for the climate and environment. Sæter states that fossil fuels pollute and never can be climate friendly (Sæter, 2017, p. 49). Professor Øyvind Ihlen has labelled the term "sustainable oil" an oxymoron, as it is a term built up by contradictory words. Something that creates damage for the climate is talked about as something that is good for the climate. Sæter questions why something that leads to pollution can be talked about as something good (Sæter, 2017, p. 49). The discussion of whether decreasing the emissions from the oil and gas platforms is good, or whether it leads to a path dependency in fossil fuels is discussed in the analysis.

Theoretical framework

Political Ecology

This thesis is based on perspectives from political ecology. This is a scholarly field, which, according to Robbins (2020), is an evolving practice more than a theory or a framework. In this thesis, the Anglophone tradition of political ecology is used, where one questions powerful narratives, as well as knowledge production, and study power relations in land and environmental conflicts. Both material conflicts and conflicts of meanings is the focus of study. Political ecology embraces several different definitions. Some of the definitions have an

emphasis on political economy, others at formal political institutions, some put their emphasis on environmental change and others on narratives and stories of change. Yet, all the definitions put political ecology as an explicit alternative to an «apolitical» ecology (Robbins, 2020, p. 10-11), therefore political ecology is a critical approach.

Critical realism

In political ecology, the most common way to perceive reality is called critical realism, or soft constructivism. Critical realists argue that an objective world exists, but when filtered through our subjective conceptual systems and scientific methods, our understandings become socially conditioned. So, there is “a real” reality, but our understandings of an empirical reality tend to reflect incorrect, biased, incomplete, or false understandings (Robbins, 2020, p. 124). Empirical research is therefore the preferred approach as it can uncover and disentangle flawed interpretations of environmental issues, and the underlying realities of these (Robbins, 2020, p. 10-11).

Winning and losing

According to Robbins (2020): “Political ecology stories are stories of justice and injustice”. The transformation of environments and other social-ecological changes have causes and consequences that are unevenly distributed between different countries, societies, communities, classes, and groups of people. Robbins argues that this in part reflects how environmental effects or costs often is offloaded at people, communities, or spaces without the political or financial resources to resist. Thereby, foundational narratives within political ecology overlap with narratives within environmental justice (Robbins, 2020, p. 88). Political ecology emphasizes that winners and losers are not found in different cases at random, they are repetitive and persistent: Structures produce the same losers and winners. Therefore, one must consider the historical process, as well as the legal and institutional infrastructures of narratives. One must also assess socially implicated assumptions, which make injustice the normal outcome (Robbins, 2020, p. 88). So, “Political ecology stories, therefore, narrate the uneven and structurally unjust character of socio-natures.” (Robbins, 2020, p.88).

Climate Justice

Climate justice is a subfield in the normative tradition of environmental justice (Benjaminsen & Svarstad, 2021, p. 130). Climate justice can be used as a tool to understand the implications of climate change and to see how actions for transformation affect people and societies. Several climate-related social movements work for climate justice. The idea of climate justice is related to the idea of environmental justice, and it deals with ethical, justice, and equity concerns related to climate change (Leichenko & O'Brien, 2019, p 189). This includes equity dimensions of GHG-emissions and uneven impacts of climate change, including different actors' vulnerability and adaptation capacity (Leichenko & O'Brien, 2019, p 189). Benjaminsen & Svarstad (2021) see temporal and spatial justice as two of the most important dimensions of climate justice. Temporal justice imply that a country reduces climate emissions to avoid the most serious climate effects for future generations, while spatial justice would imply that climate mitigation is distributed fairly among the people of today (Benjaminsen & Svarstad, 2021, p. 130-131). In radical environmental justice, which is a dominant approach within the field of environmental justice, distribution, recognition, and procedural justice are seen as three crucial elements for justice. Distributional justice refers to how the burdens and benefits of environmental interventions are shared. Recognition concerns whose voices are heard, and whose values, interests and views are considered. Procedural justice considers who are involved and can influence the decision-making (Benjaminsen & Svarstad, 2021, p. 49). In the sub-field of climate justice, recognition is often not included as a key element of justice. A lack of formal or discursive recognition can lead to injustice, and the exclusion of actors can create less effective choices of climate action (Benjaminsen et al., 2022, p. 14). Leading discourses influence policies and practices and when some people are misrecognized and presented in a manner that deviates from their own perspectives this might lead to further injustice (Benjaminsen et al., 2022, p. 14). When people are not recognized in climate change discourses, this can create a misframing of the issue, which can disguise the interests of powerful actors and shield them from accountability (Benjaminsen et al., 2022, p. 25), therefore recognition should be included in climate justice.

Hegemony, discourse, and narrative

“A discourse may be understood as a system of representation that is made up of norms, rules of conduct, institutions, and language that influence and legitimize certain perspectives and

meanings over others” (Leichenko & O’Brien, 2019, p. 42). They include both explicit and implicit values, judgements, and contentions that define the discussions on an issue, including what is and what is not included in an analysis or debate (Leichenko & O’Brien, 2019, p. 42). Another definition of a discourse is an established knowledge regime of a particular phenomenon or theme (Benjaminsen & Svarstad, 2021, p. 41). Hegemonic discourses are those stories that limit the imaginations of the public, decision-makers, planners, and scientists (Robbins, 2020, p. 71-72). These leading or hegemonic discourses are shared among powerful actors (Benjaminsen & Svarstad, 2021, p. 41). Some discourses support existing interests and power structures, and carry much political weight, but there are also counter discourses challenging existing structures. Discourses influence how climate change is tackled. Studying discourses makes it visible how different approaches to climate change are linked to ways of understanding the world (Leichenko & O’Brien, 2019, p. 42). A narrative is a story with a storyline, with a beginning, middle and an end. This storyline includes at least one or more actors. The actor gallery, within different narratives, can sometimes have similarities with typical fictional characters, such as heroes, villains, and victims. The narrative producers are actors that create, reproduce, and modify narratives (Benjaminsen & Svarstad, 2021, p. 69). A discursive narrative is a storyline about a specific case, where the case is understood through a discourse, at the same time, when a narrative draw from a discourse it also contributes to the discourse (Benjaminsen & Svarstad, 2021, p. 69). I will elaborate more on narratives in the methodological framework.

Degrowth, ecomodernism and criticism of green growth theory

Environmental and climate crisis clarifies contradictions between unlimited economic growth and the environment (Benjaminsen and Svarstad, 2021, p. 235). Erik Gómez-Baggethun argues that there is empirical research on ecological thresholds, and a link between growth and environmental crisis (Gómez-Baggethun, 2019, p. 1). Our planet is a closed system, when we transform energy and materials into goods and services, we irreversibly make resources into waste. The economic system should not go beyond the planet's ecosystem (Gómez-Baggethun, 2019, p. 2). The economy demands untapped resources, which often cannot be reused. The need for new resources pushes extraction into new territories, which has negative effects on communities (Gómez-Baggethun, 2019, p. 2). Therefore, degrowth is needed according to Gómez-Baggethun. However, we live on a planet where too many lack sufficient resources.

Degrowth can be seen as a form of romantic environmentalism, which focuses on small «green»

choices and economies (Robbins, 2020, p. 241). The journalist Leigh Phillips sees degrowth as the opposite of progress. 800 million people in Africa live without electricity. Technological innovations and increased production are needed to increase the quality of life for the majority (Robbins, 2020, p. 240). The ecomodernism movement argues that technological progress can lessen the impact on the planet, rather than increase it. New energy revolutions have led to more efficient use of energy: Woods and other biofuels were replaced by coal, which then again were replaced by natural gas and now is being replaced by renewable energy sources such as solar energy (Robbins, 2020, p. 240). There are different forms of ecomodernism. Modernist ecosocialism argues for an anti-capitalist version of modernism, with large scale planning and distribution of technological solutions (Robbins, 241, p. 241), while Liberal ecomodernism believes in the market's ability to innovate and use resources efficiently. Both versions do, however, focus on how technological developments can lead to improved livelihoods for people, communities, and nations.

Ecomodernism is related to the theory of green growth. Green growth theory relay on the assumption that decoupling GDP growth from resource use and carbon emissions is possible and feasible (Hickel & Kallis, 2020, p. 469). By using technological change and substitution the ecological efficiency of the economy will improve. Governments can make this process more efficient through regulations and incentives (Hickel & Kallis, 2020, p. 470). However, Hickel & Kallis argue that there is a lack of empirical support for the green growth theory. Green growth requires permanent absolute decoupling of resource use from GDP, which no empirical studies have found possible globally. Green growth also requires permanent decoupling of carbon emissions from GDP, which must happen fast enough not to exceed the carbon budget between 1.5 °C to 2 °C decided in the Paris Agreement, which is unlikely to be achieved. They further argue it is more plausible to achieve the necessary reduction in resource use and emissions without growth than with growth (Hickel & Kallis, 2020, p. 483). Hickel & Kallis argue that insisting on green growth is politically motivated, as it is not politically acceptable to question growth, which then makes the only alternative disaster (Hickel & Kallis, 2020, p. 483).

Fixes – capitalism using a crisis to change and expand

Economic setbacks have been part of capitalism throughout history and geography. Some of these setbacks have been crisis, which leads to transformations of capital accumulation (Ekers &

Prudham, 2015, p. 2438). The spatial fix theory, developed by David Harvey, influenced by Marxism, explains how capitalism survives by changing form. Capitalism inherently resolves inner crisis by expanding and restructuring (Ekers & Prudham, 2017, p. 1374). A spatial fix is only a temporary remedy, which solves the current crisis of accumulation, but it is not a final fix. The state facilitates this dynamic, which delays crisis or makes crisis invisible (Benjaminsen & Svarstad, 2021, p. 32-33). The concept of spatial fix is used in political ecology to discuss the role of scale and to describe how capital movement for investments leads to winners and losers (Benjaminsen & Svarstad, 2021, p. 32-33). The spatial fix is increasingly used as an analytical tool related to the environmental and climate crisis; therefore, socio-ecological fixes have been added to the conceptualization. Socio-ecological fixes can conceptualize the energy transition from fossil fuels related to the capitalist relations to production (Chambers, 2020, p. 114). The concept sees production of space together with the production of nature. It conceptualizes how landscapes and ecologies are changed because capital moves into new spaces, while emerging crisis creates new commodities such as carbon, biodiversity, ecosystem services and genes (Benjaminsen & Svarstad, 2021, p. 33). Environmental politics and regulations shape, constrain or limit the dynamics of capitalism. The capitalist production of nature can be untangled, by conceptualizing socio-ecological fixes, so that one can find political room in the system for changes, which would not reproduce crisis (Ekers & Prudham, 2015, p. 2439). The insights derived from the conceptualization gives understanding of future capitalist accumulation and creates insights into political and ecological conditions needed for the growth of counter-movements (Ekers & Prudham, 2015, p. 2442).

Methodological framework

Choice of theme, aim and research design

For me, the debate about electrification of oil and gas operation seemed messy and difficult to follow. There are a variety of understandings of the issue. Personally, a part of me has been positive to electrification of oil and gas operation, as emissions must be reduced fast from the sector, while another part is worried that electrification will lead to further path dependency of oil and gas in Norway. Moreover, the debate has been so unclear that I have found it difficult to take a clear stand. Therefore, I have conducted this research with a curious mind, wanting to

understand the debate. Overall, I think global climate justice should be fundamental in decision making related to climate mitigation, therefore I wanted to see how different actors understood climate justice related to the debate on electrification of oil and gas. I use qualitative methods in this master's thesis. Qualitative researchers try to get a contextual understanding of social behavior (Bryman, 2016, p. 395). To understand the debate about the electrification of oil and gas I decided to conduct a narrative analysis, which organizes and gives understanding of the storytelling about electrification of oil and gas.

The process of this project started by reading white papers, reports, and media debates from the 1990s until the current debate on electrification of oil and gas. This background reading gave me an understanding of arguments, as well as changes in the debate. It also gave me an understanding of who were the main actors in the debate. The background research was also important for triangulation, which is using more than one method or source of data (Bryman, 2016, p. 697). Based on this background research, I decided which participants to include in the interviews. After I had conducted the interviews, I organized my data using open coding to identify the narratives in the debate. Narrative analysis cannot be used to reveal an objective truth, but it is a way of understanding how different actors understand an issue. The stories told by actors on the issue also tend to be told with a purpose in mind, so the stories are told with an intended effect (Bryman, 2016, p. 589). In my discussion chapter I look at my findings in the analysis chapter together with theory. In the following part of the methods chapter, I will further explain my methodological approach and choices.

Data collection and analysis

Actors

Based on the document research of the debate on electrification of oil and gas production I decided to include three groups of participants, which I saw as the most prominent in the debate: (1) actors from political parties, (2) actors from environmental organizations, (3) actors from the oil and gas industry. These three groups have both been vocal in this debate for a long time and have been prominent voices in the debate about electrification of oil and gas.

When it came to the actors from political parties, I choose to include actors from each of the political parties in The Standing Committee on Energy and the Environment in The Norwegian Parliament, as this committee has processed several proposals related to electrification of the oil and gas sector, so the committee is familiar with the issue. Furthermore, the members of the committee have political power on the issue, and also to some degree political trust. They have received the responsibility from the party to be nominated in the election and chosen by the party to sit in that specific committee, which implies that they are trusted by their party on this specific issue. Further, parliament members have trust of the nation as elected to the parliament. This makes these actors relevant to my study. All political parties represented in the Standing Committee on Energy and the Environment were asked to participate, and all parties participated, except for The Christian Democrats (Krf), who declined, as they did not have time to participate. The Christian Democrats currently have limited power in the Parliament and have not been a main actor in the debate about electrification of the oil and gas sector, so even though they could have participated with valuable insights, their absence is not crucial for the analysis. Only including one actor from each political party causes some limitations to the study. Many of the political parties have recently had internal disagreements on issues related to electrification at their national congress and/or in media. This includes particularly The Conservative Party, The Socialist Left Part, The Centre Party, The Red Party and The Labor Party. As only one actor from each party has been included in the study, alternative storytelling within the political parties is not shown.

From the environmental organizations, I have included three actors: Bellona, Zero and Greenpeace. These actors have been the most active environmental organizations in the debate, which made them the most obvious to include. A limitation with this choice is however that the environmental organizations that are the most negative to electrification, except Greenpeace, does not really influence the debate about electrification of oil and gas, as they are against the oil and gas industry altogether, which makes the debate about electrification of the sector irrelevant to them. If actors like Friends of the Earth Norway, Nature and Youth – Young Friends of the Earth Norway, Motvind and Extinction Rebellion Norway were included in this research, this could have brought forth other counter-narratives to the leading narratives on electrification.

Lastly, I have included two actors from the oil and gas industry. The first actor is Equinor, which is an obvious relevant actor, as a partly state-owned oil company with important roots in the Norwegian oil and gas industry. The second actor is also a relevant actor from the oil and gas industry. This participant only wanted to be published when the name of the company/organization was anonymized. This actor will be called An Actor from the Oil and Gas industry (AOG). The insights from the interview with this participant were so valuable, that I see the insights as important in the narrative analysis, even though the name of the actor is unknown to the reader.

In my analysis and discussion chapters I will refer to the participants with the abbreviation of the organization/political party/company they represent (See table 1). In my analysis and discussion chapters I use the data from my interviews. It is important to note that what my participant says, does not necessarily represent the entire organization/political party/company, as I have only interviewed one participant. However, I believe that all my interviews have been conducted with people, who are important in the organization/political party/company and who have explained a story, that include the core values and beliefs of the actor in a satisfactory manner, and who have managed to bring out important points of views for the organization/political party/company. During their interview, they were a representative of their political party/company/organization, so even though there possibly would have been slightly different data with different representatives, the main direction of the storyline would probably be similar.

Participants		
Actor	Data from the interviewed actor will be referred to as:	Type of actor
The Progress Party	FrP	Actors from political parties. All actors are members or attending deputies of The Standing Committee on Energy and the Environment in The Norwegian Parliament.
The Conservative Party	H	
The Liberal Party	V	
The Centre Party	Sp	
The Labour Party	Ap	
The Socialist Left Party	SV	
The Red Party	R	

The Green Party	MDG	
Bellona	Bellona	Environmental organization. Participants are employed at the central office.
Zero	Zero	
Greenpeace	Greenpeace	
Equinor	Equinor	Participants from the Oil and gas industry. The participating actors work in fields relevant to electrification of oil and gas.
An Actor from the Oil and Gas industry [Wanted to be anonymous]	AOG	

Table 1: Participants

Interviews

I conducted 13 interviews, where I used a semi-structured interview guide. Each interview started by going through an information and consent form (see Appendix 1), to get consent from the participant, and to check that the participant was aware of how the data would be used, as the integrity and autonomy of participants are important for the ethics of the study. All participants agreed to the use of audio recording of the interview, which made it possible for me to transcribe the interviews afterwards.

Narrative analysis emphasizes the stories that people apply to account for events (Bryman, 2016, p. 590). Therefore, it is important when conducting narrative interviews to let the participants tell their stories of the issue through their interview. There were three parts of my interview guide (see appendix 2), where part one included questions about their views on electrification of Norwegian oil and gas, part two was questions on their views on the debate about electrification, and the third part included questions on global climate justice and the green transition related to electrification of oil and gas. My first question in the interview was: “What do you think about electrification of Norwegian oil and gas, and why do you believe this?” During most of the interviews, this question, with follow-up questions, became a big part of the interview, as it opened for the participants to say what they saw as relevant to the issue, which made them tell their story about electrification. The most important for me was not to ask all the questions in my guide, but to hear views on the issue, changes in the actor’s views over time, and how they related electrification of oil and gas to green transition and global climate justice. During some interviews, I asked almost no questions, only follow-up questions, while the actors told their

stories about electrification. While there were other interviews, where I used most of the interview guide. Before each interview I read my notes from my document research on the actor's position, to check if there were additional questions, I should ask them specifically. Right after the interview, I took notes on how the interview went, so that I both could improve my interview technique and questions for the next interview, and also so that I could look back on how I had understood the actors just after the interview, which was valuable when analyzing the data.

Analysis

During and after I had transcribed the interviews, I got to know the data, by reading the interviews several times, while attempting to find storylines about electrification in each interview, then I looked for similarities and differences between the interviews. I used open inductive coding. This resulted in four narratives. All were found in the text, but one of the narratives also draws on existing literature (see table 2). One actor works within more than one of the narratives, this will be elaborated on in the analysis chapter.

Narrative	Creation
Development, not liquidation of the oil and gas industry	Found in the data
Liberal ecomodernism	Found in the data, draw on existing literature
Stop fossil fuels	Found in the data
Electrification is too expensive and inefficient	Found in the data

Table 2: Creation of the narratives

All narratives in Table 2 have a clear storyline, found in the data material. The storylines have a beginning, middle and end, and the narratives are described through their storylines in the analysis chapter.

In my analysis chapter I have kept my analysis close to the data material, this is done to strengthen the credibility of my analysis. The research should be believable, and the data should be linked to the findings (Bryman, 2016, p. 384). I have used data material throughout the analysis for the data to tell the stories of the narratives. Quotes from the interviews show the

narratives, which is to make the reasoning more believable. This has, however, made the analysis chapter long. I would say this is justifiable, as the narrative analysis conducted in my analysis chapter, answers my research question 1, with the following sub-research question 1.1, as well as it answers my research question 2, and the sub-research question 2.1. The findings will be further discussed in my discussion and summed up in conclusion. Sub-research question 2.2, is not explicitly answered in the analysis chapter, but it will be discussed in the discussion chapter. As the interviews were conducted in Norwegian, I had to translate the included quotes from Norwegian to English, which can cause unintended biases, but I included the original quotes as footnotes, to strengthen transparency.

Positionality, ethics, and limitations

Even though I have discussed some ethics and limitations already throughout this chapter, I will elaborate on it here. The narrative analysis should be conducted based on the content of the interviews, rather than personal beliefs, however, objectivity is not possible. Instead, researchers must act in good faith, while biases and personal values should not overrule the data findings in the research (Bryman, 2016, p. 384). Rather than objectivity, I can strive for transparency. In this study, I have chosen the literature, the theory, and the methods. Even though my participants have a variety of opinions, it is I who conducted the interviews and interpreted the data. I have conducted this project curiously with good intent, but my choices, beliefs and background affect the results. Critical reflexivity stresses the need for transparency. The researcher must be self-critical of their own beliefs, values, and assumptions, this includes critical reflection on the relationship between the researcher and participants (Bryman, 2016, p. 388). I am for example a climate activist and a long-time member of the Socialist Left Party (SV), which has affected my beliefs and understanding of the world, and which further can affect how I interpret my data. I am also a student in global development studies, with an interest in critical theory, which frames the research. I have tried to use critical reflexivity as a tool, and use it when creating the design plan, during my interviews, and analysis. I have been thinking about my own positionality and ethical issues throughout the process and discussed ethical issues, principles, and goals with peers. There are always ethical dilemmas that must be balanced. I strive for openness about my choices and background. However, I have biases, which affect the research in my choices and understandings.

Participants' autonomy, integrity, and justice must be taken seriously for the ethics of the research. When conducting research, researchers must take ethical responsibility to society, to other researchers and research, and it is important to take ethical responsibility on behalf of the participants in the research. I have tried to do this in my research, by attempting to present the actors' opinions true to their intent. At the same time, I have interviewed people in power positions, who are used to being part of public debates and who have the possibility to use their voices, when needed.

Throughout my work with the master thesis, it has become clear that there are other groups of actors, which could have been interesting to include in the interviews, such as: labor unions and mainland industry (to gain understanding of how they see the conflict of where to prioritize energy resources), Sami reindeer herders (especially related to electrification of Melkøya), offshore wind power companies (as there has been a lot of debate on cost and the time frame of offshore wind projects), local politicians (as there are disagreements within political parties on the issues related to electrification), workers in the oil and gas industry (as their livelihood will be effected by the future of Norwegian oil and gas). It could also be interesting to include actors, who are not from Norway, to include how they see the need for Norwegian oil and gas, and how they see climate justice in relation to electrification of Norwegian oil and gas production, as actors outside Norway would have different interests in the debate. Due to time limits, I am however, pleased with my choice of included actors. The participants I included have been fundamental in forming the debate on electrification of the Norwegian oil and gas sector. When conducting the interviews there were differences in the background of the participants, this which could have affected how they interpreted the questions. Participants were asked questions related to complex concepts and theories such as climate justice, where different actors had different background knowledge, which could have favored participants, who have worked within climate justice-movements, or who have a social academic background. However, in a narrative analysis, it is also relevant how different actors interpret these types of issues.

Due to limited space I decided to do the narrative analysis based only on the data from the interviews, however, to strengthen data triangulation, it could have been valuable to conduct the analysis partly with document analysis. This would also have weakened the concern of only including one participant from each political party. It is also worth mentioning that the

interviews were conducted in February and March 2023, and there have been developments in the debate since then, especially relevant is how Trollvind is indefinitely postponed and electrification of Melkøya have been approved by the Government, this was not the case during the time of my interviews.

Analysis – identifying the narratives

In this chapter I start by briefly classifying the different actors according to their position in the debate about electrification of the Norwegian oil and gas sector. Then I will go through some common “knowledge” or stories that all or most actors support. Further, I will explain four narratives influencing the debate on electrification of oil and gas.

Actors’ positions on the electrification of Norwegian oil and gas

There are differences in whether actors support the mitigation efforts of electrification of the oil and gas in Norway. This is a simplification of their positions, but it gives an overview of the political situation in which the debate takes place. Some of the positions have some similarities, but they have enough differences for me to group them separately.

- The Red Party (R): No electrification of oil and gas neither with cables from land, nor with offshore wind turbines.
- The Progress Party (FrP) and Greenpeace: No electrification of oil and gas with cables from land. Electrification of the oil and gas operations is not seen as an efficient climate measure. Electrification can be done with offshore wind turbines paid by the oil and gas companies to contribute to technological development.
- The Green Party (MDG) and The Socialist Left Party (SV): No more electrification with cables from land. Yes to electrification with offshore wind turbines. This is seen as an important climate measure.
- ZERO: Electrification is important climate mitigation, but because of the energy crisis it should mainly be done with offshore wind turbines. Cables from land can be accepted.
- Bellona and The Liberal Party (V): The most important thing is to reduce emissions from the industry, with all means necessary. CCS needs to be taken more into account, but cables to land and offshore wind turbines are also needed measures.

- The Conservative Party (H), The Centre Party (Sp) and The Labor Party (Ap): Each project must be examined on its own merits. Electrification, including with cables from land, is necessary.
- Equinor and An actor from the oil and gas industry (AOG): Cables from land are needed to reach to 2030-targets. The sector already takes responsibility for developing offshore wind farms.

These positions do not necessarily align with the narratives where the different actors are classified later in this chapter.

Common stories

There are certain concerns that are clearly stated among all or most actors to the extent that they may be considered common concerns, or even established “knowledge”, in the Norwegian energy debate. I also include some important disagreements in the understanding of these common stores.

1. **Electrification reduces Norwegian emissions:** All actors agree that electrification of the production of oil and gas would decrease Norway’s climate emissions. (However, there were huge disagreements on how electrification would affect European and global emissions, and some disagreements on whether the money used on electrification could be used for more efficient emission mitigation efforts if put into other sectors).
2. **Support for international climate agreements:** All actors express support for international climate agreements and consider the Paris agreement to be an important framework. Most of the actors express feasibility and desirability towards achieving the Norwegian climate goals within the time limit. A minority of political parties (Frp and SP) contends that a slight postponement of the Norwegian 2030-target would be an acceptable course of action if necessary. One actor also expresses that the adaption goal⁴ should be eliminated (Frp).
3. **Sufficient energy for the mainland industry:** All political parties and environmental organizations stress the need for enough available energy for the mainland industry. The actors from the oil and gas companies also see the need for energy to the mainland

⁴ The adaption goal: 55% reduction of Norway’s emissions in Norway by 2030. Further explanation in the background chapter.

industry. Western Norway and Northern Norway are areas of particular concern. There are however differences regarding the extent of this concern.

4. **Affordable electricity prices for households:** Higher electricity prices for the “average” consumer are seen as a concern by most actors. All actors want affordable electricity prices for households. There is, however, disagreement about the extent to which electrification is the driver of higher energy prices. Especially the actors from the oil and gas industry focus on other drivers, such as the war in Ukraine and a lacking political will to develop land-based green energy.
5. **Offshore wind power:** All actors, except R, are positive to offshore wind power plants. Many actors (H, V, Sp Ap, SV, ZERO, Equinor) use “Trollvind” as an example of how big scale electrification of the oil and gas sector with wind power is possible within 2030. Some actors (H, Equinor) use “Trollvind” as “evidence” of how the oil and gas industry already takes responsibility for the development of green power production⁵. Some actors highlight the need for policies that would impose or make it favorable for the oil and gas industry to build out more offshore wind power for electrification (especially ZERO and SV).
6. **CCS is needed:** All actors except Greenpeace view CCS as a needed measure on the Norwegian continental shelf. There are differences in how central different actors assess the importance of CCS compared to other measures such as electrification of oil and gas operations. Disagreements persist regarding the possibility that CCS can facilitate the oil and gas industry in achieving their 2030 targets, where especially the actors from the oil and gas sector argue that it is more realistic that CCS will be used to reach the 2050-targets.
7. **Emission reduction on Melkøya:** the need to reduce emissions at Melkøya within 2030 is voiced by most actors. However, there were differences on whether cables from land or CCS is the most feasible alternative. Especially Bellona and V argue for CCS, while the oil and gas industry accentuates cables from land. Greenpeace argues for a planned shutdown of Melkøya within 2030.

Collective stories related to changes in the debate:

«Trollvind»-project was postponed indefinitely 22.05.2023

Increase in skepticism towards cables from land: All actors see a recent change in the debate that can be explained as more skepticism of using cables from land, as the energy crisis makes it more difficult to prioritize energy between different industries. There are contrasting views on whether the increased skepticism of cables from land is a positive or negative change in the debate. For example, AP worries that more skepticism of cables from land makes it more difficult to meet the climate commitments, while FrP sees this as a positive and needed change in the debate, as more actors now agree with them on their concerns.

Shift in actors' support of electrification: There is a collective story of changes in which actors support electrification of the oil and gas sector. In the early 2000s, environmental organizations used to work for the electrification of oil and gas with cables from land. Since then, they have become more negative, while the oil and gas industry has become increasingly positive. The debate and decision on electrification of the Utsira High in 2014 is seen as a turning point.

SV described this change in the debate:

The environmental movement used to be quite in agreement in wanting electrification. [...] And now we see that the environmental movement increasingly has shifted their position. Although, it was the environmental movement that brought this measure forward in the early 2000s, against the will of the oil companies that did not want this. So, things have turned around a bit now. Now it is more the oil companies and Offshore Norway, formerly Norwegian Oil and Gas, who perhaps are the biggest driving forces to bring it about⁶.

Equinor also commented on this shift:

So, Johan Sverdrup was, in a way, a shift, where we realized that in order to get an approved plan for development and operation, we had to deliver a zero-emissions solution. The political signals were so unambiguous, and in a way the will to increase the

⁶ SV: «Tidligere så var miljøbevegelsen ganske samstemt i å ønske elektrifisering. [...] Og så ser vi nå at miljøbevegelsen i større grad har snudd. Mens miljøbevegelsen var med på å slåss fram dette tidlig på 2000-tallet, mot oljeselskapene egentlig, for de ønsker ikke å gjøre dette. Så har det snudd litt nå. Nå er det mer oljeselskapene og offshore Norge, tidligere norsk olje og gass, som er kanskje de største drivkraften for å få det fram.»

CO₂-cost was already formulated so clearly. Then we envisioned it was the least risky way to develop a field, to take electrification into account from day one⁷.

During the debate and after the decision on electrification of the Utsira high many environmental organizations shifted their position and became more negative to electrification. The oil and gas industry used to be hesitant of electrification of oil and gas, but became increasingly more positive after the decision in 2014, as they saw the positive impact electrification could have for the industry. Currently, the oil and gas industry is seen as a driving force for electrification, especially with cables from land.

Narratives

Even though there are some common stories related to electrification, there are also clearly distinct narratives in the debate. I have divided all interviewed actors into narratives which align the most with their storytelling about electrification of the oil and gas industry. Classifying the actors into narratives is a simplification of the debate, which is useful to gain understanding of the debate, power relation within the debate, and to explore how narratives affect each other. One actor (SV) operates within two narratives and are therefore classified accordingly.

Development, not liquidation of the oil and gas industry-narrative

The narrative:

The Norwegian oil and gas sector is essential for the Norwegian economy, Norwegian wealth and labor opportunities. Norwegian oil and gas are important for European energy security, especially in the time of the war in Ukraine. Norwegian oil and gas production already has low emissions, but international climate agreements and the need to sell a desirable product also in the future creates a need for further emission reduction from the sector. Norway as a developed nation has the responsibility to reduce our own emissions, and further development and technological progress in the oil and gas sector can benefit everyone. Cooperation between the oil and gas industry and politicians can lead us to our common goal of emission reduction. All measures for emission reduction are welcomed. Still, the only way for Norway to reach its goal of 55% reduction within 2030, is with further electrification with cables from land.

⁷ Equinor: «Altså Johan Sverdrup var på en måte et skifte. Hvor vi innså at for å få godkjent plan for utbygning av drift, så måtte vi levere en nullutslippsløsning. Da var de politiske signalene såpass entydige og på en måte viljen til å øke CO₂-kostnaden var allerede da formulert såpass klart. At vi så at det var for oss den minst risikable måten å bygge ut et felt på, å ta høyde for elektrifisering fra dag en.»

The fundamental and collectively shared starting point among all actors in this narrative is that the oil and gas sector must be further developed, while it must also reduce its climate gas emissions. There are some important differences between the actors in this narrative. The oil and gas sector put the most emphasis on the need for cables from land to reach the 2030-targets. H's argumentation prioritized how technological development in the Norwegian oil and gas sector can be used as a business development opportunity where technology can be tested and later exported, which then may lead to further technological development and emission reduction globally. Ap focuses on how solving the climate crisis is actually about justice for the future generations and stresses the importance of reducing emissions to solve the climate crisis. Sp's core concern is the need for affordable energy prices for households and mainland industry, while they focus on the importance of electrifying the oil and gas sector to maintain its legitimacy. However, all these actors, with their differences, presented common understandings which can be described as storyline, with a start, middle and ending. I will now further explain this narrative, and show how H, Sp, Ap, AOG and Equinor follow and reproduce the Development, not liquidation of the oil and gas industry-narrative:

Importance of the oil and gas industry: tax revenues, workplaces and energy security

The actors see the importance of the oil and gas industry for job creation, for the Norwegian economy and for European energy security. Equinor talked about how they just had turned 50 years as a company and how the economic interests of the company often align with the interests of the Norwegian society:

And we intend to be a company that also can celebrate its 100th anniversary. And that is important for the Norwegian nation. Our interests often align closely with the interests of Norway because Norwegian politicians have established a system whereby the main share of the values created on the Norwegian continental shelf is returned to the citizens due to tax regulations⁸.

⁸ Equinor: «Og vi har tenkt å være et selskap som også kan feire 100 års jubileet. Og det er jo viktig for nasjonen Norge. Våre interesser er ofte veldig sammenfallende med nasjonen Norges interesser, fordi norske politikere har skrudd sammen et system, som gjør at, størstedelen av verdiene som skapes på norsk sokkel, føres tilbake til fellesskapet på grunn av skattereglene»

The oil and gas industry provides tax revenues to the state, which gives revenues to the Norwegian society. Furthermore, the Norwegian state is the main shareholder in Equinor with a 67 percent stake in the company. The importance of the oil and gas industry is also clearly stated by Ap. One of the reasons electrification is needed, according to Ap, is that if we are not able to reduce emissions from the industry, the alternative is to close it down, which is not desirable:

Then I think that the only alternative [...] is to close down Norwegian oil and gas. We are in no way in a situation where we can just turn off the oil tap. This is both because of jobs and not the least because right now we are actually the security supplier for many countries in Europe with the situation right now⁹.

The same argumentation can be seen from Sp: “Our concern is that we should develop, not liquidate the Norwegian oil and gas industry. We believe Europe and the world still will need Norwegian oil and gas in the foreseeable future.¹⁰” Energy security, with the situation in Europe related to the war in Ukraine, has according to AOG led to a changing understanding in the Norwegian society of the need to produce oil and gas in Norway:

I think, in regard of production of oil and gas in Norway, there used to be less understanding for the need for Norwegian production. Now there is more of an understanding that if we do not produce gas and send it to Europe, then we put Europe in a crisis. They are dependent of the energy they can get from us now. It is a different understanding of that. But it is of course also a completely different situation as well, from when Russia was the biggest supplier to the EU¹¹.

So, according to this narrative the Norwegian oil and gas industry is important both nationally and internationally. The industry is important for the Norwegian economy as it creates jobs and

⁹ AP: «Jeg da tenker en at alternativ [...] er at man skal stenge av norsk olje og gass. Vi er jo på ingen måte i den situasjonen at vi bare kan skru av kranen. Det handler jo om både arbeidsplasser og ikke minst akkurat nå så er vi faktisk forsyningsikkerheten til mange land ute i Europa med den situasjonen vi står i.»

¹⁰ SP: «Vi er opptatt av at vi skal utvikle og ikke avvikle norsk olje- og gassnæring. Vi mener at Europa og verden fortsatt kommer til å trenge norsk olje- og gass i overskuelig framtid.»

¹¹ AOG: «jeg tror i forhold til produksjonen av olje og gass i Norge, så var det tidligere mindre forståelse for at vi trengte å produsere i Norge. Nå er det en større forståelse for at hvis ikke vi produserer gass og sender det til EU nå, så setter vi Europa i krise. De er avhengige av den energien de kan få fra oss nå. Det er en annen forståelse av det. Men det er selvfølgelig en helt annen situasjon også rundt det, enn når Russland var største leverandør inn til EU.»

tax revenues, while the war in Ukraine has clarified how dependent Europe is of Norwegian gas, and how important the Norwegian fossil industry is for the energy security of Europe.

Electrify to reach international agreements, for competitive advantage and legitimacy of the sector

This narrative focuses on reaching the 2030-climate target, whereas electrification is pointed out as a measure that will lead to reduction in emissions from large point emissions, which needs to be tackled to reach the 2030-targets. AP points out how electrification is one of their most important measures:

We mainly believe that we should electrify the continental shelf. And that is one of the things that we supported in our election campaign, in relation to the climate measures that we are going to do. And the reason why we have it as one of our most important measures is because ... it reduces very big point emissions when we electrify. Therefore, it will have quite a significant impact in the areas that we electrify.¹²

Equinor also states clearly that the climate crisis and the Paris agreement were important drivers for their emission reduction efforts:

The climate crisis, definitely, right ... That was what lay behind it. There was a major shift in 2015 with the Paris agreement, and we declared early that we are a company that aims to have a business model consistent with the Paris Agreement. That means we need to achieve net-zero by 2050¹³.

AOG also points out the importance of the climate goals: “The most important is of course the climate goals, which we both have been requested by the Parliament, and imposed on

¹² Ap: “Vi mener jo i hovedsak at vi skal elektrifisere sokkelen. Og det er en av de tingene som vi gikk til valg på, i forhold til etter de klimatiltakene som vi skal gjøre. Og grunnen til at vi har det som et av våre viktigste tiltak, det er jo fordi at ... det tar ned veldig store punktutslipp når vi elektrifiserer den sokkelen. Så det vil få ganske stor betydning inn i de områdene som vi elektrifiserer.”

¹³ Equinor: Klimakrisen, helt klart, ikke sant ... det er det som ligger bak. Det var et stort skifte i 2015 når Paris-avtalen kom, og vi var tidlig ute med å si at vi er et selskap som ønsker å ha en forretningsmodell som er konsistent med Paris-avtalen. Det vil si at vi må være på netto null i 2050.

ourselves”¹⁴ (AOG). Both actors from the oil and gas sector are clear that the international climate agreements, and the Norwegian climate targets, are affecting their decision-making.

All actors in this narrative aspire to achieve the 2030-targets on time. The only exception is SP, who says they are open to postpone the target by a couple of years:

In the Centre Party, we quite agree that electrification is necessary, but that it should not come at the expense of mainland industry and household prices. [...] And that means that we may have been open to postpone the 2030 target by a year or two. But we are going there. We fully agree on that.¹⁵

The actors also argue that emissions must be reduced to strengthen the competitive advantage of the Norwegian oil and gas industry, and it is needed for the industry to be profitable when the EU emission trading system tightens. The actors argue that in the future, importers of oil and gas products will prefer products with less emissions. This is articulated clearly by H:

Norwegian oil and gas is, as a group, our biggest source of emissions in Norway. So it is very important for Norway to reduce the climate [...] emissions on the Norwegian continental shelf. And it is about us having a responsibility for that, but at the same time making the Norwegian continental shelf competitive in the future. [...] And if you want to sell petroleum products in the future, then they must be produced with the lowest possible emissions. This means that in our newest fields, Johan Sverdrup for example, we are down to 0.64 kilograms of CO₂ per barrel.¹⁶

A similar thought process is voiced by Equinor:

¹⁴ AOG: Det viktigste er jo klimamålene, som vi både har blitt bedt om av Stortinget, og pålagt oss selv.

¹⁵ Sp «Senterpartiet er vi ganske enige om at elektrifisering er nødvendig, men at det ikke skal gå på bekostning av fastlandsindustrien og husholdningens pris. [...] Og det gjør at vi kanskje har vært åpne for at 2030-målet må forskyves et år eller to. Men vi skal dit. Det er vi fullt enige om.»

¹⁶ H «Norsk olje og gass er, som gruppering da, den største utslippkilden vår i Norge, av klimagasser. Så det er veldig viktig for Norge å få ned klima [...] utslippene på norsk sokkel. Og det handler om at vi har et ansvar for det, men samtidig og å gjøre norsk sokkel konkurransedyktig i framtiden. [...] Og hvis du ønsker på en måte å selge petroleumsprodukter i framtiden, så må de være produsert med lavest mulig utslipp. Det gjør at vi nå på de nyeste feltene våre, Johan Sverdrup for eksempel, er nede i 0,64 kilo CO₂ per fat.»

It has recently been said in Parliament by the Minister of Oil and Energy that if we are not prepared to deliver, then the CO₂-tax is their instrument to make us deliver.

Therefore, we also believe it is good business to ensure that all operations that still have a long life are decarbonized. Because it will be [...] compatible with Norwegian political goals, and we also believe ... it will be a competitive advantage in the market, to have lower emissions in connection with the products we deliver to the markets¹⁷.

Similarly, SP focuses on how electrification is needed to legitimize the sector: “It is crucially important both for reaching Norway's climate goals by 2030, and it is crucially important for the oil and gas industry in Norway to continue to have legitimacy. So, it's a kind of twofold”¹⁸. It is, according to SP, also important to implement electrification to weaken the argumentation of those who are in favor of closing down the oil and gas industry: “Therefore, we must dare to have the discussion, because if we do not manage to cut emissions in that sector, then those who want to shut it down will have very good cards in their hands”¹⁹. Thus, according to Sp, further electrification of the oil and gas sector is needed to strengthen the argument for developing the sector in a decarbonized future.

Use of all technology, but to reach the 2030-target cables from land are needed

The actors support technological measures to reduce emissions from the industry, including electrification, with both cables from land and offshore-wind power. They also support CCS. All measures that can reduce emissions from the oil and gas industry should be considered. What solution to use must be considered “case by case”, as voiced by Sp: “And we have said that we need to consider case by case how to cut the emissions, with that which technology to use. Should it be cables from land, offshore wind power, CCS or a combination²⁰”, how these decisions should be made depends on the economy, timeframe, social and climate effects.

¹⁷ Equinor: «Det har jo seinest blitt sagt i Stortinget av olje- og energiministeren, at hvis ikke vi ligger an til å levere, så er det CO₂-skatten som er deres virkemiddel for å få oss til å levere. Så dermed tror vi også det er god forretning å sørge for at alle anlegg som skal leve lenge, er avkarbonisert. For det vil være [...] kompatible med norske politiske mål, og vi tror også ... altså det vil være et konkurransefortrinn i markedet, å ha lavere utslipp i forbindelse med de produktene vi leverer til markedene.»

¹⁸ Sp: Det er avgjørende viktig både for å nå Norges klimamål innen 2030, og det er avgjørende viktig for at olje- og gassindustrien i Norge fortsatt skal ha legitimitet. Så det er på en måte todelt.

¹⁹ Sp: «Derfor må vi tørre å ta den diskusjonen, for hvis vi ikke får til å kutte utslipp på den sektoren, så vil de som ønsker å legge ned, få veldig gode kort på hånda.»

²⁰ Sp: «Og så har vi sagt at vi må vurdere fra sak til sak hvordan klimagassutslipp skal kuttes, altså hvilken teknologi som skal brukes. Skal det være kraft fra land, skal det være havvind, skal det være CCS eller en kombinasjon.»

Similarly, Ap voiced: “To see each project separately, it is also about the scale of the different platforms and what kind of emissions that are actually reduced. But the main idea is to electrify everything that can be electrified”²¹

All actors in this narrative state that they view cables from land as an important measure to reach the 2030-target, as voiced by H: “The Conservative Party believes cables from land is important to reach the climate goals for the Norwegian Continental Shelf”²². Further, H elaborates on how the oil and gas industry has been clear on their need for cables from land to reach the sector targets of the industry, and especially after the targets were reinforced as part of the negotiations on the oil tax relief during the pandemic in 2020:

The Parliament has reinforced the requirement for emissions from the Norwegian continental shelf from 40 to 50% within 2030. It is like this; when we have reinforced those targets, the oil industry was also very clear that, if we are to reach those targets, they must have electrification and power from cables to reach the emissions targets. So the Parliament was well aware that there were going to be a huge need for power on the Norwegian continental shelf when we decided to increase the emission requirements from 40 to 50%. What is a bit special is that, for example, FRP voted in favor of it. But today they are completely against everything called electrification of the continental shelf, even though they were warned against it. [...] There were some earlier questions about the internal discussions in the Conservative Party, and everything, but we have a resolution stating that we shall electrify with power from cables, but that we must look at each individual project separately and look at it in relation to the power access on land, as well as the measure cost. And large power withdrawals must be taken where there is power, and not in such a way that residents have to pay for the expansion of the power grid up to the coast if the oil company wants to connect. [...] We are in favor of this as long as there is access to plenty of power.²³

²¹ Ap: “Men å se hvert prosjekt for seg, det handler jo også om hvor store de ulike plattformene er og hva slags utslippen man faktisk tar ned. Men hovedtanken er at man skal elektrifisere det som man kan elektrifisere.”

²² H “Høyre mener elektrifisering med kraft fra land er viktig for å nå klimamålene for norsk sokkel.”

²³ H «Stortinget har forsterket kraven til utslipp fra norsk sokkelen fra 40 til 50% i 2030. Da er det slik; når vi har forsterket de målene, så var jo også oljeindustrien veldig tydelig på at, skal vi nå de målene, så må de ha elektrifisering og kraft fra land for å nå de utslippsmålene. Så stortinget var vel kjent med at det kom til å bli et voldsomt kraftbehov til norsk sokkel, når vi vedtok å øke utslippskravene fra 40 til 50%. Det som er litt spesielt er at for eksempel også FRP stemte for det. Men i dag er de helt i mot alt som heter elektrifisering og sokkelen, selv om de

H is clear that there is a need for cables from land and criticizes how parties who voted for the sector targets do not support the measure. Yet, H recognizes that there are other interests that also must be considered. SP has similar concerns: “The debate has become more nuanced. Both when it comes to price and a potential power deficit in the extended timeframe. This means that we may have to look a little differently at electrification, and perhaps also within what time frame it should be done”.²⁴

AOG is clear that electrification with cables are needed to reach the 2030-target: “The solution in 2030 is electrification. So, if it is politically decided to withdraw permissions, or new permissions are not granted going forward, then we will not reach the 50% decrease”.²⁵ Similarly Equinor, states that: “...And I hope that we will have the capability to raise and get decided upon the remaining projects that are needed, to deliver on the 2030-ambition. And that we get access to the power needed to solve it.”²⁶ Both actors from the oil and gas clearly state that electrification with cables is needed to reach the 2030-targets. The sector is also clear on how electrification is a tested technology known to give large reductions in emissions.

Even though cables from land, according to all actors in this narrative, are needed to reach the 2030-targets, they are also in favor of electrification with wind power. According to Ap, this is important because some parts of the country have a power deficit, and wind power plants can therefore be the solution: “very many places, there is a power deficit. So, therefore, a way to secure it [electrification] is by using offshore wind power to get enough power.”²⁷ AOG talked about the importance of projects like Hywind Tampen, but pointed out that the wind turbines in this project only produce about one third of the needed power for the two electrified platforms,

ble advart mot dette. [...] Det var jo litt tidligere spørsmål om det interne diskusjoner i Høgre, og alt, men vi har landsmøte vedtak på at vi skal elektrifisere med kraft fra land, men at vi må se hver enkelt prosjekt for seg og se i sammen med krafttilgangen på land og tiltakskosten. Og at store kraftuttak må takas der det er kraft, og ikke sånn at innbyggere må betale for nett fram til kysten dersom oljeselskapet ønsker å knytte seg på. [...] Vi er for så lenge det er tilgang på rikelig kraft.»

²⁴ Sp: «debatten har blitt mer nyansert. Det handler både om pris og potensielt kraftmangel på sikt. Det gjør at vi kan være nødt til å se litt annerledes på elektrifisering, og kanskje også innenfor hvilke tidsrom det skal gjøres.»

²⁵ AOG: «Løsningen i 2030 er elektrifisering. Så om det blir politisk besluttet å trekke tilbake tillatelser, eller at man ikke får tillatelse på det man søker framover, så når man ikke 50 prosent kuttet.»

²⁶ Equinor: «Og så håper jeg vi evner å løfte og få besluttet de resterende prosjektene som trengs, for å levere på 2030-ambisjonen. Og at vi får tilgang på den kraften som trengs for å løse det.»

²⁷ AP: veldig mange steder, så er det jo et kraftunderskudd. Så derfor så må en og sikre med havvind med å få inn nok kraft.

and the effect of the turbines is very dependent how much the wind blows. AOG sums up their reflections about Hywind Tampen like this:

So it is a good solution for periodic reduced emissions, but if you want the full effect, then the power must come from cables from land, in order to get stable power. It may well be offshore wind, such as Hywind Tampen, but we have seen that the need for stable power is a limitation related to, for example, Hywind Tampen²⁸.

The concern about not having enough stable energy from wind projects that directly electrify the platforms is shared among the actors. Therefore, the proposed project Trollvind is put forward as a solution to this challenge, as explained by Sp:

Equinor wants to establish an offshore wind farm where the power is taken to land before electrifying an oil and gas installation offshore from a land cable. So, in a way, there will not be a direct link between the wind power plant and the offshore field, but the wind farm compensates for the power that is taken out.²⁹

The background for the Trollvind-project was according to Equinor a response to the Hurdal platform and they chose an area they know well for the effectiveness of the project:

That's what the Hurdalsplattformen says, right, that electrification of oil and gas should be done, but it should primarily be done with offshore wind. [...] And that was the whole background for us proposing Trollvind, because then we saw that we had to take an area we knew, and where we knew exactly what the seabed conditions were like. We had an overview of fishing activity. Then we were able to run such a tough timeline that we could manage to produce the first power as early as 2027. In that sense, we believe it was a very good response to the Hurdal platform.³⁰

²⁸ AOG: «Så det er jo en grei løsning for å få ned utslippene i perioder, men skal man få full effekt, så må jo da kraften tas fra land for at du skal få stabil kraft. Det kan godt være havvind, som Hywind Tampen, men vi har jo sett at det at man trenger stabil kraft er en begrensning i forhold til for eksempel Hywind Tampen.»

²⁹ Sp: «Equinor ønsker å etablere et havvindfelt hvor krafta tas til land for å elektrifisere en olje- og gassinstallasjon offshore med en landkabel. Så det blir på en måte ikke en direkte kobling mellom det vindkraftverket og det offshore-feltet, men en kompenser for den kraften en tar ut»

³⁰ Equinor: «Det sier jo Hurdalsplattformen og ikke sant. At elektrifisering av olje og gass, det skal gjøres, men det skal primært gjøres med havvind. [...] Og det var hele bakgrunnen for at vi foreslå Trollvind da, for da så vi at vi måtte ta et område vi kjente, og hvor vi visste akkurat

H states that the government and the Parliament are positive to this project, as it is positive that the oil and gas sector takes societal responsibility to produce electricity, as an actor who already have gotten a lot of electricity through cables from land:

What we have achieved with Trollvind, for example - well, it has not yet been adopted, but the government has taken a positive stance on it, and the Parliament has taken a very positive stance on it, and [we have] given the government the opportunity to directly award offshore wind contracts and generally follow this up in a good way. It is desirable that the industry itself takes social responsibility and sees that it must have legitimacy to take out so much power, and so perhaps we can get more such wind power projects linked to the oil and gas industry.³¹

Further, H argues that “The point is that the oil and petroleum industry is involved and takes responsibility for power production”³². They also state that the politicians have the responsibility to design the systems so that building offshore wind power is desirable for the oil and gas companies: “The conditions must be designed so that the oil companies have vested interests in contributing to power production, for example as we see with Trollvind”³³ H Even though the political parties are positive to rapid development of the offshore wind projects, AOG is unsure that large-scale development of offshore wind power will be possible before 2030:

Offshore wind power will come, but there is a lot that needs to be done with approval of offshore wind areas, environmental impact assessments, and that the authorities does their work, before we can start building and installing turbines. So in that way, we see that it is not realistic within 2030.³⁴

hvordan sjøbunnsforholdene var, vi hadde oversikt over fiskeriaktivitet. Så kunne vi kjøre en såpass tøff tidslinje at vi kunne greie å produsere første kraft allerede i 2027. Sånn sett så mener vi det var en veldig god respons på Hurdalsplattformen.»

³¹ H: «Det vi har fått til med Trollvind for eksempel, det er nå ikke vedtatt enda da, men regjeringen har stilt seg positivt til det, og Stortinget har stilt seg veldig positivt til det., og gitt regjeringen mulighet til å direkte tildele havvindkontrakt og i hele tatt følge opp dette på en god måte. Så er det ønskelig at næringen selv er med å ta samfunnsansvar, og ser at det skal ha legitimitet å ta ut så mye kraft, og så kanskje vi kan få flere sånne vindkraftprosjekt tilknyttet olje- og gassindustrien.»

³² H: «Poenget er at olje- og petroleumsnæringen er med og tar et ansvar for kraftproduksjon.»

³³ H: “Rammebetingelsene må utformes slik at Oljeselskapene får en større egeninteresse i å bidra til kraftproduksjon, som for eksempel slik vi ser med “Trollvind”.”

³⁴ AOG: «Havvind vil jo også være på plass, men der er det også mye som skal på plass med godkjenning av havvinnsområder, konsekvensutredning, at myndighetene skal gjøre sitt arbeid da, før man kan begynne å bygge turbinene og installere. Så det er i det bildet at vi ser at det ikke er realistisk da i forhold til 2030.»

Overall, all actors are positive to offshore wind power, even though there are some disagreements about the possibility for this technology to be built out and operate on a big scale before 2030. Similarly, the CCS technology is considered important for the 2050-targets for the oil and gas industry, but the actors from the oil and gas industry doubt that this will be a feasible technology before 2030. AOG argues that CCS on oil and gas operations still needs more technological development and is too expensive:

We need more technology to develop CCS, because these are installations that have very limited space. And the CCS facilities that we have today need a lot of space. So, we need to develop facilities that are small enough to be placed on an offshore installation. And we also need to reduce the cost. We have, for example, calculations for Hammerfest [LNG] that say that it would be very, very much more expensive with CCS. [...] In the future we must reduce the cost so that it can be a profitable measure. Combined with the CO₂-cost increasing, we think that it can be profitable after 2030.³⁵

All actors see the need for cables from land, especially the actors from the oil and gas industry emphasize this. SP seems more concerned than the others about how cables from land can lead to high electricity prices for other industries and households. The actors from the oil and gas companies emphasize how CCS is highly important in the long term towards the 2050-targets, but that cables from land are what is needed to meet the 2030-targets.

European and global climate gas reduction measure

Actors in this narrative argue that there is solid research backing the European and global mitigation effect of electrification of the oil and gas sector. All actors in this narrative see the *Thelma Consulting* report from January 2023 (see Background p. 10) as important knowledge on the issue. Especially the report's calculation of the European and global market effect of electrification is considered valuable. Similarly to the report, AOG argues that the extra gas exported due to electrification will displace LNG: "Then [After electrification] we use renewable

³⁵ AOG: «CCS trenger vi mer teknologi for å utvide, fordi dette er installasjoner som har veldig begrenset med plass. Og de CCS-anleggene som vi har i dag er veldig plasskrevende. Så vi er nødt til å utvikle anlegg som er små nok til at det kan få plass på en offshore-installasjon. Og så må vi også få ned kostnaden. Vi har jo da for eksempel på Hammerfest beregninger som sier at det vil være veldig, veldig mye dyrere med CCS. [...] vi må framover få ned kostnaden, sånn at det også kan være et lønnsomt tiltak. Da kombinert med at CO₂-kostnaden vil gå opp, så tror vi at det kan bli lønnsomme tiltak etter 2030.»

power instead of burning gas, and we send that gas to Europe. Then Europe will not have to import as much LNG. Thus, there are less emissions in Europe”³⁶.

Equinor argues that electrification of the oil and gas operations is a form of energy efficiency. The gas that used to be burned in less effective gas turbines on the platforms, can be used in more efficient gas power plants in Europe:

If we look at the energy crisis, energy efficiency will be an important part of the totality. And there I try to be very clear, that electrification, that is energy efficiency, as you manage to utilize the resources in the gas and the total resources in the energy system a lot better.³⁷

Further, Equinor argues that:

In principle, there is no difference between electrification of Norwegian oil and gas and electrification of cars. It is possible to use the argument that the petrol that is freed, will be used, burned other places. But if one accepts that argument one also says that electrification of fossil emission sources does not matter. That would be a kind of a nihilistic way of thinking, and then you do not have the right understanding of how the entire energy system works.³⁸

Similarly, when Ap was asked about what they think about the argument that electrification is greenwashing of the oil and gas industry, they point out how electrification gives actual reduction in climate gases: “So, in a way it is undermining to say that it is greenwashing. Because it has an actual climate impact to do the measures that are being done.”³⁹(Ap) Electrification is also seen as important as it releases quotas from the EU emission trading system, which is argued to then lead to a further tightening of the market and further decrease of

³⁶ AOG: Da bruker vi jo fornybar kraft i stedet for å brenne gass. Så sender vi da den gassen til Europa. Det gjør at Europa ikke trenger å importere så mye LNG. Dermed får de mindre utslipp i Europa av det.

³⁷ Equinor: «Hvis vi tar energikrisen. Så energieffektivisering vil jo være en veldig viktig del av totaliteten. Og det der jeg prøver å være veldig tydelige på at elektrifisering, det er energieffektivisering, fordi at du greier å utnytte ressursene i gassen og total ressursene i energisystemet mye bedre.»

³⁸ Equinor: Det er ikke noe prinsipiell forskjell på elektrifisering av norsk olje og gass eller elektrifisering av bilparken. Man kan jo bruke argumentet at den bensinen som blir frigjort, den blir brukt, brent andre steder. Men godtar en det argumentet sier en samtidig at elektrifisering av fossile utslippskilder ikke nytter. Det blir en litt sånn nihilistisk måte å tenke på, og du har ikke en rett forståelse av hvordan totalenergisystemet fungerer

³⁹ AP: «Så på en måte så undergraver det jo litt å kalle det for grønnvasking. For det at det har en helt reell klimapåvirkning at en går inn og gjør de tiltakene som en gjør.»

emissions. H argues that it is ethically problematic to argue for buying quotas rather than electrifying the oil and gas industry in Norway, as we can afford electrification. When the European emission trading system tightens, Norway should reduce emissions and leave the remaining quotas to countries that need them more:

So, the argumentation that some parties have, that this is extremely simple: “We do not need to electrify, we can just buy quotas.” Yes, they do not see that the prices for quotas in the trading system will go up, while the number of quotas will go down. Then you can ask yourself the question: is it right that such a rich country as Norway should buy the quotas, which will become a make-or-break factor, rather than other countries in Europe with a completely different gross domestic product and perhaps a completely different need for industrial jobs than we have in Norway, who could have taken the cost of electrification, given that we manage to produce enough electrical power?⁴⁰

Global climate justice – justice in reducing our own emissions and being an incubator for global technical development.

Consistently, the actors in this narrative argue that there is justice in Norway decreasing our own emissions. As explained by AOG:

It [electrification] is an expensive measure, but it is profitable because we have a high CO₂-tax and are part of the EU emissions trading system. It is very expensive to do this here compared to other places in the world. But that is just why we must do it. We cannot sit still and say that we must decrease emissions in Poland or other places in the world, or that we should rather invest in conservation of rainforests, because we need to take that cost and reduce our emissions in Norway. That is the justice in this. Yes, it is expensive for us, but we can afford this as an oil and gas nation.⁴¹

⁴⁰ H: «Så den argumentasjonen som enkelte partiet har, at dette er fryktelig enkelt: Vi trenger ikke å elektrifisere, vi kan bare kjøpe kvoter. Ja, de ser ikke for seg at kvoteprisen skal opp og at antallet kvoter skal ned. Så kan du jo stille deg spørsmålet, er det rett at et så ritt land som Norge skal kjøpe opp kvoter, som blir en knappfaktor, fremfor andre land i Europa med en helt annen bruttonasjonalprodukt og kanskje et helt annet behov for industriarbeidsplasser, enn det Norge, har som kunne tatt kostnaden til å elektrifisere, gitt at vi klarer å produsere nok elektrisk kraft.»

⁴¹ AOG: «Det er jo et dyrt tiltak, men det er jo lønnsomt fordi vi har en høy C2-avgift og kvoter. Så det er jo veldig dyrt å gjøre dette i forhold til andre steder i verden. Men nettopp derfor så må vi gjøre det. Vi kan ikke sitte og si at vi må kutte utslipp i Polen eller andre steder i verden.»

Equinor argues that the national emissions are what we can do something about: “Our focus has to be on what we can do something about, and that is our own emissions.”⁴² Sp also has similar considerations, but highlights that Norway has the responsibility to reduce emissions as we have profited so much from the fossil industry:

In the sense that Norway must take care of our own commitments, as one of the world's richest countries, and as one of the world's leading oil and gas exporting countries, and has made good money from it, then it is appropriate that we should also take our share. Ensure that emissions are reduced from our own sector, and that will also contribute to the development of new technology, and we should help spread new expertise around the world. So, we must take that responsibility.⁴³

The argumentation that emission reductions can benefit the world with technological development and new expertise is also used by H, who wants the Norwegian oil and gas industry to be the world’s biggest and most important technological incubator:

I just went to India and got feedback from India that they had no plans about reaching the climate goals in 2030 or 2050. They were going to reach the climate goals in 2080. And I think that is something I cannot argue on. They have hundreds of millions of people that still do not have light in their living rooms. [...] What I can do is to travel back home and use the Norwegian continental shelf as the world’s biggest incubator and the most important incubator in the world, for making technology that also India can benefit from when they are going to electrify their society. [...] When it comes to that climate justice, I think Norway have earned so much money on others using Norwegian petroleum that we can afford the cost, and take the development cost, but it has a small effect on global climate gas emissions, that only we do this. The effect comes the day India, China, USA

Eller at her må vi heller investere i bevaring av regnskog, fordi vi er nødt til å ta den kostnaden og kutte våre utslipp i Norge. Det er det som rettferdigheten er i dette. Ja, det er dyrt for oss, men det har vi råd til som den olje- og gassnasjonen som vi er.»

⁴² Equinor Vårt fokus må være at vi gjør noe med det vi kan gjøre noe med, og det er på en måte våre egne utslipp.

⁴³ Sp: I den forstanden at Norge skal ta sine forpliktelser, som et av verdens rikeste land, og som et av verdens ledende olje- og gass-eksporterende land, og har tjent gode penger på det, så er det på sin plass at vi også skal ta vår andel. Sørge for å både ta ned utslippa på egen sektor, og det vil også bidra til å utvikle ny teknologi, og bidra til å sprede ny kompetanse rundt i verden. Så det ansvaret må vi være med å ta.

do it. [...] Then we have succeeded as a nation, by in a way contributing so that others can take modern technology into use, when they are in that position themselves.⁴⁴

Technological development on the Norwegian continental shelf is going to help other countries in their green transition, which will be cheaper when Norway already has taken the development cost. The climate effect of our technological development will thus be greater, as the technology can be used by other countries to reduce their emissions. AOG also pointed out that there is justice in Norway being the energy securer for many European countries, and that we can contribute to global climate justice by making other countries less dependent on oil and gas: “Norway has an obligation to use research and development on helping other countries to be more independent from oil and gas.”⁴⁵

The actors in this narrative argue that there is climate justice in taking care of our own climate emissions. They also argue that technological development can be exported to other countries, and thus contribute to global climate justice.

Liberal ecomodernism-narrative

Narrative: *The climate crisis is happening right now. Fast decline in Norwegian emissions from all sectors is fundamental to reach the global climate goals. The oil and gas sector in Norway is the sector with the second largest emissions, so emissions must be reduced fast from this sector. The research supporting electrification features electrification as an effective climate measure, both domestically and internationally. The oil and gas industry will be part of the Norwegian economy for a long time, therefore there is a need for pragmatism and solution seeking, while at the same time being visionary. Electrification is a key measure for cuts in national, European and global emissions. The oil and gas industry are powerful with big economic strength and should be obligated to implement offshore wind power or CCS for fast emission reduction in a*

⁴⁴ H: Høyre: Jeg har nett vært i India og fikk tilbakemelding ifra India om at de hadde ingen planer om å nå klimamålet i 2030 eller 2050. De skulle nå klimamåla i 2080. Og da tenker jeg at det kan ikke jeg bestrides. De har flere hundre millioner mennesker som enda ikke har fått lys i stua si. [...] Det jeg kan gjøre er å reise hjem igjen og bruke norsk sokkel til å være den største inkubatoren i verden og viktigste inkubatoren i verden, på å lage teknologi som og India kan gjøre seg nytte av, når de skal på en måte elektrifisere sitt samfunn [...] I den klimarettferdigheten da, så mener jeg at Norge har tjent så mye penger på at andre har brukt norsk petroleum, at vi kan være med å ta en sånn kostnad, og ta den utviklingskostnaden, men det har veldig liten effekt på de globale klimautsleppene at vi gjør det. Men effekten kommer den dagen India, Kina, USA gjør det [...] Da har vi jo lykkes, som nasjon, med å på en måte være med å bidra, til at de andre og kan ta moderne teknologier i bruk, når de er i den posisjonen selv da.

⁴⁵ AOG: Så det å bruke forskning og utvikling til å hjelpe andre land til å gjøre seg uavhengig av olje og gass er Norge en forpliktelse til å gjøre.

time with energy deficit. The oldest most polluting platforms should be phased out. Norway must invest in technological solutions and implement marked mechanisms to reduce emissions from the Norwegian continental shelf.

The fundamental and collectively shared starting point among all actors in this narrative is that emissions from all sectors must decrease rapidly. The actors in this narrative are the environmental organizations Bellona and Zero. V is the only political party exclusively included in this narrative. SV is included into this narrative, but is also included in the “Stop fossil fuels-narrative. All actors in this narrative historically advocated strongly for electrification of the oil and gas industry with cables from land. Bellona and V put the most emphasis on CCS, while ZERO and SV emphasizes the need for offshore wind power. SV stands out as the actor most negative to cables from land, only supporting cables from land if the industry itself compensates the needed energy, for example by building offshore wind power. SV is also less market optimist than the other actors. All actors highlight the need for sufficient “green” energy for mainland industries. Bellona is particularly clear on this. This narrative was identified based on a similar storyline between the actors, but I believe the storyline is so close to the storyline of liberal ecomodernism, that I have named the narrative thereafter. So, the narrative draws on existing literature, but is found in the data material. I will now further explain this narrative, and show how Zero, Bellona, V and SV follow and reproduce the narrative:

Fast reduction in emissions from the oil and gas sector

Rapid decline in climate emissions is the most important objective in this narrative, as conveyed clearly by Bellona:

Our main concern is to reduce emissions from all sectors in Norway, including the oil and gas sector. And that can be done in many ways. That [which technology] is not too important for us. It is not like it must be done with cables from land, or it must be done with offshore wind power, or it must be done with carbon capture and storage. [...] How

it is done is not too important; what is important is that the emissions decrease, so that Norway can reach its climate commitments.⁴⁶

V responds in a similar fashion when asked what they see as most important in the discussion on electrification:

Electrification is just a method and a means of action. The most important is to reduce the emissions with 50% [within 2030]. And this will be achieved with cables from land, CCS and it can be done while accelerating the offshore floating wind technology.⁴⁷

Zero argues that sufficient decrease in climate emissions is impossible without electrification:

It is impossible to meet any of the targets without a massive electrification of the Norwegian continental shelf. Both targets [the national target and the sector target] are very ambitious and borderline impossible to meet, as we now already are in 2023. But if we are to make it, then we must electrify a massive part of the Norwegian continental shelf. That is quite obvious. There are not enough other emission reduction possibilities available, so you cannot do it without that electrification.⁴⁸

SV is also clear that emissions must be reduced from the oil and gas sector to meet the climate targets:

If we are to reach the climate targets, then we must decrease emissions from the oil companies. If we do not do that, we will not reach the climate targets. And then electrification and carbon capture and storage are the two most realistic alternatives.⁴⁹

Make the oil industry use offshore wind power and CCS

⁴⁶ Bellona: «Det som er vårt hovedanliggende det er å redusere utslipp fra alle sektorer i Norge, også olje- og gassproduksjon. Og det kan gjøres på mange måter. Det er ikke så nøye for oss. Det er ikke noe sånt at: Det er ikke noe som det må gjøres med kraft fra landet, eller det må gjøres med havvind, eller det må gjøres med karbonfangst og lagring. [...] Hvordan man gjør det, det er ikke så nøye, men at utslippene må ned er helt avgjørende for at Norge skal nå sine klimaforpliktelser.»

⁴⁷ Venstre: «Elektrifisering er bare en metode og et virkemiddel. Det viktigste er at utslippskuttene med 50%. Og det må nås med kraft fra land, CCS, og kan være med på å dra opp flytende havvind og drive den teknologien fremover.»

⁴⁸ ZERO: Det er jo umulig å greie noen av de målene uten en veldig stor elektrifisering på sokkelen. Så også begge målene er jo veldig ambisiøse og på grensen til umulig å klare, gitt at vi er kommet til 2023 nå. Men hvis vi skal greie det, så må vi jo elektrifisere veldig mye av sokkelen. Det er jo ganske opplagt. Så det finnes ikke nok andre kutt å ta av til at du kan greie det uten den elektrifiseringen.

⁴⁹ SV: Skal vi klare å nå klimamålene, må vi kutte utslippene fra oljeselskapene. Hvis ikke så når vi ikke klimamålene. Og da er det elektrisering og karbonfangst og lagring som er de to mest realistiske alternativene.

Even though cables from land are acceptable for all actors except for SV, all actors prefer to use electrification to develop the offshore wind industry in Norway and to accelerate the use of CCS on the Norwegian continental shelf. This is necessary to ensure enough electricity for the mainland industry. All actors in this narrative support offshore wind power for electrification of oil and gas operations, but especially ZERO and SV promote this measure. They see offshore wind power as the solution on how to continue electrification in a difficult energy situation, as conveyed by ZERO:

What we have said the last few years is that the oil and gas industry increasingly must contribute in production of the needed power to electrify the Norwegian continental shelf. We have proposed several policies that could make it either more profitable or that would obligate the companies to produce more energy, with for example floating offshore wind power. [...] We are very clear that electrification is necessary and a good climate measure, but at the same time we are heading towards an energy deficit in Norway. And given the profits in the oil and gas industry, [...] they should take a bigger responsibility to contribute to increased power production. Ideally, this should be more or less in proportion to what is needed to electrify the Norwegian continental shelf.⁵⁰

According to ZERO, the oil and gas industry should build out the same amount of energy as they need to electrify the Norwegian continental shelf. SV argues similarly:

You can either have offshore wind power plants linked directly to the separate platforms or areas, or you can establish wind power plants that send the electricity to shore, and then the fields can get power back from the grid. But the production of wind power that the oil companies must be obliged to implement, build and pay for, must be equal to the amount of electricity they use for the electrification. And now we see for example Trollvind, which Equinor is planning for. There, the electricity will be sent to shore and

⁵⁰ ZERO: Det vi har sagt kanskje de siste par årene er jo at olje og gassnæringer i større grad må bidra til å produsere den kraften de trenger til å elektrifisere sokkelen. Vi har jo fremme flere forslag som skal gjøre det enten mer lønnsomt eller skal pålegge selskapene og produsere mer kraft med for eksempel flytende havvind. [...] Vi står veldig fast på at elektrifisering er nødvendig og er et godt klimatiltak, men samtidig er vi på vei mot et kraftunderskudd i Norge. Og gitt lønnsomheten i olje og gassnæringer, [...] bør de ta et mye større ansvar for å bidra til økt kraftproduksjon. Og ideelt sett så er det omtrent i det samme størrelsesforholdet, som vi trenger til å elektrifisere sokkelen.

then sent back out again. So that is a way to do it. But we wish to for example use the petroleum regulations to oblige the oil companies to build out offshore wind power.⁵¹ SV

ZERO also supports projects like Trollvind: “Trollvind is a project where you combine cables from land with self-produced wind, and we think that is great. We want many more projects like this. That is exactly the model that we need political means to realise.”⁵² They are also, similarly to SV, clear on how political means or obligations must be implemented so that the oil and gas industry takes responsibility for electricity production. ZERO is also positive to wind energy projects that are directly linked to platforms:

With Hywind Tampen, perhaps 30% to 40% [of the power need] are covered [with electricity]. If you have a battery connected to the floating installation, then you can perhaps get well above 50%. [...] And then you also need gas turbines as backup, or cables from land in addition. We think that is totally okay.⁵³

So, there are different ways to electrify with self-produced electricity. The actors in this narrative also believe that it is possible to realize these offshore wind power projects within 2030, as conveyed by SV: “I still think that it is possible to manage within that time limit. For example, Trollvind shall be operating from 2027. So, if one begins by compelling the oil companies to do this, then it is possible.”⁵⁴ Similarly, ZERO thinks that it is possible if there is political will to impose it:

Right, if there were political will, then it could be done in many ways, and it could be imposed [on the oil companies]. It is perhaps not as straightforward, but they operate

⁵¹ SV: Du kan enten ha offshore-vindkraftverk direkte knyttet til de enkelte plattformene eller områdene. Eller du kan også etablere vindkraftverk som sender strømmen til land. Også har man på noen felt landstrøm. Men den produksjon av vindkraft som oljeselskapene må pålegge seg gjennomføre, bygge ut og betale for, må være lik den mengden strøm de bruker til elektrifiseringen. Og nå ser vi jo sånn som det her Trollvind for eksempel som Equinor planlegger. Der skal jo da strømmen sendes til land, og så sendes det ut igjen. Så det er jo også en måte å gjøre det på. Men vi ønsker å bruke for eksempel da petroleumregelverket til å pålegge oljeselskapene og bygge ut offshore-vindkraft.

⁵² ZERO: Trollvind er jo et prosjekt der du kombinerer kraft fra land med egenprodusert vind, og det tenker vi er helt topp. Vi vil ha mange slike prosjekter. Det er liksom egentlig akkurat den modellen vi har tenkt at vi må lage virkemidler for å få realisert.

⁵³ ZERO: Hywind Tampen, så får du kanskje dekt 30-40 prosent. Hvis du har batteri i bunn av flyteren, så kan du kanskje komme godt over 50. [...] Og så må du i tillegg ha gassturbiner som backup, eller eventuelt kraft fra land i tillegg, som du kan bruke. Det tenker vi er helt ok

⁵⁴ SV: «Jeg tror det er fortsatt mulig å få det til innenfor den tidsramma. Sånn som Trollvind skal jo være opp å gå fra 2027 av. Så hvis man starter med å pålegge oljeselskapene dette, så er det mulig.»

under the licenses that were given to them, and some [licenses] might be difficult to change. But if there was a majority in the Parliament, then one could directly change the licenses and impose it on them⁵⁵.

V also argues that with the economic strength of the industry, they can be in front in the development of offshore wind power technology: “And of course, with the earnings that the petroleum sector has, and with those favorable tax arrangements, they can be a driving force in the technological development [of offshore wind power].”⁵⁶ Bellona are positive to offshore wind power, but they do not see it as the main solution:

It [offshore wind power] is a good contribution to in periods take less power from the grid, but it will never be a ... you can never fully electrify a platform with offshore wind power. Because occasionally there will be less wind, and a platform needs stabile power supplies around the clock, the entire year. So, in any case it is only a supplement. But it is a good supplement⁵⁷.

So, Bellona sees offshore wind power as a good supplement to cables from land but worries that it is not a sufficiently stable power source. Instead, Bellona highlights CCS as a solution. V also sees CCS as a solution in a time with limited electricity: “Where we are now, because it [electrification with cables from land] needs so much energy [...] we cannot take everything with cables from land. We must also use carbon capture and storage.”⁵⁸

Bellona also argues that CCS is a needed technology to reduce emissions from the Norwegian continental shelf, especially so that mainland industries will have enough electricity. They argue that the companies’ assessments when looking at costs and benefits of cables from land versus CCS are not conducted fairly:

⁵⁵ ZERO: «Altså hvis det var politisk vilje på det, så kunne man gjort det på mange måter, og man kunne pålegge dem å gjøre det. Det er ikke helt rett frem kanskje, men de opererer jo under konsesjonene som er gitt, så det er kanskje noen typer det er vanskelig å endre på. Hvis det var et flertall på Stortinget for å gjøre det, så kunne man også endret direkte i konsesjoner og pålagt dem å gjøre det.»

⁵⁶ V: «Og det er klart med den inntjening som petroleumssektoren har, og med de gunstige skatteordningene, så kan de være med på å drive fram teknologitviking.»

⁵⁷ Bellona: “Det er jo fint bidrag for å i perioder å trekke mindre kraft fra land, men det er jo aldri en ... du kan jo aldri hel-elektrifisere en plattform med havvind. Fordi innimellom så blåser det mindre, og en plattform må ha stabil kraft hele døgnet, hele året. Så det er jo uansett bare et supplement. Men det er et godt supplement.”

⁵⁸ V: «der vi er nå, fordi det krever så mye kraft [...] at du ikke kan ta alt med kraft fra land. Vi må også bruke karbonfangs og lagring.»

The oil industry is obliged to assess alternatives to electrification. [...] Low-emission gas power plants should be assessed as an alternative. We experience that this is done to a very small extent. It is their own [the companies] internal evaluations that is done, and it is sufficient to deliver a plan for development and operation that only describes that carbon capture and storage was considered and found less sensible business wise than cables from land. But they [the oil and gas companies] have often gotten away with it, without a real assessment. So, now that is a discussion that is very relevant for example on Melkøya.⁵⁹

Bellona continues by arguing that other systems for assessments of alternatives to cables from land should be considered, for example that the oil companies could be imposed to use an external actor to do the assessments, which would also consider different measures for mitigation of emissions socioeconomically. V also sees themselves as an instigator for CCS and says this explicitly: “We are now a driving force for CCS, where The Liberal Party now has the leading role.⁶⁰” They also use Melkøya as an example of a project where CCS is needed:

I have now a proposal about having carbon capture and storage at Melkøya. Because there are particularly two areas [Northern Norway and the West Coast] with problems of not having enough power. And in the north that is Melkøya, because it needs so big quantities of power, which will come at the expense of other commercial activity in Northern Norway. You can see this already. There are so many [industry projects in Northern Norway] who do not get electricity. I think Equinor has applied for 3.6 TWh. That is huge, so it takes all the surplus energy in Northern Norway. Carbon capture and storage is a well-known technology and a good alternative.⁶¹

⁵⁹ Bellona «Som oljeindustri er man pliktig til å utrede alternativer til elektrifisering. [...] Det å ha et gasskraftverk med lavutslipp, skal utredes som alternativ. Det opplever jo vi at blir gjort i veldig liten grad. At det er egne interne vurderinger som blir gjort, og at det holder å sende inn en plan for utvikling og drift som bare beskriver at karbonfangst og lagring er vurdert og funnet mindre bedriftsøkonomisk fornuftig, enn kraft fra land. Men at man ofte har kommet unna liksom bare med det, uten at det har blitt utredet skikkelig. Så det er jo en diskusjon som nå er veldig relevant på Melkøya, for eksempel.»

⁶⁰ V: “Nå er vi pådriver for CCS, der Venstre nå har lederrollen.”

⁶¹ Venstre Nå har jeg et forslag liggende inne om å ha karbonfangst og lagring på Melkøya. For det er særlig to områder hvor det er problemer med kraft fra land. Og det er i nord med Melkøya, fordi det tar så store kraftmengder at det går ut over annen næringsvirksomhet i Nord-Norge. Det ser du jo allerede. Det er mange som får nei. De har vel søkt om 3,6 terawatttime, tror jeg det er, Equinor. Det er en enorm, så det tar hele overskuddet i Nord-Norge. Karbonfangst og lagring er en velkjent teknologi og er et godt alternativ.

V sees CCS on Melkøya as a way to ensure enough energy for other commercial activities in the North at the same time as emissions are reduced. Equinor argues that this is too expensive, therefore I asked V whether they believe it will be economically possible to get CCS on Melkøya before 2030. V replied that: “It is more expensive than cables from land for Equinor, but Equinor can afford it, I have no doubt about that”⁶². Similarly, Bellona argues that the oil industry has enough economic capabilities to finance measures for emission reductions. Bellona sees CCS as the most feasible alternative in many cases, including on Melkøya. SV also sees CCS as an alternative, especially on Melkøya:

Of course, something must be done with the emissions on Melkøya, because that is Norway's fifth biggest emission. We believe that Equinor must be obliged to assess CO₂-capture and storage, and that Statnett must be obliged to assess sea cables, because of the conflict of interest with the reindeer herders in the area. So that is two possible solutions.⁶³

ZERO is also open for CCS, but have not focused on it:

The reason we have not been too concerned about it, is that the companies have not been interested in it. We have assumed that it is a more expensive solution and that it do not have the same climate effect. [...] If there are projects of CCS that can be realized, then we obviously support it.⁶⁴

ZERO does not seem as optimistic as V and Bellona that CCS is possible and feasible before 2030. However, overall, in this narrative, the oil and gas industry are seen as powerful, with much money and adaptation abilities. Therefore, the actors are open to impose measures to make the industry reduce their emissions either with offshore wind power or CCS.

⁶² Venstre Det er dyre enn kraft fra land for Equinor, men at Equinor har råd til det, det er jeg ikke tvill om.

⁶³ SV: “Og det er klart at vi er nødt til å gjøre noe med utslippene fra Melkøya, for det er Norges femte største utslipp. Vi mener at Equinor må pålegges og utrede CO₂-fangst og lagring, og Statnett må pålegges og utrede en sjøkabel, på grunn av at du har konflikten med reindriftsinteressene i området. Så det er to mulige løsninger på det.”

⁶⁴ ZERO Grunnen til at vi ikke har vært så opptatt av det er at selskapene ikke har vært interessert i det. Vi har antatt at det er en dyrere løsning og at du ikke har en like god klimaeffekt. [...] Hvis det finnes prosjekt på CCS som kan realiseres, så støtter vi selvfølgelig det.

Close down fields with the highest carbon emissions, if realistic politically

The actors in this narrative are open for closing down oil fields, especially old ones that are close to their final phase of operations, and which already have redeemed their investment expenses. As conveyed by Bellona: “There is one measure that we have not covered, and that is closing down business. That must also be part of the assessment for the emission reduction in the petroleum sector.”⁶⁵ The same is voiced by SV: “We are open for closing down fields, but it is probably less realistic to get a majority for it [in Parliament]”⁶⁶. How realistic it is to close down the oil and gas industry is also discussed by ZERO in relation to the argument that electrification is greenwashing:

I get the argument [that electrification is greenwashing] if you are in favor of closing down the oil and gas production as quick as possible. [...] Because it [electrification] will strengthen the argument that Norwegian oil and gas has a lower climate footprint than many other producers of oil and gas. [...] We probably have a slightly different view of the realism on very fast out-phasing of oil and gas production. We think the oil and gas production will be here for many years, thus you must produce with as low emissions as possible.⁶⁷

Both ZERO and SV emphasize realistic, pragmatic and achievable solutions to decrease emissions. Bellona also stresses the need for solutions that are possible to achieve, while they also argue that CO₂ is the main issue, not the fossil industry itself:

It [closing down oil fields] would be an evaluation from operation to operation, right? What is the most sensible to do with this field, right? There is no point in electrifying a field that will produce for five more years and has bad conditions for wind [power]. Then it would be most sensible, both business wise and socioeconomically, to rather, close it

⁶⁵ Bellona Et element som vi ikke har vært inne om, og det er jo å legge ned virksomhet. Det må også være en del av vurderinga for utslippsreduksjonen i petroleum sektoren.

⁶⁶ SV: Vi er åpne for å legge ned felt, men det er nok mindre realistisk å få flertall for.

⁶⁷ ZERO: Jeg kan jo skjønne det argumentet hvis du vil legge ned olje- og gassproduksjonen så fort som mulig. [...] Fordi det vil jo styrke argumentasjonen om at norsk olje og gass har et lavere klimaavtrykk enn mange andre produsenter av olje og gass. (...) Vi har nok et litt annerledes syn på realismen i å fase ut olje- og gassproduksjon sånn veldig raskt da. Vi tenker at olje- og gassnæring kommer til å være med oss i mange år, og gitt det så må du også produsere med så lave utslipp som mulig.

down, if it has short time left and it is very costly to electrify it. That is the alternative for some installations. It is not as if we see the possibility of closing down the Norwegian oil and gas production. That is not part of any of our scenarios. So, the main issue for our part is the CO₂-emissions, not necessarily whether it is fossil or not. That is not the main issue. If it is possible to clean up most of it, then it is okay. Then we have at least solved the climate issues related to it⁶⁸.

Bellona is the only actor stating explicitly that the main issue itself is the CO₂, not the fossil industry. SV, ZERO and V focuses on how electrification is a needed and pragmatic manner to quickly reduce emissions from the oil and gas industry, while they also wish to reduce the production over time, as argued by V: “There is no contradiction between decreasing emissions on the Norwegian continental shelf and at the same time work purposefully on reducing the use of the product itself, whether it is oil or gas.”⁶⁹

Electrification is an effective measure

Similarly, to the Development, not liquidation of the oil and gas industry-narrative, the actors in this narrative see electrification of oil and gas production as an effective measure both nationally, in Europe and globally. SV argues that a reduction in the use of fossil fuels has a climate effect regardless of the industry in which the reduction is made:

Reducing Norway’s fossil consumption has a climate effect, no matter if it happens on the mainland or out on the North Sea. And, for example, there are no differences between the effects of reducing fossil energy consumption in the North Sea, versus reducing the use of private fossil fuel driven cars⁷⁰.

⁶⁸ Bellona: «Det blir en evaluering fra installasjon til installasjon. Ikke sant. Hva er mest fornuftig å gjøre med dette feltet? Ikke sant. Det er ikke noe poeng å elektrifisere et felt som skal gå i fem år til og har dårlig forhold for vind. Da er det mest bedriftsøkonomisk og samfunnsøkonomisk å heller da stenge det ned, hvis det er kort levetid igjen og veldig kostbart. Det er jo da et alternativ for noen installasjoner. Det er jo ikke sånn at vi ser på det som en mulighet å stenge ned norsk olje og gassproduksjon. Det er jo ikke noen av våre senarioer. Så hovedproblemet fra vår siden er CO₂-slippende, ikke nødvendigvis om det er fossilt eller ikke. Det er ikke først og fremst det som er problemet. Hvis man kan rense mesteparten av det, så er det ok. Da har vi i hvert fall løst altså klimaproblemer rundt det.»

⁶⁹ V: «Det er ingen motsetning mellom å kutte utslipp på sokkelen og det samtidig jobbe målretta for at selve produktet skal brukes i mindre grad, enten det er olje eller gass.»

⁷⁰ SV: Det å redusere Norges fossile forbruk har en klimaeffekt, uavhengig av om det skjer på fastlandet eller ut i Nordsjøen. Og det er ikke noe forskjell på virkninga av å redusere fossile energiforbruk i Nordsjøen, kontra det å redusere privatbilismen basert på fossile biler for eksempel.

ZERO presents a similar argument:

From a climate perspective, some have questioned the climate effect of electrification, and thought that there is no effect on a European and global level. But we have been clear on that this entire time. This is classical climate politics. You close down a gas turbine; thus, you get rid of a fossil source of emissions by using electric power. That is textbook climate policy⁷¹.

Further, SV argues that the climate effect becomes clear when you look at the totality of effects from electrification. Then, electrification might even lead to a lesser demand for opening new platforms:

We can see that if you look at this isolated on one individual platform, then it might be that the gas that is taken up, and not burned in a gas turbine will be exported. But since there is no new increase in consumption, but rather [the export] being a result of us having reduced our own usage, then this will lead less pressure on opening new areas⁷².

So according to SV, electrifying platforms will free gas, that can be exported, but since there is no change in the demand, there will be less pressure on opening new platforms. ZERO commented on the recent report from Thelma Consulting on the global climate effect of electrification (See background, p. 10):

It sums up everything. I think that I agree on everything in it. They have very thoroughly gone through the interaction between the European emission trading system, the European energy market and the global market for gas and oil. And I believe that all of their conclusions are absolutely correct.⁷³

⁷¹ ZERO: Fra et klimaperspektiv, noen har jo satt spørsmål om klimaeffekten av elektrifisering, og tenkt at det ikke har noen effekt på europeisk eller globalt nivå. Men der har vi stått veldig stødig hele tiden. Dette er jo klassisk klimapolitikk. Du stenger av en gassturbin, altså du blir kvitt en fossil utslippkilde med elektrisk kraft. Det er jo klimapolitikk etter læreboka.

⁷² SV: vi kan se at hvis du ser dette isolert på en plattform, så kan det godt være at akkurat den gassen som da tas opp og som ikke blir brent i et gasskraftverk, vil bli eksportert. Men siden det ikke oppstår et nytt økt forbruk, men følger av at vi reduserer vårt, så vil jo det bety mindre press på å bygge ut nye områder.

⁷³ ZERO: «Den oppsummerer alt. Jeg tenker at der er jeg enig i alt som står i den. De har gått gjennom veldig grundig altså samspillet med europeisk kvotesystemet, europeiske energimarked og globale marked for gass og olje. Og jeg synes at alle de konklusjonene er helt riktige.»

ZERO elaborated on how the EU emissions trading system is flexible and politically governed so when emissions in the system decrease, it becomes easier to tighten the trading system. This was also discussed by V:

And to have faster reductions also gives room for faster political decision-making on reduction of the quota cap in the EU emissions trading system. Which we already are about to do, now the discussions in the EU are on whether there should be a 61% or a 63% reduction in quotas within 2030, so this [emission reductions from the Norwegian oil and gas production] is one of the ways to support that the reduction [in quotas] can happen faster. And thereby that the prices of emissions become even higher⁷⁴.

The argument from V supports the idea that electrification of the oil and gas sector would lead to a stricter emission trading system, which then again would lead to even more emission reductions in the EU, as it would be more expensive to pollute.

The actors in this narrative oppose the idea that electrification is greenwashing of the oil and gas industry, as elaborated by SV:

Then [if electrification is greenwashing] electric cars would be greenwashing of private cars. Then you can say that most emission reduction measures become greenwashing of some sort. The fact is that if we are to reach our climate goals, then we need to reduce the emissions from the oil companies. Unless you wish to shut down the oil and gas production that exists today, then there is no way around the fact that you must do something with the emissions. You can say let's shut down all oil production today, but nobody is suggesting that. Then you must do something else to reduce the emissions. Electrification is one way, CO₂-capture is another way, but the alternative is to say: No, we will not be reaching our climate goals⁷⁵.

⁷⁴ V: «Og det å ha raskere reduksjoner gir også rom for raskere politiske vedtak for å kutte kvotetaket i det kvotemarkedet. Som vi jo er i ferd med å gjøre, nå pågår jo de diskusjonene i EU om det nå blir 61 eller 63 prosent det skal reduseres fram mot 2030, så er dette en av de måtene også man kan være å understøtte at den reduksjonen kan tas raskere. Og dermed også prisene på utslippene blir høyere.»

⁷⁵ SV: «Da er elbil en grønvasking av privatbilisme. Da kan du si at det meste av utslippskutt blir en grønvasking av et eller annet. Faktum er at skal vi klare å nå våre klimamål, så er vi nødt til å kutte utslippene fra oljeselskapene. Og med mindre du skal legge ned den olje og gassproduksjonen, som vi holder på med i dag, så kommer du ikke utenom å gjøre noe med utslippene. Du kan si at vi kutter ut alt av oljeproduksjonen i dag. Det er det ingen som foreslår. Da må du gjøre noe annet for å kutte utslippene. Elektrifisering er en måte, CO₂-fangst er en måte, men alternativet er å si at: Nei, vi når ikke klimamålene våre.»

SV argues that reducing the emissions from the current production is the only realistic solution if we ought to reach the 2030-targets. Hence, electrification cannot be understood as greenwashing. V agrees, adding that: “The industry has an interest in showing that they do not emit. Still, it is a real climate measure, right ... It is not an argument against decreasing emissions, that the industry also uses this in their argumentation⁷⁶”. Bellona understands that electrification can be seen as greenwashing, but similarly to V and SV, still thinks that Norwegian policy needs to focus on the measures that we can control, one of those things being the emissions from the oil and gas production:

I understand why some say it. Because almost all emissions from oil and gas comes from burning the product, it is not from the production. So, electrification is a part of a value chain that has enormous emissions [...] So, I get the argument, but it is also about what we have responsibility and control over. So, a business and a country must take their responsibility, and for our part that is the production of the petroleum products. That is what we can do something about, and that is what we have committed ourselves to do something about. So, then we must do something about it, even though it is a tiny part of, like, the total emissions in the total value chain⁷⁷.

Overall, the actors in this narrative see electrification as a needed and effective measure with national, European and global climate impact. Shutting down the production of oil and gas is not a realistic solution. The only way to reach the 2030-targets is with electrification or CCS. Thus, electrification cannot be understood as greenwashing of the industry.

Technological solutions and the market are needed

The market optimism of the EU trading system can be seen as part of a bigger vision in this narrative: growth, technical solutions and market mechanisms are essential in solving the climate and nature crisis. This is conveyed by V when asked whether measures like electrification is

⁷⁶ V: Det at næringen har interesser av å vise at de ikke slipper ut, det har de. Men det er et reelt klimatiltak, riktig ... Det er ikke noe argument imot å kutte utslipp, at næringen også bruker det i sin argumentasjon.

⁷⁷ Bellona: Jeg forstår hvorfor man sier det. Fordi nesten alt av utslippene fra olje og gass kommer fra forbrenning av produktet, det kommer jo ikke fra produksjonen av det. Så å elektrifisere en del av en verdikjede som har enorme utslipp [...] Så jeg forstår argumentet, men det handler også om hva man har ansvar og kontroll for. Så en virksomhet og et land må ta sitt ansvar, og for vår del så er det på produksjonen av petroleumsprodukter. Det er det vi kan gjøre noe med, og det har vi forpliktet oss til å gjøre noe med. Så da må vi gjøre noe med det. Selv om det er en bitteliten del av liksom de totale utslippene i verdikjeden.

enough to solve the climate crisis, or whether there is a need for some type of system change: “So what you must do is to establish a global market economy within the limits of nature.”⁷⁸

When asked to elaborate on this V expressed that:

That is the only thing that is economically sensible. Because everything else will only be more costly and give less value. But the market economy is effective on distribution. It works. While there needs to be frames ensuring that it [the market] is within what is ... system changes that keep it [the market] inside the limits of nature. Which means emission reductions must come quickly enough, and we must take care of nature, and with nature in a dimension that protects the biological diversity⁷⁹.

The market economy can, according to V, be designed to solve the climate crisis, take care of nature and secure social distribution. Similarly, ZERO argues that a market-based economy is a prerequisite to solve the climate crisis:

We are not part of the degrowth movements that thinks lower economic growth and less consumption is the way to decrease emissions. I almost believe the opposite. I think it is easier to reach the global emission goals in a peaceful world with significant economic growth. Because big investments are needed, requiring a lot of capital. And the entire energy system must change [...]. An important part of making it is the circular economy, which is about reusing the resources a lot more. I think, for example, that a market-based economy is a prerequisite to make it. I do not think communist or authoritarian systems of governance have a bigger chance of making it than a democratic system of governance based on a market economy. I rather think the opposite. So, if it is that type of system change, then the answer is no. I believe that democratic market-based economies are the best manner to reach fast change. It is of course really difficult no matter what⁸⁰.

⁷⁸ V: Så det du skal gjøre er å etablere en global markedsøkonomi innenfor naturens tåleevne.

⁷⁹ V: det er det eneste økonomisk fornuftige. Fordi alt annet vil bare være mer kostbart og gi mindre verdier. Men markedsøkonomien er effektiv på fordeling. Det virker. Mens det må settes rammer som gjør at det ligger innenfor det som er ... systemendringer som gjør at det ligger innenfor det som er naturens rammer. Det vil si at utslippskuttene må komme raskt nok, og vi må ta vare på natur, og med natur i en dimensjon som sikrer det biologiske mangfoldet

⁸⁰ ZERO: «Vi tilhører ikke degrowth-bevegelsene som tenker at det er lavere økonomisk vekst og forbruk som er veien til å kutte utslipp. Jeg tror nesten det motsatte. Jeg tror det er lettere å nå de globale utslippsmålene i en verden som er fredelig og har betydelig økonomisk vekst. For det er snakk om veldig store investeringer, som krever mye kapital. Og hele energisystemet må legges om [...]. Det med sirkulær økonomi, som handler om å gjenbruke ressurser mye mer, er jo en viktig del av å få det til. [...] Jeg tror at en markedsbasert økonomi for eksempel er en

The market based democratic economy is, according to ZERO, the system that is best fit for peaceful change. Economic growth is needed to implement the change, thereby degrowth is not a sensible path. Bellona does not put emphasis on the need for a market economy. Still, their arguments fall within the same storytelling of change, with a system change as a shift from fossil fuels to electricity:

Yes, mainly we must electrify all that can be electrified, and the electricity must be produced without emissions. Then we have gotten quite far. [...] We try to make the framework for the industry in a way that makes it more costly to emit a lot of CO₂ [...] and it is possible to produce enough power to electrify everything that we use fossil fuels on as of today. That is possible within the limits of the planet⁸¹.

In short, the argumentation by Bellona, V and ZERO puts an emphasis on the market and technological solutions. SV do not put the same emphasis on the market economy, thereby they do not follow this part of the storyline in this narrative, yet they have a fierce belief in technological solutions.

There are more important climate measures for global climate justice than electrification of the Norwegian oil and gas industry

When it comes to global climate justice, both V and ZERO convey that the relation between global climate justice and electrification of the oil and gas sector is not too clear:

No, here I do not really see any relation. What is important for both the Global South and us is to reduce the emissions. When it comes to climate justice it is a lot more about support for climate measures and the effect of the climate change in developing countries. And that is a different discussion, with other agreements and other systems with different equities. [...] To reduce emissions on the Norwegian continental shelf is not part of that

forutsetning for greie det. Jeg tror ikke at et land som er kommunistisk eller autoritær har større sjanse til greie det enn et demokratisk system basert på markedsøkonomi. Det tror jeg er tvert om. Så hvis det er den type systemendringer så er jo egentlig svaret nei. Jeg tror i stort så er demokratiske markedsbaserte økonomier den beste måten å få til så rask endring på. Det er selvfølgelig super vanskelig uansett.»

⁸¹ Bellona: Ja, altså først og fremst må alt som kan gå på strøm gå på strøm, og samtidig som det gjør det så må vi jo gjøre strømproduksjonen utslippsfri. Da har man jo kommet ganske langt. [...] Vi prøver å få rammeverket til industrien til å være sånn at det koster mye å slippe ut mye CO₂ [...] Og det er jo mulig å produsere nok kraft til å elektrifisere alle ting som vi i dag bruker fossile drivstoff til. Det er mulig innenfor jordas tåleevne.

discussion [the discussion on global climate justice]. It is a mere climate measure, and it is the right thing to do anyway.⁸² (V)

ZERO had a similar reply:

For me, global climate justice is much more about our big responsibility to finance climate measures in all countries, especially the poorest countries. [...] So, decreasing emissions from the production on the Norwegian continental shelf, I think, that is not it [global climate justice]. For me that is not related to climate justice, that is related to us reaching Norwegian and European emission targets. And then there is climate justice, which is something that must be ensured by other means. On this, I believe Norway has a big international responsibility to contribute to climate financing⁸³.

Both actors see electrification as an important measure, but not a measure related to global climate justice. Both actors believe climate justice must be achieved through financing of climate measures and climate adaptation in the Global South. SV sees the relation between climate justice and electrification of oil and gas in the manner that Norway must reduce its emissions.

Bellona had a different take on it and reflected on climate justice nationally, where they argued that the use of cables from land can lead to other industries, for example in Northern Norway, not getting the electricity needed for in their green industry development. They made an example hypothesizing about what will happen if Melkøya were electrified with cables from land, without new electricity production:

Then there will, for example, be no new green industry development, for at least the next ten years. Finnmark will perceive that as unjust. While in the south there is a big focus and tens of billions of tax money used to realize carbon capture and storage projects,

⁸² V: «Nei, der ser jeg ikke egentlig noe sammenheng. Det som er viktig for både det globale sør og oss alle er å få ned utslippene. Det som går på klimarettferdighet handler mye om støtte for klimatiltak og effektene av klimaendringer i utviklingsland. Og det er en egen diskusjon, og det er der egne avtaler og egne systemer som er satt opp også med ulike fond. [...] det å kutte utslipp på norsk sokkel ser jeg ikke på som en del av den diskusjonen. Det er et rent klimatiltak, og riktig er det uansett.»

⁸³ ZERO: «For meg handler global klimarettferdigheten mye mer om at vi har et stort ansvar for å finansiere klimatiltak i alle land, særlig de fattigste landene.. Så det at vi kutter utslipp fra produksjon på norsk sokkel, det tenker jeg, det er ikke der. For meg handler det ikke om klimarettferdighet, det handler om at vi må nå norske og europeiske utslippsmål. Og så er det klimarettferdighet, det er en ting man må sikre på andre måter. Der tenker jeg at Norge har et stort internasjonalt ansvar for å bidra til klimafinansiering.

while Finnmark does not get the possibility to use that climate technology. That is also unjust⁸⁴.

So, even though Bellona works within the Liberal Ecomodernism Narrative they have a different take on climate justice than the other actors in this narrative.

Stop fossil fuels

Narrative: *The Norwegian oil and gas sector must be limited and over time phased out.*

Exploration of new oil and gas fields must stop, new fields cannot be opened, and older fields should be phased out. Most of the emissions from oil and gas comes from the burning, not the production of oil and gas, therefore reduction of emissions in production is not sufficient.

Norway has ethical responsibility for not only national emissions from our oil and gas production, but also responsibility for our exported emissions. Big investments in the oil and gas sector can lead to a further path dependency on the oil and gas sector and a down-prioritization of green industries. The energy crisis has stressed the need to prioritize energy more wisely, which would mean that energy from Norwegian hydropower should not be used to electrify the fossil industry. It is unfair that cables from land are being paid for by the taxpayers, when this is merely greenwashing of the oil and gas industry. Further, cables from land may lead to a higher demand for more renewable energy, which can lead to destruction of nature. Even though renewable energy production and technological development is needed, it should not be used to extend and legitimize the production of oil and gas in Norway. If Norway is to act according to principles on global climate justice, they must limit the production of oil and gas rather than greenwash the industry through electrification.

The fundamental and collectively shared issue among all actors in this narrative is to limit the oil and gas sector. The clearest voices in this narrative are the environmental organization Greenpeace and the political parties MDG and R. SV is also working within this narrative, in the manner that they argue to limit the oil and gas industry. Greenpeace is more negative to CCS than all other actors in this narrative. R is the only actor who rejects the use of offshore wind

⁸⁴ Bellona: Da blir det ikke noe ny grønn industriutvikling for eksempel, på nærmeste ti år hvert fall. Det oppfatter jo Finnmark som urettferdig. Og at i spør så har man et stort fokus og ti-talls milliarder skattekroner til karbonfangst og lagringsprosjekter, mens Finnmark får ikke muligheten til å ta i bruk den klimateknologien. Det er også urettferdig.

power. All actors except SV are critical of the global climate effects of electrification of oil and gas production and see electrification of this industry as a form of greenwashing. I will now further explain this narrative, and show how Greenpeace, R, MDG and SV follow and reproduce the Stop fossil fuels narrative:

There is no such thing as green oil: The oil and gas industry must be limited and over time phased out

In this narrative the actors reject the idea that there is any way for the oil and gas industry to become green, as addressed by Greenpeace:

More than 90% of the emissions from oil and gas comes from burning it, and then it does not help very much to decrease the production emissions, because that is anyway a marginal share of the big emissions. It is basically a bad argument, at the same time as Norway very much pushes oil, as we see with the latest report from Rystad [Energy, see background chapter, p. 13], which was ordered by the government, and states that more Norwegian oil and gas will be a good contribution to the world's climate. [...] There are some assumptions there that has no root in reality in our perspective.⁸⁵

Greenpeace criticizes the assumptions in the Rystad report and argues that Norwegian oil and gas cannot be positive for the global climate. Further they question whether the Norwegian state believes itself when arguing that Norwegian oil and gas is the greenest:

I feel that it is pretty obvious in Norwegian oil policy that Norway does not believe in this itself. Norway has not been willing to take initiative for an alliance of oil producing countries to govern oil production in accordance with the 1.5-degree goal. If Norway really believed that we should produce the last oil because we have the greenest oil, then

⁸⁵ Greenpeace: Over 90 prosent av utslippene fra olje og gass kommer fra forbrenning, og det hjelper det pent lite om man kutter produksjonsutslipp, fordi det er på en måte uansett i marginalen på hvor de store utslippene skjer. Så det er rett og slett et dårlig argument, samtidig som det er et argument vi ser at olje Norge pusher veldig senest med den siste rapporten fra Rysstad, som regjeringen har bestilt, som viser at mer norske olje og gass vil være positive for verdens klima, som jo er, der har man laget noen forutsetninger som ikke har rot i virkeligheten etter våre perspektiver.

we should have taken the consequence of it and worked for an agreement with the other oil producing countries⁸⁶.

MDG also questions the way Norwegian politicians argue that there is a massive climate crisis, while at the same time supporting expansion of the oil and gas industry:

It is a weird logic; we all agree that this is the biggest threat to human survival and to the ecosystems of the planet. So, it is like saying that Norwegian burglars always pick open the door rather than breaking the window, therefore we should prioritize export of Norwegian burglars to the rest of the world. How about just not breaking in⁸⁷.

The point is, according to MDG, that Norwegian oil and gas cannot become climate friendly. Trying to make the oil and gas production seem green moves the focus away from actual climate solutions, which is to move away from fossil fuels. R uses a similar argument: “Oil and gas simply is not renewable energy, and can never become so [...] even if they electrify, because the product itself is made of fossil energy. That is absolutely basic knowledge, and I think they [oil and gas companies and politicians] should be more honest on that.”⁸⁸ R questions the timeframe of the oil and gas industry:

Equinor said to Klassekampen [Norwegian left-wing newspaper] that they wish to be the world’s last oil company, so that is their timeframe. And Aker BP recently stated that they will continue producing oil and gas, and that they have found new fields that make it possible for them to produce until 2080. And that is like, I do not believe in setting an end-date for Norwegian oil and gas. [...] Like, it is a very stable energy source, but there is something about tempo, quantum and layout, right? [...] I believe that we now have an economy, that in Norway, in a way, is way too focused on oil and gas, and that the task

⁸⁶ Greenpeace: Jeg føler jo det skinner tydelig gjennom i norsk oljepolitikk at Norge tror jo ikke selv på dette. Norge har jo ikke vært villig til å ta initiativ til en allianse av oljeproduserende land for å på en måte styre oljeproduksjonen i tråd med 1,5 graders målet. Hvis Norge virkelig mente at Norge bør produsere siste rest av olje, fordi vi har den grønneste oljen, så burde man tatt konsekvensen av det og jobbet for en avtale med de andre oljeproduserende landene.

⁸⁷ MDG: Det er jo en rar logikk, all tid man er enig om at dette den største trusselen mot menneskehetens overlevelse og planetens økosystem, så blir det litt som å si at norske innbruddstyver dirker alltid opp døra i stedet for å knuse vinduet, så vi burde jo satse stort på å eksportere norske innbruddstyver til resten av verden. Hva med å da slutte å bryte oss inn.

⁸⁸ R: Olje og gass er bare ikke en fornybar energi, og det kan det aldri bli [...] selv om man elektrifiserer, fordi at det man produserer er fossil energi. Det er bare, det er helt grunnleggende og det synes jeg man kan være litt ærligere på.

forward is not really to shut down, so much so as that new investments should be in something else⁸⁹.

The economy must, according to R, be switched from investments in oil and gas into other sectors. SV is also clear on the need to limit the oil and gas production:

We want to stop allocation of new fields. No new search permissions, no new production permissions. [...] And we are also open for closing down production from some fields. Because the oil companies must regularly apply for renewed operation permits on their operations, and then we are open for decline of some of these in the perspective of the 1.5-degree target⁹⁰.

So, SV is clear on not wanting to search for new fields and not wanting to give new permissions, as well as they are open to shutting down some oil and gas operations. Similarly, both Greenpeace and MDG welcome a debate about limiting the oil industry, by phasing out oil fields. SV also includes international emissions as Norway's responsibility:

Most of the emissions from the oil production do not occur from the production itself, but when using the oil. So, electrification should not be used as an argument to open new fields of oil and gas. [...]. This [electrification] should be used to cut the emissions of today, not to avoid future emissions⁹¹.

To sum up, in this narrative, the actors believe that there is no such thing as green oil. Both the national emissions from production of oil and gas and the international emissions from burning the product are relevant in the discussion. Therefore, Norway has the responsibility to not open new projects and to over time limit their oil and gas production. New investments should not be in oil and gas, but rather in other sectors or industries.

⁸⁹ R: Equinor har jo sagt til Klassekampen at de vil være verdens siste oljeselskap, så det er på en måte tidshorisonen deres. Og Aker BP hadde nylige et utspill om at de skal drive med olje og gass, og har funn, som gjør at de kan drive frem til 2080. Og det er liksom, jeg tror ikke på å sette en sluttdato for norsk olje og gass. [...] Altså, det er en veldig stabil energikilde, men det er liksom, det er noe med både tempo, kvantum og innretning, sant? [...] oppgaven framover ikke egentlig er å legge ned, så mye som at de nye investeringene skal være i noe annet.

⁹⁰ SV: Der vil vi stoppe tildelingen av nye felt. Ingen nye lete tillatelser, ingen nye produksjons tillatelser. [...] Og så er vi også åpne for å stenge produksjonen på enkelte felt. For det er jo sånn at oljeselskapene må jevnlig søke om fornyet drifts-tillatelser på sine anlegg, og da er vi åpne for at noen av dem kan bli avslått i et 1,5 grads perspektiv.

⁹¹ SV: «Det er jo at det meste av utslippene fra oljeproduksjon skjer jo ikke ved selve produksjon, men ved forbruket av oljen. Så elektrifisering skal ikke brukes som et argument for å åpne nye olje og gassfelt, det skal ikke. Dette er noe vi skal gjøre for å kutte dagens utslipp, ikke for å unngå framtidige utslipp»

Electrification is greenwashing of the powerful oil and gas industry

In this narrative electrification is seen as a form of greenwashing of the oil and gas sector, as conveyed by MDG:

Then [with electrification] we do reduce our climate gas emissions, according to the local accounting [...] but the same gas is moved and burned a different place. So, it is this potential to use this measure to pretend like those climate gas emissions do not exist, and that would be a type of greenwashing.⁹²

Similar concerns are voiced by Greenpeace:

Overall, we believe that it [electrification of the oil and gas sector] is a greenwashing measure that is not a satisfactory solution for any climate or environmental issues. [...] Even before the electrification debate took off, the oil industry and the oil friendly parties used the low emissions in production of Norwegian oil and gas as an argument to continue. And that is an argument that we think will be wrongfully strengthened with electrification. In a climate perspective there is nothing that can justify more oil and gas [...] when the IPCC [...] says there is not more room for it if we are to reach the 1.5-degree target.⁹³

The greenwashing of the oil and gas industry seems, according to Greenpeace, to be a way to continue in the same fossil path. R has a similar argument, and they also argue that the industry organization for the Norwegian continental shelf, Offshore Norge, changing their name is part of this greenwashing project:

I believe that those who have been heard [in the debate about electrification] are Norsk olje og gass [Norwegian oil and gas]. And what is ironic is that now they do not call themselves Norsk olje og gass anymore, but Offshore Norge, as part of their own project

⁹²MDG: «Da reduserer vi våre klimagassutslipp i henhold til et regnskap, lokalt, [...] men den samme gassen flyttes og brennes et annet sted. Så er det jo potensialet for å bruke et sånt grep for å late som at de klimagassutslippene ikke finner sted, og det vil jo være en form for grønvasking.»

⁹³ Greenpeace: «Vi mener jo sånn jevnt over at det er et grønvaskings-tiltak som ikke er en tilfredsstillende løsning på noen klima- eller miljøproblemer. [...] Og allerede før elektriseringsdebatten begynte å ta til at det ble brukt som et tiltak i oljeindustrien, så har oljeindustrien og de oljevennlige partiene brukt det at norsk olje og gass har lave produksjonsutslipp som et argument for å fortsette. Og det er jo et argument som etter våre syn feilaktig vil styrkes med elektrifisering. I et klimaperspektiv så er det ingenting som nå kan rettferdiggjøre mer olje og gass [...] når FNs klimapanel [...] sier at det ikke er plass til noe mer om vi skal nå 1,5 graders målet.»

of greenwashing. They used to be against electrification of the Norwegian continental shelf and said that it was not a climate measure. I believe that was a lot more honest. But as soon as it became profitable for them, and they were rewarded for it. Then they started to think of it is a climate measure. That is my analysis. And they are in some sort of alliance with changing governments. Both the Labor Party and the Conservative Party, they have sort of agreed on maintaining the activity. Yes; develop, not liquidate. And a part of that contract is that; okay, we must have some climate measures. And that was very clear in the case of the oil tax relief, where they agreed on; okay, now we are going to massively subsidize Norwegian oil and gas, but we need a band-aid on the wound, therefore, we increase the climate ambition⁹⁴.

R sees the oil industry and the two major parties in Norway in an alliance that works on securing the oil and gas industry, hereby attempting to make the industry seem green so that they can continue their pace. Even though SV does not follow the storyline of this narrative when it comes to electrification as greenwashing, they have no doubt on whether the oil and gas sector uses electrification as an argument for their own legitimation:

So, of course Offshore Norge is in favor of electrification, and of course they wish to contribute to more legitimation of oil and gas production in Norway. We shall not be so naive to believe they mainly do this out of goodwill, but they want to do it to be able to use it as an argument⁹⁵.

Electrification of the oil and gas industry comes at the expense of the nature and mainland industry

An increased need for power due to electrification of oil and gas can lead to more development of on-land renewable energy production and reinforcement of the electricity grid. According to

⁹⁴ R: «Ja, jeg mener at de som har blitt hørt er Norsk Olje og Gass. Og det ironiske er at, nå heter ikke de Norsk Olje og Gass lenger, men Offshore Norge, som en del av grønnvaskings-prosjektet deres. De pleide jo å være mot elektrifisering av sokkelen, og sa at det ikke er et klimatiltak. Og jeg mener de var mye ærligere. Men med en gang det ble lønnsomt for dem og at de ble belønnet for det. Så mener de at det er et klimatiltak. Heheh. Det er min analyse av det. Og de har på en måte, i en allianse da, med skiftende regjeringer da. Både arbeiderpartiet og høyre, klart å liksom bli enige om at vi skal opprettholde aktiviteten. Ja utvikle, ikke avvikle. Og en del av den kontrakten er at ok, vi må ha noe klimatiltak. Altså det syntes jo veldig godt og i den oljeskattepakken, der man ble enig om at: Ok, nå skal vi subsidiere Norsk olje og gass massivt, men vi må ha et plaster på såret, vi øker klimaambisjonene.»

⁹⁵ SV: «Så er det klart at Offshore Norge ønsker jo elektrifisering, og det er klart at de ønsker det for å bidra til en større grad av legitimering av olje og gassproduksjonen i Norge. Vi skal ikke være så naive at vi tror at de først og fremst gjør dette av god vilje, men det ønsker de for å kunne bruke det som et argument».

Greenpeace, people have become more aware of the negative consequences of wind power on land, which also has made them more negative towards cables from land to the oil and gas industry:

There is talk about a need for 10-12 TWh, at least, to electrify the oil industry, [...] and there is another debate that has made this [issue] relevant. That is the debate about wind power on land, and that nature is built down with wind power to electrify the oil, and that is also something I believe have contributed to more opposition⁹⁶.

Greenpeace also added that even though they are negative to the destruction of nature due to electrification of the oil and gas sector, they are not against all on-land wind power. Extra pressure on nature caused by electrification is also a concern for R:

It leads to more pressure on nature, and that is probably something that has led to more parties becoming more critical with time. Because of the fear for a power deficit, there has been built out wind power especially on the West Coast and in Trøndelag. Quite massive build-outs of wind power... And development of the power grid, right, that cuts right through nature⁹⁷.

So, both the build-out of massive wind power projects and the electricity grid are seen as destructive to nature. Similar concerns are voiced by MDG, who are worried that an electricity deficit will lead to a higher demand for new power production and therefore more destruction of nature.

Several of the actors in this narrative also voices concern on how electrification of especially Melkøya can lead to conflict with reindeer herders, as conveyed by R:

I think the only logical consequence of the Fosen ruling is that the wind turbines, at least some of them directly in conflict with the reindeer herding, must be torn down. [...] And

⁹⁶ Greenpeace: Det er jo å snakke om en 10-12 terawatt timer i hvert fall man trenger i strøm til oljeindustrien [...], og det er også en annen debatt som har gjort det aktuelt. Det er jo debatten om vindkraft på land, og man skal bygge ned natur med vindkraft for å elektrifisere olje, og det er også noe som jeg tror har bidratt til økt motstand da.

⁹⁷ R: «Så øker det presset på naturen da, og det er nok det som gjort tror jeg at mange andre partier og har blitt mer kritiske etter hvert. At på grunn av at man er redd for kraftunderskudd, så har man fått særlig på Vestlandet og egentlig Trøndelag vindkraftbygging. Ganske massiv vindkraftbygging... og nettbygging sant, som skjærer tvers gjennom naturen.»

you will get the same with Melkøya with that Skidi-power line, which will go through [herding areas], when it is upgraded. And if one is to build out more on-land wind power in Finnmark, for more power production ... Supplying Melkøya with power will take more than 3 TWh [...] every year. Yes, which will lead to the same types for conflicts.⁹⁸

Both the increased need for power production and the power line from Skidi to Hammerfest which is needed to electrify Melkøya can lead to conflicts. Indigenous rights are mentioned more by the actors in this narrative than in the other narratives.

All actors in this narrative also have clear concerns for the mainland industry, as conveyed by SV, when asked about why they have become more negative towards cables from land:

I think that it is a lot because of the power situation, which has developed on the mainland, where there is more scarcity of electricity. And then one has to prioritize the use of electricity more. And then one has wished to use it for the mainland industry, rather than for the oil companies⁹⁹.

Similarly, Greenpeace believes the electricity should be used to create green industry jobs:

Now we are facing an electricity crisis, we are moving towards electricity deficit, then it is extra pressing to consider where to use the electricity, and then we in Greenpeace strongly believe that we should use the renewable electricity resources to create green jobs, rather than to greenwash Norwegian oil and gas production¹⁰⁰.

R worries that prioritizing electricity to the oil and gas industry in effect is a controlled liquidation of mainland industry, which would lead to job losses and make it even harder to phase out the oil and gas industry:

⁹⁸ R: «jeg mener den eneste logiske konsekvensen av den Fosendommen er at de vindturbiner, hvertfall en del av de, som er i direkte konflikt med reindriften, må rives [...] Og du vil få det samme med Melkøya med den Skadi-linjen, at den vil gå, når man skal oppgradere den. Og hvis man skal bygge ut mer vindkraft i Finnmark da, for å øke kraftproduksjon ... Det vil jo ta over 3 terawatt [...] årlig, å forsyne Melkøya med kraft. Ja, det vil komme, du vil få de samme type konfliktene!»

⁹⁹ SV: «Jeg tror nok at det er mye på grunn av den kraftsituasjonen som man ser etter hvert utvikle seg på fastlandet. Hvor det blir større knapphet på strøm, og hvor man da må prioritere bruken av strøm mer. Og at man da har ønsket å bruke det til industrien på land, fremfor oljeselskapene.»

¹⁰⁰ Greenpeace: «nå står vi overfor en strømkrise, det går mot strømmangel, og da er det ekstra presserende å vurdere nytten av hvor vi bruker strømmen, og da har vi i Greenpeace mye mer troa på å bruke fornybare strømrerurser til å skape grønne arbeidsplasser, i stedet for å grønnvaske norsk olje og gassproduksjon.»

To be completely honest, it is part of a bigger, for me at least, a bigger debate about what type of workforce we are to have in Norway. Do we want local communities that are connected to industry workplaces, or are we just going to shut it down?¹⁰¹

So, according to R, the debate about electrification is linked to what type of societies and communities we want, and the survival of mainland industries and workplaces. Overall, the actors in this narrative worry that electrification will lead to destruction of nature, negatively affect reindeer headers, and lead to losses of mainland industry.

Oil and gas path dependency

The actors in this narrative believe electrification will lead to a path dependency of the oil and gas industry. As MDG explains: “It is like when the energy of the future is not fossil, then we lock ourselves to the solutions of the past”.¹⁰² R uses a similar argument, arguing that the oil friendly politicians end up making the Norwegian society more and more dependent on the oil and gas industry, although claiming different:

It is the opposite of what the politicians say they will do in celebratory speeches; that now we have to go for new climate friendly industry, and then through electrification of the continental shelf, they do really put all the eggs in one basket. [...] That they prioritize massively the Norwegian oil and gas industry. That is sort of what they mean [...] with “develop, not liquidate”. That is what it’s about ... We reduce the emissions on the Continental Shelf, and then we extend the lifespan of Norwegian oil and gas¹⁰³.

While R worries that electrification will extend the lifespan of Norwegian oil and gas, MDG sees electrification as being only a short-term solution:

¹⁰¹ R: «Før å være helt ærlig, så det er en del av en større, for meg da i hvert fall, en større debatt om hva slags arbeidsliv vi skal ha i Norge. Om vi skal ha lokalsamfunn, som er knyttet til industriarbeidsplasser, eller om vi bare skal legge det ned egentlig.»

¹⁰² MDG: “Det er jo det at når fremtidens energi ikke er fossilt, så låser vi oss da til fortidens løsninger.»

¹⁰³ R: «Det er det motsatte det politikerne sier de skal gjøre i festtaler, at nå må vi satse på ny klimavennlig industri, og så gjennom elektrofiseringene av sokkelen, så setter man egentlig alle eggene i en kurv. [...] At man satser massivt på norsk olje og gassindustri. Det er jo det på en måte de mener med [...] «utvikle ikke avvikle». Det er egentlig det... Vi kutter utslippene på sokkelen, og så forlenger vi levetiden til norsk olje og gass.»

When we have limited resources, energy resources, why should we risk using them on an industry that we know is going down, instead of using those resources in an industry that we try to get up? Wouldn't that be a more long-term perspective, instead of thinking that; what can we do in the short term to very rapidly decrease Norwegian climate emissions? Instead of thinking; what is most important for handling the climate crisis and nature crisis long term? [...] And thus to rather find other ways to decrease the climate emissions on the Norwegian continental shelf¹⁰⁴.

Further MDG argues that because Norway is stuck in an oil and gas economy, we are lobbying in Europe to make other countries continue using our oil and gas:

Let us lobby desperately in Europe for them to continue using Norwegian oil and gas, which is to lobby directly against our own climate goals, and nature goals. And that is a bit wrong, but we get so desperate, because we have wasted a lot of money on this here in Norway. So, then we put pressure on ourselves, and are going in a direction, which when we talk to all our collaboration partners, is the opposite direction of where everything else is heading really. And that is an extra danger, we build a lot of infrastructure for the oil and gas business¹⁰⁵.

According to MDG, we have locked ourselves to one solution, and try to lobby for this solution in Europe, because oil and gas needs to be attractive in the future for our investments to be worth it.

Offshore wind and CCS paid by the oil and gas companies, without negative effects on nature

All actors in this narrative see either CCS or electrification through offshore wind power as desirable or acceptable, although they are less enthusiastic about this than to actors of the other

¹⁰⁴ MDG: «Når vi da har begrenset med ressurser, energiresurser, hvorfor skal vi risikere å pense de ut til en industri som vi vet er på vei ned, og ikke pense de ressursene inn i en industri som vi prøver å få opp? Vil det ikke være et mer langsiktig bilde, i stedet for å tenke da, hva kan vi på kort sikt få norske klimagassutslipp ned med veldig rast? I stedet for å tenke sånn, hva er det viktigste for å håndtere klimakrisen og naturkrisen på lengre sikt [...] Og så heller finne ut av hvilke andre måter kan vi få ned de klimagassutslippene på norsk sokkel.»

¹⁰⁵ MDG: «Ia oss lobby-ere helt desperat ned i Europa, for å få de til å fortsatt bruke norsk olje og gass, som jo er å lobby-ere direkte imot vår klimamål, og naturmål, og det blir jo litt feil, men vi blir jo så desperate, fordi vi vet at vi har kastet masse penger etter dette her i Norge. Så da legger vi jo press på oss selv, i å gå i en retning som vi egentlig, når vi snakker med alle våre samarbeidspartnere, er den motsatte retningen av der alt kommer til å gå egentlig, og det er en ekstra fare da, vi bygger veldig mye infrastruktur, for olje og gass-virksomheten da.»

narratives. The actors question how the offshore wind power production might influence nature and believe the oil companies should pay for the projects themselves. There is some uncertainty from Greenpeace about electrification of the oil and gas sector. Still, they believe development of offshore wind can make it acceptable. However, they are still critical of how much money the state uses to compensate the oil and gas companies:

We can go as far as saying that if electrification is used to drive installation and development of offshore wind power, then it would be, [...] perhaps, acceptable. And then there are of course some criticisms remaining, which is that the state has covered so much of the bill¹⁰⁶.

Further, Greenpeace argues that the money spent by the state on electrification of the oil and gas sector could have been used to reduce emissions in other sectors, without more investments in the oil and gas sector. SV is clear that the oil and gas industry should pay the cost of the investments themselves, and that they will not do it unless imposed on them:

But this is about the willingness to impose it on the oil companies. We see for example Trollvind, which will be producing in 2027 ... quite a big project. That is totally possible according to Equinor. Then it also must be possible to impose this on other oil companies. But you cannot get away from the need to be willing to impose it on them¹⁰⁷.

It is more costly for the oil and gas companies to invest in offshore wind power than to get cables from land, thereby electrification with offshore wind power must according to SV be imposed for the oil companies to take responsibility, because profit is ultimately the most fundamental priority for the companies. All actors in this narrative see offshore wind power production as needed, except R. When asked why they are against development of an offshore wind industry in Norway, R reply: "It was nature, fisheries and bird life particularly that is... and the precautionary principle. [...] There have not been proper impact assessments¹⁰⁸». Their worries

¹⁰⁶ G: Vi strekker oss til at om man får brukt elektrifisering til å drive installering og utbygging av havvind, så er det da, [...], kanskje akseptabelt. Og så er det jo selvfølgelig noe av kritikken som likevel gjenstår, det er jo at staten har dekket så mye av regninga

¹⁰⁷ SV: «Men her handler det om villigheten til å pålegge oljeselskapene til å gjøre det. Vi ser som Trollvind, som skal være opp i 2027 ... ganske stort prosjekt. Det er fullt mulig å få til ifølge Equinor. Da må det være mulig også å pålegge andre oljeselskap å gjøre dette. Men du kommer ikke utenom at du må være villig til å pålegge dem å gjøre det.»

¹⁰⁸ R: «Det var natur, fiskeri og fugleliv da særlig som er ... og at det føre-var-prinsippet. [...] Det er ikke konsekvens-utredet skikkelig.»

for the effect on nature, fisheries and birds, as well as their concern towards the process are similar to concerns voiced by MDG. One of MDGs main worries is that offshore wind power, as well as CCS, can be used as an excuse to not take further climate action:

So, that is the issue with measures such as CCS, offshore wind power and those types of things, that it also can be used as an excuse to do nothing. Then one can say; okay, we agree about CCS now, nice, let's go, but then there is something that needs to be developed, and it takes time and blah-blah-blah, so it can become some kind of resting pillow [the word *sovepute* in Norwegian is a figure of speech referring to an excuse to not do anything]. And then one sits there and still emitting. And it is the same with the venture into offshore wind power, which has two diametrically opposed pitfalls. One, which is the same as with CCS: that one says that one is venturing into offshore wind power, and then one does not really end up venturing into offshore wind power [...]. Or that one says that; we are going to venture into offshore wind power, and then venture into offshore wind power in the same manner as with wind power on land; now we are going to find all the most vulnerable areas, all the bird migration routes, all the areas of vulnerable sea life, and then go in with a lot of windmills right there. So, one ends up doing it in the worst possible manner. So, that is the downside with all the solutions that we in principle are in favor of: in practice we can end up with projects that we end up being against, or that it is used as an excuse for doing something at some point, but then it never happens¹⁰⁹.

So, both CCS and offshore wind power can be used as false solutions, at the same time, MDG wants solutions to decrease emissions from the oil and gas sector now. Melkøya is an example, where MDG view CCS as desirable: "That [Melkøya] is an example of such a facility, which we typically believe could have CCS, while building out CCC there, this could also help build up a

¹⁰⁹ MDG: Så det er problemet med ting som CSS, Havvind og den type ting, er at man kan også bruke det som unnskyldning for å ikke gjøre ting. Så kan man si at, ok, nå blir vi enige om CSS, sånn fint, kjør på, men det er noe vi må utvikle noe greier, og dette tar tid og bla bla bla, så det kan vel bli noe sånn sovepute da. Og så sitter man der og får disse klimagassutslippene. Og det samme med Havvind satsingen, som da har to egentlig diametralt motsatte fallgruver man kan gå inn. Den ene som er det samme som CCS at man sier at man satser på Havvind, og så satser man ikke på Havvind [...]. Eller at man sier at nå skal vi satse på Havvind, og så satser man på Havvind på samme måte som man satser på landvind; nå skal vi finne alle de sårbare områdene, alle fugletrekkene, alle de sårbare områdene for sjølivet, og så dunder vi på masse vindmøller akkurat der, så gjør man det på den verst tenkelige måten liksom. Så det er jo ulempen med at de løsningene vi da i prinsippet egentlig er for, fort kan det hende at vi i praksis da ender opp med prosjekter som vi da enten er imot, eller så blir det da brukt som en sånn unnskyldning for at vi skal gjøre noe på et eller annet tidspunkt, men så skjer det aldri.

CCS industry¹¹⁰.” (MDG). SV agrees that the emissions from Melkøya need to decrease, but that the development of the power line from Skaidi to Hammerfest is not desirable. SV is clear on how Equinor can afford the more expensive solutions: “Equinor released a record result for 2022 a few days ago. That shows how Equinor will also be able to pay for sea cables and CO₂-capture and storage.¹¹¹” According to SV, the big economic muscles of the oil and gas companies should be used to impose solutions that could be more expensive for them but will have socially valuable effects. When it comes to CCS, Greenpeace is the most negative actor, and is for example against both CCS and electrification of Melkøya:

When it comes to Melkøya, we think that it is not good to electrify it. [...] An alternative to electrification is to stop Melkøya in 2030, when the current operating concession expires. Then it is possible to completely stop the emissions. If one is to use the arguments of the oil industry, then it sort of makes sense, since LNG has the highest emissions¹¹².

Greenpeace also argues that Europe would have time to find green energy sources, if Norway announced now that the LNG from Melkøya will no longer be exported in 2030. This would help Europe’s transition by adding pressure on finding other energy solutions.

Electrification and CCS of oil and gas are seen as possible ways to decrease climate emissions before 2030, but the actors do not accept cables from land. The actors in this narrative are also more critical of CCS and offshore wind power than the actors in the two previous narratives. These measures should not lead to further dependency on the oil and gas industry, nature must be taken into account, and the oil and gas industry should pay for the measures themselves.

Climate justice – Norway must limit the oil and gas industry

¹¹⁰ MDG: Den et eksempel på en sånn anlegg, som vi mener man typisk da kunne ha hatt CCS på, i kombinasjon med å bygge ut der så bygger det opp CCS-næringen.

¹¹¹ SV: Nå kom Equinor med et rekordresultat for 2022 for noen dager siden. Det viser at Equinor også vil ha mulighet til å betale for sjøkabel og CO₂-fangst og lagring.

¹¹² Greenpeace: «Når det gjelder Melkøya, så tenker vi at det er bra å ikke elektrifisere det. [...] Et alternativ til elektrifisering, er jo også stanse Melkøya i 2030, når den nåværende driftskonstruksjonen løper ut. Da får man stoppa utslippene helt. Om man skal bruke oljenæringens argumenter, så gir det jo på en måte mening, siden LNG er det som har de høyeste utslippene.»

In this narrative, climate justice implies that Norway limits their oil and gas industry. It is unjust that Norway, with our historical emissions and wealth are finding ways to prolong the fossil industry. As conveyed by Greenpeace:

If there is someone with the best prerequisites to begin the transition away from oil and gas to renewable, and in a climate justice perspective, then that is Norway. We have the resources and should just get started. Instead, we see that Norway and the oil industry uses electrification as an argument to continue the production in Norway, which is the opposite of concepts of global climate justice. Like, if we are to take climate justice seriously, then Norway would have to, like, phase out all oil production by 2034. [...] And not even in Greenpeace we are that radical in our demands, [...] but that is sort of where we should have been to take our climate justice responsibility in the efforts of decreasing climate emissions. And as I have said, instead we see that Norway uses electrification as an argument to continue production.¹¹³

Norway has, according to Greenpeace, the possibility to move away from fossil fuels and into renewables, and this would be justice. MDG has similar reflections:

Also with the global perspective, that we sit here and decide on what to happen to these resources by some kind of coincidence, because we randomly live close to them. While these are resources that were created on this planet during millions of years, and it is randomly nearby us. And all the rest of the world is affected by what is done with those resources, while we are the only ones getting the money that comes from selling those resources. [...]. So, in this there are quite a lot of climate justice related issues. And a way to connect this to the electrification issue, is that this is infrastructure that potentially can

¹¹³ Greenpeace: «Er det noen som har de beste forutsetningene for å starte omstillingen bort fra olje og gass og til fornybart, og i et klimarettferdighetsperspektiv så er det jo Norge. Vi har ressursene til det, og burde bare begynne med det. I stedet så ser vi at Norge og oljenæringa bruker elektrifisering som et argument for å fortsette produksjonen i Norge. Som jo går tvert imot begreper om global klimarettferdighet. Altså sånn, om vi skal ta klimarettferdighet på alvor, så måtte Norge, altså sånn, så skal vel Norge fase ut all oljeproduksjon innen 2034 [...] Og vi, selv ikke Greenpeace er jo så radikale i kravene våre, [...] men det er på en måte der lista ligger da for om vi tar vårt klimarettferdige ansvar i arbeidet med å kutte klimagassutslipp. Og som jeg da har sagt i stedet så ser vi at Norge bruker elektrifisering som et argument for å fortsette produksjonen.»

contribute to a prolonged oil age, which is not necessarily the best investment for the world, from a global perspective¹¹⁴.

MDG sees it as random that the Norwegian society has sovereignty over the oil and gas, and that Norway can profit from these fossil resources. Exploiting these resources has global consequences. Electrification, according to MDG, is a way to make this injustice last longer. R argues that Europe needs Norwegian gas in the current situation, however, electrification and new investments in the oil and gas sector are not a measure for the current situation, but the future:

What we are talking about with the electrification projects and with new exploration permits and all that is production, not only in 10, but also 20, 30, 40 years ahead. And this is a different time horizon, and I believe we must take that more into account. So, I think there is no climate justice in the electrification of the continental shelf.¹¹⁵

As is illustrated by R, pointing out the time frame of the planned exploration and electrification projects, electrification of the oil and gas sector is not seen as to be in line with global climate justice in this narrative, because it prolongs the fossil age.

Electrification: too expensive and inefficient

Narrative: *The Norwegian oil and gas sector is nationally and internationally important.*

Norwegian oil and gas are produced with good standards related to climate and nature. The Norwegian oil and gas industry has several decades of production ahead, yet electrification is not a satisfactory solution for the development of the sector. The climate effect is too uncertain, and the measure is too expensive. Cables from land have negative effects on energy prices, affecting both consumers and the mainland industry. Electrification is highly substituted by the state, which is undesirable. The tax money should be used more wisely. Technological solutions

¹¹⁴ MDG: «Også er det det med det globale perspektivet, at vi sitter her og bestemmer hva som skal skje med disse ressursene, av en slags rent tilfeldighet, fordi vi tilfeldigvis er i nærheten av der de er. Mens det her er ressurser som har blitt lagt ned på planeten i millioner av år, og så er det tilfeldigvis vi som sitter der. Også er det hele resten av verden rammes av hva som skjer med de ressursene, mens akkurat vi får alle pengene som kommer inn for å selge de ressursene. [...] Så der er det en del klimarettferdighets-type ting, og så blir vel måten man kan koble på den elektrifiseringen på, vil jo være at dette er jo da infrastruktur som potensert da kan bidra til å forlenge oljealderen, som ikke nødvendigvis er verdens beste investering for verden globalt sett.»

¹¹⁵R: «Men det vi snakker om med de elektrifiseringsprosjektene og med nye letetillatelser, og alt det, er jo produksjon, ikke bare 10, men også 20, 30, 40 år frem i tid. Og da er du på en annen tidshorisont, og det er den jeg mener vi må ta større hensyn til, så jeg synes ikke at det er noe klimarettferdighet i at vi skal elektrifisere sokkelen.»

like CCS and offshore wind power can create win-win solutions for the mainland industry and the industry offshore, but only if they are profitable. Moreover, it is possible to buy emissions from the EU emissions trading system, and in this way efficiently contribute to emissions reduction in Europe. Norway can take climate responsibility while still developing the Norwegian oil and gas sector without electrification.

FrP is the only actor in this narrative, they stand out as they are positive to development of the oil and gas sector, but negative to electrification. I will now further explain this narrative, and show how FrP follows and reproduces this narrative:

Alone in the debate – in favor of an oil and gas industry for the next decades, but skeptical of electrification.

FrP explicitly states to see themselves as a lonely voice in the debate about electrification of oil and gas operations. For a while, they have been the only actor in favor of further development of the oil and gas sector, but against electrification. However, they believe more actors are starting to understand their concerns:

I feel more and more [actors] are seeing the issues. Those who have supported us [in the skepticism of electrification] until now, they are the ones who want to shut down the sector. We are a party who are cheering for the sector and want the petroleum industry to stay with us for many decades into the future. Those that I talk to believe it is both nationally and internationally important for Norway to stay a petroleum nation. We see this especially with Russia [their war in Ukraine] and what significance it [Norwegian gas] has for global security¹¹⁶.

FrP is skeptical of the climate effect of the electrification:

We are very skeptical of the electrification of the Norwegian continental shelf [...] as a climate measure. And what we are skeptical about is of course electrification with cables

¹¹⁶ FrP: «jeg føler jo at det er flere av flere som nå ser problemstillingen da. De som har støttet oss til nå, er jo de som vil legge ned sektoren. Vi er jo et parti som heier på sektoren og ønsker å ha petroleums-næringen med oss i mange tiår enda. De jeg prater med mener at det er både nasjonalt og internasjonalt veldig viktig at Norge er en petroleums-nasjon. Det ser vi jo spesielt med Russland og hvilken betydning dette har for den globale sikkerheten.»

from land as a climate measure. [...] We are skeptical of how much it will benefit the climate.¹¹⁷

When asked more about the background for this skepticism, Frp elaborates on how the research on the climate effect is biased. They use the example of the 2023 report from Thelma Consulting, [See background p 10] which they see as commissioned work:

The one screaming will quickly be met with an answer, and obviously, if you ask whether it is positive to electrify the Norwegian continental shelf, then the answer to that may be yes. [...] But what if the question was: is the most climate friendly way to use Norwegian electricity to electrify the Norwegian continental shelf? Then the answer would clearly be no. And they have not examined this. And therefore, this report has little worth as it only answers what has asked.¹¹⁸

The research on the climate effect of electrification of the oil and gas sector does not question the best use of electricity.

Electrification is too expensive – the state pays too much

Frp argues that too much of the electrification is paid by the taxpayers, and that the oil and gas sector is economically favored over the mainland industry:

We have a lot of industry on land. [...] The state does not facilitate for financing their emissions reduction, like one does with petroleum. And the petroleum sector has a tax regime that entails that if they electrify the continental shelf, then they pay ... with the new tax regime now ... down to 22% of the expenses themselves. The rest is paid for by you and me. And therefore, they say that it is profitable and good for business, but it is not socioeconomically sensible.¹¹⁹

¹¹⁷ Frp: «Altså vi er veldig skeptiske til å elektrifisere norsk sokkel på bakgrunn av klima ... som et klimatiltak. Og det som vi er skeptiske til er selvfølgelig er å elektrisere med kraft i fra land som et klimatiltak. [...] Vi er jo skeptiske til klimagevinsten.»

¹¹⁸ Frp: «Den som roper får jo fort svar, og det er klart, hvis du spørre om det er positivt å elektrifisere sokken, så kan jo gjerne svaret være ja. [...] Men hvis spørsmålet hadde vært, er den mest klimavennlig måten å bruke norsk kraft på å elektrifisere sokkelen, så vil jo det svaret være tydelig nei. Og det har ikke de utredet. [...] Og derfor så mener jeg at den rapporten der er lite verdt med at den svaret opp det som man spør.»

¹¹⁹ Frp: «Vi har jo masse industri på landet. [...] Staten driver ikke å legge til rette for at de skal få lov til å finansiere deres utslippsreduksjoner, sånn som man gjør på petroleum. Og petroleumssektoren har et skatteregime, som gjør at hvis de elektrifiserer sokkelen, så betaler, med det

High energy prices and workplaces on land – offshore wind power and CCS can be a win-win solution

Two main reasons why Frp is against cables from land, is that it will lead to higher energy prices and less value creation:

Now we lack power on the mainland. Then there are two issues: it is of course the prices of power on land, which is way too high. Then we take away even more power to electrify, so that the price becomes even higher. But even worse, we wish that the power was used in Norway, to create value and workplaces. Power gives less value creation through electrification of the continental shelf than it would have done if we had used it for battery factories, data storage or other industries.¹²⁰

The electricity used for electrification should rather be used to create value and jobs. Frp argues firmly against cables from land but speaks positively about offshore wind and CCS projects. They argue that offshore wind projects are particularly favorable if they lead to win-win solutions:

We have a couple of projects on offshore wind power right now that are in fact kind of pioneering projects in Norway [...] And if we were to get some projects related to the continental shelf, then that could be a positive experience, especially if we manage to make it win-win, so that the industry gets assignments while the petroleum industry gets access to power.¹²¹

Further, Frp argues that it is important that the projects become economically viable.

nye skatteregime nå, så er det nok gjerne ned i 22% som de betaler selv. Resten betaler jeg og du. Og derfor så sier de at det er bedriftsøkonomisk lønnsomt, men det er ikke samfunnsøkonomisk å gjøre det.»

¹²⁰ Frp: «nå har vi jo mangel på kraft på land. Da er det to ting: Det er jo selvfølgelig prisen, på kraft på land som er altfor høy. Så tar vi vekk enda mer kraft og elektrifiserer, så vil jo den prisen stige enda mer. Men gjerne enda verre er at vi ønsker jo at den kraften skal bli brukt i Norge for å skape verdier og arbeidsplasser. Og da sier vi jo at den kraften her gir mindre verdiskapning, gir mindre arbeidsplasser med å elektrifisere sokkelen, enn den kunne gjort hvis vi for eksempel hadde brukt den til batterifabrikker, datalagring eller annen industri.»

¹²¹ Frp: «Vi har jo et par prosjekter som går på havvind nå, som jo egentlig er litt sånn pionerprosjekter i Norge. [...] Og kunne vi da i tillegg fått en del prosjekter knyttet til sokkelen, så kunne jo det vært en positiv erfaring, og ikke minst om vi også klarte å gjøre det vinn-vinn med at næringen får tilgang til oppdrag, og petroleumsnæringen får tilgang til kraft.»

We will meet the international climate commitments, but the world will not end in 2031 anyway

There are many ways for Norway to meet the international climate commitments, and FRP believes Norway will manage to do so: “We will have no issue meeting Norway's international climate commitments completely independent of the Norwegian continental shelf.”¹²² According to Frp, one of the ways to reach Norway's international climate commitments without diminishing the oil and gas industry is through the EU emission trading system. Buying quotas will cost less money and be a more efficient path for emission reduction. Further, Frp argues that Norway must decrease its emissions and the process of emission reduction has already started, but if we do not make the 2030 target on time, it will not be the end of the world:

We need to change our ways, there is no doubt. And then there is an obsession with 2030, which, I think ... That is okay, it is the Paris agreement, which one had 15 years to meet. But the world will not end on the first of January 2031. So, if we have not reached all the goals, then I still believe we have reached a good start. And then we just have to hope that we will manage to reduce the rise in temperature as much as possible¹²³.

Climate justice related to electrification of the oil and gas operations

When asked about electrification of oil and gas operations related to climate justice, Frp does not see electrification of oil and gas operations as directly related to climate justice. They point to international climate funds to compensate people affected by climate change. However, Frp also points out that it is difficult to make everything perfectly just:

Like, we have cooperation with Europe, and then I guess you can say that Europe has bigger commitments to decrease emissions than other regions, given their historical background. And then there are probably those who believe that they should have been better off. But we have created some climate funds that try to correct this a bit, so that

¹²² Frp: «Altså Norge sine internasjonale forpliktelser har ikke vi noen problemer med å nå, helt uavhengig av norsk sokkel.»

¹²³ Frp: «Vi er nødt til å endre måten vi driver på, det er ingen tvil om. Og så er det blitt veldig opphengt til 2030. Det tror jeg for så vidt... det er nå helt greit, og det er jo Paris-avtalen, og det 15 år som en hadde på seg. Men verden går ikke under første januar 2031. Så om vi ikke har klart å nå alle målene, så tror jeg at vi har fått en god start. Så må vi bare håpe på at vi gjerne klarer å dempe temperaturøkningen så godt som mulig.»

especially those who are affected by the consequences of climate change will be compensated. But if we were to measure justification by every inch, then I think it would become difficult. It is anything but justice that we sit on a green branch in a green part of the world and are doing terribly well, while we know there are many people in this world that are suffering [...] Life will never be just, not life on earth at least¹²⁴.

Discussion

In my analysis, I identified four narratives that affect the debate about electrification of oil and gas production, and through the identification of narratives I have explored views and arguments in the debate. Thus, I inquired into my RQ1 and sub-RQ1.1:

RQ1: “Which narratives affect views and policies on electrification of the oil and gas operations in Norway among actors from the political parties, climate organizations and the oil and gas industry?”

Sub-RQ 1.1: “What are different actors' views on the electrification of Norwegian oil and gas operations and what are their main arguments?”

The findings from my analysis are summed up in table 3:

Narrative and actors	Premises	Main argument	Conclusions
Development, not liquidation of the oil and gas industry (Ap, H, Sp, Equinor, AOG)	The Norwegian oil and gas sector is fundamental for the Norwegian society.	Politicians and the oil and gas industry can together find solutions to reduce the emissions.	Further development and technological progress in the oil and gas sector is needed to reduce emissions, cables from land are needed to meet the 2030-goals.
Liberal ecomodernism	Norway must meet the global climate goals, thus	Norway must invest in technological solutions and implement market	The oil and gas industry must be obligated to

¹²⁴ FrP: «Atså vi er jo med i et samarbeid med Europa, og så kan du vel si gjerne at Europa har en større forpliktelse overfor andre regioner sitt historiske på å kutte utslippene da. Så det er jo nok sikkert de som vil hevde at de bør komme bedre ut av det. Men der har vi jo lagd noen klimafond, som skal prøve å rette litt opp i dette, at spesielt de som vil bli utsatt for konsekvenser av klimaendringene, skal kunne få det kompensert. Og begynne å millimeter rettfærdiggjør, da tror jeg at det blir vanskelig. Det er alt annet enn rettfærdig at vi sitter på en grønn grein i en grønn verdensdel og har det fryktelig godt, mens vi vet at det er veldig mange i denne verden som har det vondt og vanskelig. [...] Rettfærdig blir aldri livet og ikke livet på jorden i alle fall.»

(ZERO, Bellona, V, SV)	Norwegian emissions must rapidly be reduced from all sectors, including the oil and gas sector.	mechanisms to reduce emissions from the Norwegian continental shelf. Visionary solution seeking is needed.	implement offshore wind power or CCS for fast emission reduction.
Stop fossil fuels (Greenpeace, R, MDG, SV)	The Norwegian oil and gas sector must be limited and over time phased out.	Electrification is greenwashing of the industry.	Norway must limit the production of oil and gas rather than greenwash the industry through electrification.
Electrification: too expensive and inefficient (Frp)	The Norwegian oil and gas sector is nationally and internationally important.	Norwegian oil and gas are produced with good standards related to climate and nature.	Norway can take climate responsibility while still developing the Norwegian oil and gas sector without electrification.

Table 3: A sum up of the narratives in the debate about electrification of oil and gas production.

The sub-RQ 2.1, “Do the actors view the electrification of oil and gas operations as greenwashing or an effective emission reduction measure?” was also inquired in my analysis and is summed up in Table 4:

Narrative	Electrification: Greenwash or an effective emission reduction measure?
Development, not liquidation of the oil and gas industry	Effective emissions reduction measure
Liberal ecomodernism	Effective emissions reduction measure
Stop fossil fuels	Electrification greenwashes the oil and gas sector
Electrification: too expensive and inefficient	The measure is not an effective emission reduction measure, but not necessarily greenwash.

Table 4: A sum up of views related to electrification as an effective emission reduction measure or greenwash of the oil and gas industry.

I will now further discuss the narratives that I found in my analysis and relate these to my theoretical framework, while exploring the current power dynamics in the debate. First, I will look at the debate in relation to winners and losers and then global climate justice. After this I will look at power relations in the debate by looking at electrification as a socio-ecological fix. Finally, I will relate the narratives to the discussion between modernism and degrowth.

Actor galleries and winners and losers

The Sub-RQ 2.2: “Who are, according to the actors, the winners and losers of the electrification of the oil and gas operations in Norway?” has not been tackled explicitly so far in this thesis. To answer this, I will first discuss the actor galleries of the narratives. In a narrative the actor gallery can have similarities to typical fictional characters, such as heroes, villains, and victims (Benjaminsen & Svarstad, 2021, p. 69). I will identify what can be seen as heroes, villains and victims in the different narratives. Then I will discuss who can be seen as winners and losers in each of the narratives.

In the Development, not liquidation of the oil and gas industry-narrative, the oil and gas industry can be seen as a hero. They are willing to reduce emissions, bring wealth to the nation and provide energy security to Europe. Actors opposing electrification can be considered the villains, as they want to limit the oil and gas industry. The victims of electrification can possibly be households and mainland industry. The victims, if there were no further electrification, would be people affected by climate emissions from the production of Norwegian oil and gas, as well as people in developing nations, who could have benefited from the import of technological developments from the Norwegian industry. If the oil and gas sector were limited, the victims would also be people depending on the energy security of Norwegian oil and gas, and people working in the sector. Thus, the winners of electrification of oil and gas, according to this narrative, would be the Norwegian state and society, people benefitting from emission reductions and people working in the industry. Electrification would also lead to winners among those who benefit from the technological developments from electrification. It is not too clear who would lose due to electrification of oil and gas according to this narrative, even though households and mainland industry could be seen as losers if the oil and gas industry takes up too much of the available electricity.

In The Liberal ecomodernism-narrative, the heroes would be people who work for rapid emissions reduction measures, while the victims would be people affected by climate change if emission reduction is not carried out. One example of a villain in this narrative would be actors who oppose the democratic liberal market, as well as actors that do not want to decrease emissions. The winners of electrification of oil and gas operations, according to this narrative,

would be the climate and people who benefit from Norway reaching the 2030-target, while losers could be households and mainland industry.

In the Stop fossil fuels-narrative, the villain can be identified as the oil and gas companies, as well as political parties that do not support policies to limit the oil and gas production. The heroes are actors that work for limitation of the oil and gas operations, while the victims are people globally that are negatively affected by the emissions from Norwegian oil and gas production and export. Victims can also be seen as renewable industries that are deprioritized when huge investments go to the oil and gas industry. Further, in the case of electrification of Melkøya, Sami reindeer herders can be seen as victims. The victims of electrification would also be people affected by the expansion of the grid and new power production, which affect people and nature. Thus, the winners of electrification would be the oil and gas industry, while the losers would be alternative industries, as well as nature and people affected by the expansion of new energy and expansion of the grid. People globally who suffer from Norwegian oil and gas emissions would also be the losers.

In the Electrification: too expensive and inefficient-narrative, the villains are both actors who wish to limit the oil and gas production, and actors who spend the taxpayers' money on electrification measures on the Norwegian Continental Shelf. The hero is the oil and gas industry, which already takes environmental responsibility, and is important for the Norwegian economy. Victims of electrification are the taxpayers. The losers of electrification are households, who get higher electricity prices, and taxpayers, who pay for the companies' electrification, while the winners are the oil and gas companies. However, in this narrative they argue that profitable electrification with offshore wind power can cause a win-win situation, where both the mainland industry can get assignments and the oil and gas sector can get electricity.

According to Robbins (2020), political ecology emphasizes that winners and losers are not found in different cases at random, they are repetitive and persistent. Political ecology untangles

structures that keep producing the same losers and winners (Robbins, 2020, p. 88). With this perspective, it is important to include the historical and institutions context, when identifying winners and losers. I would argue that the Development, not liquidation of the oil and gas industry-narrative is a leading narrative in the debate. Leading or hegemonic discourses are shared among powerful actors (Benjaminsen & Svarstad, 2021, p. 41). 45% of the oil and gas operations are already electrified. However, the narrative is currently challenged, due to the energy crisis, which makes it more difficult to argue for cables from land to the oil and gas operations. Still, the Government just recently approved electrification of Melkøya. When looking at this in relation to winners and losers, it seems like the oil and gas industry keeps winning, while people affected by the expansion of the grid and nature keep losing. The Development, not liquidation of the oil and gas industry-narrative and the Liberal ecomodernism-narrative share the same understandings of electrification of oil and gas as an effective emission reduction measure. These two narratives having the same “knowledge” of the effect of electrification, makes it possible for the two narratives to discuss the issues and influence each. The Development, not liquidation of the oil and gas industry, takes input from the Liberal ecomodernism-narrative seriously as they discuss on the same terms or “reality”. Thus, collectively, these two narratives have a lot of power in the debate.

Global climate justice in relation to electrification of oil and gas production

Robbins (2020) argues that the tradition of identifying winners and losers in political ecology relates political ecology to environmental justice (Robbins, 2020, p. 88). Building on my identification of winners and losers in each narrative, I will now look further into my RQ 2: “How do actors view electrification of the oil and operations in relation to the debate about global climate justice?” All actors included in this study were asked how they saw climate justice in relation to electrification of oil and gas, which is accounted for in the discussion chapter.

Consistently, the actors in the Development, not liquidation of the oil and gas industry-narrative argue that there is justice in Norway decreasing its own emissions. They highlight that Norway can afford electrification of oil and gas even though it is expensive. It is also argued that reducing emissions in Norway is something we have the responsibility to do as one of the

world's richest countries. This can be seen as a form of spatial justice. Temporal justice implies that a country reduces climate emissions to avoid the most serious climate effects for future generations, while spatial justice would imply that climate mitigation is distributed fairly among the people of today (Benjaminsen & Svarstad, 2021, p. 130-131). According to H, there is justice in Norway taking the development cost of electrification, so that the Norwegian continental shelf becomes a technological incubator, where the technology later can be exported and lead to further emission reduction in other countries.

However, one can argue that this understanding of climate justice lacks recognition of certain groups. For example, the narrative does not talk about equity concerns related to exported emissions and it can be challenged whether the technological development of Norway mainly benefits Norwegian interests, or whether it benefits the interests of developing nations that possibly can import the technology in the future. Further, the narrative does not recognize indigenous people as losers related to expunction of the power grid. When people are not recognized in climate change discourses, this leads to a misframing of the issues, which can disguise the interests of powerful actors and shield them from accountability (Benjaminsen et al., 2022, p. 25). One can argue that the limited scope of what is seen as relevant for Norway's equity concerns in this narrative is an example of this.

V and ZERO in the Liberal ecomodernism narrative reject electrification of oil and gas operations as particularly relevant to climate justice. Both actors see electrification as an important measure, but not a measure related to global climate justice. Both actors believe that climate justice must be achieved through financing climate measures and climate adaptation in the Global South. This fits with the pragmatism of the narrative, as the actors see climate justice in relation to the existing institutions for compensation. Bellona had a different take on it and reflected on climate justice nationally, arguing that the use of cables from land can lead to other industries, for example in Northern Norway, not getting the electricity needed for their green industry development.

I would argue that climate justice is an integrated part of the storytelling of electrification of oil and gas in the Stop fossil fuels-narrative. In this narrative, the actors argue that Norway uses electrification as an argument to continue oil and gas production. The equity concerns in this narrative deal with both temporal and spatial justice. Climate justice in this narrative would

imply that Norway limits the oil and gas industry, both due to historical justice, as a country with historical emissions and wealth (spatial justice), but also as it is random that Norway has sovereignty over these resources, and thus it is not just that the country keeps producing oil and gas at the expense of the global environment (temporal justice). It is worth noting that there are similarities in the argumentation of the Development, not liquidation of the oil and gas industry and the Stop fossil fuels-narrative, as both argue that global climate justice would imply action at home. However, the difference is whether the best measure for climate justice is to reduce the emissions from the production of oil and gas, or to limit the oil and gas production itself.

In the Electrification: too expensive and inefficient-narrative, Frp does not see the relation between climate justice and electrification of the oil and gas sector. Similar to V and Zero, they rather point at international climate funds as the manner to compensate for climate injustices. In contrast to Zero and V, however, Frp rejects the notion that it is possible to make everything just.

Electrification of oil and gas as a socio-ecological fix

In the storyline of the Development, not liquidation of the oil and gas industry-narrative, the actors argue for emissions reduction in Norway. The actor from AOG even argues that since electrification is expensive, it is just that Norway reduces emissions as a wealthy nation. AOG argues that Norway must mitigate nationally, rather than through investments in for example conservation of rainforests. In my background (p. 6) I looked at how Norway historically has argued for international cost-effectiveness. Powerful actors have argued that it would be cheaper to mitigate climate change in low-cost countries rather than in high-cost countries such as Norway, but now the two biggest political parties, Ap and H, argue that Norway has the responsibility to reduce national emissions through electrification of the oil and gas operations in Norway. One way to understand this shift is through the conceptualization of socio-ecological fixes.

Pressure from international climate agreements and climate research weakens the argument that Norway can mitigate emissions in low-cost countries, or that Norway can buy quotas for the emissions from the oil and gas operations. The Development not liquidation of the oil and gas industry-narrative had to adapt to legitimize the oil and gas industry. To secure Norwegian oil and gas production they thus must strengthen the argument that Norwegian oil and gas is more

climate friendly than other countries fossil production. Therefore, electrification of oil and gas production can be seen as a socio-ecological fix, as it is a way for the industry to resolve their image crisis and rather represent a future solution. A socio-ecological fix is not a final solution, rather it is a way to keep the same power dimensions, without solving the underlying issues (Ekers & Prudham, 2015, p. 2442). One can argue that electrification of oil and gas is not a final fix or solution to the climate crisis, rather it is a way to continue as always. This coincides with how electrification of oil and gas is seen in the Stop fossil fuels-narrative; as a measure made to prolong the lifespan of the oil and gas industry.

Degrowth or ecomodernism

Lastly, I will briefly comment on the narratives in the debate on electrification of oil and gas in relation to the debate about degrowth and ecomodernism. I would argue that all narratives in the debate can be seen as modernist narratives. The ecomodernism movement argues that technological progress can lessen the impact on the planet, rather than increase it (Robbins, 2020, p. 240). This argumentation is particularly salient in The Development, not liquidation of the oil and gas industry-narrative. Similarly, The Liberal ecomodernism narrative fits into a liberal ecomodernist direction as they believe in the market's ability to innovate and use resources efficiently, at the same time as they similarly to green growth theory stress how Governments can make the process more efficient through regulations and incentives (Hickel & Kallis, 2020, p. 470). The Electrification: too expensive and inefficient-narrative is also a modernist narrative, with its faith in the market and in technology.

The Stop fossil fuels-narrative can possibly be linked to socialist ecomodernism, especially in the way they argue for development of new green industries, rather than degrowth. Yet, there is uncertainty about the technological solutions in this narrative than in the others, as the actors reflect around potential traps of technological solutions (especially MDG, p. 72). MDG also reflected on an issue with technologies such as offshore wind power and CCS, where companies can promise a technical solution that will reduce emissions, which then politicians can then facilitate for, but then the project can be delayed or cancelled. I think Trollvind is a good example of this dynamic. During my interviews, so many actors fronted Trollvind as a solution to reduce emissions from the sector, yet in May the project was suddenly indefinitely postponed. This substantiates the argument that promises of technological development and progress are

not always fulfilled. In the Stop fossil fuels-narrative, the actors were also concerned about how electrification of the oil and gas operations could negatively affect nature. Yet, none of the actors can fully be placed in a degrowth narrative. Hickel & Kallis argue that insisting on green growth is politically motivated, as it is not politically acceptable to question growth, which then makes the only alternative to growth disaster (Hickel & Kallis, 2020, p. 483). This can be a reason for why degrowth is not prominent in the debate on electrification of oil and gas production: it is so politically unacceptable to question growth, that if you do, you end up sidelining yourselves from the discussion.

Conclusion

Based on 13 interviews from main actors in the debate about electrification of oil and gas production in Norway, I identified four narratives which all have distinct storylines about electrification of oil and gas production. During my analysis I also explored views and arguments in the debate about electrification of oil and gas production, and I looked at how the different narratives see the relation between electrification of oil and gas production and climate justice. This relation was further explored in my discussion, where I looked at the actor galleries of the narratives in relation to winners and losers in the debate, and when I looked at climate justice theory in relation to the narratives. Then I argued that electrification can be seen as a socio-ecological fix, before I briefly looked at the debate on electrification of oil and gas operations in relation to the debate on ecomodernism and degrowth.

The four narratives are that I identified in the debate were (1) the Development, not liquidation of the oil and gas industry-narrative, (2) the Liberal ecomodernism-narrative, (3) the Stop Fossil fuels-narrative and the (4) Electrification: Too expensive and inefficient-narrative. I have argued that the Development, not liquidation of the oil and gas industry-narrative is the leading narrative in the debate. Even though counter narratives have gotten more influence recently, due to the energy crisis, it is still decided that Melkøya will be electrified. The Development, not liquidation of the oil and gas industry and the Stop fossil fuels-narrative, both argue that global climate justice would imply action at home. However, the difference is whether the best measure for climate justice is to reduce the emissions from the production of oil and gas, or to limit the oil and gas production itself. So far, it seems far away to limit the oil and gas industry.

Even after engaging with different positions in the debate about electrification, I am left with doubts about whether it is most effective to fight for the demands of limiting the oil and gas industry, which I find the most rightful, or whether it is more effective to be a visionary pragmatic similar to the actors in the Liberal ecomodernism-narrative. One thing that is certain is that these dilemmas will continue to be of relevance in future debates on climate policies and climate justice.

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Appendix

Appendix 1:

Vil du delta i forskningsprosjektet «Elektrifisering av norsk sokkel»?

Dette er et spørsmål til deg om å delta i et masterprosjekt hvor formålet er å forstå debatten rundt elektrifisering av norsk sokkel. Jeg er interessert i: Hvilke aktører som deltar i debatten og hva de mener. Hvilke stemmer og argumenter som blir hørt. Hvordan ulike aktører ser på global klimarettferdighet og grønn omstilling i relasjon til temaet.

I dette skrevet gir vi deg informasjon om målene for masterprosjektet og hva deltakelse vil innebære for deg.

Formål

Jeg ønsker en større forståelse av debatten om elektrifisering av norsk sokkel. Samt forståelse av hvilke aktører som deltar i debatten, for å forstå hvordan ulike aktører og interesser bidrar til ulike narrativ om elektrifisering av norsk olje og gass. Og hvordan/hvorvidt dette påvirker ulike aktørers syn på olje og gass sektoren. Jeg lurer også på om debatten rundt elektrifisering av sektoren har endret seg de siste årene, og i så fall hvorfor og hvordan.

Jeg ønsker å se på dette opp mot hvordan/hvorvidt ulike aktører mener at elektrifiseringen av Norsk olje og gass bidrar til global klimarettferdighet/urettferdighet, og hvordan tiltaket bidrar til å gjennomføre en grønn omstilling.

Jeg har gjennomført en medieanalyse og dokumentanalyse for å se hvilke aktører som har vært viktige i debatten, før jeg nå ønsker å ha personlige intervjuer med noen utvalgte aktører, for å få mer informasjon om deres syn på elektrifisering av norsk sokkel. Jeg ønsker å spørre spørsmål om deres syn på elektrifisering av sokkelen relatert til global klimarettferdighet og grønn omstilling.

Dette er prosjektet er en 30 studiepoengs masteroppgave innenfor globale utviklingsstudier.

Hvem er ansvarlig for forskningsprosjektet?

Forskningsprosjektet er en masteroppgave ved institutt for internasjonale miljø- og utviklingsstudier, som er ved fakultet for landskap og samfunn på Norges miljø- og biovitenskaplige universitet – NMBU. Min veileder er professor Tor A. Benjaminsen.

Hvorfor får du spørsmål om å delta?

Basert på en medie- og dokumentanalyse har jeg sett at du eller ditt selskap/parti/organisasjon har vært aktive i debatten. Derfor ønsker jeg å høre mer om ditt/deres syn på elektrifisering av

norsk olje og gass, syn på debatten rundt dette og ditt/deres syn på klimarettferdighet og grønn omstilling. Det er et begrenset utvalg som blir spurt om å delta grunnet tid- og ressursbegrensninger.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du deltar på et intervju. Det vil ta deg maksimalt 60 minutter. Intervjuet inneholder spørsmål om ditt/din organisasjon/selskaps/partis syn på elektrifiseringen av norsk olje og gass, syn på debatten om dette, og tanker rundt grønn omstilling og klimarettferdighet i relasjon til temaet. Jeg tar lydopptak og notater fra intervjuet. Disse notatene og lydopptaket blir brukt for å transkribere intervjuet. Lydopptak er frivillig, og vi kan også gjennomføre intervjuet uten lydopptak.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun jeg som student og min veileder som vil ha tilgang til opplysningene og alle opplysninger vil være lagret på en personlig konto på NMBU sin skytjeneste. Personopplysninger blir slettet etter prosjektslutt. Informasjonen vil bli anonymisert fortløpende, ditt navn og kontaktinformasjon vil byttes ut med kode/stillingstittel/organisasjon. Dette blir ikke publisert. Dersom du godkjenner dette, vil du bli publisert med stillingstittel og hvilket selskap/organisasjon/parti du representerer, i så fall kan du indirekte kunne gjenkjennes i publikasjon.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes sommeren 2023 etter at masteroppgaven har blitt godkjent, seinest 15. August. Etter prosjektslutt vil datamaterialet med dine personopplysninger slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra NMBU har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende

- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Helga Hustveit, student ved Norges Miljø- og biovitenskaplige universitet, +47 94836260,

helga.hustveit@nmbu.no

- Tor A. Benjaminsen, professor ved Norges Miljø- og biovitenskaplige universitet, +47 67231353, t.a.benjaminsen@nmbu.no

- Vårt personvernombud: Hanne Pernille Gulbrandsen. Mobil: 402 81 558.

Personvernombud@nmbu.no

Hvis du har spørsmål knyttet til vurderingen som er gjort av personverntjenestene fra Sikt, kan du ta kontakt via:

- Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.

Med vennlig hilsen

Helga Hustveit, student

(Tor A. Benjaminsen, veileder)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet “Elektrifisering av norsk sokkel”, og har fått

anledning til å stille spørsmål. Jeg samtykker til:

- å delta i prosjektet gjennom et intervju
- at mine opplysninger om meg publiseres tilknyttet min organisasjon/selskap/parti
- at opplysninger om meg publiseres slik at jeg kan gjenkjennes ved at mine opplysninger blir tilknyttet stillingstittel og organisasjon/selskap/parti

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet.

(Signert av prosjektdeltaker, dato)

Appendix 2:

Intervjuguide.

(Husk vil vite noe om disse tingene: Meningene om saken, endringer i egne meninger, meninger om debatten, tanker opp mot grønt skifte og klimarettferdighet.)

Presentere meg selv: Jeg heter Helga Hustveit, studerer globale utviklingsstudier på NMBU

Valgte tema fordi:

- Dagsaktuelt: mye som har blitt bygd ut de siste årene, flere planer om videre elektrifisering.

Lite tid til 2030.

- Mange vanskelige dilemmaer.

- Tidvis rotete debatt, går inn i prosjektet med et ønske om større forståelse.

Da kan du kanskje introdusere deg kort og din rolle i ...

Jeg stiller noen spørsmål, det er bare å svare. Hvis det er noe du føler at du ikke vil svare på eller hvis det er noe du vil at jeg skal omformulere, som jeg spør om, så er det bare å si ifra. Er det noe du lurer på før vi starter?

Elektrifisering av norsk olje og gass – spørsmål rundt deltagerens meninger om elektrifisering av Norsk olje og gass.

1. Hva mener dere om elektrifiseringen av norsk olje og gass? Og hvorfor mener dere dette?

a. Hva er hovedargumentene deres?

2. Hva tenker dere om det som allerede er gjort?

a. (Både kraft fra land prosjekter og Hywind Tampen som har begynt å forsyne vindkraft til Gullfaks.)

3. Hva tenker dere om fremtidig elektrifisering?

a. Dersom man skal elektrifisere mer i fremtiden, er det en spesiell måte dette må gjøres på? Hvilke typer prosjekter?

4. Har noen faktorer i samfunnet endret deres syn på elektrifiseringen av olje og gass i Norge? (for eksempel klimakrisa, energikrisa, strømkrisa, krig i Ukraina, ny forskning på effektene av elektrifisering)

- a. Dersom det har vært en endring i hva de mener: Når kom denne endringen, og hvorfor?
- b. Er det andre ting dere syntes var viktigere elementer for hvorfor dere var for/mot opp gjennom årene?

Debatten om elektrifiseringen

5. I den bredere debatten har det skjedd et skifte eller endringer i debatten? Hvorfor? Hvordan kommer det til syne?

6. Hvordan synes du at debatten om elektrifisering av sokkelen har vært?

- a. For eksempel: Er det noen som har hatt mer å si enn andre? Er det noen stemmer som ikke har blitt hørt?

7. Hva har vært viktige argumenter for/mot? Er det noe som har gjort dere usikre på deres standpunkt?

- a. Fordeler ved deres standpunkt?
- b. Ulemper ved deres standpunkt?

Global klimarettferdighet/grønt skifte

1. Hva slags klimaeffekt har elektrifiseringen av Norsk olje og gass?

2. Norge har mål om å kutte 55% innen 2030. Olje og gassektoren har mål om 50% kutt innen 2030. Hva tenker dere om situasjon? Hva er løsningen?

- a. Dersom skeptisk: Hvordan nå 2030 målene om man ikke elektrifiserer?

3. Hvilken rolle bør elektrifisering ha i det grønne skiftet?

- a. Og i så fall hvordan, hvordan ikke? Sentralt?

4. Noen snakker om at elektrifisering av norsk olje og gass som en grønnvasking av næringen, hva tenker dere om det?

5. Global klimarettferdighet og klimarettferdighet har vært viktige begreper for mange i klimabevegelser. Hva tenker du om global klimarettferdighet i forhold til elektrifisering av norsk olje og gass?

6. Kan tekniske løsninger som elektrifisering være nok for å løse klimakrisa, eller trenger man en form for systemendring?

Avslutning: Hva er hovedpunktet/hovedargumentet; som du tenker at er viktigst for deg og ... av det vi har snakket om i intervjuet. Kan du oppsummere det med 2-3 hovedpunkter? Jeg spør sånn at det blir klart for meg hva som er viktigst for dere.

Da har jeg stilt de spørsmålene jeg lurte på. Føler du at du har fått sagt det du ønsket, er det noe du vil legge til på temaet? Er det noe du vil spørre meg om?



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