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A Green Recovery in Norway: Contradictory Energy Policy Responses in Times of Crises

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Declaration

I, Henrik Thomas Årby declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature……Henrik Årby……..

Date……15.05.2022……

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Abstract

This thesis looks at Norway's policy responses in the pandemic, focusing on domestic energy policy and its impact on the green recovery – a response seen in the EU to decarbonize the energy industry and lay the foundation for green growth. It uses a qualitative framework to uncover the deeper meanings in reports written by the for and by the authorities. An additional semi-structured interview of ten respondents fills in the gap of what the reports' content does not reveal – where there is evidence in domestic energy policy that Norway is part of a green recovery.

It finds that Norway's response has been contradictory because it has seen an upscale of investments and tax cuts in the oil and gas industry, with significantly lower investments in a sustainable energy transformation. These contradictory responses are explained by a history of path dependency and opposing interests from different sectors that have caused a shift in rhetoric, unsustainable governance structures and inadequate environmental protection, climate resilience, and climate neutrality goals. The dynamics of the energy debate radically changed after the electricity price crisis and the Ukrainian war, thereby changing the narrative of resource politics. The energy policy responses found in government reports show a different outcome than what actors from the energy industry and NGOs perceived.

Table of Contents

List of abbreviations

Ap – Arbeiderpartiet (The Labour Party)

CBA – Cost-benefit analysis

CNCR – Climate Neutral Climate Resilient

EEA – EØS-avtalen (The European Economic Area)

Frp – Fremskrittspartiet (The Progress Party)

GDP – Gross Domestic Product

H – Høyre (Right/The Conservative Party)

HDI – Human Development Index

MW – Megawatt

NHO – Næringslivets hovedorganisasjon (The Confederation of Norwegian Enterprise)

NOROG – Norsk olje & gass (Norwegian oil & gas)

NSD – Norsk senter for dataforskning

NVE – Norges vassdrags- og energidirektorat (Norwegian Water Resources and Energy Directorate)

OED – Olje og Energidepartementet (Ministry of Petroleum and Energy)

R – Rødt (Red)

Sp – Senterpartiet (The Centre Party)

SSB – Statistisk Sentralbyrå (Statistics Norway)

SV – Sosialistisk Venstreparti (Social Left-party/social democrats)

TWh – Terrawatt hours

Translations

Energiloven – The Energy Act

Finanskomiteen - Standing Committee on Finance and Economic Affairs

Grønn omstillingspakke – Green restructuring package

Hurdalsplattformen – The Hurdal Platform

Klima-og miljødepartementet – Ministry of Climate and Environment

Motvind – Headwind

Naturmangfoldloven - The Biodiversity Law

Naturvernforbundet – Norwegian Society for the Conservation of Nature

Norsk Industri - The Federation of Norwegian Industries

Oljefondet - Government Pension Fund Global

Oljeskattepakken – Oil tax package

Plan- og bygningsloven – The Plan and Building Act

Stortinget – The Storting (parliament)

1.Introduction

This thesis focuses on the changes in Norwegian energy policy after the pandemic broke out domestically in early 2020 and the implications the change in policy has had on green recovery efforts.

The pandemic was a turning point for development. The common denominator among most countries is that they all experienced extreme economic downturns. People's livelihoods worsened, workers were given leave, and industries came to a standstill. On the flip side, the environment started recovering because of reduced human pressures – an Anthropause of sorts (Young et al., 2021). As emissions decreased due to stagnant economies worldwide, countries started recognizing the positive changes in the state of the environment, estimating at least a 5% reduction in global emissions in 2020 (Liu et al., 2020). Despite wishes to return to the economic conditions as before the pandemic, there was a global recognition that doing so would need to happen under different circumstances.

Nevertheless, many countries still rely on fossil fuels as their primary energy source. Participating in the green transition is thus an afterthought. The UN, OECD and IEA were clear: Going back to normal is not an option (Buisman 2021; IEA 2022a; IPCC 2022). Once emissions from energy consumption started increasing in 2021, there was a greater need for a new energy policy to better work with, not against, the environment and its limits.

The disruptions of the global economy enabled the environment room to recover, yet remaining issues contradict the progress – notably, the dependence on fossil fuels. Countries in the Global South might have scarce energy supply for heating, cooking or lighting, with unreliable access. Conversely, the Global North and countries like Norway have more abundant and reliable energy sources to supply countries in times of crisis and are equipped to participate in a more extensive green

transition. Relying on oil and gas for over 50 years has made Norway path-dependent. When the new government coalition took office in August, they promised to deliver on their green promises (Regjeringen 2021e). Minister of Climate and Environment Espen Barth Eide admitted that Norway is "uncomfortably oil dependant" (Barth Eide, cited in Eidesvik 2021). Still, it is looking for oil like never at the same time (Sølvberg 2022).

The EU responded differently to the pandemic, sharpened its sustainability focus, and intensified progress toward the Green New Deal (GND) – a comprehensive plan to reorganize social and economic reform to consider sustainability in all public policy. Other countries followed and pledged to cut fossil fuel emissions and decarbonize energy-intensive industries (Chatzky and Siripurapu, 2021). The GND was already in the works before 2020, so the response after the pandemic was titled a *Green Recovery*. In comparison to the GND, the Green Recovery's aim is twofold: 1) To resolve the economic recession and 2) to use green growth as the primary driver to mitigate climate change by divesting from fossil fuels and transitioning to a renewable energy system.

As the demand for oil decreases and Norwegian households and businesses consume more energy than before, it could cause an energy deficit. Norway's current pathway is to intensify (green) growth and decarbonize the energy industry by producing more green ammonia and hydrogen to transform the transportation and construction sectors and make Norway a low-emission society (DNV 2021).

However, with a pandemic causing energy shortages worldwide, an electricity price crisis, and the Ukrainian war, many dynamics have changed the green recovery landscape. There is thus a critical moment taking place in which Norway is trying to give domestic customers cheap and affordable electricity while trying to become a global leader in green growth, all whilst taking on the role of supplying Europe with gas to help stabilize the gas shortages caused by the ban of Russian petroleum.

Research Question

The EU is the leading European front for green growth. Norway's energy strategy is similar to that of the EU's green recovery pathway but with the contrasting actions taking place, the lines to which Norway is part of a green recovery become increasingly blurred.

Considering this problematic context, the key research question asked in this thesis is as follows:

- What evidence exists in domestic energy policy that Norway is part of a Green Recovery?

State of the art

There has been writing about the green recovery prior to the pandemic, but these have focused on opportunities of past crises to "reduce carbon dependencies" through green growth and green stimuli packages (Omri et al., 2015). More recent research puts these topics into the context of the pandemic using country responses as case studies to show why the green recovery is more important than ever to rebuild sustainable economies whilst preserving the environment and mitigating climate change to build resilience for future disasters (Maas and Lucas 2021).

A post-pandemic future for energy development can take many forms. Liu et al. described a viable post-pandemic future as one that needs to be "based on structural and transformational changes in energy production systems, de-carbonization of transportation and improved energy use efficiency" (2020: 7). Bird and Hamada share this view and call for a "systems-based perspective that recognizes the connectedness between sector-based activity and the whole economy" (2022: 3). Their working paper is a written collaboration between organizations such as the World Bank, IMF and OECD on climate resilience from COVID-19. Whereas other frameworks are angled from a more theoretical perspective (Sandbrook et al. 2020), Bird and Hamada's paper is one of the most concise and

applicable frameworks to explain the green recovery in the pandemic (2022).

Despite a few existing frameworks, not many papers engage with the green recovery topic in the context of a country and instead focus on the themes emerging in a post-pandemic society. For example, there are recognitions that past recoveries have failed to do enough to "structure long-term support to sustainability initiatives" (Gusheva and de Gooyert 2021). The current global green recovery efforts aim to resolve these conflicts. Some states stress the need to be "building back better" – by driving green investments for economic growth and recovery, creating short and long-term green jobs and securing social benefits (UNEP 2021b).

At a global level, countries and organizations have allocated around US$ 677 billion to meet these goals (Green Alliance 2021; OECD 2021). This distribution of funds is an extensive movement, at least in the Western world, showing that they realize the gravity of the matter and are willing to face the threats more diligently. Exactly what type of strategy is best suited for a sustainable future is contested. People have different conceptions of what such a strategy needs to focus on and whether some areas are more critical than others. For instance, conservation policies for wildlife preservation can sometimes come at the expense of developing renewable energy (Gutiérrez et al., 2016).

A Green Recovery post-pandemic seeks to intersect energy transition with sustainable development and equity. The term has seen the most traction and uses outside Norway. An example is The UN and OECD urging states to put *green* in recovery efforts post-pandemic to when economies worldwide would eventually rebuild (Holder 2020; UNEP 2021a; UNEP 2022b). Over the past decade, the growing worries about climate change have only increased, especially with the releases of UN's IPCCs reports that predicted dire consequences for the environment unless dramatic

action is taken immediately to reduce global CO_2 emissions below 1.5° by 2030 and net-zero before 2050 (IPCC 2018; IPCC 2022).

First, a green recovery is not the same as the green transition and the green shift. These terms have been used for many decades, while a green recovery has seen most use after the pandemic broke out worldwide in early 2020. Researching for a Norwegian translation did not give many results besides one in Farstad et al. (2021: 4), from CICERO – Center for International Climate Research – who see its use in the European Green Deal to rebuild the economy.

A *green stimulus* shares a similar meaning and is used to describe immediate policy responses to crises. In a paper by Strand and Toman (2016), they present the term in the context of the 2008 financial crisis to create more employment and long-term growth, reduce emissions and promote more positive effects on the environment and other externalities. The authors also link the term to *A Green New Deal*, with origins in Europe and the USA (Strand and Toman 2016: 2). They argue that environmental benefits that come with a green stimulus require policies that consider wildlife protection and more significant consideration of energy-saving as well. These criteria directly link to a green recovery and follow the same line of thought as Agrawala et al., who discussed how a green recovery is not a "cut and paste" solution that should copy the lessons learned by the financial crisis. Instead, it should strive to prioritize public health and better social and economic policies (Tienhaara 2010; 2020: 7).

Because emissions from energy-related activities declined 7% in 2020, projections estimated declining pressures on the environment by 1-3% - states also agreed that "business as usual" should not be an option. Instead, investments should stimulate a low-carbon economy and reinforce environmental care and economic growth (Dellink et al., 2021). Going back to "business as usual" and the previous economy is not a choice but a necessity to prevent the worst consequences of climate

change, as some see it (Knežević et al., 2022), using sustainable investments and green economic stimuli to help people get on board with a just economic recovery (Volz 2020). Others observe a trend where people spend more time in nature than before the pandemic and recognize that a healthy environment can provide a healthier population (Robinson et al., 2021). Throughout the pandemic, more people realised the human-nature values of living in a healthy environment to cope with crises (Morse et al., 2020; Hynes et al., 2021). For instance, according to Weinbrenner et al. (2021), forests play an essential role in reducing stress and help maintain a level of agency and control in their lives. Under these circumstances, people will be more likely to care about environmental values (Morse et al., 2020).

Moreover, when people shift their preferences to care more about the environment, they will have a greater acceptance of green technology (Answer et al., 2020) and tax money spending purposes, depending on a population's confidence in its government (Hynes *et al.,* 2021). Therefore, a Green Recovery is not only about committing to more sustainable socio-economic policies but about shifting social preferences in all corners of society and creating a just transition that provides additional benefits to society (Agrawala et al., 2020). This type of recovery emphasises a traditional economic recovery, as seen after recessions, with a more distinct connection between environment and health grounded in a just transition for improved social and economic policy for all (Bouzarovski 2022).

These topics are highly relevant to explaining the implications of green recovery, but there is a research gap. The gap does not address; 1) The relationship between the green recovery and energy policy post-pandemic and 2) Green recovery responses focusing on particular government policies. Whereas Maas and Lucas (2021) outline green recovery responses in several countries, they do not analyse government policy. Moreover, there have been writings on equity and distribution (Alva and

Singh 2022) and improved health from decreasing emissions (Bouzarovski 2022); fewer writings engage with how domestic and global energy dynamics will shift market preferences and what the effects of this have to say for the environment.

Given this gap, there is hope that this thesis may contribute to the literature on the green recovery topic. There have been writings on countries' green recovery strategies (Maas and Lucas, 2021), and although Goldthau and Moesma (2022) see a connection between the Ukrainian war, the energy market, and environmental consequences - no authors have written a comparative analysis that discusses the implications of The Ukrainian War on the green recovery in particular.

Finally, it should be recognized that the green recovery approach has been adopted mostly by institutions, organizations, and actors with neo-liberal approaches to environmental economics and is why a green recovery is consistently set within a green growth paradigm (Strand and Toman 2016). Hence, it should also be acknowledged that my values do not always correspond to that theory. Many writings have dispelled the myth of green growth, socio-economic efficiency and GDP as the definitive measure of progress, with an alternative economic theory to environmental economics like ecological economics, whose premise is to create a sustainable society and a good life (Smith 2022). Instead of pursuing limitless growth, there are other ways of financing a green recovery with a more progressive taxation system and equitable distribution, resembling a degrowth scenario (Hickel 2020; Sandbrook et al. 2020; Smith 2022).

Some authors are proponents of green growth and call for systemic change. Still, these authors do not always engage with themes of geopolitics, materialism, overproduction and class struggles as consequences of the capitalist system (Bieler and Morton 2018). Writing this thesis from a degrowth perspective would be very theoretical, as there are no indications that Norway would favour such a scenario. The

thesis thus conforms to the green recovery framework because there are fragments of it in current policy, making it easier to identify, analyse, and apply to existing structures.

Summary of chapters

The thesis has 8 chapters. The next chapter explains the qualitative methodology for analysing the findings. Chapter 3 aims to give insight into the meaning, purpose and understanding of a Green Recovery through the lens of political ecology. It also shows its socio-political implications by briefly explaining how a green recovery impacts society. The final section of Chapter 3 links the topics with that of resource sovereignty and ownership to better illustrate how the different struggles over energy not only are not only applicable in the context of a green recovery but may illuminate contemporary challenges in the Norwegian energy debate.

Chapter 4 then presents Norwegian energy history, the relationship with the EU and international energy and environmental policymaking before discussing how the Norwegian energy debate changed due to the pandemic. Chapter 5 takes the themes of chapter 4 further by placing them in the contemporary setting, discussing the evidence of a green recovery in different energy policies. Its final section spends some time on the latest developments in the Ukrainian war and how the current events may explain some of the dynamics in how Norway's energy industry changes the rhetoric and actions in the face of crises. Chapter 6 analyses the evidence found in domestic energy policies and interviews with various actors who have roles connected to the industry. Lastly, Chapter 7 discusses the research limitations and future research suggestions before concluding in chapter 8. The results found evidence that Norway has engaged with a contradictory green recovery response. It gives positive indications of a green transformation in government reports but has not lived up to the expectations in practice.

2. Methodology and Study Design

The qualitative methodology is divided into two parts. The first part consists of semi-structured interviews with ten respondents, and the second is a content analysis of government reports on Norwegian energy and environmental politics.

The semi-structured interview form allows the responder to give more flexible answers, making it easier to uncover meanings and experiences (Bryman 2012). What is essential is to provide the respondent with the room to answer the pre-determined questions set by the researcher, yet not feel constrained by the questions' phrasing. The respondent wants to feel like they can speak freely about the subject without worrying about structured observations by the researcher.

Moreover, grounded theory worked as an extra layer that adds to the analytical thoroughness. It is suitable for this type of research because it elicits narratives by listening to the respondent, preferable in an in-depth interview. From that, one can construct a collective story and then the theory. The individual and collective narratives can tell us more about the social processes that drive behaviour and actions (Røe 2019). Inductive reasoning and data collection imply that the person we observe is the starting point of the research. This comparative process constructs concepts that tell different stories individually, but put together, forms patterns and meanings to tell something about social processes in society (Charmaz and Belgrave 2019)

The second part of the analysis looks at reports regarding the developments in domestic energy policy from 2019 to 2022. The following reports were chosen because they represent Norway's energy strategies since the pandemic started, giving insight into how Norway has and will manage its energy resources going forward and how these will align with the goals of the Paris Agreement.

First, The government publishes an annual report called Energimeldingen, which outlines pathways for profitability from Norwegian resources and the prospects of future job creation. The previous Energimelding from 2021 (Meld. St. 36) is the most recent report and lays the foundation for rebuilding the energy industry amidst the pandemic (Regjeringen 2021d). In a speech following the report, previous Minister of Petroleum and Energy Tina Bru stated that Norway has good capabilities to electrify the country, with hydropower as the backbone of renewable energy production, with increasing interests in offshore wind. However, she clarified that the oil industry would be kept up and running if there was a global demand (Bru 2021; Regjeringen 2021d). By stimulating projects that create jobs and generate value while cutting emissions, they were optimistic that all these goals would be compatible with securing a low-carbon society by 2030 and 2050.

The second analysis looks at the Hurdal Platform, emphasising the rhetoric more than in the other reports because of its lack of empirical data. That is why it needs to be seen and looked at with a different lens than Energimeldingen, which is much more technical.

The final analysis looks at Energi21. Established in 2008 under OED, Eneri21 is the primary "national strategy for research, demonstration and commercialization of energy solutions" (OED 2021b). The strategy consists of two reports: The first by Multiconsult (Grimsby et al., 2021) and the other by Thema Consulting Group (Borgen et al., 2021).

The reasoning for choosing these particular reports is as follows: Energimeldingen is one of the most detailed energy policy documents that emerged in the middle of the pandemic. Energi21 is even more technical than Energimeldingen and includes analyses and interviews with the industry. The Hurdal platform represents the current energy developments in Norway and is the only representation of the current government policy, as opposed to the two others published under the Solberg government.

Content analyses can uncover manifest and latent content, either visible in-text or hidden by implicit meanings. We distinguish them as such: Manifest content is the explicit meaning of content, e.g. the topic emphasized or the message that the sender is trying to convey (Bryman 2012). Therefore, the manifest content in Energimeldingen, Energi21 and the Hurdal Platform would be the strategies for managing Norwegian energy resources on a long-term scale. These concern profitability, job creation and responsibility to meet domestic and international goals, as outlined in the Climate Plan (Klimaplan) 2021-2030 (Regjeringen 2021a) and Paris Agreement.

Moreover, latent content is "hidden beneath the surface" that must be uncovered (Bryman 2012: 290, 297). Examples are patterns in a message, and studying the time and place can give insight into central contemporary themes. These themes are further explored in a report's socio-cultural context to see how the authors make statements about social realities, e.g., expecting the newly elected government to deliver on promises they made during their electoral campaign and issues that were important to the public at that time. Another critical thing to note is that findings might be inaccurate unless facts or references back up. Latent content can consequently fill in the gaps in the research, e.g. finding the empirical evidence of a statement.

Another essential step is determining the meaning of a green recovery. Since it shares a similar meaning to the green transition and green shift, respondents are likely to mix the terms unless they know the difference. Therefore, the following chapter will spend some time clarifying the meaning of a green recovery and how to assess it.

Lastly, the analysis requires a couple of criteria to evaluate the quality of the documents. The requirements determine whether the data can tell something about the green recovery and whether the evidence in the reports is accurate. The evaluation follows the format made by Scott

(1990, cited in Bryman 2012: 544) and examines 1) *authenticity,* 2) *credibility*, 3) *representativeness,* and 5) *meaning* (Bryman 2012: 544).

Authenticity and credibility

The content analysis looks at four separate reports – one written by the Norwegian government and two by consulting firms. The two reports by Thema and Multiconsult represent Energi21, which is the government's national energy strategy. The data should be authentic, meaning that facts are correct and represent the government's purpose accurately and accountable (Bryman 2012). The Hurdal platform is less informative, relies on less quantitative data, and only acts as a draft for future policy. Its content does not outline the most recent energy policy because the government has already changed its opinions several times since they came into office and wrote the Hurdal platform.

Determining data credibility is similarly to identify whether the author's true intentions are present in the text and whether its factual information is accurate (Bryman 2012: 545). Finding latent content helps assess the document's credibility, such as whether claims are correct or incorrect.

Representativeness

A good sample is representable, so the research sample includes a range of diverse actors. For example, NGOs and stakeholders from the private sector might have two very different explanations of phenomena in the energy and green recovery debate. Ideally, there would be an equal number of participants from each side to avoid giving more weight to one side than another. A good sample is also extensive. However, the number of interviews was affected due to the limited timeframe of the thesis, people's availability and the Corona restrictions.

Data collection and sampling

The first step was to submit a proposal to The Norwegian Centre for Research Data (NSD – Norsk senter for forkningsdata). A Norwegian

researcher submits a proposal there for guidance on the ethical consent of a research project. One of NSD's downloadable forms contained pre-filled text explaining how the project would adhere to the NSD guidelines on ethical standards (NSD 2022). The form included information about the thesis topic, intention, project length, data storage, consent, and processing. Before the interviews took place, all respondents received this information and expressed their consensual preferences, such as whether they wanted to be identifiable by name or their association with their company or organization.

All who responded by email were willing to meet in person or on Zoom. It was favourable to do in-person interviews rather than online on Zoom, but an alternative was to fill out a Google Form with a set of questions. In the end, no one filled out the form. The worry was that this would weaken the sample, but the respondents gave fulfilling and thorough answers such that it made up for an abundance of responses that could lack depth. Lastly, the semi-structured question template changed throughout the research process to better fit new themes that had emerged while in conversation. Doing so made the discussion more natural and fluid, and the respondents answered questions on topics that were closer to their expertise while keeping to the main topic, a green recovery.

If we met online, the interviews were recorded using Zoom's record function, and if we met in person, it was recorded using a recording application on my phone. The interviews were then transcribed and coded according to themes and topics using different colours to indicate the type of theme brought up.

Study limitations

Validity and reliability

Firstly, it is essential to acknowledge that the Hurdal Platform is a draft that sketches what the forthcoming energy policy will look like rather than

an actual policy document. Its value is vital for insight into what we can expect to change and what will remain.

Secondly, there were ten interviews to meet the scope of the thesis and its qualitative nature. In hindsight, it was sufficient to look at the cases from a more condensed perspective because the interviews started to intersect in content. More interviews could not guarantee better data. After all, the respondents had limited knowledge of the green recovery, and connecting the deeper patterns was challenging, resulting in data that tells more about Norway's energy policy concerning the green transition than it does about the green recovery.

Reflexivity

Understanding the research was as essential as understanding the researcher and the research subjects. It is about the phases of the study and how one evolves and gains a deeper understanding of how the connection between theory and practice changes as more insight is uncovered along the process

Writing daily entries in a journal helped organize the work because it made it easier to pick up a consistent and organized structure. New references were always written down for uncovering later. Doing so saved time and helped filter and select the most relevant.

The thesis topic was chosen because of personal interest in environmental politics and the global energy debate. Specifically, choosing Norway as a case study would open a vault of research opportunities due to fluency in the language and residence in Oslo, not to mention having a register of contacts from different sectors.

Looking back at the first draft, it became more evident that the critical view on liberal politics showed through more than it should have. This was the case because the questions strictly followed a structured format that made an open assumption about Norway's political economy. Hence, following the semi-structured design, the new interview questions were

phrased to blend the interview style and create a more open debate. Asking in the *right* might sometimes give the interviewer more certainty and not make it so that the respondents experience the interviews as unfulfilling (Watt 2007). Later interviews were more comfortable because the new framing of the questions allowed for a more free-flowing conversation.

3.Theoretical framework

Political ecology

The world is heading towards a trajectory of more devastating environmental degradation. Earth is not a planet of infinite resources. We need to move over to a more sustainable economy is necessary to preserve our ecological systems and the species that live here (Dietz and O'Neill 2013). When the thesis discusses these issues, it uses theoretical frameworks that acknowledge and respect the earth's ecological limits. The frameworks further recognize the needs and preferences of present and future generations (Rockstrøm et al*.,* 2009). Among the myriad of political theories picking apart the complexities of contemporary politics, few are as cautiously optimistic about future development as political ecology. Whereas biology limits theory to the realm of science, political ecology distinguishes itself in how it politicizes otherwise apolitical environmental issues. By connecting the relationship between socio-economic and political factors with the environment, it uncovers deeper meanings of how humans preserve and exploit nature (Breslow 2014; Harlan 2020) by investigating "…the relationship between environmental change, socio-economic impact, and political processes" (Pezzoli 2007: 27, cited in Byrne et al., 2007: 156).

In more recent studies, there is a deepened emphasis on the limits of the earth, austerity and how technology will both be a solution and a threat to the climate crisis (Sandbrook et al., 2021). Robbins (2019) is a proponent of technology's advantages in advancing climate resilience. In his paper, he compares technological advancements of modernism against degrowth as two imaginaries with opposing pathways for ecological sustainability. Gómez-Baggethun (2021) critiques Robbins' view that limits are politically constructed. He reminds Robbins that little empirical evidence suggests that green growth will become compatible with sustainability. The system can not necessarily account for entropy and high energy costs, so a low-carbon economy with decoupled emissions is unlikely to occur, according

to Goméz-Baggethun (2021). Switching over to renewable energy requires rare minerals and metals that are finite. Therefore, the transition from fossil-based energy sources to renewables is another cycle that brings other geopolitical and environmental issues that will pose a risk to future supplies of these resources (Vidal et al., 2013).

Huber (2017) addresses the more deeply rooted problems stemming from industrial production. Political ecology should perhaps not only be concerned about how to create a liveable future where humans, animals and all other organic life may coexist, but it should also highlight the obstacles that prevent this from happening. Technology has transformed how we live and work to benefit productivity and efficiency (Huber 2017). Nevertheless, with new energy technologies, recent ecological conflicts have arisen.

According to the theory of the *economic man*, humans are self-centred and seek only to maximise their gains and reap the most considerable profits for themselves. The term is used in neoclassical theory to explain how rational actors behave in the market. The economic man will strive for the lowest cost possible and not necessarily act morally responsible for his choice (Vatn 2015; Kenton 2020). For example, although a facility may not process its waste sustainably, it might benefit from lower production costs and higher wages for its labour force (Huber 2017). Suppose an offshore windmill park causes less harm to local populations and landscapes than onshore parks while creating jobs but still harms marine biodiversity. The developers might evaluate the project as viable if the losses are evaluated as minimal in the concession. This example illustrates how specific businesses can determine the costs and benefits of energy projects, depending on what value they put on the gains and losses (Snyder and Kaiser 2009).

Similar themes are found in political economy, dealing with issues like instability and adaptation, as discussed by Blaike and Brookfield, who saw the connections between society and resources and within groups and

classes. They further identified the pressures caused by overproduction and how we have created incomplete environmental data (1987: 19, cited in Walker 2005: 75). As contended by Watts (1983), overproduction at large-scale forms uneven global power relations that undermine more local knowledge about the environment (Watts 1983), which might lead to land conflicts such as land grabbing (Fairhead et al., 2012; Benjaminsen and Robbins, 2015). A growing focus has also looked at how marginalized groups respond to these actions and the actors that impose them (Cavanagh and Benjaminsen, 2015).

Implications and misinterpretations

There appears to be a misinterpretation of the term (see Chapter 6). Concepts can be diffuse due to different understandings of how we interpret the world around us. All concepts stem from knowledge, and knowledge disseminates from our different ways of knowing. Language, for instance, can shape discourse and frame concepts to hold a particular meaning, depending on the sender and the intended audience. If the actor has a worldview that perceives one specific activity as good or harmful to the environment, it will change how the actor may apply and act upon that concept. As Western worldviews differ from indigenous peoples', there are multiple ways of perceiving and using the same concept (Meighan 2021). To further elaborate, it is necessary to pick the terms apart. First, there are epistemological disagreements as to what defines something as *green*. Although not widely agreed upon, the word *green* might refer to an adjective used to describe an action, subject or object that puts little to no pressure on the environment (Fairhead et al., 2012).

Words can have multiple meanings, and we may interpret them differently. Some concepts describe phenomena in a sociological context, in which scholars may look for a way to establish objective truths (Weber 1949). Therefore, finding an accurate description of *green* is not widely agreed upon because people have different relationships with nature and

its value (Salmón 2000). When interpreting the term *green recovery*, one should first acknowledge how the term itself is a product of Western institutionalization. Western knowledge has thrived and developed for centuries, institutionalizing traditional knowledge systems and replacing colonial norms that have laid the foundation of modern knowledge systems (Domínguez and Luoma 2020).

One example is the assimilation of the Sámi People and Kvens in Northern Norway experienced Norwegianization, having to accept state-defined Norwegian culture (Berg 2013). Frandy (2021) explains that this type of assimilation is a form of *green colonialism*, in which a specific ethnocentric western thought constructed sustainability as the term we know today. He thus worries that marginalized groups' values and worldviews are less represented in policymaking. These "reproductions of social power" further exacerbate ethnocentrism's influence on shaping sustainability and environmental science. She argues that this "colonial logic" distinguishes environmental management from the deeply rooted cultural relationships nurtured by specific populations (Frandy 2021: 56).

In a political setting, being *Green* is" …connected with the protection of the environment; supporting the protection of the environment as a political principle" (Oxford Learner's Dictionaries 2022). When the word combines with another – those positive connotations carry over. In economics, there is talk about *green finance*, *green investments*, and *green bonds* – all of which are embraced by the neoclassic school of economics for applying *green* to economics, finance, the modern global economy and society (Kahlenborn et al., 2017; Berrou et al., 2019; Opatha and Hewapathirana 2019; Volz 2019). Another relevant term is *greenwashing*, which is a critique of the frequent use of *green* "…as an intersection of two firm behaviours: poor environmental performance and positive communication about environmental performance" (Delmas and Burbano 2011: 65). Harlan (2020), who takes a political ecology approach, argues that applying the concept of *green development* may

overlook the political motive behind its application and who benefits from it. Using China's Belt and Road Initiative (BRI) as a case, he distinguishes between *green* activities that either "mitigate environmental risk" or "invest in low-carbon infrastructure. According to him, it does not perform as well with the former as the latter. Despite the energy transition leading to a cleaner infrastructure network, BRI is brown development greenwashed to construct an environmental narrative to drive economic growth through more modernized governance of natural resources (Harlan 2020: 1-2). However, 26% of BRI's energy will come from coal and may cause carbon lock-ins to hold back a true and effective transition away from fossil fuels (Tsinghua 2019: 10). While decarbonizing coal can reduce emission levels, it is nevertheless a great source of emissions. Using terms such as *green coal* mitigates the negative connotations one may have with coal and be more open to accepting coal as a "bridge fuel". This belief that low-carbon fossil fuels can act as a bridge to a greener energy industry has occupied the energy discourse for a long time. Proponents argue that it is a compromise that softens the transition phase, giving time for the energy industry to reorganize its structure without significant blows to employment and economic growth (Delborne et al., 2020). Still, it is worth being critical and aware of the possibility that the concept of bridge fuels is an attempt to greenwash brown and black energy to get more public acceptance for preserving business as usual, doing little to speed up the green recovery.

A green recovery assumes that green growth and technological advancements enhance environmental quality (Strand and Toman 2016). So-called *environmentally-friendly* activities are said to go hand in hand with activities that generate economic income. The EU's Green New Deal currently discusses the possibilities of a global green growth economy. Similar strategies are in place in other parts of the world, such as China's Belt and Road 2017 *Environmental Cooperation Plan*.

Here, China presented a narrative in which they claim to be a driver for sustainable development in transport and other parts of the commodity chain in Asia by electrifying a railway system linking Asia to Europe and Africa. The transport sector causes 25% of all energy-related emissions, so decarbonizing this sector could benefit the environment under the right conditions (UNEP 2022c: 16). China has said that it respects local wildlife, neighbouring populations, and those affected by the development (MEP, China 2017). However, evidence has shown that the railway is not as sustainable as China would claim it to be (Ascensão et al., 2018: 2016). Certain hotspots are vulnerable to human intervention and will endanger species' habitats (Liu et al., 2019). Thus, China pushes for its vision of an "ecological civilization" by connecting countries together by more *environmentally friendly* means of transport, creating new biodiversity issues (MEP, China 2017). In a green recovery, the environment and biodiversity should receive equal attention, and authorities should not prioritize one over the other (Strand and Toman, 2016; Sandbrook et al*.,* 2020). Hence, the BRI case might be something to compare when analysing the environmental implications of large-scale energy-related projects in Norway.

Another matter with *green recovery* as a term is how actors interpret the word green differently, or in other words, what *shade of green* they see. For example, Norway's sustainability rhetoric does not always match its actions. Granting subsidies to the oil and gas industry while setting ambitious climate goals is one example and goes against their commitments to reduce emissions by 55% by 2030 (Regjeringen 2021b). The term frequently conflates several understandings of what *green* means to make independent definitions. On the one hand, the Minister of Climate and Environment Espen Barth Eide calls for "urgent action" to mitigate the magnitude of climate change while still advocating for Norwegian gas as a transition fuel. On the other hand, a researcher from 2021's SDG conference called it: "a real dirty recovery" (Barth Eide 2022;

Kleiven 2022). They are from the same country but have different opinions on how Norwegian energy can combat the climate crisis. It all depends on what one puts in the definitions of sustainability, which is why Norwegian actors perceive Norway's environmental performance differently.

A way to concretize the viability and effectiveness of energy-related projects on the environment is to create criteria for how environmentally friendly a project is. Categorising environmental performance can indicate what Norway does well and what it does not but is not necessarily the ideal way to interpret public policy and investments. CICERO's *Shades of Green* methodology is a tool that determines Norway's long-term contributions to transparency, resilience and planning to guide investments and track progress towards the green transition. The scale of five colours – red, yellow, light green, medium green and dark green – rates stakeholders on how green their projects are (Alnes et al., 2020: 15). For example, electrifying Norwegian oil platforms could have a yellow to light green shade. Although there has been some efficiency in abating fossil fuels, Norway is still a big emitter by preserving the oil and gas industry (Office of the Prime Minister 2020; OED 2022a). Since a green recovery requires divestment from fossil fuels along with new green energy technology, it should have the shade of dark green, meaning "projects and solutions that correspond to the long-term vision of a low carbon and climate-resilient future" (Alnes et al., 2020: 15; Sandbrook et al., 2020: 2).

A dark green shaded green recovery recognizes that sustainability needs to be at the top of the political agenda. However, achieving this does not come for free, nor is it easy to initiate. It takes coordinated planning between all societal actors to change people's preferences toward a common interest in a sustainable future.

Industry actions are motivated by public perception, and they might not change unless they are encouraged or forced to make changes to how

they operate (Buhr and Hansson, 2011; Markusson *et al.,* 2011; Whitmarsh et al., 2015;). For example, when stakeholders fail to deliver on Corporate Social Responsibility (CSR) - consumer scepticism grows and causes distrust in stakeholder promises to deliver on their goals (Leonidou and Skarmeas 2015). Consumer distrust restricts companies from gaining a consumer base that approves of their actions and is especially necessary when the government proposes a new policy, causing a behavioural change in their attitudes that can shift their values to become, e.g. more environmentally friendly (Vahdati et al., 2015).

Theory of Change for Green Recovery

The applied theories of the thesis build on the "Theory of Change for Green Recovery", as outlined by Bird and Hamada (2022: 4) and Sandbrook et al. (2020). Both research papers use frameworks to identify the stages of a Green Recovery and help identify the criteria which can help answer the RQs. The sections below follow the framework by Birk and Hamada (2022). Both of these frameworks can be found in the appendix.

Rescue phase

There are a few assumptions about the first stage of the rescue phase. The actors are expected to make strategic choices, design and implement interventions based on resource availability, and deliver the outputs on schedule (Bird and Hamada 2022: 4).

Next, a green recovery would need to divert from investing in fossil fuels. Doing so would require actors that form a bond between public policies and marked-based instruments. These actors would see the pandemic as an opportunity, rather than a constraint, to launch a Green New Deal to further ambitious conservation policies that may slow down climate change, biodiversity loss, and emissions – given that decoupling is successful (Sandbrook et al., 2020: 2).

One worry among political ecologists is that some political agendas are cloaked as conservation policies to justify their actions (Neumann 1991, Robbins 2012, cited in Breslow 2014: 323). The appropriation of land for economic gains might cause harmful damage to wildlife such as bird nest areas close to windmill parks (Apostolopoulou and Adams, 2015; Benjaminsen and Robbins, 2015; Cleasby et al., 2015). Therefore, biodiversity and environmental policies are not always in harmony, creating a social hierarchy where policymakers shape the outcome according to their interests and preferences (Jackson 2011). Building a large-scale wind farm might supply electricity for thousands of households, vehicles, and buildings. Sometimes, the side-effects are unforeseen, however, and are only visible later. For instance, a large-scale windmill project in Ireland caused a landslide, dislodging the peat buried deep below the landmass to pollute the nearby river and killing around 50.000 fish deaths and lasting damage to the area (InfoCuria 2008; ECJ 2008, paragraph 89). Concessions are in place to prevent these kinds of outcomes from happening. Still, with the political justification to build even larger-scale renewable energy projects to meet the demands after the pandemic, there will always be considerable uncertainty about how well all possible risks are accounted for beforehand. Thus, it is easier to measure the environmental outcomes of new energy policies, but not so much for effect on conservation.

Solving the climate crisis through a green recovery does not happen by unilateral consensus, so the idea of reforming the economic system to work *for,* not *against,* the environment is integral. In the rescue phase, a government is likely to stimulate economic incentives by creating welfare packages and more employment. Environmental policies target technologies such as Carbon Capture Storage (CCS) and renewable energy projects and improve energy efficiency. Communication green information will further develop a market for ecosystem services and cause more significant investments in a greener industry. Therefore,

investments will need to prioritize activities that cause eco-efficiency, more green technology, and focus on renewables while not causing extensive environmental pressures (Bird and Hamada 2022).

The connection between the pursuit of growth and environmental impacts is evident in multiple old and more recent crises. Previous recessions, such as the 2008 financial crisis, put environmental policy-making aside to remove obstacles to economic growth. Appropriating land and resources for monetary gains is called green grabb*ing*. Sometimes, ecologically destructive economic policies are masked as eco-friendly to promote and advocate for a capitalist *solution* to climate change. The complete and extensive impact a new energy project has on nature might thus be downplayed to appeal to sceptics (Apostolopoulou and Adams, 2015). Jones blames state institutions and economic actors for the cause of environmental degradation, linking it to issues of economic growth (2008).

Recovery phase

Once a government is past the planning in the resue phase, they will need to consider other aspects of the recovery that will change the different sectors and industries. For example, while the thesis focuses on the Norwegian energy industry, it also describes how changes in energy policy affect transport and manufacturing. As such, there needs to be evidence that the energy industry has clear climate resilience plans linked to the pandemic recovery. Doing so also requires "new sector policy processes, regulatory measures or institutional structures" (Bird and Hamada 2022: 8).

One important cross-sector theme is resource sovereignty. Resource sovereignty regards how we use, manage, and govern resources. Resources are the foundation of development, from giving people housing, electricity, and firewood for heating and other purposes. From a

political ecology perspective, it is also the driver of conflict and war (Le Billion, 2001; Byrne et al., 2007).

To compete with foreign markets and private companies, state-owned firms sometimes operate transnationally for improved productivity (Ohene-Asare et al., 2017). Ownership and trade of renewable energy sources share a similar governance structure. In Italy, their national energy strategy *Strategia Energetica Nazionale* (National Energy Strategy), has been seeking to combine environmental goals with a competitive production system, finding favourable efficiencies and investments in a public-private (Di Pillo et al*.,* 2020*)*. Other countries like Denmark have seen wide acceptance for green energy projects by offering municipal ownership by giving 20% of the shares back to the population in some regions (Gorroño-Albiz et al., 2019).

Public awareness of the environment has changed since the pandemic broke out. On the one hand, Gusheva and de Gooyert (2020: 3) observe that public awareness of environmental topics has reduced because they are seen as "detrimental to economic recovery". Rousseau and Deschacht (2020) found that the pandemic experiences have changed twofold: either people feel a lower sense of urgency because they see media coverage showing a recovering environment, or strengthen the support for recovery programmes. One's relationship with natural resources may have changed, realizing how dependant we are on nature as natural capital, giving us food and shelter, but also as a protector of the harmony of all biological and organic life.

First is the public perception, legitimacy and acceptance of a government's actions. Being separated from the political elite can prompt opposition to projects that seem to give no gains back to a community (Vatn 2015). Therefore, marginalised communities can feel conflicted when confronted with an energy project that is supposed to be part of the green transition (MacArthur and Matthewman 2018). Not feeling listened to or considered in the planning might create value conflicts that erupt in

particular framing, e.g. windmill parks. Fostering attitudes of post-truth and populism might materialize within a population (Giordono et al., 2018) if it perceives that the benefits do not come back to them in the form of energy subsidies to pay their bills (Hancevic et al., 2016).

Public support for new energy projects and the energy transition is necessary because it shapes policy (Blumer et al., 2018). People's attitudes are affected by technological acceptance, but fairness is the most crucial driver for public acceptance (Blumer et al., 2018; Gölz and Wedderhoff, 2018). However, preferences and attitudes may vary across geographic locations (Giordono et al., 2018; Gölz and Wedderhoff, 2018). Graff et al. (2018) also find heterogeneity across age and employment status.

Reinforcement phase

Finally, the reinforcement phase is where a state has used the pandemic to build a green recovery framework and is observing societal changes. The ideal outcome is when the green recovery policy responses cause two impacts: "1) Established climate-neutral pathways for national economies, and 2) Strengthened climate resilience (with an emphasis on vulnerable and marginalized groups" (Bird and Hamada 2022: 5).

4. History and context

Norway's Energy History

Before explaining Norway's energy history, there are a couple of important names to consider when discussing Norwegian energy policy. Firstly, there is the Ministry of Petroleum and Energy, whose role is to integrate effective, efficient, and lucrative energy policies that manage Norway's resources in an environmentally responsible way (OED 2022b). NVE – or Norwegian Water Resources and Energy Directorate (Norges vassdrags-og energidirektorat) is the government agency under OED and is responsible for flood risk management and regulating water and energy resources (NVE 2022a). Statkraft is the leading producer of renewable energy, not only in Norway but in Europe. Under the ownership of the Norwegian state, it manages many of the same energy resources as NVE does (Statkraft 2022a).

Then there is Statnett, a state enterprise also fully owned by the Norwegian state, also under OED. Its job is to construct, manage, and improve the infrastructure of power grids. Another task is to supply electricity to the whole country and manage its production and use (Statnett 2022). Another important state enterprise is Enova, formed in 2001 and used to be under OED until the ownership switched to the Ministry of Climate and Environment. Lastly, the Energy Fund finances energy projects to reduce emissions, innovate and improve domestic R&D in renewable energy, and facilitate efficient energy use (Enova 2017; Regjeringen 2018; Enova 2021a).

A brief explanation of the key actors in Norway's energy sector will now follow because contextualising Norway's energy history is crucial to uncovering how contemporary energy politics emerged. Doing so can tell us about how Norway responds to environmental problems and whether there is a pattern to why and how the outcomes ended as they did. Analysing these patterns can improve our understanding of Norway's

accountability when developing energy and environmental policies during the pandemic.

The most critical moment in Norway's energy history was finding Ekofisk, a vast reservoir of oil and gas in the North Sea, which set Norway's role in motion to become one of the world's leading oil and gas producers. The event is one of the main reasons Norway is as fortunate today (Tollaksen et al., 2020a; Tollaksen et al., 2020b). Today, Norway's GDP and HDI are some of the world's highest. Much can be attributed to the decisions to establish national oil enterprises like Statoil (Equinor) and Norsk Hydro that governed Norwegian oil and gas resources with responsibility toward its people while maintaining good connections with international stakeholders (Schjølberg 2017; Tollaksen et al., 2020a). Despite the industry wanting to maintain a responsible environmental standard, it met opposition from environmental organizations that worried about the implications for an "oil-dominant Norway" (Tollaksen et al., 2020a).

These concerns also extended to the way Norway governed nature. An appropriate example is Alta-taken (The Alta-case). In the late 70s, a planned hydropower construction project in Finnmark would potentially threaten the region's diverse plant and animal life. In 1982, the case concluded by giving legal status to the construction. The aftermath sparked more discussions about themes of the rights to local ownership and governance, the value of conservation and the relationship between minorities and authorities (Berg-Nordlie and Tvedt 2019).

Understanding this part of history is not only important because it explains the more profound struggles of Norwegians' relationship with nature, but it can uncover the reasons why Norway's role in the international community stands in contrast with other, less resourceful countries. Other countries have their resource struggles, but Norway is different in that it sits on a pool of resource wealth that it will not give up easily, despite the international community calling for a complete stop (Knežević *et al.,* 2022).

International relationships and the EU

Norway's energy policy does not operate in isolation. The current government has stressed that international cooperation will be critical to domestic and global environmental goals (Regjeringen 2021c). This belief echoes the benchmark moment for global cooperation on sustainable development - *Our Common Future* - launched by Norwegian Labour Prime Minister Gro Harlem Brundtland (Brundtland 1987). Today's current energy policy is not created in isolation but with other countries, sharing knowledge on technologies like CCS, offshore wind, hydrogen and batteries with neighbours like Sweden (Statsministerens kontor 2022).

Europe sees green development in all parts of society. Finland invests the most in energy-related projects as part of its recovery plan among all EU countries. Their recovery plan intends to phase out coal and set an energy tax to encourage the move to renewables. Significant investments will follow in decarbonizing the energy sector, producing low-carbon hydrogen and applying its use in CCS. These projects will achieve the EU's 37% climate spending goal (EC 2022a; Green Recovery Tracker 2021: 3).

The EU acts as both a European and a global leader because it coordinates action and gives recommendations on what environmental standards European and non-EU countries should follow. Since Norway is not part of the EU, it provides the country with more flexibility to construct policies targeting domestic interests. Norway has nevertheless committed to working together with the EU on environmental issues. The EU's 2018 report on sustainable growth is one example of Norway endorsing EU regulations. It intended to address the state of the financial system after the financial crisis in 2008. Part of the lessons learned was transitioning towards a greener economy (EC 2018).

While Norway is not part of the EU, their relationship is close. Norway joined the International Platform on Sustainable Finance (IPSF) in 2019, consisting of 18 members who contribute to 55% of the world's

greenhouse gas emissions (EC 2022b). Another critical part of the EU's Green Recovery Plan is The taxonomy – a classification system of economic activities that the EU deems environmentally sustainable. Its purpose is to equip investors with knowledge of making greener investments. The taxonomy lists six environmental objectives: mitigating climate change, becoming more climate-resilient, protecting and restoring biosystems, and transitioning to a circular economy. Using the taxonomy could help distinguish between sustainable and non-sustainable energy production (EU 2022a). These objectives are all part of a green recovery.

The resources, products and services that the EU put on their list will impact what Norway will produce, the volume and trade relations. The government has two leading energy and environmentally related foci: Hydrogen and Carbon Capture Storage (CCS). Although Norway's climate goals align with the EU's, they proposed that some resources, such as hydrogen, should fall under the sustainability label because they argue for its ability to bring the energy industry closer to the green transition (Ministry of Finance 2020). Some of Norway's cross-border energy industrialization may fall under the EU's *Important Projects of Common European Interest* (IPCEI) – for research and innovation of new, green technology (EU 2021). IPCEI is part of the government's plan to map out hydrogen's potential to become the next energy sensation through a mutual transfer of technology and information about the energy market (Regjeringen 2020a).

Unfortunately, the progress towards a green recovery is not as easy to achieve as it would seem. While Norway advocates for hydrogen as one of the leading energy sources in Europe's green recovery, they contradict their environmental profile by fighting to preserve the gas industry. As a signatory of the Paris Agreement, Norway must continuously report figures of how far they have come in meeting its climate goals (Regjeringen 2021d). Before COP26, countries were encouraged to strengthen theirs. Norway's 2030 target to cut emissions by 40% recently

increased to 50-55%, following growing concerns in the international community over worrying projections of reaching beyond the 1.5˚C threshold. (Regjeringen 2021b; UN 2021).

However, the OECD is worried about Norway's progress in transforming its energy industry due to its unwavering intentions to keep the oil and gas industry alive well into the next decade (OECD 2021). Thus, there are opposing international interests in the green recovery. Whereas the EU has set goals for a Green Recovery scenario in post-pandemic Europe, Norway mostly continues the same path as before, with some upscaled environmental goals. Hence, it has yet to adopt the same comprehensiveness as the EU did when the pandemic arrived, making the shift to a green recovery more arduous.

The Pandemic as an Opportunity for Change

The pandemic was an opportunity to re-think energy-related environmental policies. It also arguably kept the oil path dependency alive to relieve the economic blows caused by the pandemic (Office of the Prime Minister 2022). All industries in Norway suffered, resulting in many businesses going bankrupt and dismissing employers (SSB 2021a; SSB 2022). National GDP then started declining in April 2020, after a steady rise in the years prior (SSB 2021b). At the time, it was unclear where the world was heading. If the pandemic's beginning was a hard blow to the Norwegian economy, the latter part has been quite the opposite.

In the first period of 2020, the oil prices went up dramatically, with a GDP increase of 788 billion NOK in 2021, increasing 22.2% from 2020. 2021 is considered another year heavily affected by the pandemic, and while the industry experienced growth, it had to pay for the many expenses such as unemployment. (Buholm Johansen 2022; NTB, cited in Klassekampen 2022). When all industries froze in place, it seemed as if the momentum towards the green transition was halted or even going backwards. One significant response by the Norwegian government was to introduce two

recovery packages to compensate for and preserve the paralyzed oil and gas industry. The other's intention was to stimulate research and development in a more sustainable energy industry (Regjeringen 2020b).

The Oil Tax Package

The first package, dubbed the oil tax package (oljeskattepakken), was designed to "maintain activity during the coronavirus crisis" by relieving high tax rates of the oil and gas industry. With volatile markets and prices plunging, there was a high degree of uncertainty regarding the state of the oil and gas industry. Solberg also stressed the importance of keeping Norway's critical jobs alive, such as workers on oil platforms. Moreover, she amended the oil tax rate to protect jobs, improve company liquidity and make oil investments more attractive. The authorities would then refund the income losses from taxation for 2020 and 2021 (Office of the Prime Minister 2020).

The move displayed that Norway wants to hold on to the profits from oil and gas for as long as possible, even if the national GDP is one of the world's highest despite the decline (World Bank 2020). Considering the Government Pension Fund Global (Oljefondet) has around 11 348 billion NOK market value, it would not be preposterous to argue that the economy is far from collapsing (NBIM 2022a; NBIM 2022b). Instead, it is a pool of assets that could, in theory, fund a green recovery. That does not seem likely to happen because of the deeply rooted oil and gas industry's history as a security net in times of crisis. Therefore, the country's cultural history and legacy determine some of the authorities' current actions due to the economic resilience safeguarding the Norwegian economy for decades.

The interest in maintaining this structure is still strong today, even with the distortions caused by the pandemic. If a proper green recovery were to happen, the funds' allocation would need to be more significant and finance a broader range of energy projects. Economists do not like

uncertainties and risk-taking when financial gains are difficult to predict, so they would need funding from the state and more precise frameworks for engaging in a green recovery (Ministry of Finance 2021).

With decreasing global emissions from 2020, the government could vouch for intensified investments under the right circumstances and leadership to capitalize on the pandemic's opportunities to restructure the economy to re-form the energy industry. Still, with many businesses going bankrupt and unemployment rising, it was a matter of political priority that determined the current domestic energy policy landscape. A late 2020 research study looked at the macroeconomic impacts of reduced petroleum activity by 2050 and presented two pathways where Norway scales down their oil production. One of the pathways introduces a higher tax rate, discouraging companies from using their investments to renew or open new oil concessions (Aune et al., 2020).

The Green Restructuring Package

Second, The green restructuring package was proposed simultaneously with the oil tax package to stimulate interest in the green transition. 3.6 billion NOK was allocated primarily to the Green Platform Initiative – an aid initiative funding green growth for businesses and investments in green R&D (Forskningsrådet 2022) and support for a greener transport industry. A significant grant was given to the state-owned enterprise Enova's green growth programme, handing out 2 billion NOK (Finanskomiteen 2021). In late 2021, Enova granted over 1 billion NOK to the three enterprises, Tizir Titanium & Iron AS, Yara Norge AS, and Horisont Energi AS, for their contribution to developing knowledge and innovating Norwegian industries for future generations (Enova 2021b). Enova is one of Norway's most important drivers of funding domestic green energy projects. Before 2018 it was owned by the Ministry of Petroleum and Energy before being handed over to the Ministry of Climate and Environment, signalling a more decisive move towards the green transition (Regjeringen 2018). Enova's plan from 2017 to 2020 was to "1)

Reduce Norway's climate footprint to meet climate commitments within 2030, 2) Increase innovation in energy and environmental technology that enables the transition towards a low-emission society and 3) Strengthen supply security through flexible and effective effect and energy use" (Enova 2017). The grant thus contributed to accomplishing these goals.

On paper, the allocation given to the green restructuring package was a positive boost to building more renewable and sustainable energy projects, but when compared side-by-side with the oil tax package, its impact bleaks in comparison because it counteracts the purpose of the Enova funds. Hence, the government attempts to appeal to voters who voted for a fossil-free and just future. Meanwhile, it also appeals to the oil lobby seeking to give Norway a competitive advantage when the pandemic has settled (Ministry of Finance 2020). As a result, they created an obstacle to advancing more sustainable energy sources for hydrogen and wind energy at sea – which complicates the path towards the green recovery, even if there is evidence that the renewable energy industry is upscaling (NTB 2021).

International consequences

This juxtaposing profile is more visible at the international level than at the domestic level. At COP26 in Glasgow 2021, Norwegian Prime Minister Jonas Gahr Støre received the "Fossil of the day" award by the Climate Action Network (CAN 2021). The leader of WWF Norway, who was present at the conference, claimed that Norway is playing a double standard in which they present themselves as climate activists yet continue to lobby for *clean* oil and gas to catch the interest of markets worldwide. Even if goals such as cutting emissions by half by 2050 are a positive development, the focus on the petroleum industry still stands. That is why oil investments overshadow the advancements seen with Carbon Capture Storage (CCS) and increasing greener investments in renewable energy (NRK 2021a, translated from Norwegian). The theme of *developing versus*

discontinuing the oil and gas industry has caused a considerable national debate and is the point of interest in this chapter. Understanding why Norway is so hesitant to let go of its oil is critical to understanding the current energy developments and why there is scant evidence for a green recovery in domestic energy policy.

Robust environmental policymaking is not unknown to being hindered by lobbyists who have an interest in maintaining their economic interests in domestic and international markets (Vesa et al., 2020). At least seven lobbyists were present at COP26 to convince the audience that Norwegian gas could be part of the solution by acting as a bridge to more renewable sources of energy (Corporate Europe Observatory 2021). Evidence of lobbying was already found in 2020 when the Ministry of Finance submitted an amendment to adjust the EU taxonomy to include blue hydrogen and hydropower under the same criteria as all other renewable energy sources generated by electricity. The letter addresses that unless the EU's sustainability criteria apply to blue hydrogen and hydropower, they worry that Norway will lose market access. They further clarified that Norway is supportive of the EU's Green New Deal for a green transition. Still, they stressed the importance of not creating asymmetries in green markets by not imposing technological neutrality (Ministry of Finance 2020). Thus, Norway wants to secure a position as an international actor accountable for its efforts to mitigate the effects of climate change.

A grey shift in Government

13th September 2021 marked an important day for Norwegian Politics when the electoral vote swayed to the left, declaring Labour (Ap) and the Centre Party (Sp) the winners, followed by notable results for the Socialist Left Party (SV) and Red (R) (NRK 2021b). The results marked an end to eight years under Erna Solberg's Blue-Blue government Right (H), the Progressive Party (FrP), Christian Peoples' Party (KrF) and Left (V). One significant promise was improving the previous government's environmental policy by escalating the transition towards a completely

renewable energy industry (Regjeringen 2021e). These promises signified change. Hence, there was widespread optimism that Norway would advance its climate politics.

However, things did not go as planned, and SV decided to abandon the proposed coalition because they argued their politics would not get any significant breakthroughs. Instead, they hoped to become a more vigorous watchdog in parliament (Carlsen et al., 2021). That meant Ap and Sp could not follow through with their dream political platform. In their favour, the decision to leave the coalition ensured that Ap and Sp could change the energy-environment narrative – thereby accomodating the oil and gas industry instead of discontinuing it, as would happen with SV in government. Instead of making a firm divestment from fossil fuels and going completely renewable, the Norwegian energy industry, under the leadership of Ap and Sp, has now ended up with a mixture of strategies that contradict each other's net environmental effect. The outcome is not green – but a grey – and dismisses some of the green recovery's most vital criteria to abandon fossil fuels.

An important turning point occurred during the winter of 2021/2022. The energy price rose, giving Norwegian consumers a higher bill than usual. When the national water reservoirs are at a minimum, and the wind is mild, prices go up because of an imbalance between supply and demand, as the cold winter makes people use more heat in their homes (Mæland and Oma 2021). A green recovery scenario in which Norway shuts the oil tap and goes completely renewable would require a more efficient allocation of energy to meet the demand of consumers, businesses and industries.

The interest in the green transition vitalized an ongoing discussion about whether Norway is producing enough electricity to meet the growing demand. Wind energy proponents like Norwea and Energi Norge urge the government to greenlight more projects that help meet the demand (Energi Norge 2022; Kroepelien and Haga 2022). On the other side, wind

sceptics look for solutions elsewhere, bringing attention to energy efficiency and saving (Energi & Natur 2021; Malkenes 2022). Others recognize the need for a renewable energy surplus by building more energy sources but question the possible harm construction might bring to nature (Randøy 2022). Producing more energy could relieve some of these fluctuations, but this is uncertain.

Even without the uncertainty, the question remains, who pays the bill for new energy technologies? A study in 2018 documented that 87.6% of Norway's Mayors thought that climate adaptation would bring higher costs that the municipalities would have problems financing. One of the main reasons for the struggles to finance improved resilience was inadequate economic planning, as explained by the environment's unpredictability and the fear of taking risks. The number increased from 25% in 2017 to 46% in 2021 (KS 2021; Ramberg Aasen and Rygh Hjorthen 2021) and reflects a growing worry about environmental changes and the necessity of financing solutions quickly. Without the means of doing so, the municipalities face political inertia that stagnates the progress forward toward the green transition.

Environmental policies under a green recovery are government-led (Bird and Hamada 2022: 5). They aim to create green jobs and supply aid packages that encourage goals to decouple the oil and gas industry, slow down climate change and preserve habitats. However, the characterization of a green recovery is also full of uncertain environmental and ecological quality outcomes (Sandbrook et al., 2020: 2). It is only under a complete system change that the changes in an energy transition could guarantee the results that Norway is now striving to meet. Given Riksvevisjonen's report and the absence of radical change after COVID, there is reason to suggest that Norway is not on a path to a green recovery, at least for the moment, because it has yet to organize a comprehensive response that not only stimulates new technologies but creates monitoring systems and launches educations specifically targeting

the green recovery (Bird and Hamada 2022). It is not enough to decarbonize the energy sector when it may cause environmental degradation and possibly put species and biodiversity at risk. With the direction that the energy politics under the Ap-Sp government is heading right now, there is reason to argue that both do not receive the same priority – making it all the more difficult to call the changes after COVID a green recovery.

This dual profile has worked against their favour. April's IPCC report says, "it's now or never". UN Secretary-General António Guterres called it a "document of shame", expressing disappointment in countries' "empty promises" and "radical" decisions to continue the search for oil in this day and time. According to the report, there are only 2.5 years to turn around the grey development, and even then, there is no guarantee that the world can reduce global warming to the 1.5° goal (Cited in Honningsøy et al., 2022). According to Barth Eide, we will see a growing renewable energy industry emerging alongside a responsible oil and gas industry (Cited in Knežević et al., 2022). Still, as long as it waits for Europe to shut off the demand for gas, the opportunity to scale up investments in green energy technology during the pandemic has been nought. These very recent developments in the debate confirm that Norway neither used the pandemic to switch investments from fossil fuels to green energy technology when neither the Ukrainian war nor criticisms from the global community were enough to change its course.

The next chapter will give a deeper look into the implications of these projects on Norway's environmental policies regarding their impact on a green recovery. The discussion is then brought up again in the results chapter. It argues that despite the government's intentions to decarbonize the energy sector further to intensify the upward adjustments to the climate goals set by the Conservative (H) government, it has instead followed a similar pathway. Whereas there is evidence of some progress, there is insufficient evidence to suggest that the

pandemic changed the behaviour and action of Norway's energy and climate policy. These claims are discussed further in the analyses in Chapter 6.

5. Recent energy developments

So far, the thesis has explained what a green recovery is and discussed the theories and implications of a Green Recovery in Norway. This chapter takes this discussion further by applying it to energy projects and policies from the past and present. It distinguishes that a project or policy is only part of a green recovery if it has seen substantial changes throughout the pandemic. The structure follows the categories presented by Sanbrook et al. (2020: 2), who organised the different policy scenarios of a post-pandemic reality in a table to distinguish what a green recovery response implies clearly. The chapter finds some evidence that domestic energy policy resembles a green recovery in increasing green financialization and investments, with a private and public sectors taking more responsible action for their appropriation of nature and climate.

Nevertheless, the green finance pales compared to the current goal of supplying the world with gas and maintaining stable oil production. The pandemic has shown that emissions can decrease when fossil fuel footprints decrease. However, its effect is not significant enough to call it a driver of greener energy politics when Norway's oil and gas industry contradicts the central message of the IEA and the UN's IPCC reports.

Uncertainty

Generating power does not come without complications. Projects first need the approval to materialize. For instance, projects in Storheia and Roan were granted concessional licenses by NVE in 2010 and further approved by OED in 2013 (Lindgaard Stranden 2021). NVE's 2019 report predicted that due to the significant opposition from the public, there would most likely be no renewed operation until 2030 (NVE 2019). Smaller municipalities may be interested in harnessing wind power to capitalize on the economic opportunities of energy generation. In 2020, the government revised the wind power policies to give public authorities a more prominent role and influence over the projects and set stricter environmental regulations (Hovland 2020; OED 2020). At the time,

Minister of climate and environment, Sveinung Rotevatn (V), stressed that Norway needs a good balance between having access to renewable energy and giving more consideration to environmental values. Additionally, the message promised more predictability for local municipalities, developers, and inhabitants (OED 2020). This message was a positive turning point for conservation policies because it suggested that the government saw a more definite connection between windmill farm development and environmental and ecological degradation and declining support from civil society.

One year later, the Fosen case concluded that the wind development infringed upon the rights of the Samí to preserve their reindeer herding pastures without interruption from the wind farms (Børstad et al., 2021). Fosen was a clear example of a fault in the energy policy. Still, sometimes the disadvantages of energy construction are less evident and cause those involved to act on the precautionary principle, as in Vardø, where the army declined the municipality's request to start building because the signals may disrupt the army's radars (Rapp 2022). Municipalities will receive compensation for the disturbances, but owners of existing parks might receive a wind power fee that finances the payment. Norwea, one of Norway's leading advocators for wind energy, worries that a fee on existing projects will lower investors' trust in the green transition (Nyhus 2021).

Thus, there is a distinct divide between the interests of how the energy policies will benefit the nation. Civil society actors from organizations such as Motvind have been critical of the supposed environmental advantages of windmills over other forms of renewable energy (Børstad and Kringstad, 2021). According to the cost-benefit analysis, it could be permissible to go through with the construction based on the concessions that deemed a project viable. However, windmills are currently producing only a fraction of the total energy production in Norway (Moe 2019). Negative factors such as harm to wildlife and people should weigh more if

Norway's energy policies are beneficial both for Norwegian nature and the directly or indirectly involved people.

Fosen Wind claimed to have greenlit the project on permissible grounds and that the judgment was illegitimate (Steen 2021, cited in Lindgaard Stranden 2021). Converse arguments against construction are present in Motvind, who would instead follow the precautionary principle to reduce all possible harms to a minimum when there is a high degree of uncertainty (Gardiner 2006; Malkenes 2022). The cost-benefit analysis (CBA) assumes the actors have complete information about the possibilities of their actions. Still, when problems emerge after a concession, it is difficult to know whether OED and NVE considered all plausible scenarios or if they were willing to take a risk. However, the poor public perception from comprehensive media coverage can impact public policy development with time. Therefore, awareness and perception of how the government or a company manages risks can appeal more than science (Pike et al., 2021).

Norwegian citizens have expectations for their representatives to deliver on wind projects that are less environmentally intrusive. People hold power to shift how the government engages with future projects because they hold the government accountable for their actions (Vatn 2015; Torvanger 2022). Whether the turbines are to be torn down or remain without no new construction remains to be seen (Lindgaard Stranden 2021), but it is an example of how Norway's political structure limits them from fulfilling certain energy developments.

Ownership

The common denominator among these wind projects is that there has been growing attention to how Norway govern its resources and how much ends up back in the municipalities' pockets. It would be vital that municipalities hosting such projects have an economic incentive for companies to intervene on their land (Moe 2019). In 2017, Zephyr and

Norsk Vind opened up Tellenes windmill park in the municipalities Sokndal and Lund, hosting 50 turbines. It is estimated to generate 520 GWh – the equivalent of supplying the energy usage for 25000 households (Norsk Vind 2022). The owner of this project is Blackrock, who also owns Guleslettene windmill park ten kilometres North of Florø. It will generate 197.4 MW and an annual capacity covering 40000 households. (Zephyr 2018). The corporation is a leading international pension that is not unknown to controversies (Jolly 2020). Its commitments to improve its environmental and social governance standards have been met with recent scepticism regarding its contradictory action to financially back fossil fuel-driven energy companies in Texas, fearing losing out of the state's pension fund benefits (Kerber 2022).

Moreover, they published a sustainability report in 2020 showing how revenue growth links to harmful greenhouse gas emissions in the energy sector (BlackRock 2020). Meanwhile, they consider stakeholder assets as the prime importance for the group. Some would say their fear of climate risk is not about being politically *woke* but rather a fear of giving stakeholders bad terms to invest on due to the uncertain long-term benefits of green investments because of the instability of climate change itself (Jolly 2019). Therefore, Blackrock is on an inconsistent sustainability path. It arguably shows that investments in renewable energy in Norway are primarily motivated by the economic incentives it brings more than the good intentions to participate in the green transition.

If Blackrock's sustainability standards were as high-standard as they claim to be, then they would not show support for the brown and black energy. Similar consequences could potentially happen in Norway, and the case above shows that indirect emissions on Norwegian soil are likely to materialize somewhere else in the world. Further, A Blackrock investor claimed the concessions' timeframe of 25 years is to avoid risks that might occur when changing the project within that period (Åkerlund, in Kampevoll 2019). Similarly, Google signed a 12-year contract for

purchasing electricity from Tellenes park (Kampevoll 2019; Norsk Vind 2022).

Google is also meeting opposition to their new data centres. Skien's mayor welcomed its purchase of an area North of the city as an opportunity to create jobs and an economic boost (Skumsvoll et al., 2019). The centre will produce 450 MW at full operation, compared to Skien's annual use of 87 MW. Estimations expect the data centres to require enough energy worth Norway's entire power generation (Tornes Espeseth and Aune 2021). Statnett is favourable to these changes and welcomes international firms to engage in Norwegian green energy development (Knudsen 2019). However, prioritizing large-scale production would arguably make it more challenging for other small-scale projects (e.g. solar panels on household roofs) to materialize because the economic priorities regard larger projects. (Stamland, in Tornes Espeseth and Aune 2021). Minister of Trade of Industry, Jan Christian Vestre (Ap), wants owners to set more ambitious climate goals and bring "the public politics of ownership closer to people" (Vestre 2022, cited in Ministry of Trade, Industry and Fisheries 2022a; 2022b), so there is a hope to see improved distributional policies.

Environmental protection

Firms that want to construct in Norwegian nature need to follow Naturmangfoldloven (The Biodiversity Law), the foundation for everything regarding biodiversity conservation (Klima-og miljødepartementet 2009). Building in protected nature sometimes conflicts with these regulations (Fjeld and Moe Kaupang 2021; Jarstad and Skårdalsmo 2022), however, especially considering the profitability of resources such as timber, which is a growing replacement for heating from fossil fuels (Siem and Heggen 2021). For example, Denmark buys Norwegian pellets for heating and replacing coal (Siem and Heggen 2021). Norway, therefore, sees itself as taking part in the green transition both domestically and internationally while within the law of Naturmangfoldloven.

Firms that want to build domestic energy projects are aware that their actions might threaten biodiversity. To take responsibility, they often publish annual and long-term sustainability reports and risk assessments on how their activities impact biodiversity and to what degree it is plausible to commence. Possible risks to nature include depletion from resource use, preservation of biodiversity, and potential emissions that can pollute air and water. Norsk olje & gass (Norwegian oil and gas/NOROG) is an organization working for the interests of the oil and gas industry in Norway. NOROG aims to find solutions to generate income by facilitating "sustainable use of resources and ecosystem services while maintaining the ecosystem structure, behaviour, productivity, and biodiversity (NOROG 2021: 24, translated from Norwegian). The goals are the same for Norsk Industri (Norwegian Industry) and NHO (The Confederation of Norwegian Enterprise) (NHO 2021; Norsk Industri 2021), which are organisations for employers in Norwegian industries, and lobby on their behalf. These sustainability reports exist to complement and respect the rules and regulations as set in Naturmangfoldloven.

Norway's authorities might permit construction in protected areas, with an outcome that yields an increased power output, which might be permissible from a utilitarian point of view if the (economic) benefits are significant enough to outweigh the losses that cause little harm to biodiversity. If the construction follows the regulations set in the law, then such actions are more permissible from a legal perspective. The developers could use loopholes in existing policy to pass the concessionary round. Researchers, local populations, and NGOs worry that what we see in the current energy development policy is not up to an adequate environmental standard because of incomprehensive accountability to manage Norway's conservation policies (Malkenes 2022; Randen Johnson 2022; Randøy 2022; Torvanger;). In a recently sent letter to the Minister of Local Government and Regional Development,

Bjørn Arild Gram, the spokesperson for energy-related issues in SV, Lars Haltbrekken expressed his concern about building a coal mine in Repparfjorden (The Reppar fjord). The country governor repealed the concession grant because the municipality supposedly gave some exceptions to concessions.

In his response, the minister highlighted how the Planning and Building Act exists to preserve and consider the environment in all decisions regarding development that intervenes with nature (Haltbrekken and Gram 2022). Chapter 14 of the act, according to article 191 in the EEA agreement, bases all development decisions on the precautionary principle to prevent any necessary harm and the polluter pays principle (PPP) in cases of environmental damage (EU 2008; Lovdata 2008[2011]). Nevertheless, in a time when the authorities call out for more energy, the use of the precautionary principle seemed to be less critical of the harm projects would have on land and biodiversity. What remains to observe is whether the need to build out more national energy projects to generate renewable energy at the cost of loss of land and biodiversity is a risk the authorities are willing to take to achieve their 2030-2050 emission cut goals (Jackson 2011)?

The government has signalled a great need to produce more energy to meet the growing demand, so they grant permission to private companies to contribute to the cause. However, the private sector's pledges for a greener energy future do not always go as planned. One example was the ambitious plans to build the world's largest and greenest data centre in Ballanger in Northern Norway, whose plans went nowhere (Brembo and Skjelvik 2021). Whereas other big tech companies are relatively non-transparent in publishing their water efficiency figures, Google has been more public in sharing the impact of their data centres that demand immense amounts of energy. Because customers put pressure on their suppliers to be more responsible with energy use and environmental precautions, this can explain why stakeholders sometimes choose to

display their sustainability records in public as an act of transparency (Mytton 2021). Other times, the public sector is vague about how construction will affect the nature around it. For instance, Tina Bru, the Solberg government's Minister of Oil and Energy, proposed a new directive in 2021 that would use spill heat from the data centres to improve energy efficiency. It would go further than the EU's directive (OED 2021a). However, what followed were energy projects that went against this idea.

A recent example from March 2022 might illustrate the case more clearly. Two members from R proposed prohibiting cryptocurrency mining in Norway because it is highly energy-intensive, causing massive global CO2 emissions, unsustainable land use, and depending on minerals and resources whose extraction may further damage nature and biodiversity (Jørgensen and Marhaug 2022). These new energy projects may therefore violate the principles of the Plan and Building Act. When Norway permits possible irreversible or non-amendable concessions that pose a potential threat to environmental protection, they do not act according to the precautionary principle, which is a precondition in the Plan and Building Act (Lovdata 2008[2021]). Because nature's ecosystem is never in a static condition, the concessions would need longer timeframes to be accurate. Limiting the state of nature to a value or condition at a given time reduces its value in other areas, which are also important for humans' well-being and health (Morse et al., 2020; Robinson et al., 2021).

Granting new energy-demanding projects becomes even more problematic when the authorities display an insufficient and comprehensive understanding of the various dynamics in the different ecosystems of Norway. This was the conclusion of Riksrevisjonen's latest report. Riksrevisjonen, the Storting's control body, recently published a report supporting the above points. Its job has been to watch over the government's work on environmental issues and whether they live up to

their promises and goals. The report specifically evaluated responses to floods and landslides. The central point is that it criticises the government's long-term resilience planning. Instead, it presents short-term solutions to get out of crises such as the pandemic, when systemic change is needed, long before a disaster hits (Riksrevisjonen 2022; Knežević et al., 2022). In other words, the report critiques the environmental resilience performance of the government during the pandemic.

Meanwhile, the government's climate and environmental strategy paint a brighter picture of the situation, highlighting the need to produce more bioenergy to replace fossil fuels. They also acknowledge the role of forests in holding back floods and landslides (Regjeringen 2021a: 18). The fact that Riksrevisjonen concluded after Norway permitted energy projects that intervened in nature was not a positive indication that Norway had changed its conservation policies enough after the pandemic.

If Norway were following a green recovery plan, the government would likely have issued more immediate responses to environmental degradation. When the control body critiques the planning and responses to such crises, it tells us that the government has not fully advanced and improved its resilience. Moreover, the conclusions summarize the poor reaction to environmental damages, stating a lack of "necessary awareness over dangers of environmental occurrences in a future climate" (Riksrevisjonen 2022: 9). Perhaps one of the most significant takeaway points is that "central ministries do not have a sufficient information foundation to evaluate the status for climate resilience in Norway" (Riksrevisjonen 2022: 9). The evaluation is worrying, considering the debate last year when Ap and Sp discussed the opportunities of opening protected river systems. Political parties like Frp and Ap argued that the current technology followed safety standards and did not cause the systems any harm while simultaneously building out more necessary power to meet the energy demand from an energy-intensive renewable

energy industry (Fjeld and Moe Kaupang 2021). It is, therefore, clearer today that the preparedness was insufficient and that building environmental resilience and using protected nature to generate more power is a currently unsustainable dilemma.

There is uncertainty surrounding who is responsible for securing buildings and infrastructure from environmental degradation. OED concluded that it is difficult to establish what the municipality needs to take on and how to solve these tasks (Riksrevisjonen 2022: 17). The "impacts on conservation" category in a green recovery scenario presumes that "habitat loss may decrease". Instead, the current pathway seems to align more closely to that of the "restoration of the previous economy" in which "existing conservation projects and & projects will survive, but biodiversity loss will continue" (Sandbrook et al., 2020: 2). Estimating the full extent of Norway's conservation policies is difficult, but the energy projects already in effect or under development are seemingly affected by the pandemic, ownership structures, and scope.

Green growth and economic interests

Sometimes, less is more – where the most environmentally friendly action is where one puts the slightest pressure possible on the environment (Hickel 2020). Whether to electrify Norwegian oil platforms or not is one of the most recent discussions that take place in the energy debate. The emissions from Norwegian oil platforms made up about 27% of the total domestic GHGs in 2020, making it one of the most significant contributors to climate change (Nyhus 2021). There was recently a political feud in Parliament because Sp representative Sigbjørn Gjelsvik suggested that the government cancel these ambitions. He argued that electrifying the oil platforms would require 15 tw/h, more than the electricity generated from Norwegian windmills. Backed by a fellow party member and Parliamentary leader of Sp, Marit Arnstad, she proposed delaying the climate goals for 2030 because she saw the situation as "unrealistic" (Arnstad 2022, cited in Rønning et al., 2022).

The turnaround would clash with industry interests, however. Downscaling the production of land-based renewable energy worries companies who depend on ample energy supplies for their enterprise. Elkem, a producer of silicon and silicone, works with energy-intensive production, such as converting quartz to silicon requires 4 tw/h a year and cannot afford a possible energy deficit, which could halt the production of resources needed to participate in the green transition (Gjelsvik, cited in Åsnes and Schrøder 2022). Their climate targets aim to reduce scope 1 and 2 emissions by 28% by 2031, product carbon footprint by 39% by 2031 and reach net zero in 2050 (Elkem 2022). In other words, such industries might experience an energy deficit, as it will prolong the decarbonization process to become wholly renewable and circular in every step of the value chain.

Contrasting these opinions, Barth Eide stated that moving away from their plans to electrify the oil platforms is a clear breach of The Hurdal Platform because Norway's climate strategy will not permit its participation in the market of climate quotas as a solution to the environmental crisis (Barth Eide, cited in Åsnes and Schrøder 2022). When imagining possible immediate solutions to abating emissions in Norway to fulfil green recovery ambitions, it would be necessary to discontinue oil production in a much shorter time frame than is set today.

However, the Norwegian population is split on whether these projects are as good for sustainability as they claim to be. As explained in Chapter 2 – public perceptions matter because they shape policy support (Buhr and Hansson, 2011; Whitmarsh et al., 2015; Markusson et al., 2020). After all the negative press over the Fosen case, all wind projects in Norway were delayed (OED 2020). Perceptions of CCS differ depending on national frameworks that determine companies' credibility. For example, Statoil (Equinor) had more public support for CCS in the area of Mognstad because it was seen as an important national project for prosperity and growth for the Norwegian economy, compared to Sweden's Vattenfall,

which had more negative press due to their more international profile. Thus, there is a relationship between the media and the outcome of energy projects like CCS determined by where the project takes place (Buhr and Hansson, 2011; Markusson et al., 2011).

Furthermore, this might say something about how Norway's authorities engage in the green energy transition debate, wanting to satisfy the national stakeholders and its population while being an attractive partner and collaborator internationally. CCS might be one method to remove some emissions from the equation, but it keeps Norway on the fossil-fuel-stained pathway that it is currently on. To avoid these lock-ins, Norway could combine CCS with bioenergy (Vergragt et al., 2011), but doing so would not be a transformative move toward a green recovery scenario because there would still be fossil fuels involved in the larger picture. The "key divestments" in a green recovery scenario come from reduced reliance on fossil fuels, but right now, it falls closer to a "restoration of the previous economy" (Sandbrook *et al.,* 2020: 2).

Hydrogen is considered Norway's next big domestic energy adventure. The last years have seen an upsurge of new organizations and groups spreading awareness, praising the environmental benefits of using hydrogen in meeting helping Norway's energy industry reach its climate goals (Enova 2021c; Hydrogen24 2022; Norsk Hydrogenforum 2022). Barents Blue is a project led by Horisont Energy, collaborating with Equinor and Vår Energi (Our Energy), estimated to produce 1.17 billion kWh/y (1170 GWh/y) (as estimated by the reference), giving a yearly yield of 1 million tonnes of ammonia. It will be the first of its kind globally and hopes to accelerate the establishment of more emission-free ammonia factories in Europe (Enova 2021d; Horisont Energi 2021a, 2021b). Barents Blue will reduce emissions by producing 1 million tonnes of ammonia a year in Hammerfest.

The metal producer Tizir will switch from coal to hydrogen to cut emissions by 205.000 tonnes of CO_2 a year at their smelting facility in

Hærøya just outside Porsgrunn. Tizir can provide metals for building more windmills. At the same time, Horisont produces green ammonia, which can be used as a fuel in the transport sector, which accounts for around 25% of energy demand in Norway (DNV 2021: 16).

The projects were given grants because they will help jump-start the green transition. At the Enova conference in December 2021, Horisont CEO Bjørgulf Haukelisæther Eidesen claimed that Barents Blue would deliver on these goals (EU 2022a; Haukelisæther Eidesen 2022), but private companies sometimes give incomplete data from their reporting regarding how their activities impact the environment. Part of Norway's climate strategy is to combine the public and private sector forces. Additionally, the Ap-Sp coalition has stressed that a green transition depends on job creation and profitable energy industry (Regjeringen 2021d), which is why energy industry actors call for better collaboration between the public and private to coordinate how domestic energy policy will be most beneficial for all.

Right now, the agreement on how the energy industry can be greener is not set in stone because of how emissions are registered. Firms report their climate reporting through Scope 1, 2 and 3. Scope 1 refers to all direct emissions from production (BioMar 2022). Equinor has an ambition of reaching net-zero by 2050 by ensuring that scopes 1 and 2 (Production) and 3 (Use of product domestically and abroad+ equity shares) are all accounted for in their climate reporting (Equinor 2021).

Because of Norway's strategy to primarily cut emissions abroad and not domestically, the challenge is that the indirect emissions become harder to track and deal with because they are not always required to be disclosed in corporations' environmental reports (Foss and Moen 2022). Unless the scope 3 emissions are registered, Norway will have difficulty telling how domestic energy policy externalizes its emissions abroad. Even if all calculations showed that Norway had dramatically cut its emissions from, e.g. its windmill parks, it would have few ways of showing whether

the resources used to produce them caused significant emissions along the value chain. It does not tell the whole story and is why a green recovery scenario would be distant unless all indirect emissions are part of the sustainability statistics.

International crises – Changing the narrative?

This chapter's final and critical point is what the Ukrainian war can tell us more about how Norway's energy policy responds to global crises other than the pandemic, which comparatively – says something about the policy responses to the pandemic. As discussed in chapter 4, Norway is intertwined with the European energy market. When there are disruptions in the market like the war, it shifts Norway's preferences of how they can best be a reliable partner to Europe. At the same time, it secures its national interests from a profitable export of oil, gas and electricity.

Norway is currently pushing a narrative where they claim its role as a supplier of energy to Europe is imperative to cut emissions, keep domestic prices low and offset the need for Russian oil (Malkenes Hovland 2022a). These current dynamics shape energy policy that more clearly shows how reliant Norway and the EU have been on international energy trade, at least from a political point of view. The effect the war has on the supply side of energy is much more uncertain, but what is more certain is that war is an enormous cost to the environment. Energy networks like oil pipelines are targeted. Energy-saving will perhaps be a lower priority, and Norway has decided to take on a more prominent role by supplying the EU with coal and oil (Lund 2022). Norway thus wants to take on the responsibility to help its European neighbours get through the war without facing energy deficits when the major supplier – Russia – has been cut off from the Western market. From this, two points can tell us more about Norway's energy policy and the green recovery.

First, it shows the distance between Europe and Norway's energy policy regarding how it responds and adapts to shocks. The distance can tell

more about the responses to the various crises that emerged from the pandemic by comparing it to how Europe responded. Furthermore, it reveals the magnitude of Norway's actions and how its energy industry has transformed with COVID as the catalyst. While the EU has introduced a 10-point plan to stop the reliance on oil, Norway goes in the other direction by seeking to increase its export of gas to European markets, contradicting what Europe wants and what the UN and IEA want Norway to do.

Minister of Foreign Affairs Anniken Huitfeld recently announced that stepping up the green transition is necessary to offset Russia's influence over the global energy market, highlighting competence in CCS, hydrogen, wind power at sea and battery production (Huitfeldt 2022). This mindset is contrasted with statements by the Minister of Transport (Ap), who dismisses plans to join IEA's 10-point plan to help the EU reduce the reliance on Russian gas (IEA 2022b; Nyen Berg and Jon-Ivar Nygård 2022). Additionally, the Minister of Petroleum and Energy attended IEA Ministerial Meeting (23-24 March) and promised further development of the oil and gas industry to offset the current changes in the global energy market (Aasland 2022, cited in OED 2022a). The dynamic between Norway and Europe might change because of the turmoil in Ukraine. Comparing Norway's response to Europe's makes it easier to view Norway's energy policy differently.

In Germany, the Previous vice-chancellor and foreign minister, Joschka Fischer, called Nord Stream – the gas pipe between Russia and Germany – "the biggest foreign policy blunder in Germany since World War II". In his view, energy politics are also geopolitics fuel states' political dynamics (Fischer, in Bergvall Henmo 2022b). Germany could become independent from Russian gas within two years, but despite its 50% renewable energy production, it only covers 20% of its total energy needs (Byskov Lindberg). Norway, similarly to Germany, has relied too heavily on

Russian gas and is now facing a political dilemma where it stands between two options:

1) it can come out of the crisis with a more assertive energy policy that relies more heavily on domestic production and storage of renewable energy sources that strengthens its resilience against both climate change and future international crises.

Alternatively, and most likely, is the scenario where it 2) will continue its green energy strategy as before but increase the export of oil and gas. In theory, the former could be a green recovery if it followed a design similar to REPowerEU and IEA's 10-point plan. Hence, it could cause a societal transformation in how Norway manages its energy resources.

Now that the EU launched its REPowerEU initiative to stop the reliance on Russian gas, the EU will hold a stronger position in facilitating a global green transition. REPowerEU might transition the EU closer to a green recovery because it imports 90% of its gas from abroad, and 40% of the total gas imports come from Russia (EC 2022c). Gahr Støre has guaranteed that the green shift would not face a delay due to the war and cited the Hurdal Platform gives a more significant reason to pick up the pace with renewables. He then reaffirmed that the electrification of Norwegian oil platforms would have to wait, which might delay the reduction of Norwegian emissions (Gahr Støre, cited in Falnes 2022).

While this is a good sign for the energy transition trajectory in Norway because it forces a change in how the resources are allocated and produced, it has caused the energy prices to skyrocket because of the EEA agreement (Skårderud 2022b). Article 12 in the EEA-agreement permits free trade of power without barriers restricting the quantity of trade flowing on the global market. Such export regulations are problematic (Marhaug and Mjøs Persen 2022). Considering Norway's previous responses to the energy crises and the pandemic is upscaled

emissions from oil and gas production to offset the volatile energy market.

It is noteworthy that the war illustrates that Norway could have responded more aptly to the pandemic. It could have introduced a more comprehensive energy strategy that not only aimed to cut emissions and increase the viability of alternative sources like hydrogen and ammonia. However, due to lacking political initiatives and interest from domestic stakeholders, the authorities have now been given an excuse to continue just like before, with few steps forwards. Immediate action taken by the national authorities is possible in extraordinary situations which require a response from all parts of society.

For instance, Norway put immediate sanctions on Russia to stop the global economy from funding the warfare and thus put pressure on the aggressor. Norway organized the embargo in just a few days, and as such, it is not unreasonable to suggest that with the intent to change the economy in favour of the environment – it could. Russia is one of Europe's leading gas suppliers, so when Norway sanctioned the Russian gas industry, it showed that decisive political action could be taken under extraordinary circumstances. As such, turning off all domestic oil production and directing financialization towards a decarbonized and clean energy industry way before 2050 does no longer seem like an impossible feat if the intentions for a green recovery were strong enough. Although sustainability is going in the right direction, too many steps are going backwards, and the planet cannot withstand more pressures.

6. Results from Primary Resource Research

The thesis has, up to this point, used secondary literature to explain the current energy contestations in Norway and why some indicators might build the foundation for a green recovery while others do not. This chapter will analyse the evidence for Norway's participation in a green recovery from a political ecology perspective by separating the chapter into two parts.

First, it explores a set of official reports that evidence Norway's engagement with the environment and the energy industry, using the framework by Bird and Hamada (2022: 4) and Sandbrook et al. (2020: 2), whose frameworks are in appendix 1 and 2.

Texts that have been written for or by the government show rhetoric that speaks positively of Norway's current political outcomes, while statements by NGOs suggest otherwise. Therefore, this chapter dissects the contradictory explanations. It became apparent that the conclusions of whether Norway is greening its energy industry do not have so much to do with the factual data as it has to do with the context, application, and interpretation. In other words, the reports use much of the same data but use it differently to back up different explanations of how well Norway commits to the environment and the global green recovery

Second, it engages with ten semi-structured interviews to show how the different narratives of Norway's environment and energy policies vary according to perceptions depending on the origin of the respondent (e.g., private or public sector). The research finds a mutual agreement that Norway's current energy policy was not an effect of the pandemic but caused by the different interests at the specific moment – economic opportunities and an attempt to seek domestic and international approval of its commitments to the environment. Many respondents saw this as a rhetorical device to justify prolonging and expanding the oil and gas industry and increasing the use and export of blue hydrogen and

ammonia to capitalize on the electricity price crisis and the Ukrainian crisis.

Using political ecology lets me some of these tensions by assessing how Norway's growth orientation pressures the environment (Rockstrøm et al., 2009; Gómez-Baggethun 2021) and its (marginalized) populations (Bird and Hamada, 2022). For example, the interviews reveal tensions in "…the relationship between environmental change, socio-economic impact, and political processes" (Pezzoli 2007: 27, cited in Byrne et al., 2007: 156) and unpack how environmental technologies (e.g. Windpower) have created new resource conflicts (Vidal et al., 2013; Huber 2017) in Norway that contradict the impact criteria of a green recovery of emission mitigation and environmental protection. Furthermore, the decision to upscale the search for oil, gas and more electricity is a driver of new geopolitical dilemmas (Le Billion, 2001; Byrne et al., 2007) in which Norway's deeply rooted oil history is a reason for noncomplementary policy responses

Lastly, what currently unfolds in Ukraine may illuminate some explanations for how Norway responds to a crisis that affects us more directly, especially regarding security policies and economic impacts. Although the thesis will not spend much time discussing its implications, it is worth bringing it up because it links to themes of supply, the Norwegian economy and accountability. Furthermore, as shown later, the interviews after the invasion were more likely to bring it up to explain the connection and impact it has on Norwegian energy. Comparing pandemic responses with the war is relevant because it shows how two decade-defining crises had different responses. Doing so illuminated how the political rhetoric is shaped by how actors perceive and feel the impact and consequences of different crises and how this influences their actions.

Content analyses

Outputs

The following outputs indicate progress in the "rescue phase" (starting phase) of the green recovery. This phase is where the authorities set a framework for the green recovery strategy. Two indicators illustrate progress: "Policies and Planning" and "markets and investment" (Bird and Hamada 2022). Achieving a robust green recovery output assumes that the authorities make "strategic choices", "carry out preparatory analysis" for interventions and deliver outputs on schedule (Bird and Hamada 2022: 2).

Output (Policies and planning)

Energimeldingen indicates a wish for improved monitoring mechanisms to preserve the state of nature. These include marking turbines, reducing human activity in the areas and monitoring changes in the habitat. (Regjeringen 2021d: 101). These responses were not common practice as of Energimeldingen's publication date. The Hurdal platform stressed the need to monitor floods, soil erosion and carbon leaks (Regjeringen 2021e: 31). However, their maintenance was critiqued in Riksrevisjonen (2022), suggesting that the government lacks the necessary monitoring instruments. There is also no mention of any training and capacity building for resilience against potential degradation from energy development.

Conversely, the authors saw potential in educating a new workforce to strengthen the prospects of battery factories (Regjeringen 2021d: 82), and this has been followed up on. The new programmes aim to give students cutting-edge experience, hoping to create around 200 jobs when Morrow's battery factory opens in 2027 (Løberg Skår et al., 2021). Furthermore, funding is going to several battery projects listed on Enova's website contributing to transforming the transport sector (Enova 2022).

The main capacity building challenges are related to the existing network because it requires government funding. (Regjeringen 2021d: 15-16). Energi21 predicts energy efficiency could reduce the need for increased capacity building (Grimsby et al. 2022: 46) and sees the pandemic as an "opportunity" to implement renewable energy technologies. (ibid 2022: 27). Meanwhile, it also questions the uneven Corona package distribution between the oil restructuring pack (90 billion NOK) and the green restructuring package (4 billion NOK), seeing that "in isolation, (it) contributes to weakening the competitiveness of more climate-friendly technologies" (ibid 2022: 4).

Output (markets and investment)

Energi21 predicts that the consumer will have a more active role in moulding a flexible energy system. Solar panels are cited as an underused opportunity that is not competitive, but long-term prospects indicate a more prominent role in the international market. It cites the self-efficiency of companies like Google and Facebook (Borgen et al., 2021: 29). The Hurdal Platform similarly envisions more specific goals for the energy sector and more binding measures that the industry needs to follow. However, it does not focus on the adverse impacts data centres may have on Norwegian nature (Skumsvoll et al., 2019; Tornes Espeseth and Aune, 2021) and how Norway's economic actors might disregard solar panel investments due to their profit risk. Thus, they might invest in data centres with more direct consequences for biodiversity (Stamland, in Tornes Espeseth and Aune 2021).

Despite Energi21's recognition of the limited potential of increased renewable technology markets in the face of the oil and gas industry's accommodation – it does not cite any developments due to the pandemic. As such, it does not hold more evidence of a green recovery taking place in Norway than Energimeldingen. Neither is the pandemic cited as an event that paved the way for a new macroeconomic and fiscal policy for the energy industry. Energimeldingen worried that if IEA's estimation that

9-10% of global production of oil decrease every year, it would cause a loss of investment and higher prices to compensate for it (Regjeringen 2021d: 167-168). The exploration in the Johan Sverdrup area in the North Sea was cited as one of the primary reasons oil and gas activities rose because of their profitability. Instead, the costs of the restrictions received the most attention, like the unstable workforce and missing deliveries of necessary equipment (Regjeringen 2021d: 140-141). Most importantly, Energimeldingen does not acknowledge the paradox between the oil tax package and the requirement for large-scale systemic change to "re-direct financial flows towards CNCR (Climate Neutral Climate Resilient) objectives" (Bird and Hamada 2022: 9).

Energimeldingen claims that "Never before has there been higher investment in the green transition" (Regjeringen 2021d: 80). The report shows this by displaying a table from Bloomberg's Energy Transition Investment Trends 2021, ranking it as the ninth highest energy transition investor in 2020 (Bloomberg 2021: 6, cited in Regjeringen 2021: 80-81. See appendix 3). A year after Energimeldingen launched, Bloomberg submitted its 2021 report (See appendix 4), which knocked Norway off the list (Bloomberg 2022: 8).

The reason could be the conflicting policy desires found in statements such as "The transition to a low-emission society requires that we cut emissions, not development" (Regjeringen 2021d: 14, translated from Norwegian). *Scale* is an indicator of the documented short-term investments that mobilize the finance to prioritize low-carbon investments in energy (Bird and Hamada 2022: 8), and the Bloomberg data reveals that Norway has not engaged as much as it claims to be. On the contrary, there is an upscale of oil and gas extraction, pushing for social and economic policies for "austerity, welfare packages & stimulus to private & financial sectors" when it should instead create "welfare packages & government-led green job creation as an economic stimulus" (Sandbrook et al. 2020: 2).

The chapter on finance states that the government will review the mandate and selection of green investments that will create long and domestic value chains, e.g., hydrogen, offshore wind, and CCS (Regjeringen 2021e: 8). There is a greater focus on market investments in hydrogen markets. Energimeldingen determines that justifying hydrogen export calls for expansion at a grander scale, citing transportation costs as the determining factor for its longevity and competitiveness. High transport prices inhibit hydrogen export at the desired scale (Regjeringen 2021d: 114). Nevertheless, Energimeldingen explains the government's desire to increase the number of pilots for technological innovation and commercialization (Regjeringen 2021d: 104). One of Energi21's surveys asked businesses from the private sectors about the desired measures for a sustainable industry, in which they highlighted more financialization of pilots (Grimsby et al. 2021: 130).

The Hurdal platform states that it wants to give investors "good, predictable and stable framework conditions" to make growth investments more viable (Regjeringen 2021e: 21). However, the desire for more energy technology pilots was absent in the Hurdal platform. Still, initiatives like the Green Platform and Enova have contributed to research and development that will positively impact the viability of CCS, hydrogen and battery factories (Forskningsrådet 2022), which should receive more funding over time (Regjeringen 2021d: 112). According to Norsk Industry, the increase in pilots did not drive the energy industry any closer to the desired green transition goals because of their uncertain profitability and efficiency (Foss and Moen 2022), which will be discussed further in the interview section.

Change processes[1]

Sector-based signals (Energy) and cross-sector themes

[1] The original indicators from the ToC were "Macroeconomic & Fiscal Policy" and "Financial Policy & Regulation" (Bird and Hamada 2022: 9) but were combined into the indicator "Economic Policies" to allow for a broader analysis.

1) Poverty and equity

Under the sub-heading "Offshore wind power and the relationship with other industries and interests", Energimeldingen highlights the need to form a coexisting relationship between the "affected actors" (Regjeringen 2021d: 101, translated). Renewable energy from wind was, at the time, a disputed topic that ended in a halt for the windmill park concessions in 2021. The authorities were looking to resume the process in 2022. Still, now almost midway through 2022, things are not looking to change – the reason being, as written in the report, that "to grant concessions for new power production, the total benefits for society should be higher than the disadvantages" (Regjeringen 2021d: 6, translated from Norwegian; Malkenes Hovland 2022b). These benefits are mostly the economic potential a project brings. As such, the government justifies interventions in nature when it "…benefits the community" greatly (Snyder and Kaiser 2009; Huber 2017; Regjeringen 2021d: 17). This justification links to the green recovery theme of a just transition, as the community does not always feel that these developments benefit them in cases where nature and biodiversity come at the cost of building large construction sites (Bergvall Henmo 2021). From a bottom-up political ecology perspective, what is less addressed are changes in "property ownership, civic engagement, and knowledge production" (Bourzarovski 2022: 13).

Energi21 says a primary EU focus area is "a just transition with access to clean and affordable energy of the development of circular markets (Borgen et al. 2021: 3). The Hurdal platform wishes for the same outcome (Regjeringen 2021e: 13), but as discussed in chapters 4 and 5, this is not what occurred considering the electricity price crisis caused by high export volumes, the import of international prices, giving energy companies the profits, and the consumer the bill (Braanen 2022). Nevertheless, the platform mentions how it wants to create more binding agreements and introduce a green tax for the financial sector such that the public gets a higher percentage of the profits earned from the green transition (Regjeringen 2021e: 8).

Energimeldingen has similar goals aimed at improving distribution. It claims that the national energy network exists to give consumers affordable electricity costs and give markets the incentives for profitable renewable energy production (Regjeringen 2021d: 34). The Hurdal platform wants more national ownership of Norwegian energy and to become a global leader in renewable energy. However, given the unstable electricity prices caused by the hybrid export cables to foreign markets in Europe, it weakens the government's legitimacy (Skårderud 2022a). By enforcing the 2000 NOK CO_2 fee, they hoped to stimulate action in more climate-friendly technologies by giving incentives to businesses and society through national support schemes. Most importantly, the CO_2 fee would impact oil platforms more than other parts of the energy industry (Regjeringen 2021e: 29).

2) Governance

Energimeldingen mentions that the new research centre NorthWind for R&D in onshore and offshore windmill parks was funded through the funds in the government's third transition package with 15 million NOK a year. (SINTEF 2020; Regjeringen 2021d: 93). Enova is similarly mentioned as an important measure for the green transition. Then again, it is difficult to determine whether these should be considered products of the pandemic or the global recognition to speed up the transition and act as an economic incentive to stimulate a growing market for offshore wind (Regjeringen 2021d: 92, 94). As stated in the Energi21, there is currently a limited domestic market for offshore wind Grimsby et al. 2021: 134). From this, one might suggest that it will take years for the projects to materialize, despite the urges to fast-forward the process to get them up and running (Energi Norge 2022; Nesse 2022; Stensland 2022), and there is now a split in government as to what the future for offshore wind is (Ramberg 2022).

The need to build out more energy is not a product of the pandemic but rather to meet the growing demand for electricity and other renewable

energy. Energimeldingen recognizes that increasing the country's energy surplus requires acquiring larger land areas and possible interventions in nature but not that there would be no more construction than needed (Regjeringen 2021d: 7).

International climate cooperation is seen as a vital means of meeting the goals of the Paris Agreement. Norway says it will act as a global leader that will speed up the transition by financing the development of renewable energy and climate-friendly technology in developing countries where coal remains the top source of domestic energy supply (Regjeringen 2021e: 78). Norway has arguably caught itself in a dilemma of trying to supply Europe and other gas-reliant countries with fuel until they can switch over to renewables (Delborne et al., 2020) but meets the wall when one of its largest importers does not want it. This dilemma is not expressed in the text and perpetuates oil-friendly rhetoric while trying to appeal to environmentalists.

Another dilemma regards environmental protection. As discussed, the green recovery cannot solve the climate crisis unless it simultaneously preserves biodiversity. Thema's Energi21 report mentions how considerations for the climate are increasingly aligned with concerns over loss of biodiversity and giving the preservation of ecosystems a much higher priority (Borgen et al., 2021: 3, 15). However, there is little evidence in the report that supports this claim, nor does it spend any time discussing how the development of renewable energy infrastructure can cause harm to the ecosystems of concern. For example, the government does not want to tax emissions from "natural processes" (Regjeringen 2022e: 9), meaning carbon leaks from more windmill construction would not be eligible for a tax. This could mean that companies that seek to build renewable energy projects in Norwegian nature could harm biodiversity and pasture (Apostolopoulou and Adams, 2015; Benjaminsen and Robbins, 2015; Cleasby et al., 2015) and not lose the incentives to

continue to do so due to a non-taxation on emissions that were not disclosed as part of their concession analysis.

Energi21 goes further and acknowledges that climate and environmental politics are two separate fields that need to be considered with equal weight, recognizing the need to set "…new requirements for the development and operation in the energy sector" – a prerequisite for a green recovery (Borgen et al., 2021: 15; Sandbrook et al., 2018). Therefore, the reports' rhetoric implies that the government is aware that the energy industry growing out of the pandemic needs to support a greater emphasis on the interconnectedness between the environment and nature. However, most of the changes found in a Green Recovery are in EU policy, not in Norway.

3. New economic policy

The final output, "New economic policy", regards economic policies established in the pandemic that go towards CNCR-related goals (Bird and Hamada 2022: 9).

A green recovery requires documented sources of green investments throughout the pandemic. Since the reports preceded the big Enova grant in late 2021, it did not have many documented sources of growth in renewable energy. When looking at more recent data, Enova has thus far spent 3.86 billion NOK on 5768 projects. Barents Blue, Green Ammonia in Porsgrunn and Tizir's hydrogen are at the top of the list, with Flagship – the pilot for offshore wind in fourth place (Enova 2022; Regjeringen 2022e: 92). Some offshore wind is considered so competitive that it does not need subsidies from the state (Grimsby et al. 2021: 63), but due to the recent energy price fluctuations and the wish to halt the export of electricity to Europe, there is a worry in government that the state will have to take a considerable portion of the payment themselves (Malkenes Hovland and Rustad 2022).

Outcomes

Strengthened frameworks

The reports lacked a comprehensive explanation for the consequences of the prolonged search for oil caused by the oil tax package (Regjeringen 2020b). For example, Energi21 stated that "many countries chose to direct compensation packages for corona towards green industries, research and jobs" (Borgen et al., 2021: 3, translated from Norwegian). Still, they do not show how this affects the green restructuring package's effectiveness; thus, it weakens the data's credibility. The other Energi21 report by Grimsby et al. (2021) is slightly more precise and transparent in discussing these implications and acknowledges the monetary gap between the oil tax package and the green restructuring pack. The new frameworks would depend on increased financial frameworks, but the oil tax package negates the effectiveness of the green restructuring package.

Scale

If the viability of technologies for CCS, hydrogen and battery factories go according to plan, it could imply greater interest in renewable energy by Norway's economic actors. By increasing export by 50%, there was a hope to make Norwegian trade more competitive in global markets. The Hurdal platform stressed that oil and gas would not be part of this goal (Regjeringen 2021e: 13). Meanwhile, the page earlier states that the forthcoming business policy will strengthen the trade balance between oil and gas (Regjeringen 20221e: 12). Norwegian gas accounts for about 20-25% of the EU's gas supply, with the UK topping the chart with 20.1% (Norsk Petroleum 2022). However, the EU has confirmed that they no longer want oil in their markets (EC 2022c). Therefore, it is slightly unclear what Norway means by wanting to increase trade but strengthen the trade balance of petroleum when it has had one of the best production performances in years (Sølvberg 2022).

Energi21 shows that Norway will move away from fossil fuels by decarbonizing energy industries. Transport, machinery, industry and oil

and gas are the key areas that will use CCS, Blue and green hydrogen, electricity, and bioenergy (Borgen *et al.,* 2021: 17). These indicate that Norway prioritizes expanding the industry rather than scaling down. This contrasts with a "transformative economic reconstruction" scenario, which uses progress indicators other than growth, but the indicators above are still examples of technology appropriate for a green recovery (Sandbrook et al., 2020: 2).

Although Norway is scaling up its climate-friendly technologies, these plans were already in a start-up- phase before the pandemic, as evident in prior national energy strategies and interviews (OED 2017). Some focus areas like CCS were in their infancy and saw a resurgence after the pandemic, but it is difficult to determine whether its renewed interest was due to those events.

Still, the outcome area "support economic actors" (Bird and hamada: 2022: 5) is evident in all three reports. "The government will facilitate the development and establishment of new, profitable offshore businesses based on effective and predictable framework conditions" (Regjeringen 2021d: 8), "…facilitate predictable frameworks for commercialization" (Grimsby et al. 2021: 43), and "good, predictable and stable framework conditions that facilitate private investment and further growth" (Regjeringen 2021e: 12). These outcomes were later reinforced through the oil tax and green restructuring packages. However, as shown in the next sector – what was promised in these reports did not meet the expectations.

Interviews

This chapter explores the most prominent themes that emerged whilst interviewing the ten respondents. The first two are more general and ask for the respondents' understanding of the green recovery and whether it occurs in Norway. Followingly, a set of themes emerged that unfolded the intricacies of the Norwegian energy and green recovery debate. These

themes include several sub-themes that link to the broader topic. Lastly, the analysis in this section also follows a political ecology approach, with themes linked to those in Sandbrook et al. (2020) and Bird and Hamada (2022).

The term

The first question asked the respondents if they knew what a green recovery is and, if so, to explain their definition. They were somewhat familiar with the term *green recovery* and what it implies. Some were more familiar with the terms *grønt skifte* (*green shift*) and *grønn omstilling* (*green transition*), but they had an idea of what it could mean in the context of the word *recovery*—giving them a hint that it relates to the pandemic cleared up some confusion. The Norwegian translation of green recovery – grønn omstart – was lesser known than its English term. One of CICERO's researchers stressed the importance of not forgetting the "*om* i omstart" (recovery). One can translate *om* as *re*, as in something that resets, e.g. a *re*-birth, but some meaning is lost. Others also emphasised *starting anew* – from scratch.

A common trend among the respondents was to emphasise how emissions, crises and recessions are connected. First, emissions are likely to increase because states will attempt to boost the economy to compensate for economic stagnation and then fall later when the economy has been reorganized once there are frameworks in place to finance green technologies. One of Norway's delegates at COP26, Marianne Karlsen, emphasised that the COVID-19 pandemic shares some of these characteristics but differs because the global community is more united than ever in using the pandemic to achieve environmental goals that have been challenging to meet because of the different world interests. This is a green recovery, she said and was a believer in the ideologies of Joseph Schumpeter, a believer in "waves" of economic growth coming from capitalist innovation (Ørstavik 2019; Karlsen 2022).

Similarly, others described recovery as a scenario where states experience a frozen economy and loss of jobs before igniting projects that can boost economic growth significantly and get back to the pre-crisis state. A representative from The Confederation of Norwegian Enterprise (NHO) distinguished between the Norwegian understanding of the term and the one used in Brussels. He claimed that Norway is usually thinking long-term about the conditions that will shape the future, while Brussels has a tradition of wanting to build resilience to manage crises more immediately. "Two different approaches – the same goal". Interestingly, the same sentence was used in the interview with two representatives from Norsk Industri (NI). The rhetoric used by NHO and NI is similar because NHI is an organization that is part of NHO. They shared the same understanding of adaptation to crises, but the pandemic presented a chance to reset in a greener and more sustainable manner.

The organization Motvind similarly emphasised the attention to systemic change as a critical part of the green recovery and shared the view with CICERO and Naturvernforbundet.

The Pandemic's effect on a Green Recovery

After the respondents explained their definitions, they evaluated the current state of Norwegian energy politics regarding environmental performance. They were also asked to give examples of a green recovery in Norway. All agreed that the technological advancements in Norway's energy industry were not a result of the pandemic. Few respondents agreed that Norway is part of a green recovery because they saw little to no dramatic or systemic change.

Nevertheless, even with new technology targeting renewables, some respondents struggled to see the lasting impact when a green recovery would require a more transformative approach. Motvind saw the necessity to approach the issue from a systemic level instead of just looking at where Norway performs well and where it does not. When the energy

industry would be far from business as usual, it would indicate that it was on the green recovery path, which he believed it was not. Motvind was worried that the frozen economy during the pandemic led the government to import the European energy prices due to the cable networks and gas pipes that supply Europe with Norwegian energy. From a systems-based perspective, the financial crises were, similar to other situations, used by the Norwegian authorities to push forward a more potent liberal market economy that greenwashed its energy industry to make renewable energy the next grand opportunity, caring more about economic growth than remedying the environment.

On the contrary, the respondents attributed the changes in energy policy to what was already in progress before the pandemic. Energy-intensive projects in the process industry experienced limited impacts on their operation (Foss and Moen 2022). As such, the halt in production and emissions was only temporarily. Those who thought Norway had robust and ambitious climate goals presented more descriptive accounts of a green transition rather than a green recovery, encompassing broader socio-economic structural issues. This means that where were divisive opinions of Norway's contributions to the green transition, none thought the pandemic had initiated the energy developments, and many cited the electricity crisis and the ongoing Ukrainian war as more decisive moments.

Policy evidence of a green recovery

Respondents brought up Energimeldingen and The Hurdal Platform as energy policies that could say something about the green recovery. Additionally, those in the private sector like NHO, Norsk olje & gass, and Norsk Industri pointed to their climate strategies, emission targets and annual environmental reports as signals that the industries are doing more for the environment than ever before.

CICERO has published studies on the topic but recognized that a green recovery is more present in academia and research papers than actual energy policies. Zero is an organization closely working with Norwegian industries, so its reports intend to guide economic actors into making the right choices. Therefore, their profile is much more neutral and industry-friendly than, e.g. Greenpeace and Naturvernforbundet, which are not working directly with the private sector. Therefore, one disagreement between the respondents was whether the increased financialization of green energy projects should be considered part of the recovery or not. Respondents from the private sector saw more opportunities emerging from the grants from the government, such as from ENOVA and the green restructuring package. Still, Greenpeace and CICERO could not see big positive scale long-term changes due to the continuous financialization of oil and gas. CICERO said that a green recovery occurs if we imagine a curve that takes a sharp downward turn and stays there – it is only in this scenario that a green recovery might succeed. As a researcher, he analyses the current situation differently than an economic actor or someone representing a political party's views.

Responsibilities and obligations

There is a political interest in preserving domestic and international support to legitimize the authorities' actions. When asked about what Karlsen thought of Norway's *Fossil of the Year* award at COP26, she did not fully agree with what happened. She elaborated by answering the second question of whether Norway lives up to the international community's green recovery commitments set by the international community? She pointed to the increased goal to cut emissions from 40% to 50-55%, a high carbon price covered by 80% of all Norwegian emissions, and always setting robust goals when reporting back to the UN. Karlsen represents the Norwegian authorities. Hence her role as a delegate and representative of Norway's climate ambitions made her take on a more neutral position. From a scientific perspective, these goals and

the taxonomy would have been in place even without the pandemic (Torvanger 2022). Thus, CICERO felt the current emission cut goals are more inflated than feasible in practice, at least with the current energy policy.

CICERO was particularly clear that a recovery would not happen unless society restarts by using COVID to boost a rapid green transformation. He saw little evidence of this apart from in the media. On paper, the media and politicians made it seem like the pandemic would bring about significant change, yet most of this was merely rhetoric that pre-existing policies were already in progress before the pandemic started. Stimulating the growth of offshore and hydrogen production would not cause a change in how we think about resources, especially when future renewable energy projects are an addition to the continuous search for oil.

Similar attitudes were present when discussing the implications of electrifying the Norwegian oil platforms – a measure that saw an even greater split between the respondents. Despite supporting the electrification process, Norsk Industri referred to the current goals as incomplete and that doing as we do now will not lead to us reaching the climate goals. Offshore wind is what they believed would help Norway cut emissions most efficiently, but action would need to happen now. The Chief advisor of the environment at the interest group Norsk olje & gass (Norwegian Oil and Gas, NOROD) said the developments after the pandemic depends on what you consider part of the change, for example, the EU's taxonomy and *Fit for 55*. Although she thought Norway was on track towards 40% emission cuts, she was more sceptical about the net-zero in the 2050 goal.

The optimistic outlook was not shared among all the respondents, and there were mainly two similar questions that divided them. The first was the thesis RQ, "What evidence exists in domestic energy policy that Norway is part of a green recovery?" and the second was "Regarding

Norwegian energy politics, how well do you think Norway performs in meeting international commitments to net zero within 2050?". The responses were straightforward, either favourable towards Norway's current performances (Karlsen 2022) or calling it "more talk than action" (Randøy 2022).

Some of those who think Norway is part of a global green recovery emphasised aspects of what Norway *can do* to meet international commitments. For instance, the nation has many options from various geographic locations that let industries make more efficient use of natural resources and renewable energy, thus improving the energy production output. This diversity is what they believed made Norway equipped to meet the climate and electricity price crisis in an environmentally sustainable and economically profitable way.

When asked about the progress of the green transition for the Norwegian labour force, NHO explained that there is no "one or the other" when it comes to helping the oil industry transition and stimulating new green jobs and education in renewable energy. It is vital to strengthen the entire supply chains, e.g. CCS and green hydrogen, to ensure that every step of the process is accounted for, to preserve jobs and cut emissions.

Economic interests

Now that Norway is slowly emerging out of the COVID-19 pandemic, new worries have emerged. The public and private sectors are primarily concerned about maintaining Norwegian welfare through extensive and predictive economic growth and job creation. Thus, there was a worry that the environmental benefits were lesser than anticipated. Norsk Industri touched upon this and said that Norway accounts for this by using these technologies like CCS and offshore wind while simultaneously planning for more effective actions, such as energy efficiency.

Good incentives drive actions in the energy industry forward. The economic actors called for more reliable and stable frameworks at low

cost and low risk to maintain the competitive advantage to engage more effortlessly with the green recovery. Economic jargon such as *rammevilkår* (frameworks)*, lønnsomhet* (profitability), *insentiver* (incentives), *forutsetninger (conditions)*, *forutsigbarhet* (predictability) and *risko* (risk) was primarily used by these actors only because they represented the interests of their companies. Their profile contrasted that of civil society and academia because they argued that the green recovery is an impossible scenario unless the authorities mediate predictable solutions that are of low risk to their economic viability. Zero saw that investments in climate-friendly technologies bear a serious risk because there is no guarantee that the energy output turns out as efficient as intended.

The economic system favours (green) growth. When contracts end, Norway's energy companies might go abroad to do business. That is why the government mediates convenient solutions that favour the industry over stricter requirements when appropriating Norwegian nature, according to Motvind. He claimed that everything is connected in a market. Therefore, the value of nature is set in an artificial environment where demand for a product (energy) trumps all other considerations. All relate to the socio-economic changes of capitalism and is why the paradigm of never-ending growth of energy in a capitalistic system causes a contradictory process that is not sustainable and does not contribute towards a green recovery.

Path dependency

The different explanations of the Norwegian energy industry's successes would depend on the respondents' values and beliefs about growth.

Greenpeace Norway's spokesperson for energy policy called the pandemic an opportunity that Norway has yet to seize. He illustrated how the crisis caused a release of capital and declining investments in the Norwegian petroleum sector because of low oil prices. Because of these events,

Norway could have seen politicians thinking about a recovery in which this capital could be invested in activities that could shape a greener future. When asked whether green growth is possible and its compatibility with a green recovery – Karlsen then referred to evidence found for *decoupling* in the EU and how the upward growth curve is associated with improved environmental conditions.

Respondents were generally optimistic that The Green New Deal and Fit for 55 were potential catalysts for a green recovery, but its impact would not reach Norway. However, CICERO was more sceptical of how nature is categorized into how *good* or *bad* they are for the environment. For example, if blue hydrogen becomes part of the taxonomy, it will be considered a sustainable product that consumers are encouraged to buy because it is supposedly environmentally friendly. Because blue hydrogen comes from natural gas, it is not sustainable but is named so because it is a better alternative than, e.g. coal. Increasing blue hydrogen production and sales might have a lesser environmental impact as bridge fuels than coal and oil. CICERO shared Motvind's perception, criticizing Norway's trust in the EU's taxonomy as a mechanism to guarantee a sustainable society.

The economic actors favoured results when they were empirical. For example, CCS allows a company to calculate the volume of emissions captured and put a price on them. CICERO was more sceptical and saw CCS as lacking the proper scientific evaluations because it is just in its infancy. CICERO argued that what is considered sustainable today might not be so in a few years. He highlighted CICERO's *Shades of Green* fund, as found in Alnes et al. (2020), indicating green recovery progress. This implies that Norway lacks a proper methodology to continuously define the viability of environmental performance in the energy sector.

Greenpeace argued that while the Hurdal Platform states that renewable energy projects such as CCS and hydrogen are a priority, the government always seems to put it in a fossil context, according to Greenpeace. While

they agreed, Zero was even more accepting of this technology, supporting blue hydrogen as a bridge fuel and saying that Norway should do better in the long term. Still, right now, it should be adaptive to help jump-start the transition phase for businesses and the private sector, who want to take part in the green transition, but lack the necessary frameworks.

Although there was disagreement over the longevity of Norwegian bridge fuels, all recognized the problems of the indirect emissions from bridge fuels and along the energy supply chain. Norway's scope 3 emissions are not part of its carbon accounting, and it can never really know the full extent to which a company's emissions contribute to emissions internationally. Norsk Industri said quotas could compensate for some, but generally, it is more feasible for Norway to cut emissions abroad than domestically. Nevertheless, if Norway was part of a global green recovery, emissions from energy-related projects would need to go down domestically and internationally.

Norsk Industri explained that the domestic energy industry has small direct emissions compared to the indirect because Norway follows strict regulations such as emission caps, pays a high carbon price and for carbon quotas in the market. Norwegian companies care about measures for abating emissions at the lowest costs possible, and these costs can guide a company's prospects in the energy sector and process industry. Sustainability reports can give an overview of how well a company performs in certain areas, but most companies only report scope 1, sometimes scope 2, but less often scope 3. NOROD shared the same view but did not see the changes in how energy companies operate as an effect of COVID itself but rather as an effect of the volatile prices of carbon quotas.

More specifically, it is a product of the indirect environmental costs that may be absent from Norway's climate reporting. NOROD said that companies sometimes add scope 3 in their sustainability report, but it is not an obligation. Thus, a pool of data is missing from Norway's emissions

from the energy industry. Motvind blamed this on the almost zealous ambitions to grow the renewable energy industry, stating that even producing and facilitating a net-zero industry in Norway will have consequences for considerable global emissions. Therefore, he was clear that a Norwegian green recovery is impossible unless the energy policies can account for global net-zero emissions.

Equity and distribution

Another issue the respondents frequently brought up was how the green recovery needs to be equitable and just. Equity is one criterion in the ToC, so the question of who wins and who loses in the aftermath of the current debates is very relevant to this discussion (Brunborg 2022). Legitimacy weakens when local populations feel like new energy projects do not give anything back to them. Meanwhile, respondents acknowledged that energy companies collect big profits without distributing the profits equitably in the municipality in which they operate. Furthermore, the NGOs brought up how citizens cannot pay their energy bills due to the price growth over the last year. Some respondents blamed this increase on the hybrid cables exporting Norwegian electricity. Respondents from the private sector were more likely to recognize the effects but endorse the necessity for hybrid cables to help other countries in their green transition.

Although there is an increased focus on energy efficiency as resilience against the market prices, it could require the Norwegian population to use their energy differently. That is why the government is not pushing for intrusive policies that will make Norwegians live different to what they do. Zero explained called this a traditional Norwegian debate where the Norwegian state abstains from moralising its population to make *uncomfortable* choices from policies that affect their daily lives and is why Norway cannot take part in a green recovery.

A contradictory energy narrative

The red thread going through all the themes above is that Norway's contradictory environmental profile is what inhibits the new energy policy from being part of a green recovery. One respondent, in particular, was unique from the others because he angled the topic from a historical perspective. Stein Roar Brunborg, a retired energy advisor with work experience from OED and the Ministry of Climate and Environment, was central in writing Energiloven (The Energy Act) in 1990 (Lovdata 2021).

Given his experience in multiple national organs over the years, from before and after the law was written, he gave a detailed account of how the Norwegian energy narrative changed *overnight*. To him, the first discussions about a green transition go back to Alta-saken (Berg-Nordlie and Tvedt 2019), when he was working in the MCE. The Ministry wrote a note called *Samla Plan* (NVE 2021). that would complement the rights of the Sámi with cheap energy and high environmental standards. This was the first evidence of a Norwegian green shift, he said – but after the production of excess energy in the 90s after the introduction of Energiloven, the price fell, and few constructions came into being. Before, the job of state-owned energy enterprises was to supply local areas with energy without thinking about profits.

Still, when the authorities connected with international industries to export this excess energy, the central role was no longer to supply the nation, but to strengthen their market position, thus going against the core of Energiloven. In the struggle to create a system that would benefit the people with stable access, reasonable prices and robust environmental standards, it developed into a "capitalist regulatory framework" that went against its purpose because of the growing, centralized tendencies that came after the changes in 1991 (Bouzarovski 2020: 12-13). Norway's hydropower was commonly seen as Norway's cleanest and least problematic energy source. Nevertheless, after Norway imported the energy prices after it liberalised the sector after Energiloven,

it started engaging with new energy technology that it had little knowledge about, according to Naturvernforbundet.

When asked about international ownership of Norwegian energy resources, the respondents did not see an immediate pattern that would imply that international governance and ownership shape Norway's climate strategy. When they were presented with the case of Blackpool, some agreed that there could be a link but not a direct relationship. Motvind was the most critical, claiming that Zephyr, who owns Guleslettene windmill park, has a bank in a tax haven. Others who were confronted with this claim said they had nothing to say about it due to not having that knowledge themselves.

Where the design of the energy policy used to lie closer to the people, it is now with multinational energy enterprises. These enterprises benefit from a volatile market in which Norway holds an advantageous position, being a stable producer that can equalize the patterns of energy power in Europe by being a big supplier of renewable energy and fossil fuels and gas (Brunborg 2020; 2022).

Apart from NOROD, the respondents recognized that the oil tax pack was the most defining evidence that Norway is not part of a green recovery. Whether Norway could continue looking for oil while taking part in the green transition was decided by the market rather than the government.

Greenpeace then pointed to one of their reports which examined these packages and their impact on the green recovery. According to the report, Norway has been a big offender due to the subsidization of the oil industry. They thereby perpetuate a grey rather than a green recovery. It further raised the importance of job creation in the renewables sector is necessary to create a labour force that has the knowledge to take on the technological challenges of the future. However, the report argues there is a different signal being sent out when The Green Transition Package is smaller than the US$11 billion support for the Norwegian oil and gas

industry (WWF 2022: 2). NOROD disagreed that this should be interpreted as a signal, saying that the oil and gas industry is working very hard and closely to deliver on the 50-55% emission cuts by 2050 and that the goal would be pushed back because of higher global oil prices and more demand.

Rhetoric vs action

The final layers are uncovered by identifying patterns in the rhetoric used to describe Norway's role in a green transition. When asked to assess Norway's environmental performance in the energy sector, there was a tendency to focus on what Norway has been and could be doing rather than what is happening. There was an approval of Norway's increased goals to reduce emissions by 55%, but many questioned how that would happen?

Naturvernforbundet commented that what we identify as the actual changes in our energy politics are more rhetorical than applied in action. Thus, the government justifies the search for oil, disguising production, e.g. of blue hydrogen and ammonia, as a necessary bridge fuel to help other countries meet their demand. NOROD was positive towards the oil tax package because it meant Norwegian oil platforms could continue their activities like before the pandemic and justified it by stating that Norwegian oil and gas are the cleanest in the world, referencing the "ambitious" goals of cutting emissions by 55% by 2030 and becoming net-zero by 2050. Norsk Industri supported this line of thinking and thought the benefits of Green Platform and the ENOVA grants should be seen as positive developments in Norwegian energy policy because they will, in fact, matter for the new technology that will come over the years.

These conflicting opinions link to the theme of greenwashing, where Norwegian oil, gas, and hydrogen are labelled as green to continue certain activities. Only Greenpeace used this term directly, but others had opinions that matched the description of greenwashing. According to

Greenpeace, one can praise the written commitments to transform the energy sector. Still, when the hard facts and total picture say otherwise, it becomes increasingly difficult to accept the rhetoric as part of a green recovery. The war has shown that countries can manoeuvre around and reduce the dependency on oil when met with a substantial crisis, according to Naturvernforbundet, who was worried that the war could cause a shift in Norway's priorities, perhaps opening for nuclear power and be a reason for keeping the oil and production on course.

Due to Norway's dual profile being both path dependant but a self-declared driver for sustainable development, domestically and in collaboration with the EU to fulfil the goals of the Paris Agreement - it was clear to many respondents considered Norway's energy policy was contradictory and not in line with a green recovery.

7. Discussion

This chapter synthesizes the findings from the document analysis and the interviews and discusses their implications for the research question. There are no impact indicators in the documents, and most empirical data does not go beyond 2020. It was therefore difficult to find accurate data on Norway's emission levels in 2022. Nonetheless, other impact indicators indicate Norway's progress towards a green recovery, such as the Climate Action Tracker for estimations of climate neutrality. Climate resilience is more manageable to estimate by looking at how well Norway managed its environmental policies by linking it to the debates in the winter of 2021/2022. One thing to note this that it can take years for policies to happen, so there is a chance that Norway's energy policies will have a more substantial impact than first predicted.

Furthermore, the chapter adopts the framework by Bird and Hamada (2022: 5, appendix 1) to discuss the impact indicators for a green recovery, which are: 1) Established climate-neutral pathways for national economies and 2) Strengthened climate resilience (with an emphasis on vulnerable and marginalized groups". Finally, the evaluations follow a political ecology perspective as seen in the framework by Sandbrook et al. (2020) framework (See appendix 2). These two frameworks correspond in that they depict similar outcomes and impacts of a green recovery. However, the framework by Bird and Hemada (2022) is more detailed than the one by Sandbrook et al. (2020), including equity and financial instrument indicators to depict an overall more comprehensive evaluation of green recovery strategies.

1. Climate neutrality

For successful climate neutrality impacts, Norway would need "Technologies for carbon capture & storage, renewables, use of green information & communication technology for raising energy efficiency,

development of markets for ecosystem services, government-led green job creation" (Sandbrook et al. 2020: 2)

According to Climate Action Tracker, Norway's overall neutrality target rating is "Insufficient", with "insufficient" policies and action, "almost sufficient domestic target", and "insufficient" climate finance. The low overall rating implies that Norway's actions are not entirely consistent with the Paris Agreement goals (Climate Action Tracker 2022). The ratings are consistent with the findings and cite the further oil investments in 2021 as the primary reason Norway is not on track toward climate neutrality, according to the Paris Agreement and its own domestic goals of 55% emission cuts by 2030 (Regjeringen 2021b).

2. Climate resilience

Environmental protection and resilience can expect the impact scenario; "If decoupling achieved, climate change slows down, pollution & habitat loss may decrease" (Sandbrook et al. 2020: 2). With insufficient monitoring mechanisms (Riksrevisjonen 2022), the possibility that the government will open protected river systems (Fjeld and Moe Kaupang 2021), contrasting their pledge in the Hurdal platform not to (Regjeringen 2021e: 32) –goes against the intentions of *Energiloven* and *Samla Plan for vassdrag* (Brunborg 2020; 2022; NVE 2021). By pursuing green growth and reinvestments in nature, the authorities have enabled ownership structures that have harmed marginalized populations (Cavanagh and Benjaminsen, 2015), Sámi's livelihoods, and appropriated large land areas without guaranteed success in improving energy outputs (Malkenes 2022; Randen Johnson 2022). Overall, Norway's conservation policies do not follow the green recovery standard (Sandbrook et al., 2020).

The publications are dated from before the electricity price crisis or Ukraine, representing a time when the pandemic was the only extraordinary event to change policy-making. The last few months have

seen responses to how Norway will build strengthened frameworks in light of these critical moments. The dynamic between Norway and Europe has changed, seen as they have taken on different roles regarding energy and environmental policy. The interviews helped fill in those gaps to illuminate the greater narrative. Without these events, few extraordinary situations could demonstrate how Norway enacts policy responses in the face of crises to show how environmental protection is a less important priority than economic interests.

Implications

From a political ecology perspective, the firm decision to develop rather than discontinue Norway's oil production reflects a cultural narrative - a product of the historical context maintaining Norway's oil legacy (Breslow 2014). It shows how the socio-economic impacts of Norway's political processes coming out of the pandemic caused a shift in energy policy that had contradictory effects on the environment (Pezzoli 2007: 27, cited in Byrne et al., 2007: 156). The necessity for more green growth, expansion of renewable energy, and search for oil was justified on the ground of profitability and stability for the Norwegian society (Regjeringen 2021d: 17), but by granting tax cuts that were significantly larger than the funds for a green transition (Office of the Prime Minister 2020; Finansdepartementet 2020; Finansdepartementet 2020), the impact on sustainable energy policies after the pandemic was overshadowed and reduced to a minimum effect.

This research contributes to the field of social sciences because it is one of few studies that discuss the implications of a post-pandemic green recovery with a country as a case study, whereas other studies are more theoretical and do not use case studies. Moreover, the electricity price crisis and the Ukrainian war dramatically shifted the course of the thesis. The findings are, thus, particularly representative of the current times, showing how the events changed people's perceptions of Norway's energy

policy over a short period. Additionally, it brings a new dimension to the green recovery topic in Norway, Europe and globally - which was not written about after the war. Contrasting the first interviews with the latter gave an account that would not have been possible if all interviews had coincided.

Future research could investigate whether Norway has delivered on its climate goals set in the Hurdal platform. One could do so from a more quantitative angle. Doing so could show empirical evidence of Norway's promises and contrast it with the concrete evidence of their progress. Combining this with the qualitative research shown in this thesis could give an interesting perspective on Norway's energy policy successes. Ideally, the research could benefit from a mixed-methods approach to combine semi-structured interviews with quantitive data to supply those findings. Lastly, one could compare this to the EU to look into the green recovery progress.

8. Conclusions

This thesis has investigated evidence of a green recovery in Norwegian energy policy. It did so by "What evidence is there in domestic energy policy that Norway is part of a green recovery?".

The research found some evidence that Norway is part of a green recovery. Such examples are investments in renewable technology, the upscaled emission cut goal from 40% to 55%, and the green restructuring pack. The findings imply that Norway's pledges to decarbonize its energy sector to meet the Paris Agreement goals have yet to deliver in practice, and not just rhetorically. Although there is evidence of upscaled green investment in renewable energy (CCS, hydrogen, batteries), the contradictory decision to alleviate the oil and gas industry with a tax cut package ensured a prolonged path dependency to sustain the current petroleum economy.

Still, while the evidence suggests progress indicating a green recovery, there is less evidence showing that the pandemic has been significant to Norway's recovery plan. For that, two conflicting narratives challenge the ToC: 1) The decision to preserve the oil and gas industry and 2) A large-scale commitment to a green energy transition.

The first narrative is explained by Norway's oil-rich history, which today – is kept alive by economic actors interested in maintaining the industry due to Norway's advantageous supplier role in the global energy market as a supplier of fossil fuels and electricity, justified as a necessity to help other countries take part in the green transition. Some see this as opportunistic, given the decision to scale up production in light of the Ukrainian war, provide countries with stable access to oil and gas, and use Norwegian gas as a bridge fuel for countries' energy transition.

The second narrative links to the first narrative. Taking on the role as a reliable partner who will supply Europe with Norwegian gas is a way to externalize domestic emissions from production, e.g. blue hydrogen and

ammonia, created from fossil fuels. These are, in theory, better than using coal or oil and are therefore considered sustainable sources of energy that will have essential roles in the green transition. Norway has thus launched extensive plans to increase its energy generation, considering more construction in nature without fully knowing the consequences. A high proportion of this power generation is exported nonetheless, so during the electricity price crisis in the winter of 2021/2022, Norwegian consumers had to pay higher bills than usual due to the energy deficit caused by a disproportional market relationship. Additionally, the municipalities where these projects are built do not always get back the promised benefits. As such, these processes contradict the original intentions of Energiloven, have a flawed distributional aspect, and impact the state of nature and biodiversity.

Furthermore, the gas which Norway exports is not always part of Norway's scope 3 emissions as part of companies' sustainability reports. Norway tries to compensate for this by creating a public image as a driver of sustainable development because it is vital to its international relations. As an oil-rich nation, it knows that the international community often condemns their actions. Thousands of tonnes of CO_2 are then emitted abroad, without Norway taking the consequences. Thus, it finances international climate funds and commits to ambitious and robust goals at international summits like COP26 to present its environmental profile as sustainable.

Whereas Norway followed in the footsteps of the EU towards a green transition, they did not act as resolutely to the pandemic as they did with the other events. Emissions have gone slightly down, but the outcome is uncertain with new oil explorations at large. With poor conservation policies and unstable energy for Europe, it does not seem likely that the green recovery is at the top of Norway's agenda.

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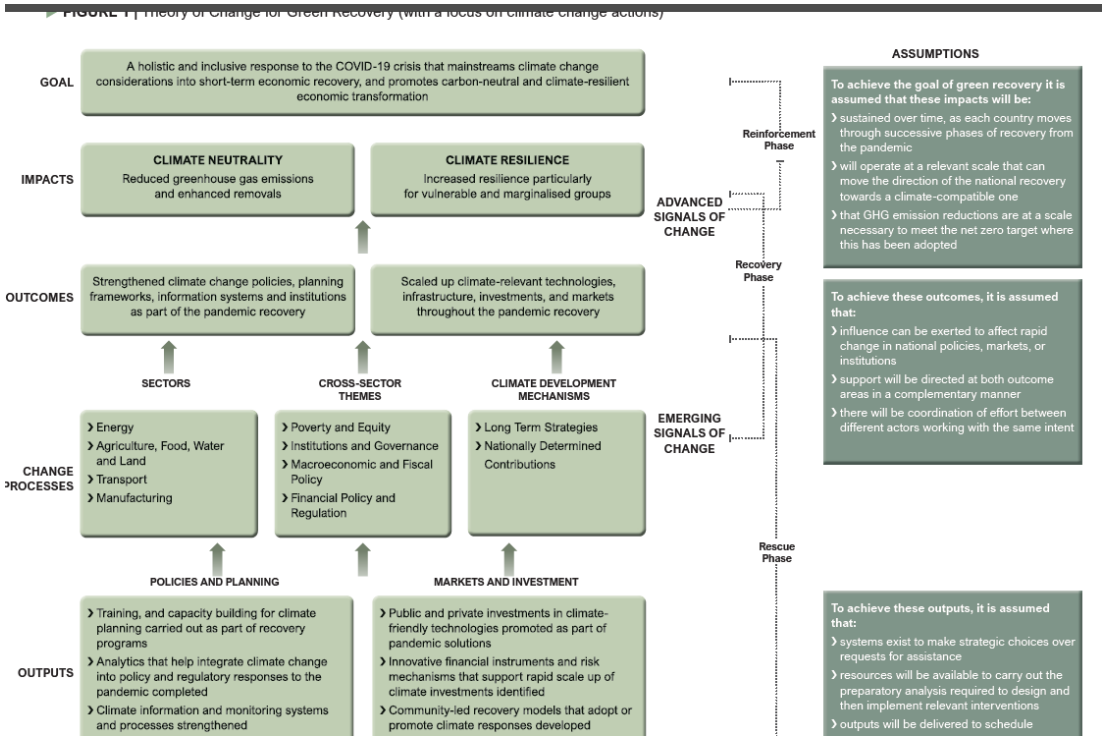
Appendix

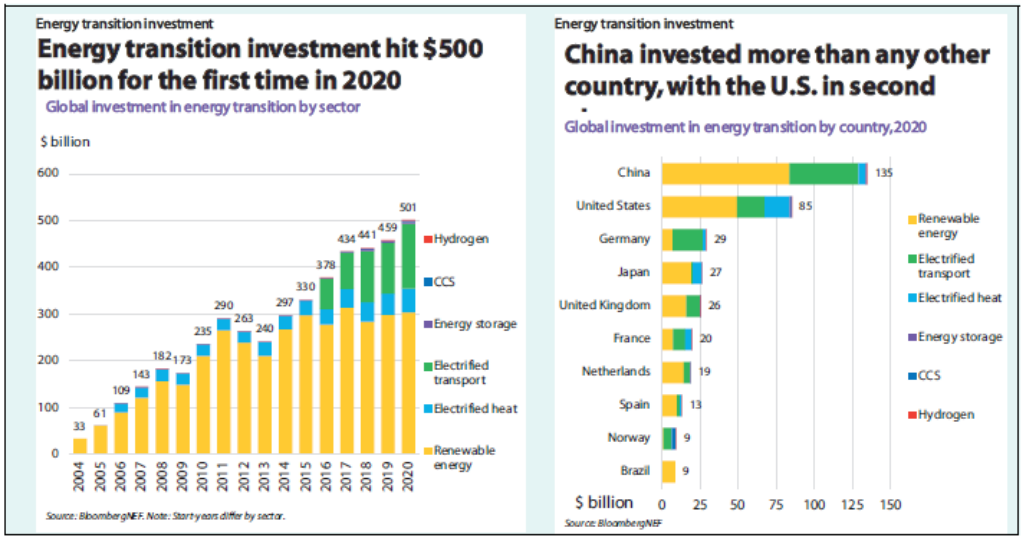


Appendix 1 *: Theory of Change Green Recovery (ToC), found in Bird and Hamada (2022: 4).*

TABLE 1 Four possible future policy responses to the COVID-19 crisis and their implications for conservation.

Social & economic policies	Environmental policies	Key investments	Key divestments	Key actors	Attitude to COVID-19	Impacts on conservation
Restoration of the previous economy						
Austerity, with welfare packages & stimulus to private & financial sectors	Mix of public policies & market-based instruments	As before COVID crises	As before COVID crises	Governments & private sector/markets	Temporary blip. We can get through this.	Existing conservation projects & areas will survive but biodiversity loss will continue
Removal of obstacles to economic growth						
Stimulus to private & financial sectors, flexibilization of labour markets	Sell off protected areas, environmental deregulation, opening up of natural capital to exploitation	Fossil fuels, aviation industry, mining & logging	Environment & welfare policies	Stronger market orientation	Blame nature: eradicate species harbouring disease	Increased funding available for conservation but likely to accelerate biodiversity loss, resource depletion, & increases in carbon emissions
Green recovery						
Welfare packages & government-led green job creation as an economic stimulus	Technologies for carbon capture & storage, renewables, use of green information & communication technology for raising energy efficiency, development of markets for ecosystem services, government-led green job creation	Renewables & other green technologies in search of ecoefficiency	Fossil fuels	Mix of public policies & market based instruments	Opportunity to launch Green New Deal	If decoupling achieved, climate change slows down, pollution & habitat loss may decrease
Transformative economic reconstruction						
Sufficiency, through basic income, max–min income ratios, progressive taxation, work time sharing & reduction	Adoption of alternative indicators of progress, work time reduction, deeper reforms in tax, fiscal & monetary policy, trade & finance, resource & emission caps	Basic income, care sector & essential services	Fossil fuels, military, aviation industry, advertising	Mix of public policies & grassroots movements	Decentralized production & less mobile society reduces pandemic risks, opportunity for transformative change	Climate change will slow down, pollution & resource depletion will decrease, habitat loss may increase

Appendix 2: *Four possible future policy responses to the COVID-19 crisis and their implications for conservation*, found in Sandbrook et al., (2020: 2).



Figur 4.9 Investeringer fordelt på segment og på land. Figuren til venstre viser globale investeringer i kategoriene hydrogen, CCS, energy storage, electrified transport, electrified heat og renewable energy i 2020. Figuren til høyre viser globale investeringer i disse kategoriene for Kina, USA, Tyskland, Japan, Storbritannia, Frankrike, Nederland, Spania, Norge og Brasil.

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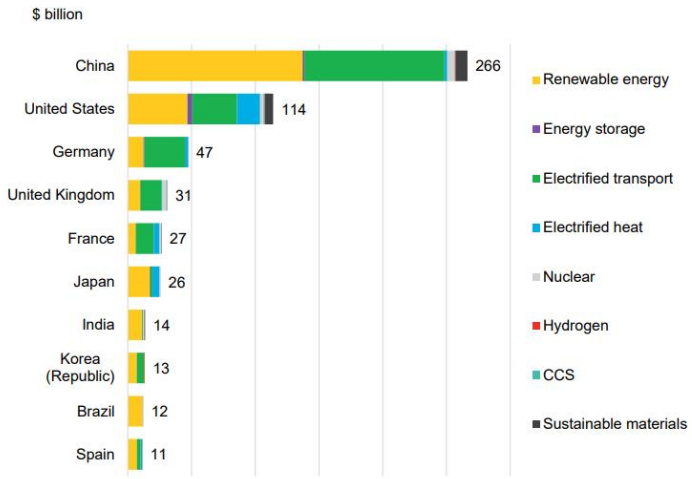
Appendix 3. *Energy Transition Investment Trends 2021,* found in Bloomberg (2021: 6).

Energy transition investment: overview

China topped the table again as Japan dropped two places

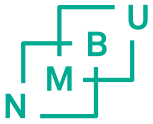
Global investment in energy transition by country, 2021



- China's energy transition investment hit $266 billion in 2021, cementing its position as the leading country. This figure was up 60% from 2020.
- The U.S. was the second-biggest investing country once again, achieving a total of $114 billion in 2021 – up 17% on the year before.
- European countries invested $219 billion in 2021, with EU member states accounting for $154 billion of that. This would place the EU as a bloc in second place behind China, and ahead of the U.S.
- European countries also featured in the top 10 in their own right, with Germany, the U.K., France and Spain all exceeding $10 billion in low-carbon spending last year.
- Japan dropped from fourth to sixth in the list as its investment levels fell slightly – allowing the U.K. and France each to gain a place.
- India and South Korea entered the top 10 in 2021, at the expense of Norway and the Netherlands.

Source: BloombergNEF

Appendix 4, *Energy Transiition Investment Trends 2022*, found in Bloomberg (2022: 8).



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