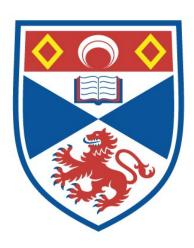
THE BAD GUYS WITH THE GOOD SOLUTIONS? ENERGY ELITES, TRANSITIONS, AND THE 'GOOD LIFE' IN NORWAY

Anna Raphaela Kyra K Seeger

A Thesis Submitted for the Degree of PhD at the University of St Andrews



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The Bad Guys with the Good Solutions? Energy Elites, Transitions, and the 'Good Life' in Norway

Anna Raphaela Kyra K Seeger



This thesis is submitted in partial fulfilment for the degree of

Doctor of Philosophy (PhD)

at the University of St Andrews

September 2022

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I, Anna Raphaela Kyra K Seeger, do hereby certify that this thesis, submitted for the degree of PhD, which is approximately 76,000 words in length, has been written by me, and that it is the record of work carried out by me, or principally by myself in collaboration with others as acknowledged, and that it has not been submitted in any previous application for any degree. I confirm that any appendices included in my thesis contain only material permitted by the 'Assessment of Postgraduate Research Students' policy.

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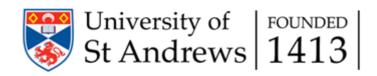
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5 June 2018

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Department of Social Anthropology

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Thank you for submitting your ethical application, which was considered at the School of Philosophical, Anthropological and Films Studies Ethics Committee meeting on 5th June 2018, when the following documents were reviewed:

- 1. Ethical Application Form
- 2. Participant Information Sheet
- 3. Consent Form
- 4. Detailed Ethical Statement
- 5. Data Management Plan
- 6. Privacy Impact Assessment
- 7. Risk Assessment Forms

The School of Philosophical, Anthropological and Films Studies Ethics Committee has been delegated to act on behalf of the University Teaching and Research Ethics Committee (UTREC) and has granted this application ethical approval. The particulars relating to the approved project are as follows -

Approval Code:	SA13591	Approved on:	5/6/18	Approval Expiry:	4/6/21
Project Title:	The Black Gold of the	High North: A Stud	y amongst People Inv	olved in Oil Production	in Norway
Researcher(s):	Anna Rauter				
Supervisor(s):	Dr Mette High				

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Yours sincerely

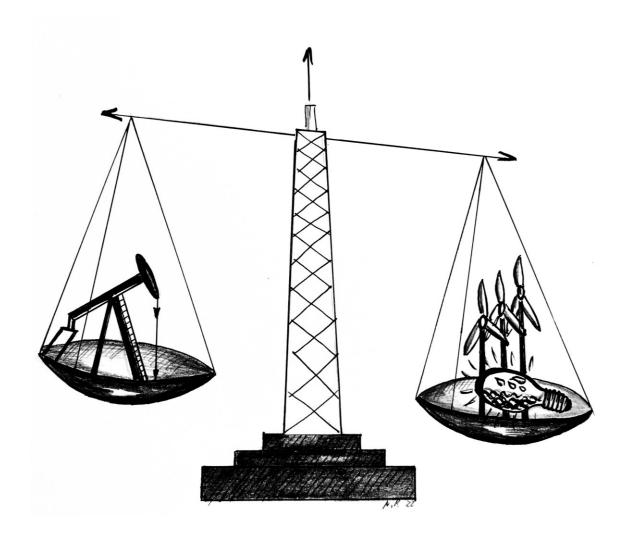
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The Bad Guys with the Good Solutions?

Energy Elites, Transitions, and the 'Good Life' in Norway



by Anna Raphaela Kyra Katharina Seeger (Rauter)

Abstract

In this thesis I examine how strategically situated energy industry professionals conceptualise and act upon energy transitions in Norway. Analytically I refer to interlocutors as 'energy elites'. This allows me to highlight their shared socio-economic, educational, and professional positionalities while showing key distinctions in their perceptions of energy.

I draw on 18 months of ethnographic fieldwork in Oslo between 2018-2020 where I engaged with over 100 industry leaders and experts. I conducted fieldwork at the formal office spaces of Norway's major energy corporations and in the private spaces that interlocutors inhabited. This allows me to make three main contributions:

Firstly, I use my detailed ethnographic insights to counter dominant scholarly presumptions that see elites as resisting socio-economic changes in order to preserve their own status. I demonstrate that the way my interlocutors engaged with energy transitions involved personal, societal, and ethical considerations of how energy production can ensure a 'good life'. Thus, I argue that strategic pursuits alone cannot account for the varied ways in which industry professionals engaged with energy transitions.

Secondly, I expand on the regional literature by critically examining dominant narratives of a 'successful' Norwegian energy model. I analyse how increasingly industry professionals scrutinised the socio-environmental sustainability of their hydrocarbon and renewable energy production in light of growing climate change concerns.

Lastly, I contribute to the study of energy transitions, as I analyse them as liminal, in-between processes marked by contestation and ambiguity. I suggest that various energy imaginaries make energy transitions uncertain 'rites of passages' without clearly defined end goals or pathways. By advancing scholarship on elites, energy, and transitions, my study demonstrates that contested visions of energy futures are united in their desires for a 'good life'.

Word count: 282/300

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The illustration on the title page is from Nicola Rauter.

¹ Please note that Chapter 3 is based on my peer-reviewed article published in Energy Research and Social Science (Rauter 2022).

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Introduction

It was one of those cold, dark, and windy evenings that are all too common during the long nights of the Norwegian winter. I had been traveling for almost an hour from my suburban 'hybel' (apartment) to reach Oslo's city centre where I was meeting my friend Anne for dinner. Anne was a petroleum engineer in her mid-30's, whom I was introduced to through a mutual friend at a dinner party. She worked in the oil and gas department at Energo, the Norwegian energy consulting company, where I conducted my first year of fieldwork. We immediately got along well and, whenever our schedules allowed, we met up outside of the office premises for after-work drinks, dinners, and concerts.

The popular, usually crowded pizzeria was quieter on this weeknight. Equipped with a glass of wine, Anne took me on a journey through the countries she had lived and worked in. Besides recounting adventurous anecdotes, she shared with me the ethical dilemmas she had experienced working for an industry whose environmental impacts she and many of her colleagues increasingly problematised. Anne perceived a conflict between the continued production of oil and gas alongside environmental sustainability initiatives. She took a sip of wine and turned silent for a moment. A few seconds later she pensively claimed: "You know, at Energo we're doing good work. We're helping to make the industry safer. We are the good guys amongst the bad guys". Energo, according to Anne, provided technological, safety, and environmental guidance to hydrocarbon companies. She felt that compared to other players in the industry who prioritise profits, her workplace ensured the health and safety of workers while promoting environmentally sound industry practices. Her emotive, moral, and polarising language was not an exception.

During my fieldwork in Oslo from September 2018 to February 2020, energy professionals perceived industry-critical voices to grow amidst rising public climate change concerns. Many felt portrayed by publics, as well as family and friends outside the industry, as 'the bad guys'. To justify their and their companies' involvement in energy production, industry professionals emphasised their ethical, environmental, and socio-economic commitments to engage with energy transitions. "We want to be part of the solution rather than, how we are perceived today, as a big part of the problem", said the CEO of an oil company. Another interlocutor argued: "We are the bad guys with the good solutions". As I soon learned, however, many felt uncertain how these commitments could be pursued in a way that allowed humans, the environment, the climate, and non-human species to thrive.

In this thesis I examine how strategically situated energy industry professionals conceptualised, envisioned, and managed energy transitions in Norway. The country is internationally renowned for its climate commitments, commended for its fully renewable energy-based electricity production, and is situated amongst the world's largest producers of oil and gas.² Given this context, I have chosen Norway as the place in which to study the interplay between environmental, technological, ethical, and socio-economic considerations of key industry players. My interlocutors were executives, board members, investors, managers, and experts of energy companies in Norway. These interlocutors occupied leadership roles and identified and were referred to as *ledere* (leaders). Professionals who contributed with their expertise to energy developments identified and were referred to as *eksperter* (experts) or more specifically to their vocations as engineers, economists, communications- or political

 $^{^{2}}$ In this thesis, I use the terms 'fossil fuels', 'hydrocarbons', and 'petroleum' interchangeably with oil and gas.

consultants etc. Descriptively I refer to my interlocutors interchangeably as 'industry professionals', 'energy professionals', or more specifically as *ledere* and *eksperter*.

Analytically, I draw on the notion of 'energy elites' to conceptualise my interlocutors. The term allows me to analyse *ledere* and *eksperter* as part of a community with shared interests and affiliations yet with distinct levels of seniority, and sometimes conflicting imaginaries of energy. As discussed in greater detail in Chapter 2, the notion of elites is not intended to homogenise but to provide insights into the strategic yet diverse positionalities of energy professionals.

The interrelationship between industry professionals and energy transitions is the focus of this study. I analyse how my interlocutors conceptualised the wider implications of their own roles in energy production. To many, energy transitions, at a time of increasing concerns about climate change, involved existential and deeply ethical questions about the kinds of 'good lives' they envisioned for themselves, future generations, and their interrelationship with other species, landscapes, and environments. In this thesis I explore deep and personal insights into the motivations behind industry professional's career and corporate strategies. The focus on peoples' ethical perceptions allows me to study contemporary energy transitions through a people-centred analysis.

This introductory chapter will commence with a discussion of my interlocutors' corporate positions in the energy industry. This is followed by a contextual overview, in which I provide insights into Norway's energy history, key energy debates, and energy transitions. I proceed with a discussion of my methodology, where I examine my own positionality, ethical considerations, and questions of access and ethnographic voice. After providing insight into the existing literature on elites and energy in Norway, I outline the contributions of this study. Finally, I provide an overview of the following chapters in this thesis.

Ledere and Eksperter in the Norwegian Energy Industry

The majority of my interlocutors occupied leadership positions in the energy industry. Most had a professional background in engineering, geology, petrochemistry or information technology with only a few educated in business management or finance. My interlocutors used the term *ledere* loosely to refer to energy professionals in management, executive, investor, or board member roles. The term, as I understood it, implied a strategic role of responsibility that involved leading other employees, including responsibility over project or corporate management, or influence over corporate strategy. As such, the term *leder* could apply to project managers with a small team of just a few employees, as well as to industry leaders who managed several companies or had multiple board member positions. The term alone provided relatively little insight into the seniority of an energy professional and was thus often specified by distinguishing someone's occupation or role.

My interlocutors repeatedly emphasised that their workplaces were based on egalitarianism and flat corporate hierarchies. To illustrate this, energy professionals in both junior and senior management positions told me on several occasions that if they wanted to, they would be able to speak to the CEO of their company "right now!". They applauded what they referred to as a "democratic" corporate culture, in which, as they noted, all employees felt they had an input into the way the energy companies were run. They emphasised that an informal communication style marked by approaching (senior) colleagues on a first-name basis, as well as open-floor office organisation contributed to an 'egalitarian' corporate atmosphere. Yet these interlocutors were routinely surprised when I

interviewed one of the company's senior executives. More than once, they asked me: "how were they?" indicating that they never had met the executive themselves.

Over the course of my fieldwork, I noticed that these portrayals of an equal work culture represented more so an ideal than a practice. Companies were hierarchically organised, usually with a managing director or CEO (chief executive officer) at the top, guided by shareholder (investor) interests and board member advice. A CEO was assisted by a group of executives who oversaw specific branches of the business. Executives then had a deputy in a management position who oversaw other *ledere* responsible for the management of departments. Department heads were responsible for project managers, who in turn had a team of several employees to complete specific tasks. This hierarchy was also underscored by the layout and architecture of offices, in which the most senior energy professionals occupied the top floors of buildings, often with personal offices.

While interlocutors in senior corporate positions emphasised that they aimed for a work culture in which all employees felt heard, they distinguished themselves from their employees. One deputy executive once told me: "During booms we are a democracy. But when crisis hits, we're at war, and leadership is top-down". To me, this suggested that he saw his company as cultivating an image of egalitarianism and employee involvement, but that this work culture was volatile to shifts in the corporate environment and market dynamics. In his research on the organisation of work at hydrocarbon companies in Norway, Vidar Hepsø (2014) noted that energy professionals form cliques based on age and experience. He highlighted in particular energy professionals with "long experience and dominating worldviews" as "key people" (2014: 500). Indeed, my interlocutors' age and experience often correlated with their levels of seniority. Recent graduates mostly occupied junior consulting and expert roles, while most of the older personnel (between 45-65) had ascended the corporate ladder and achieved leadership status. Those people whom my interlocutors frequently described as eksperter occupied consulting positions or junior leadership positions. The main distinction between ledere and eksperter was that experts' work involved project execution and mostly engineering related tasks that required a specific technical skill set, while ledere's main task was to manage a group of employees.

Experts formed part of leaders' teams and contributed their specific skills and knowledge to mutual business endeavours. It has been noted that in leadership networks, elites "are not solitary rulers. Advisers and consultants, spokesmen and opinion-makers are often the captains of their higher thought and decision" (Mills 1956: 4). In an energy context, Arthur Mason has shown that experts shape leaders' decisions via their expert knowledge (Mason 2013; Mason & Stoilkova 2012). Together with Maria Stoilkova, he suggested that experts are instrumental in negating uncertainties within energy industries and policy and as such create "communities of consensus around imagined futures" (Mason & Stoilkova 2012: 89). Mason's work demonstrated that experts alongside leaders operate in similar spheres of influence, and they occupy the same exclusive spaces often hidden or shielded from outsiders. The energy leaders and experts I encountered in Norway shared educational backgrounds, intellectual capital, common lifestyles, economic statuses, and values. This included similar living locations, membership in social clubs, and diplomas from the same technical university with a signet ring showing belonging to their alma mater. They shared preferences for recreational activities such as skiing, hunting, or golfing, as well as similar tastes in luxury goods such as cars and holiday cabins.

Ledere and eksperter were also linked through their official positions and networks. Aside from identifying with their companies, many interlocutors strongly associated themselves with their respective energy sector. Working in oil, gas, wind, solar, or hydropower was for most of them not just a professional affiliation but influenced how my interlocutors self-identified and sometimes

distinguished themselves from their peers. I thus place an emphasis on *energy* professionals and on *energy* elites to highlight my interlocutors' vocations in Norwegian energy production.

Energy Dilemmas and Transitions in Norway

Yes, we love this country. Do we not? [...] I also love our fine, old Norwegian democracy. Even though people don't actually have a say in anything, it's nice that they think they do.

And the country itself; the pure, beautiful nature – the pride of Norway!

The ice is melting! The climate runs amok! People talk about pollution, but who cares? That is what makes Norway one of the world's richest countries.

And should there be any eco-friendly national traitors who don't see any particular reason to love Norway... then think of the mountains, my friends, and ask yourselves: Who do you think will be the last ones to drown when all the ice has melted?

We, who live on the top of the world! (Hagedorn et al. 2020)

Ragnarøk, season 1, episode 6, at 31:00 - 33:00 3.

This is an extract from the Norwegian mythological drama "Ragnarøk" that was released on the online streaming platform Netflix in February 2020. It is the parodical national day speech of a high school student who uses satire to voice his climate and environmental concerns as well as his frustrations with the climate inaction, which he associates with Norwegian corporate elites and publics. Taking place in contemporary times, the series is set in the fictional town Edda where the beings of Norse mythology live alongside humans. The premise of the series is that climate change and environmental pollution have brought about the age of Ragnarøk. The opening scene describes that in Norse mythology Raqnarøk is "the definition of the end of the world. [It] begins with natural disasters and culminates in the great battle between the Gods and the Giants" (Hagedorn et al. 2020, ep. 1). Responsible for this 'Armageddon' are the Giants who are mythological beings living in the world of humans who masquerade as corporate elites. To the human inhabitants of Edda, they are known as the 'Jutuls', described as one of the richest Norwegian families with wealth deriving from their ownership of 'Jutul industries', a vaguely described heavy-industry-based business with allusions to oil and gas production. Throughout the first season, the audience learns not only that the entire town of Edda is socio-economically dependent on the income and the workplaces generated by Jutul industries, but also that its operation has polluted local water supplies and severely impacted the climate.

Released just after the end of my fieldwork, I saw Ragnarøk as the cinematographic interpretation of the rising tensions between environmental, climate, socio-economic, and energy considerations that accelerated in Norway between 2018-2020. With its allusion to misdirected pride and patriotism, climate inaction, and the prioritisation of wealth accumulation, the speech cited above captures criticisms against industry professionals and energy companies that were increasingly voiced by

8

³ Official English translation from Netflix subtitles. The series' original language is Norwegian.

publics, including vocal youth activists and representatives of the environmental green party (*Miljøpartiet De Grønne*, *MdG*). In this context, my interlocutors often felt conflicted in their roles as energy providers and their responsibility towards environmental sustainability targets. Many related this to "dilemmas" in energy transitions, referring to the simultaneous pursuit of carbon intensive energy production and low-emissions climate targets as Norway's "schizophrenia" or "paradox". The Norwegian anthropologist Thomas Hylland Eriksen has conceptualised this as a "double bind" where "growth in energy use and ecological sustainability are desired at the same time, though it is rarely possible to achieve them both simultaneously" (Eriksen 2016; see also Eriksen & Schober 2018). In the energy industry in particular, I have found that the notion of a 'double bind' encapsulates the efforts to increase renewable energy capacity and environmental sustainability targets alongside the continued subsidisation, exploration, and production of fossil fuels in Norway.

Norway is the world's third largest exporter of natural gas and supplies annually 2% of global crude oil demand (Norskpetroleum 2022a). All of Norway's hydrocarbons are produced offshore, and almost all of the oil and gas yields are exported to be consumed abroad (Ibid.: 2022). In 2021, oil and gas made up 60% of the total value of Norwegian exports of goods, rendering revenues from fossil fuel extraction a key component of Norway's GDP (Ibid.: 2022). State oil incomes from taxation and the state's own investments in hydrocarbon production and infrastructure feed into what is commonly known as the "Oil Fund". This is the country's sovereign wealth fund, which in part finances the national budget including Norway's internationally commended welfare institutions (NBIM 2022; Regjeringen 2022, for details see Ch. 4). Kari Marie Norgaard, who has ethnographically examined climate inaction amongst a rural community in Norway, has pointed out that Norway has "the privilege of being a producer of oil and natural gas, the benefits of which are garnered at home and the hazards of which are exported into the common airshed" (2011: 219).

As most of Norway's oil and gas are exported, much of its energy demand is satisfied though its "fully renewable electricity sector" with hydropower forming the largest component in the electricity mix (90%), followed by wind and thermal power (Gulbrandsen et al. 2021: 2; SSB 2022a). The use of this renewable electricity is widely encouraged by policymakers to reduce domestic carbon emissions, including for example via subsidies towards the deployment of electric vehicles. Moreover, industry and policymakers are working on the expansion of renewable energy production for export in an effort to become Europe's "green battery" (Gullberg 2013: 616). These efforts include the recent establishment of battery production capacity in Norway.

Throughout this thesis I employ the term 'renewables' to describe the types of renewable energy technology and production my interlocutors were involved in. This included offshore wind, solar photovoltaic (PV) and hydropower production. Most of my interlocutors' work focussed on renewable energy capacity development particularly the establishment of wind farms and solar PV parks. Development is the process of deploying a renewable energy project in which renewable energy installations are facilitated and constructed. This is distinct from the work of companies which produce the technology such as turbine or solar panel manufacturers. Development companies are also responsible for maintenance and decommissioning of renewable installations. However, with most of their projects being in planning or early life-cycle stage, my interlocutors had more experience with installation and maintenance than decommissioning.

The simultaneous pursuit of renewable and hydrocarbon energy production as part of energy transitions is not unique to Norway. Berit Kristoffersen (2015: 141) has pointed out that Norway's dual role as a "major oil and gas producer on the one hand, and being politically progressive when it comes to climate change, on the other" can be understood as part of a "global energy dilemma" found also in other countries. China, for example, has been portrayed as one of the world's rising "green

superpowers", yet the development of its renewable – particularly wind power – capacity has been accompanied by growing its coal power production (Cai & Aoyama 2018). Similar dualisms can be found in most other energy transition contexts. In Germany, scholars have noticed "a growing tension between the expansion of LNG [liquified natural gas] infrastructure and climate protection goals" (Brauers et al. 2021: 2). While natural gas is calculated to be responsible for 35% of global CO2 emissions since 2009 (Brauers et al. 2021: 1), it is often advertised as a 'bridge fuel' – not least by major oil and gas producers in Norway exporting it to other parts of Europe. Building up LNG or coal capacity, however, may ultimately work to slow down energy transitions rather than encourage them.

Energy transitions have been described as a "wicked process" (Komendantova 2021: 1) as they involve and are shaped by a multitude of stakeholders with conflicting views and interests. Representing a liminal space they are akin to other societal transitions in that they show us "how larger groups or entire societies undergo change and transition, how they live through these uncertainties of the inbetween, and how they come out on the other side of it – if at all" (Thomassen 2014: 1). In this thesis, I define energy transitions not as clean-cut pathways from 'old regimes' to new technology, but rather as a liminal period of the 'in-between', where seemingly opposing types of energy can be promoted simultaneously. To denote the multitude of pathways and processes that energy transitions involve, I use the plural form of the term, energy transitions. In my contribution to the scholarship on contemporary energy transitions, I critically examine Norwegian energy trajectories as prolonged processes that run the risk of becoming accepted as endpoints rather than means to low-carbon energy futures. Narratives of transitions, as I shall demonstrate, allowed some of my interlocutors to indefinitely legitimise the continued production and use of fossil fuels as a 'temporary' source of energy, thereby dampening the proliferation of other, renewable energy sources.

This specific case study, I suggest, may also shed light on energy transition contexts beyond Norway. My interlocutors often pointed out that the energy dilemmas they felt confronted with were also experienced by their colleagues in other countries. They further suggested that only through cross-border cooperation and a sharing of experiences, energy transitions could be pursued transnationally to mitigate global climate change. The context of this study is specific, particularly because my interlocutors were highly privileged, situated strategically, and worked in an industrialised country with the world's biggest sovereign wealth fund. I suggest, however, that the ethical struggles they experienced show that energy dilemmas relate to larger, transnational uncertainties about our planet's future in light of climate change.

Contested Energy History and Contemporary Debates

It is important to recognise that energy transitions are context-specific; their driving forces are deeply embedded in historical, economic, and socio-political contexts as well as individual expectations and future visions of how energy can bring about 'good lives' and 'good societies' (Araújo 2014; Smith & High 2017). As such, insights into Norway's energy history as well as awareness of contemporary energy and environmental debates are essential to understand how my interlocutors imagined and engaged with energy transitions.

In Norway there is a strong historical connection between *Regjeringen* (the government) and the energy industry, which formally traces back to the establishment of the concession laws from 1906-17. After Norway gained independence from Sweden in 1905, policymakers led by Prime Minister Johan Castberg, declared natural resources a public good. The laws developed in this process, often

referred to as the Castberg laws, regulate resource rights in Norway until today. They grant companies the right to exploit and financially profit from a natural resource for a predetermined amount of time, after which the exploitation rights return to the state (Moses & Letnes 2017: 51; Ryggvik 2010: 15). At the time, the concession laws were drafted particularly with the protection of hydropower reserves in mind (Moses & Letnes 2017: 49). They continue to ensure in contemporary times that the exploitation of Norway's abundant lakes, rivers, and waterfalls financially benefits the state as well as the local communities where hydroelectric infrastructure is based (see Fig. 1). The Castberg laws were often cited by my interlocutors as protecting the national ownership of hydrocarbon reserves when they were first discovered in 1969, and as a foundation to the equitable distribution of 'oil wealth' in Norway.

The laws crucially established the relationship between energy production and the state's income from the rents and taxation of natural resource production. Throughout my fieldwork I have found that a perceived state dependency on energy-, particularly hydrocarbon revenues as a source of national income, is amongst the key reasons why contested energy developments like the continued hydrocarbon exploration and production continue to be state supported amidst rising concerns for climate change.



Figure 1. One of Norway's waterfalls in an area with hydroelectric installations in Hardangervidda. Photo taken by a friend picturing author.

Despite political efforts to ensure socio-economic benefits to state and local communities in the extraction and production of natural resources, tensions between Norwegian energy developments and socio-environmental concerns emerged. In the 1970's and 80's, the expansion of hydroelectric installations led to large-scale environmental protests. Constructing hydropower infrastructure involved the building of dams and flooding of waterways as well as redirection of rivers in addition to construction that impacted local ecosystems and residents. Opposition culminated in the protest

movements against plans to dam the Alta-Kautokeino watercourses in the North of Norway, which is a region populated by the *Sámi* (Sami), an ethnic minority populating the Northern regions of the country and beyond.

The protests, which have been referred to as "one of the most dramatic political conflicts in Norway" (Andersen et al. 1985: 317–319), were in part aimed at protecting the local environment where the river formed a spawning ground for salmon, an important source of food, income, and tourism (Ibid.: 318). They were also defending the subsistence rights of the *Sámi* (Andersen et al. 1985: 317–319). Ultimately, after more than 12 years of unresolved conflict, Norway's Parliament decided on dam construction which commenced in 1981 (Andersen et al. 1985: 318-319). During my fieldwork, hydroelectric dams were no longer publicly debated. Yet some of my interlocutors problematised the persisting environmental and aesthetic effects of hydro-electric installations on flora, fauna, and ecosystems as well as the visual impact of long power-masts jetting electricity from remote rural areas to the urban centres.

Over the course of my fieldwork, I observed three key public debates on environmental and energy matters, which reverberated in the energy industry. At the forefront were student climate protests, which were in large part initiated by Swedish climate activist Greta Thunberg's call for *skolestreiker for klima* (school strikes for the climate). They took place regularly on Fridays in front of the *Stortinget* (Parliament) in the centre of Oslo throughout 2019. During this time, industry professionals shared with me that their children, friends, and families started to question their work in the energy industry, which in turn affected the ways my interlocutors perceived their own roles in energy production. They also noted changes in investor preferences towards 'green' portfolios and difficulty in recruiting graduates into oil and gas jobs. During this time, energy companies started to reposition themselves as climate pro-active energy producers (this is further discussed in Chapters 3-5).

Throughout 2019 further public debate was sparked by governmental plans to raise *bompenger* (road tolls). During this time the 'bompenger parti', as it became known, gained significant traction.⁴ Its main political objective was an abolishment of road tolls altogether. Amongst my interlocutors, *bompenger* led to various debates, particularly during coffee and lunch breaks. Many voiced their support for higher road tolls, hoping that this would incentivise more people to use public transportation, electric vehicles, or bikes to thereby reduce local air pollution. Others were outraged at the suggested price rises, arguing that rather than an environmental action, it was a means for the state to collect more taxes (this view was also represented by FNB, the 'bompenger parti'). Again others thought that increasing bompenger would have little effect on changing transportation habits and thereby only have minimal impact on reducing CO2 emissions. Although at the time I understood the debate as not directly relevant to the energy industry, I now see it as part of much broader sustainability-related contentions that increasingly confronted Norwegian society politically, economically, socially, and environmentally.

Such contention was also expressed in debates that emerged throughout 2019 in response to a governmental announcement identifying potential sites for future onshore wind park developments (see Gulbrandsen et al. 2021). Discussions were highly polarising within and beyond the energy industry. At the time, one of my interlocutors working in wind power told me that in order to avoid divisive discussions in his private life, he no longer introduced himself to new acquaintances with his job title. Avoiding the mentioning of wind power, he simply referred to himself as an engineer. The onshore wind debates, which my interlocutors perceived as a particularly immediate confrontation with renewable energy expansion, contributed to larger discussions about the socio-environmental

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⁴ The official party name was: Folkeaksjonen nei til mer bompenger (people's action 'no' to more road tolls) or FNB.

impacts of energy deployment and production in Norway. With the hydrocarbon sector already under public scrutiny in 2019, interlocutors increasingly questioned whether mass-scale renewable energy technology could lead to the "pure" and "clean" energy futures they desired.

The debates I have outlined show that energy transitions interrelate with larger societal and ethical questions about the kind of lives people desire for themselves, future generations, and other human and non-human actors (including the climate). In this vein, this thesis contributes to the study of energy ethics, which Jessica Smith and Mette High defined as: "the multiple and varied ways that people experience, conceptualize, and evaluate matters of energy in their lives" (2017: 1). Here I focus on how the leaders and experts of energy businesses themselves judged "the rightness and wrongness of energy" (Ibid. 2). For most of my interlocutors, various types of energy production were not inherently 'good' or 'bad'. Rather they viewed energy matters in relative terms – "better as" or "worse than" – and repeatedly told me that there is, and may never be, an "energy utopia" in which environmental, social, and economic needs are in balance.

Access to Energy Companies and Industry Professionals in Norway

I distinctly remember the moment in my childhood when I knew I wanted to work on climate change. It was 2006, I was fourteen at the time, and my favourite teacher, Mr. Bavaro, screened Al Gore's "An Inconvenient Truth" in class (Guggenheim 2006). Gore's emotive wake-up call worked on me. Growing up in the Alps and having spent much of my childhood barefoot in fields picking flowers, watching insects, and collecting berries and mushrooms, I instinctively knew what was at stake with the proliferation of climate change. After a year of working in diplomacy, where I witnessed skilled policymakers and state representatives attempt to make visionary deals, which often crumbled apart when countries demanded to strip resolutions to their bare minimum, I knew I wanted more.

Around the same time, I saw this research project advertised. I was immediately drawn to it, not only because it provided me with a chance to follow my research interest in elites, but because the stipulation that it had to include a study of 'oil in Norway' meant that I could explore climate change from a different vantage point. More than four years later, the focus of this project has expanded beyond oil. Fieldwork made me appreciate the importance of examining the complex interplay between different kinds of energy production in light of anthropogenic climate change.

It was not until the writing up process that I noticed the overarching theme of my research was the notion of 'transitions'. Transitions were idealised, promised, worked around, avoided, and most pertinently perceived as highly amplified in an industry context increasingly sensitised to the omnipresent buzzword 'energiomstilling' (energy transition). Change, as most anthropologists would concede, is an all-encompassing aspect of social life. Here I analyse not its occurrence or prevalence, but rather examine how perceived changes became a vehicle for energy professionals' (re)imaginations and corporate (re-)positioning. I analyse how a confrontation and engagement with energy transitions involved for industry professionals not only changes in physical manifestations of energy but also reorientations of their energy perceptions and visions. This allows me to examine even those instances where interlocutors opted to protecting the energy status quo and their industry positions as responses to perceived changes in energy trajectories.

The context of energy transitions and industry changes was fundamental to my ability to execute this research project, and to attain access to strategically situated industry professionals. Energy leaders and experts seemed eager to demonstrate to me how seriously they and their companies engaged with

the promotion of "low-carbon", "clean hydrocarbon", or renewables technology. Aside from that, most of my interlocutors worked for companies who advertised a culture of "trust" and "transparency" and thus situated themselves as open to researchers. Further, many energy professionals were keen to speak to a researcher who committed herself to a non-judgmental, people-centred, and perception-based study of the energy industry. For them, this seemed to be an opportunity to share their concerns and achievements with a representative of the 'millennial' generation, whom they often experienced as highly critical of the energy, particularly hydrocarbon business. My access, as this next section will explore, of course had limitations. Yet, I suggest that the timing and timeliness of this research project corresponded to wider developments in the industry and beyond, and as such provided me with deep insights into the corporate culture and professional and private networks of 'ledere' and 'eksperter' in the Norwegian energy industry.

In 2017 on my first pre-fieldwork trip, I had the opportunity to meet Ståle Knudsen and his 'Energethics' team at a conference they organised at the University of Bergen entitled "Beyond Oil". When I told them about my intention to study leaders and experts of Norwegian energy companies, my plans were met with awe and concern. "How will you be able to get access to these strategically positioned individuals?", they wondered. They shared with me that in their own fieldwork experiences in studying how Norwegian energy companies conduct business abroad, access was a significant methodological concern. As they later specified in a publication dedicated to their methodology, the access they were granted often felt "orchestrated", leading them to significantly re-define what 'good access' entailed for their ethnographic studies of corporations (see Müftüoglu et al. 2018). As a result, they became attuned to understanding limitations to ethnographic entry as valuable data in itself. They noted that denial of access to energy infrastructure sites taught them about corporate safety and security concerns, and unavailability of corporate information or industry professionals highlighted to them the information the companies did not want them to know (Ibid.: 254).

Access is also a key consideration when researching other industries elsewhere. Hugh Gusterson, who conducted fieldwork in a nuclear weapons laboratory in the United States, suggested that "participant observation is a research technique that does not travel well up the social structure" (1997: 115). Not only struggling with access to interlocutors, but also with the ways his research resonated with colleagues who were critical of studying 'the powerful', Gusterson's first publications attempted to present his data through traditional anthropological paradigms (Ibid.: 117). He noted that he portrayed the laboratory as a "ritual secret society" and nuclear tests as a "ritual" until one day, one of his interlocutors made him aware of "the objectifying, exoticizing language of anthropology" he was using (Ibid.: 117). Gusterson recounted:

I was invited by a group of weapons scientists to present my research inside the Livermore Laboratory itself. I arrived to find that one of the Laboratory's leading weapons scientists had come to my talk wearing nothing but a loincloth and carrying a cane to which he had nailed an animal skull. He shook this at me and grunted whenever my presentation displeased him – which seemed to be quite often (Ibid.: 117).

Gusterson's account offers an important reminder that ethnographic access is a mutual experience between researcher and interlocutor. Access, I was acutely aware as I entered the field, is not only something which I would or would not be granted, but an invitation to share encounters with strangers

that knew me as little as I knew them. As I will discuss further below, my ethnographic insights were made possible through the trust and generosity of interlocutors who supported and endorsed me.

Aside from corporate access, entry into elite networks has also been identified by some anthropologists as a key methodological concern. Chris Shore noted that traditional research methods of long-term participant observation do not lend themselves well to the study of elites (2002: 10). In a dramatic illustration, he wrote that "one cannot simply pitch one's tent in the board room of the World Bank or the Pentagon" (Ibid.: 10). Other scholars have not been concerned so much about the adaptability of research methods, but more so with attaining access to elite field sites in the first place. Rosanna Hertz and Jonathan Imber have pointed that "few social researchers study elites because elites are by their very nature difficult to penetrate. Elites establish barriers that set their members apart from the rest of society" (1995: viii). At the outset of my fieldwork, my colleagues moreover emphasised that studying elites in energy corporations would likely confront me with further barriers to entry.

I was told that particularly oil companies hold a reputation of being shielded from outsiders. In conversation, my supervisor Mette High recounted her own fieldwork experience in the US, where she was exposed to oil companies' vetting process which included background checks on her and her affiliations. 'Paranoia' was the word with which other researchers described hydrocarbon businesses to me. With these forewarnings about the difficulties in attaining access to corporations, elites, and the energy industry, I entered the field with cautious optimism. I distinctly remember telling the organisers of the "Beyond Oil" conference to anonymise my attendance (in writing and photodocumentation) because I feared it could otherwise jeopardise my chance of access to my future field sites. The transparency and relative openness I experienced with Energo, the energy consulting company where I spent the first year of my fieldwork, thus came as a surprise.

Energo

As I prepared for fieldwork, I had reached out to a scholar with connections to the energy industry. After telling him about my research objectives, he offered his assistance in trying to find a place where I could carry out an 'internship', as we called it. The scholar connected me to Jan, the head of the IT department at Energo based in Oslo. The three of us met briefly in a virtual video call over the summer. After I explained what my research was about, Jan asked me about my requirements. Before I could elaborate, he offered me desk space in his office equipped with a computer and help with introducing me to interlocutors. In return I suggested I could assist with any office tasks including making coffee or background research. Jan laughed and noted their coffee machine already fulfilled that task, but that he would let me know should he need my help.

Soon after our online chat, I received notice via E-mail from Jan that I could start an internship in September 2018 for an initial trial phase of three months. The company, headquartered alongside the Oslofjord, with over 5000 employees looked like a park more than a place of work. It offered many amenities for employees including multiple gyms, canteens, and coffee corners, as well as sailboats and kayaks with private access to the waterfront at the Fjord. When I first entered the premises, I was impressed by the size and infrastructure of the big buildings. Energo, and its almost village-like architecture appeared to me like a small, idyllic town, not a corporation.

I spent the first few days at Energo hoping to appear busier than I was. Jan welcomed me the morning of my first day, accompanied me to get my picture taken for the access badge, introduced me to his

team, and then showed me my designated desk space. I found myself located next to a big window overlooking a park in a large-open floor office which hosted about 60 employees. As I sat down at my new desk Jan asked: "Will you be okay for a few hours? I have some urgent work to get to". I nodded, turned on the computer for which I had already received log-in credentials and began my fieldwork by learning about Energo's corporate history and structure. I soon noticed that neither Jan nor his employees expected me to contribute to their work tasks. On the contrary, they seemed relieved that I required no time-consuming training from them and went about my research tasks independently. The 'internship' thus remained a formality on paper as I never performed any formal office tasks.

It was only after some days that Jan's team members slowly started approaching me and increasingly expressed curiosity about my work. They joked about my research, asking if I took note of the numbers of coffees they drank or how often they visited the washrooms. They referenced the Norwegian film "Kitchen Stories", an obscure comedy, in which a Swedish social science researcher visits the home of a single, rural Norwegian man to conduct a study for optimising kitchens (Hamer 2003). My interlocutors were (jokingly) wondering, whether I too was placed in the office to record their every move (see Fig. 2). After I presented my work in a team meeting, reassuring them that my study focused on industry professionals' energy perceptions, they appeared to feel at ease. Jan's team welcomed me to their lunches in the canteen, and I formed a small 'clique' with four employees near my desk space with whom I enjoyed coffee breaks almost every afternoon for the rest of my stay at Energo.



Figure 2. Picture from "Kitchen Stories", depicting the researcher sitting on a high stool to analyse his 'subject'. Photo credit: IMDb.com

By the end of my first week, Jan started reaching out to "leaders", as he called them, in the company, enquiring on my behalf if they would be willing to meet with me for a chat about their work and energy visions. Jan also encouraged me to accompany him for bike rides into work. Coincidentally I found a *hybel* (small apartment) in a family house near the head office of Energo in Bærum (suburbs outside of Oslo), owned by Sybille, a headmaster, and Jan, an engineer working at the maritime sector of Energo. Jan lived close by, and once he learnt that I am a keen swimmer, suggested that I could also join him for early morning dips in the icy Oslofjord following our bike rides to the office. It was during the freezing winter morning swims that I met some key interlocutors, all of whom seemed to appreciate my efforts to partake in this morning pre-work ritual (see Fig. 3). Jan also invited me to join

weekly team meetings, company-wide town-hall gatherings, as well as conferences and business meetings outside of Energo, where he introduced me to new interlocutors. Further, I was welcomed to partake in office celebrations. When Christmas approached, my colleagues in the department took me out to try various Norwegian specialities. I was also invited to the office Christmas outing and later the big company summer party. Colleagues also organised monthly after-work drinks and the company had an association for young professionals, which I often joined for various after-work activities. I was twice invited by colleagues to join them on one-day sailing trips and sometimes went kayaking with other colleagues.



Figure 3. Ice Bath. Sketch by Nicola Rauter

While business conferences and meetings for me were an ideal place to meet new interlocutors and get a sense of corporate culture as well as trends in the industry, most of the ethnographic data that I directly quote in this thesis stems from one-on-one conversations with interlocutors. These meetings were audio recorded, unless stated otherwise. It was in these more intimate and quiet settings in which I could get to know industry professionals' perceptions and conceptualisations of energy matters. Some interlocutors I only met with once or twice for a meeting in the office, while I became friends with others. Within friend circles, we often took our discussions about energy matters outside the workplace. Particularly the topics of climate change and Norwegian environmentalism emerged after a good dinner or some drinks.

Throughout my fieldwork most one-on-one conversations were held in English. As many companies had multinational operations and international employees, the official language at most offices where I did fieldwork was English. However, Norwegian was spoken in some meetings and conferences, as well as lunches, coffee-breaks, and after-work activities. Towards the beginning of my fieldwork, I took

an intensive Norwegian class and – in part also thanks to my fluency in German and English – soon acquired a basic understanding of the language, which bares many similarities to the aforementioned languages. I mostly drew on my Norwegian language skills to listen, while I actively spoke to interlocutors in English. This was also partly motivated by my interlocutors, many of whom switched to English when I attempted to converse in Norwegian. Their tendency to speak English reflected the ways my Norwegian interlocutors communicated with their international colleagues, and thus did not appear to feel out of place. In some instances, my interlocutors could not voice a particular thought in English and instead chose to do so in Norwegian. It was in those moments where my understanding of the language was most useful. Most of the excerpts in this thesis were originally in English. I have noted the instances where I have translated from Norwegian to English.

My ethnographic data was gathered without the aid of research assistants. The data I collected was sensitive and personal. It was gathered through long term contact with interlocutors that required establishing mutual trust and building of relationships. In this intimate setting I found that undertaking the research alone provided me with greater access than sharing research tasks with an assistant. This study also included no surveys or focus groups. Understanding my interlocutors' conceptualisations and perception, required privacy that encouraged open-ended, informal conversations, which was an environment that questionnaires or workshops would not have provided.

The qualitative data that I gathered stems primarily from participant observation, semi-formal and informal interviews, and casual conversations. In the context of this study, participant observation involved observing interlocutor's work routines, meetings, and office culture. It entailed my participation in athletic, leisure, and after-work activities. As mentioned, it did not involve me conducting any formal corporate work tasks, which also acted as a reassurance to my interlocutors that I was not attempting to gather sensitive corporate information. My methods of data collection equipped me ideally to get to know my interlocutors on a personal level as well as within their office environments, which helped me attain insights into their energy conceptualisations and ethical valuations.

As I met new interlocutors, many introduced me to their colleagues or friends in- and outside of Energo. After a few months of attending meetings, conferences, lunches, coffees, and after-work activities, as well as Rotary Club meetings, my networks within the Norwegian energy industry had grown significantly.⁵ This was in no small part due to the generosity of Jan and other interlocutors who supported my research project by introducing me to other industry professionals. My experience seems to contrast that of Knudsen and his research team's aforementioned description of their access as feeling "orchestrated". They noted that:

They [company representatives] directed us towards "key informants" (...). From their perspective, all relevant information (...) could be untangled by interviewing a few employees. If we talked to employees without approval from our appointed contact person, we received gentle reminders to go through this person. Our main contacts were gatekeepers as well as our closest dialogue partners in the company (Müftüoglu et al. 2018: 252).

My access to interlocutors, meetings, and events facilitated by my contacts at Energo seemed to develop much more organically. I genuinely felt that Jan and other energy professionals tried to refer me to people and events they deemed insightful for what they perceived to be my research

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⁵ The Rotary Club is an international charitable networking club. At St. Andrews I was part of its youth division, Rotaract, which allowed me guest access to meetings at Rotary Clubs in Oslo. I met a key interlocutor during one of these visits.

endeavours. They often discussed with me openly at the office what an event or meeting would be about, whether or not they thought it related to my project, or if it discussed business details which I was not privy to. When they took me along to meet clients or business partners, they explained my presence casually, which for the most part seemed to create talking points rather than disturbances. Sometimes my hosts were busy and had no time to introduce me. As such they trusted me to get myself acquainted with industry professionals. In these instances, it was particularly the meeting breaks, luncheons, or post-meeting gatherings in which I was able to approach new interlocutors. After a short conversation, we usually exchanged business cards, which allowed me to follow up with an E-mail on one of the following days. Except for a few industry professionals, most responded promptly and were happy to set up a one-on-one meeting with me. A few interlocutors were harder to get a hold of, and as such it sometimes required a mutual friendship or acquaintance to put in a good word for me.

My presence seemed legitimised by many interlocutors' familiarity with anthropologists in Norway, in large part due to the public appearance on national TV or in newspaper publications of scholars like Thomas Hylland Eriksen. The academic backgrounds of industry professionals, many of whom held PhDs themselves, further supported my presence. Often recounting their own academic experiences of completing a degree, my interlocutors were sympathetic to the difficulty of conducting a long-term research project, and perhaps as a result keenly supported my academic pursuits.

At Energo I also received a company E-mail address and access to the intranet. E-mail access was an immense aid in scheduling meetings with company employees and even industry professionals outside of Energo. With decades of experience, the company was well-respected in the industry. As such, the domain name in the address seemed to create a sense of trust amongst recipients, more so than the name 'University of St Andrews' with which industry professionals were less familiar. I made little use of the intranet, except for monitoring company-wide events and signing up for company sports clubs.

My initial stay of three months was extended continuously until, after one year at Energo, I had the opportunity to move to a different host company, EnergyMax. My second host company was amongst the largest energy production companies in Norway, and as such was different from the consultancy, Energo. EnergyMax promised to provide new insights into the industry and allowed me to conduct research amongst some of Norway's most senior industry professionals. At that point I had built so many friendships in the office at Energo that I became sentimental when leaving the company. Generously Jan and his team allowed me to keep my desk space for the remainder of my fieldwork, which allowed me to return a few times to socialise with interlocutors. When thinking about ethnography in corporations, Peter Benson and Stuart Kirsch have noted that:

Such [ethnographic research] strategies entail risks of cooptation, because the tendency of ethnographers to empathize and identify with their subjects may limit their findings or critical stance. However, corporate ethnography has the potential to provide insight into the assumptions, expectations, and motivations that are socialized in people who work in corporations (2010: 464).

Empathy was a key research tool during my fieldwork. It enabled me to respectfully engage with interlocutors who held views different from my own. This, I suggest, is particularly important when researching polarising topics like energy transitions. In rare instances, my interlocutors' claims felt so 'outlandish' to me that I critically, in the moment, evaluated their assertions. In one case, it nearly cost me the relationship to one of the most senior industry professionals I encountered during fieldwork, who was instrumental in connecting me to many of my executive contacts. I had critically engaged

with his assertion that economic growth would inherently lead to socio-economic development of societies. After our meeting, I went home and eventually concluded that it was not my place to judge the personal perceptions of my interlocutors.

This experience taught me the importance of self-awareness as a researcher and highlighted the ethical valuations I brought into research encounters. Differing moral or philosophical stances, however, did not preclude me from having critical conversations with most industry professionals. Disagreement, I suggest, can be fruitful, but should be based on respect and empathy. Often the most insightful chats were those where my interlocutors and I exchanged opposing views. Moreover, many interlocutors themselves scrutinised their own work and positions in the industry. They recognised conflicts that took place between their professional ambitions and their personal environmental aspirations. Throughout my fieldwork, I aimed to encourage critical encounters, yet I strove to avoid instances of judgement — even if I sometimes found this to be challenging. Therefore, empathy I suggest, was not a hindrance, but an additional tool that provided me with access and the building of trust to interlocutors.

I suggest the apprehension that ethnography within corporations may lead to co-option is rooted in a deeper anthropological concern of "going native" with people that scholars tend to demonise (Ginsburg 1989; Susan 1991). Empathy I suggest is a key research tool that will allow researchers to evaluate elites' conceptualisations and engage with them critically without dismissing them. I conceptualise empathy here as the tool that establishes evaluative understanding. It is distinct from sympathy, which is a fellow-feeling that I found is not necessary (but sometimes also helpful) in an elite-researcher encounter. Contrary to Benson and Kirsch's assertion (2010), I have found that an open-minded ethnographic research approach towards elites encourages rather that limits research findings and is required in a highly exclusive environment that is often difficult to access.

EnergyMax

In the mornings, the smell of freshly brewed coffee intermingled with the sounds of busy footsteps from people entering the spacious, white, marble lobby of EnergyMax, one of Norway's largest energy companies. While Energo was an industry-wide well-respected energy consulting company, EnergyMax was of a different calibre; it was amongst those energy companies that provided a sense of direction to other businesses. It was not only a highly prestigious workplace for employees and renowned for good pay but was also seemingly impenetrable for outsiders. With patience, and industry contacts that vouched for me, I had the chance to conduct research at EnergyMax for the last six months of my fieldwork.

It was almost winter and took me a good hour of a commute waddling through icy roads and hopping on and off buses from my 'hybel' until I reached the front-desk security guards for my daily check-ins at EnergyMax. I registered my name and contact information with the friendly and talkative staff. We exchanged a few pleasantries — mostly about the gruesome weather — as I waited to be picked up by my host. Although I spent half a year at EnergyMax, paperwork, security and bureaucratic hurdles meant that I never got full access to the premises of the company. Yet, the rule that I had to be accompanied by a full-time employee at all times was mostly an advantage to my research; it provided ample time for chit chat about the latest happenings at the office.

After passing the heavy, high-security revolving doors, we approached the lifts where sleepy employees were waiting with steaming cups of coffee for their next ride up (see Fig. 4). The renewables department, which hosted me, was on the 6th floor, one floor under the lavish executive suite. It was part of EnergyMax's "new energy" branch, which had grown significantly in size and respect in recent years. From once a small, sometimes belittled, section in a major oil and gas corporation, "new energy" had come to form part of the thriving (now mixed energy) business. Its growing prominence, as some of my interlocutors rumoured, was signified by the branch's placement on one of the building's top floors. During my fieldwork, new employees entered the renewables part of the company almost daily, whereas the fossil fuel departments were struggling so much with recruitment that they had to "take engineers out of retirement" as a department leader once told me.



Figure 4. Mornings at EnergyMax. Sketch by Nicola Rauter

My fieldwork at EnergyMax was different from the first year at Energo. Due to its role as an industry-leading company, I had hoped to conduct research at EnergyMax since the beginning of my fieldwork. At the time, however, I was told by my scholar contact who had arranged my stay at Energo, that due to company restructuring it seemed it was not an appropriate time to ask for a research opportunity. However, a year later, in 2019, I had established good relations with Irene, a key interlocutor with an upper management position at EnergyMax. Together with my scholar contact, Irene helped me set up a research opportunity at the company. Several months later, I received the exciting news that my

stay was granted and that I could commence fieldwork at the renewables department of EnergyMax in Oslo by October 2019.

Compared to Energo, the presence of researchers at EnergyMax was less common. The company was known to be somewhat shielded from outsiders, a frustration voiced by other anthropologists and scholars wanting to conduct research there. Initially, my host Emilie, who was the department head of a wind power section, only committed to accommodating me for six weeks to three months. At the outset, we agreed that I would only come to the office on those days where I had interviews scheduled. But due to the sheer number of meetings that I was able to set up with interlocutors at EnergyMax – both in the renewables and in the oil and gas departments – I ended up visiting the office almost every day for nearly six months. My host Emilie granted the extended stay on the basis of the continued interest EnergyMax professionals had in contributing to my study, including some of the companies' executives.

My host Emilie occupied a mid-level management position and had previous leadership experience in the oil sector. I encountered her as a particularly serious and detail-oriented person. As such, it was important to her to officially register me as an 'intern' at EnergyMax. Bureaucratic hurdles, however, made this difficult. Not only were internships at EnergyMax usually financially compensated (something I could not accept as an independent fully funded researcher), but in addition, my immigration status as a 'person with own funds' did not allow me to work in Norway. After several months of trying to complete the necessary paperwork, which would have included me signing a non-disclosure agreement, Emilie suggested that we would withdraw my application. She assured me that I could continue to enter the office as her guest visitor and that she would facilitate connections to potential interlocutors. Emilie and I agreed that my research would focus on industry professionals' personal perceptions, not their company involvements. This agreement allowed Emilie to support my research without risking incompliance with her company's protocols. To this day, I am appreciative of this gesture of good faith, which required trust on her and her team's part.

This arrangement limited, as already mentioned, my physical movement in the company as I had to be accompanied by an employee at all times. After some weeks, however, my interlocutors became more used to my presence and I was able to move around freely in the large open floor office of the new energy departments, which hosted approximately 300 employees. Yet moving between office landscapes, to the canteen, and large meeting rooms continued to be restricted as it involved movement between floors where security personnel would patrol the office, occasionally checking employee badges.

However, I never felt that these stipulations limited my research. Meetings with interlocutors at EnergyMax took place in conference rooms or over coffee or lunch in the canteen. I aimed to hold meetings in quiet spaces, where open conversations could flourish. We discussed interlocutors' roles, responsibilities, personal perceptions, involvement in energy projects, work experience, future ambitions, and more. These topics did not necessitate industry professionals to divulge any specific or sensitive corporate data. In the rare instance where interlocutors shared restricted data, I stopped recording and taking notes. Moreover, I made a point to not enquire about inter-office relationships although some interlocutors volunteered this information. Others sometimes asked me to share details of how a particular interview with one of their colleagues or executives went. When I explained to them that I could not share this information, they not only seemed to understand the importance of anonymity, but also appeared to appreciate my commitment to data protection.

Throughout my fieldwork, each interlocutor received a participant consent form, which provided information about the research project, outlining the use of their data, and stated that research

participants could withdraw their consent at any time without questions asked. I also explained to industry professionals how I processed their data. Coded data including fieldnotes and audio recordings were transcribed by me, or an electronic transcription service named 'GoTranscript'. I stored any personal information of my interlocutors (including contact information) on a separate coded file. My university-issued laptop was encrypted, and my files backed up on the secured, university shared drive. I used my phone as audio recording device, as this was a relatively inconspicuous object that blended in with my interlocutors' own mobile devices. I often observed that in the first few minutes of a conversation interlocutors showed awareness of the phone by glancing towards it now and then. Their attention to being recorded seemed to decrease with time, which simultaneously increased the ease and openness with which interlocutors conversed. In rare instances where I felt audio-recordings were debilitating to the research process, I turned off my phone, and switched to hand-written notes.

A few times interlocutors wanted to tell me information off the record. On those occasions, I stopped taking notes and turned off the audio recording app on my phone. Throughout my fieldwork, no one withdrew their consent from my study. There were only two instances I can remember in which interlocutors raised concerns about the research process. In the first, an interlocutor, Samesh, asked multiple times for reassurance that I would not disclose sensitive, personal information from our conversation with his employees or colleagues. To accommodate his wishes, I only took hand-written notes during the interview and assured Samesh that his personal data would be anonymised and not shared with his colleagues. The second case was a business leader high in the upper echelons of EnergyMax who asked not to be audio-recorded and requested to check my transcript after I had typed up my field notes. By the time we met for a second meeting, he was no longer interested in double-checking my notes, which gave me the impression that he trusted my research process.

Knudsen and his research team noted that in their work with the Norwegian energy companies Equinor and Statkraft, employees often voiced a wish to "check facts" before publishing articles (Müftüoglu et al. 2018: 252). This was not a concern raised by my interlocutors. Several industry professionals, however, provided me with encouraging feedback *after* they read my peer-reviewed published article (see Rauter 2022). So far, no one has raised concerns or complaints.

Due to my restricted access at EnergyMax, most of my fieldwork there consisted of one-on-one person semi-structured interviews. I was rarely invited to partake in meetings but was asked to join afterwork drinks and social events. Without access to the internal computer network, I was also not able to sign up to social or sports clubs like I had done at Energo. However, during my time at EnergyMax, Emilie and other interlocutors ensured that I had wide access to *ledere* and *eksperter* in the company. During my last six months of fieldwork, my network of interlocutors more than doubled. While I met new industry professionals, I also maintained the relationships to interlocutors I had previously met. This turned out to be a challenge in terms of time management. On most workdays, I left the house at 7.30am and only returned at midnight or later. On an average day, I had interviews scheduled with two to three different interlocutors, usually lasting about 1.5 hours each, often located at different offices throughout the city, which I had to reach by public transportation. In the evenings, I spent time with those industry professionals who had become friends for drinks, dinners, athletic activities, and occasionally parties. Only weekends were quieter, as this was the time that many of my interlocutors spent with their families. However, towards the end of my fieldwork, weekends too were increasingly filled with meeting interlocutors outside of work (see Fig. 5).



Figure 5. Kayaking trip in the Oslofjord with an interlocutor. Photo picturing author, taken by interlocutor.

Knudsen and his research team noted that in their experience, Norwegian energy companies would provide access to researchers if this was based on a quit pro quo arrangement (Müftüoglu et al. 2018). They described that "our main contact persons in Statoil/Equinor and Statkraft made it clear that this cooperation would have to go both ways, and that the company would need to benefit in some way" (Ibid.: 252). For the Energethics team, this specifically meant that industry professionals wanted to learn "more about the public opinions about their company" (Ibid.: 254).

Similarly, scholars have noted that "few corporations are eager to allow access to those whose research does not contribute to the corporation's goals" (Urban & Koh 2013: 140). Although in my fieldwork, access was not dependent on an arrangement to share research insights, my interlocutors too were interested in learning about my results. Sharing findings can be understood as a kind of 'giving back'. To me, it was an opportunity to exchange ideas and engage more deeply with my interlocutor's conceptualisations by getting their insights on the conclusions I started to draw from my data. Especially those industry professionals with whom I met frequently were curious to learn how I perceived larger trends in the industry and how others conceptualised the issues we discussed. I only shared broad insights with interlocutors when asked. Some interlocutors also encouraged me to present my research to their companies and teams. This continued to be a request post-fieldwork. Doing presentations at companies not only allowed me to get additional research insights, but was also a way to share with interlocutors the progress of my study. Moreover, through my publication and public engagement I aimed to demonstrate to my interlocutors that the time they devoted to my project has led to research findings that can contribute beyond academic endeavours.

During fieldwork I also presented interlocutors with small gifts as a way to 'give back'. These included homemade cookies, wine, Swiss chocolate, as well as olive oil and *fleur de sel* from my second home in Greece. Sometimes I also baked cakes, which I brought into the office to share within the

department. On one occasion I invited my closest interlocutors from Energo to my small apartment and prepared traditional food from Liechtenstein for them to try. These gestures were welcomed as tokens of appreciation. They were not intended by me as means of coercion nor did it appear to be understood that way by my interlocutors. All of them, without exception, were in more economically privileged positions than me. While I often invited people for a coffee, I was almost always invited by my interlocutors when we went out for dinner or drinks. Exceptions were those instances where I met with female interlocutors who were around the same age as me. In these cases, we often split the bill equally between us. While I found invitations initially difficult to manoeuvre – since interlocutors not only devoted time to my research, but sometimes spent money during our encounters – I eventually accepted that these somewhat 'unequal' relationships were part of my research process of studying elites in a country where prices were high.

Positionality

Faye Ginsburg (1989) captured in her work the challenging position in which anthropologists often find themselves when studying those people whom other scholars may find morally ambiguous, including elites. When she conducted fieldwork on anti-abortion activists in North Dakota, she encountered apprehension about her research endeavours amongst her colleagues:

It is one thing, I learned quickly, for an anthropologist to offer the natives' point of view when the subjects are hidden in the highlands of New Guinea and have little impact on the lives of the assembled audience. It is quite another to describe the world view of people from the same culture whom some people in my audiences considered to be "the enemy." [...] I found myself fielding occasionally hostile responses from colleagues. Some explained to me their concern that I had "gone native" (Ginsburg 1989: 222–223).

While my scholarly colleagues were not hostile per se, I have frequently found myself justifying my study of elites, and indeed the terminological choice of analysing my interlocutors as part of an 'energy elite'. Anthropologists seemed not so much concerned with me 'going native' rather than 'being native'. In this vein, Karen Ho has pointed out that "though many anthropologists are loathe to admit [it] (...), it is oftentimes with the relatively powerful that anthropologists share unexamined presumptions, educational backgrounds, and analytical paradigms" (2012: 36).

Although my interlocutors and I were different in many ways, I recognise that we shared commonalities, which I found to be crucial in establishing relationships with them. Education, and what Bourdieu ([1984] 2010) has termed 'cultural capital', were part of our common backgrounds. My interlocutors and I shared tastes in music, food, athletic activities, and spiritual orientations. We enjoyed similar socio-educational backgrounds and often found commonalities in our childhood experiences including formative memories at our mountain cabins. I also shared with many interlocutors a passion for the outdoors and interest in flora and fauna. Although I was a PhD student and my financial means were limited, my socio-cultural background provided me with the 'deportment', 'manners', and 'tastes' (Bourdieu 1996, 2010a) that are common in the elite circles I encountered in Norway during my fieldwork.

What differentiated me from most of my interlocutors was my young age (I was 26 when I started my fieldwork) and to some extent my gender as many industry professionals I encountered were male. In addition, I am not Norwegian, but shared a link with Norway through my country's membership in the European Economic Area (EEA). Liechtenstein was considered by my interlocutors a similarly small and

wealthy country, which might have shaped how they perceived and welcomed me into their lives. Nationality played a crucial role in energy elite circles. While this will be further discussed in the following chapter, it is important to note here that interlocutors often gave me the sense that people from certain countries were preferred over others. Liechtenstein appeared to be favoured.

This specific combination of similarities and differences provided me a particular kind of access. On the one hand, I appeared non-threatening as a foreigner and young female researcher. As some of my interlocutors told me, they also considered me to be "exotic" and "tutti fruity". This seemed to create a sense of interest amongst industry professionals to learn more about me, and by extension my research, which was thus an opportunity to build networks and establish relationships. On the other hand, I shared similar values and mannerism to my interlocutors, which created a shared sense of belonging. My access, of course, was not all-inclusive. As mentioned, my role as a researcher limited my access to some exclusive corporate spaces and sensitive corporate data. Moreover, at EnergyMax my visitors' badge, which was to be worn visibly at all times, made me physically appear different to other industry professionals.

Despite these differences in roles, nationality, and in economic status, most interlocutors treated me with respect and as relatively equal. Indeed, they often downplayed their own status and wealth. However, I recognised that in rare instances some interlocutors wanted to impress me. To do so they highlighted a particular 'eliteness' in their private lifestyles by emphasising ownership of material assets including boats and houses or accentuating the status of their corporate positions. This was mostly the case when interlocutors hoped to elevate our relationship to an intimate level. When I noticed this, I demonstrated to energy professionals that I had a research interest in their work, but not in a romantic entanglement. This delineation allowed me to establish personal boundaries and to create a more relaxed atmosphere for ethnographic encounters.

My interlocutors accepted and respected my personal boundaries except in one instance. An industry professional in his early sixties misused his senior position at EnergyMax when he attempted to kiss me in an elevator ride to the canteen. At this point we had met for two interviews and although we got along well, he seemed to have either misinterpreted the situation or felt that his power position entitled him to non-consensual intimacy. While precarious, the situation did not escalate. I moved away, smiled politely before walking off. Suffice it to say, this was the last time I met with this interlocutor.

While this situation was a singular occurrence, other male interlocutors also seemed motivated to speak to me as they hoped to elevate our relationship to a more personal level. I have often discussed with other anthropologists how gender impacts access. Being a woman can provide entry to places male anthropologists might not be invited to. While conducting fieldwork for my undergraduate dissertation amongst businessmen in Mongolia, for example, I was frequently invited to birthday or dinner parties as a guest of business owners and executives. While I often felt I was paraded around like an accessory attesting to the status of my host, it allowed me access to highly exclusive places and meetings. In Norway, I also made the opposite experience where access to certain places was denied to me based on my gender, such as after- or pre-work sauna gatherings or men-only social clubs.

It is important to also note that a research 'advantage', such as access to exclusive ethnographic spaces, can quickly turn into disadvantage as with the elevator case mentioned above. Some of my male interlocutors also expressed worries that spending time with me outside of work may give the wrong impression to their work colleagues or aggravate their partners at home. As a female researcher, I had to learn to carefully manoeuvre a balance between establishing and preserving personal boundaries (for me and the interlocutor) while securing continued access.

Research Ethics

As mentioned, I aimed to conduct my fieldwork in an empathetic, respectful, and non-judgemental manner to establish a productive and comfortable research experience for both my interlocutors and for myself. I ensured the careful processing of coded data and protected my interlocutors' anonymity through the use of pseudonyms. Names of interlocutors, their companies, locations, and any other personal identifiers have been adapted throughout the thesis and are often purposefully kept vague.

A key ethical concern of mine pertained to issues of representation. Ho (2012) phrased this as "the question of voice", noting that:

The anthropological toolkit has focused on 'giving voice' to marginalized others – so what happens when one's informants' voices are dominant, when they have considerable resources and institutional marketing platforms to make their voices heard and naturalized? (2012: 36)

In her work on Wall Street bankers, Ho (2009) examined power structures, work hierarchies, racism, and gender inequalities. She reflected critically on the dominant voices of her interlocutors, while also allowing financial professionals to voice their own perceptions. As such, Ho suggested that 'studying up' must include a reflection not only of interlocutors' conceptualisations, but also a critical examination of the researcher's own positionality. This, she further noted, then aids scholars in avoiding the reproduction of interlocutors' normative assumptions (2012: 36). I would add that examining the self-representations of strategically situated interlocutors within the broader context of their habitus through long-term encounters further allows anthropologists to disentangle 'institutional marketing platforms' from personal perceptions.

Many of the energy professionals who feature in this thesis, are people whom I encountered frequently and came to know beyond their industry positions. It was particularly the long-term contact to some of my key interlocutors that allowed me insights into them as individual persons, not only as representatives of an industry. These personal encounters gave me the opportunity to understand interlocutors' perceptions in relation to their actions and thus assess critically their self-portrayals. Yet long term encounters are not a guarantee for entry 'behind the scenes'. Indeed, as discussed above, Knudsen and the Energethics team noted that their notions of what constituted "reaching behind the curtain" changed significantly due to their challenges in attaining access to representatives of Norwegian energy companies (Müftüoglu et al. 2018: 253). Adapting their initial fieldwork expectations, they noted that "what we initially thought of as lack of access, actually provides us with basic access about the corporations' varied surfaces, flows, and concerns" (Ibid.: 254)

Similarly to them, I saw ethnographic value in official corporate actions and statements. This can be well illustrated, for example, through my encounters with the region head of oil and gas at Energo, a manager in a particularly senior position at the company. When we first met for a chat at his office, I noticed that his statements about the Norwegian oil sector followed the suggestions of a recently published study. This study was commissioned by *Norsk Olje og Gass* (the Norwegian Oil and Gas Association) to explore hydrocarbon communication strategies that could appeal to young generations (see Ali et al. 2018). Once I realised that I was told prepared marketing statements, I directly voiced my suspicion. Slightly taken aback, the manager blushed and confirmed that he was familiar with this study. While I have not quoted him in this thesis, my interaction with him sensitised me to issues of industry representation and generational differences. It demonstrated the efforts

energy professionals put into representing their business to what they perceived as young, oil-critical voices in Norway.

The experience also helped me learn to personalise my enquiries. Over the course of my fieldwork, I became attuned to asking personal, perception-based questions that allowed interlocutors to draw on their own conceptualisations and experiences rather than feel they had to represent official company statements. In these personal conversations, many energy professionals also found space to voice concerns about their company's or the industry's developments without risking incompliance with their workplace's guidelines. Moreover, in this thesis, ethnographic analysis is not only based on the statements of interlocutors, but includes 18 months of participant observation, analysis of media, arts, literature, and current events. I also received insight into the private lives of my interlocutors including their hobbies, their lifestyles, homes, holiday cabins, tastes in music, food, and art all of which helped me to understand how my interlocutors' statements were situated in their broader habiti. As such, this thesis offers intimate insights into the personal perceptions of strategically situated industry professionals while analysing them within a broader context of energy transitions.

Sparsely discussed: Elites and Energy in Norway

Given the scale of Norway's energy industry and its environmental and economic impact as one of the world's largest oil and gas producers, I have been surprised by the relatively few anthropological examinations of Norwegian energy production. In comparison there is a wide range of current social science scholarship on energy production in Norway (see for example Anfinsen et al. 2019 on electric vehicle use; Damman et al. 2021 on hydrogen as an energy source; Sæther & Moe 2021 on energy transitions in the martime sector). The aforementioned onshore wind debates in 2019, for example, have given rise to a plethora of recent studies examining social resistance, policy tools, licencing regulations, and energy justice in relation to wind power developments (see Gulbrandsen et al. 2021; Inderberg et al. 2019; Vasstrøm & Lysgård 2021). Yet these studies rarely focus on people's own conceptualisations and imaginaries of energy production in Norway.

The anthropologists, who have engaged with energy production in Norway, have mostly done so tangentially. A notable exception includes Vidar Hepsø's elucidations of technical and organisational work and knowledge-seeking processes in the Norwegian oil sector (see Hepsø 2014; see also Østerlie et al. 2012). As part of introductions to edited volumes, or short opinion pieces, most anthropologists position themselves critically towards Norway's continued hydrocarbon production (see for instance Eriksen 2016; Eriksen & Schober 2018; Logan & McNeish 2012). Owen Logan and John Andrew McNeish in their introduction to "Flammable Societies" (2012) critically reflect on portrayals of Norwegian energy developments as "benign", pointing out that Norway's environmental sustainability commitments stand in stark contrast to "questionable" hydrocarbon dealings (2012: 8–9). In a similar vein, as already mentioned, Thomas Hylland Eriksen has questioned the "double bind" between Norway's climate and environmental commitments and ongoing hydrocarbon exploration and production (Eriksen 2016; Stensrud & Eriksen 2019). Yet Eriksen's engagement with the concept pertains to fleeting explorations in his introductions. As he pointed out himself, together with Astrid Stensrud (2019) there is a gap in the literature lacking nuanced, ethnographic explorations of Norway's energy industry. In their edited volume, they noted:

It should [...] be conceded that a shortcoming in this book (...) is the relative lack of ethnographies from those countries, and social groups in them, which are the largest

emitters of greenhouse gases and most efficient consumers. There are no chapters from Qatar or Norway here, alas (Stensrud & Eriksen 2019: ix).

Ståle Knudsen and his team partially answered this call for ethnographic engagement with Norwegian energy production in their examination of corporate social responsibility (CSR) practises of state- and partly state-owned Norwegian energy companies abroad (see Energethics 2022). They suggested that the way Norwegian energy companies operate transnationally not only varies depending on specific local contexts but is also largely based on international standards rather than the strong moral ambitions of their state owner, Norway (Knudsen et al. 2020). This raises interesting questions about a kind of ethical and environmental 'exceptionalism' with which many of my interlocutors identified the Norwegian energy industry and its companies. According to many energy professionals, Norwegian energy production was "cleaner" and more environmentally sustainable than that of other countries. As Knudsen and his team have similarly noted, the notion of an exceptional "Norwegian 'way'" includes "the pervasive idea in Norway that 'we do it better' (e.g., our extraction of oil and gas is cleaner)" (Knudsen et al. 2020: 15). In this thesis, I critically examine narratives of Norwegian energy developments as 'successful' and 'exceptional'. As discussed in Chapter 4, I explore how my interlocutors presented Norway's social welfare system as an exemplar of energy industry 'success' and used it as justification for the continued exploration and production of oil and gas. Thereby I aim to contribute a critical scholarly examination of the Norwegian energy industry in the era of climate change.

While Knudsen and his team note that "energy companies are considered close to the cogwheels and power of society" (Müftüoglu et al. 2018: 250), I argue it is essential not only to examine corporate impacts on energy trajectories, but also how people working for these corporations perceive their own roles in energy transitions. Over recent years a growing body of anthropological work has focused on examining energy corporations and industries. Prominent explorations include Hannah Appel's (2012) work on hydrocarbon infrastructure as extensions of what she refers to as the 'modularity' of capitalism. Through her fieldwork in Equatorial Guinea, Appel found that transferable personal, technology, and legal structures allow oil corporations to work transnationally and remove themselves from local entanglements. Her study points towards the role of corporations in perpetuating transnational socio-economic inequalities.

More recently, Dinah Rajak (2020) traced how hydrocarbon companies have moved from a position of climate change denial to advocating themselves as champions of corporate environmental sustainability. Rajak argued that the companies' newfound roles as responsible sustainability leaders are rooted in 'techno-optimism', a communication strategy that sees technology as the solution to bridging the gap between economic growth, continued hydrocarbon emissions, and sustainability initiatives. Rajak's ethnographic excerpts from her interviews with oil company executives are astoundingly similar to some of the perceptions voiced by my interlocutors. Yet Rajak's analysis portrays her interlocutors as representatives of the corporations they work for. As such her study provides little insight into the personal perceptions of the executives beyond their official roles. This makes her interlocutors appear to be homogenous corporate mouth pieces that resolve cognitive dissonance between conflicts in sustainability and energy production through techno-optimistic marketing communication.

While I frequently draw in this thesis on the anthropology of corporations, the focus of my study is explicitly on energy industry professionals. I experienced my interlocutors not only as representatives of corporations, but more so as ethically reflexive individuals whose energy occupations as well as private concerns with energy and sustainability matters shaped their perceptions of- and roles in energy transitions.

Overall, the literature on energy industry professionals remains scarce (notable exceptions include: Field 2021, 2022; High 2019, 2022; Mason & Stoilkova 2012). Work that examines how strategically situated people may shape energy transitions is even sparser. This concerns particularly qualitative research that takes its starting point in leaders' and experts' own perceptions (notable exceptions include: Bullock et al. 2020; Li & Pye 2018). The portrayals of energy professionals often remain one-dimensional, accusatory, and paint a picture of interlocutors as amoral or immoral capitalist "suits" (Hughes 2017; Riofrancos 2019). Despite Laura Nader's (1972) call to 'study up', and a proliferation in the ethnographic examinations of leaders and experts, the wider field of elite studies has remained sparse. I have found that anthropological studies of elites continue to be meagre, under-theorised and often contested (see Ch. 2). Especially in those contexts where elites are analysed alongside "the marginalised" or other social groups, "the analysis of their choices and practices remains limited, often even simplistic, framed usually in terms of easy antagonisms" (Salverda & Abbink 2013: 8). As such, portrayals of elites – including energy professionals – frequently lack nuance and an exploration of elites' heterogeneity.

David Hughes in his "militant anthropology of elites", for example, collectively identified his interlocutors as "captains of industry", the "wealthy and powerful", and "petroleum geologists" (2017: 4; 14). Hughes determined that they are "in the wrong and doing wrong", working for an industry that he argued "should go extinct", where oil firms should be consigned to "an ash heap, worthy of condescension and worse" (lbid. 4; 151-2). Aside from his moral valuations, Hughes concluded that industry professionals "need no help from scholars" (lbid. 4). Yet, in my understanding, the assertion that strategically situated industry actors are 'powerful' and 'wrong' warrants further scholarly examinations. If industry professionals are indeed an essential part of shaping energy trajectories, what motivates their corporate actions and how do they value different kinds of energy production? While elites may not need "help" from scholars, their strategic positions raise pertinent questions for scholarship that aims to understand energy developments.

In the generalising depictions like those of Hughes, the privileging of authors' own assumption lead to portrayals of energy professionals as homogenously and unscrupulously powerful. In an effort to provide more ethnographic nuance to the study of industry professionals, I offer an examination of how my interlocutors themselves conceptualised their positions and responsibilities. In this vein, I also contribute more generally to anthropological examinations of people who are in elite positions. I show that the leaders and experts I encountered were part of a specialist, decision-making community connected not only professionally but also through shared modes of life. While I highlight similarities, I also point out inequalities in these circles. As such this thesis offers a dual approach; I highlight distinct socio-economic habiti of elites (Bourdieu 2010a), while offering much-needed insight into their personal and ethical considerations about their own positions, ambitions, and visions of energy production. To do so, I explore how industry professionals give meaning to energy production beyond immediate corporate interests. I analyse how their strategic and professional decisions are motivated by the pursuit of a good, or perhaps an even better, life for themselves, Norwegian society, and non-human actors like the environment.

From 'good life' to 'better life'?

Behind my workspace at Energo, was the desk of Ebbe. He was a senior oil and gas expert in a lower management position, eagerly awaiting his retirement. Ebbe was a tall, lean man in his early 60's, whom I experienced as a kind and warm-hearted person from the first moment we met. Born and

raised in the North of Norway near the sea, he was an avid sailor with a keen interest in poetry and art that depicted oceans. Over the course of my fieldwork, he introduced me to his wife Linda at their home in the West Oslo suburbs and invited me to stay with them for a weekend at their winter cabin, which he had built himself with his son.

Ebbe was always busy. At his job he managed several oil and gas related IT projects. In his free time, he was the treasurer of his neighbourhood association and frequently volunteered to participate in charitable activities on the weekends. Towards the beginning of my fieldwork, during one of our Friday afternoon coffee breaks in our aforementioned clique of desk neighbours, we shared upcoming weekend plans. "I will be doing some 'dugnad'", Ebbe said, lifting his greyish-white eyebrows in the process for extra emphasis. "Sorry, what?" I responded. "Dugnad", Ebbe explained, "is the traditional Norwegian word for doing things in the community for free. This week I will help to build a playground for the kids in my neighbourhood". Anders, the senior expert sitting at the table besides me, who was also part of the coffee-clique, laughed and interjected: "But you don't have small kids". "Exactly", responded Ebbe, "we do 'dugnad' to help the society, not because we necessarily get something out of it. This is Norwegian culture!" Turning towards me, Ebbe told me to "remember this, it will be important for your thesis".

Indeed, Ebbe's frequent stories about his free-time volunteering activities, 'dugnad', reverberated with me throughout my fieldwork. I started observing the tenants of 'dugnad' – meaningful activities with the purpose of improving the life of the collective – in the professional activities of my interlocutors. When enquiring into their motivations behind their corporate activities, most emphasised a desire to contribute to socio-economic wellbeing in Norwegian society.

Throughout my fieldwork I have found that ethical considerations played a fundamental role in the career choices and strategic actions of energy professionals. Economics, and with it corporate professionals, are often treated as a domain guided by "the hard calculus of rational choices" not by "emotions, beliefs, moralities or the passions" (Fischer 2014: 13). Yet in my observations, I found energy professionals' career and personal aspirations were motivated beyond economic considerations. As they were confronted with energy transitions in an era of anthropogenic climate change, many fundamentally questioned and explored their roles in shaping 'the good life'.

Virtue ethics, inspired by Aristotle, sees the good life as rooted and shared in community, and as involving the pursuit of ideals for the benefit of the collective (Mattingly 2014: 10). In that they parallel how Ebbe described *dugnad* as a collective activity with the purpose of benefiting a community. For both Ebbe and Aristotle virtuous acts were motivated by the end goal or *telos*. But *dugnad* is also a virtuous activity in itself, as such, in Aristotelian tradition, the process is considered part of the telos (Ibid.: 10). When it came to the pursuit of energy transitions, my interlocutors' views widely diverged. Some emphasised the importance of reaching low-carbon energy futures by any means necessary, including through the continued production of fossil fuels. Others advocated the importance of ensuring a sustainable transition process. Despite great variety in energy imaginaries, industry professionals' overarching visions of energy transitions were driven by a desire to pursue 'good' energy futures on behalf of Norwegian society and beyond.

I do not analyse here the 'rightness' or 'wrongness' of my interlocutors' energy ambitions. Instead, I aim to demonstrate that their conceptualisation of 'good futures' and 'good energy' involved for them besides techno-economic decisions, deeply ethical and social considerations about how their business activities impact future energy trajectories. Heeding the advice of Joel Robbins, in his sketches towards

an "anthropology of the good", I do *not* to dismiss my interlocutor's "ideals as unimportant or, worse, as bad-faith alibis for the worlds they actually create" (2013: 457). While the energy professionals I encountered justified their carbon-intensive, environmentally impacting energy production, I have found that their energy conceptualisations also demonstrated a strong desire to preserve Norwegian socio-economic welfare and promote environmental sustainability.

Yet, many questioned the extent to which social, economic, and environmental sustainability could be pursued simultaneously. They often suggested that there may never be an 'energy utopia' with zero-carbon, zero-environmental impact energy production and consumption. For most, the pursuit of energy transitions involved trade-offs. As such they approached 'good energy futures' not in absolute but relative terms. Rather than conceptualising energy transitions as paths towards 'good futures' they aimed to establish 'better futures'. Edward Fischer (2014), drawing on his ethnographic work amongst Guatemalan coffee farmers and German supermarket shoppers, suggested that what constitutes the good life may be a process rather than a set end point. In this vein, the good life may not be

a state to be obtained but an ongoing aspiration for something better that gives meaning to life's pursuits. In this view, striving for the good life involves the arduous work of becoming, of trying to live a life that one deems worthy, becoming the sort of person that one desires. As such, the good life is not made up of simple happiness. It requires tradeoffs (...) (Fischer 2014: 2).

I too analyse my interlocutors' ethical considerations in light of energy transitions as an ongoing process of developing aspirations towards a better life. But what does the pursuit of 'the good life' entail for people whom at first glance seem to have it all?

As one of my interlocutors noted "I'm an elite, in an elite country, in an elite business, in an elite age". The energy professionals I encountered often acknowledged their privilege as living in one of the wealthiest countries in the world, with a well-developed social welfare system, relative egalitarianism and in financially well-compensated industry positions. For them the pursuit of the good life involved preserving socio-economic standards while improving environmental sustainability. Indeed, with the looming threat of anthropogenic climate change and increasing concerns of how low-carbon energy transitions would impact the energy industry, many interlocutors worried that their futures may be worse than their present. In this context of uncertainties, and shifting, often conflicting energy trajectories, I examine how my interlocutors' varied ideals of 'goodness' and 'rightness' informed their pursuits of better energy futures .This expands on existing literature on the 'anthropology of the good' (Robbins 2013) and examines how privileged, strategically situated people see their professional activities in part as projects to make 'the good' better.

Chapter Overview

This introduction has provided insights into key themes of this thesis: energy transitions, elites, and the good life. I have discussed existing literature and outlined my contribution to scholarly engagements. Further I have contextualised Norwegian energy production through an overview of key historical and contemporary energy-environmental debates. Through a discussion of my methodology, positionality, and research ethics I provided insight into my fieldwork experience. The following chapter on energy elites acts as an elaboration and exploration of energy professionals in

Norway. The remainder of the thesis roughly follows a chronological passing of time, as I analyse events and themes in the order that I encountered them during fieldwork.

In **Chapter 2** I discuss the concept of 'energy elites' by examining historical, scholarly and pop-cultural depictions of elites. As I explore my interlocutors' self-descriptions and provide insights into their private and professional lives, I also demonstrate why I have chosen the notion of elites to analyse energy professionals in Norway. I argue that energy professionals form part of a heterogenous community connected by socio-economic backgrounds, professional affiliations, with distinct energy imaginaries.

In **Chapter 3** I trace the decisions of those industry professionals who chose to leave their hydrocarbon jobs to pursue careers in the renewables sector. I situate my analysis of the various motivations behind these career reorientations within the broader changes that occurred in the Norwegian energy industry between 2018-2020. In this chapter, I argue that energy professionals who left the hydrocarbon sector – *oljeavhoppere* (oil leavers) as they came to be known locally – became key promoters of energy transitions in Norway.

In **Chapter 4** I analyse why and how hydrocarbon professionals continued to promote Norwegian oil and gas production. Here I suggest that a perceived interdependence between hydrocarbon revenues and national welfare was used as a key justification for the continued production of fossil fuels in Norway. In order to adapt hydrocarbon production to energy transitions, industry professionals advocated the notion of 'clean oil'; that is, technologically 'purified' and 'low-carbon' hydrocarbons. These twofold arguments, I suggest, were key in advocating fossil fuels as a continued and integral part of energy transitions.

In **Chapter 5** I examine how increasing public scrutiny against the oil and gas sector 'spilled over' to the renewables sector. I show that many industry professionals raised concerns about the socio-environmental impacts – or in their words "sacrifices" – of large-scale renewable energy production. Sacrifices, as I will show, were envisioned as "trade-offs" in the transition towards socio-economically and environmentally sustainable energy futures. I argue that energy professional's narratives of 'sacrifice' evidence not only techno-economic considerations, but key ethical concerns about energy transitions.

In **the Conclusion** I explore how the anthropological notions of 'liminality' can shed light on contemporary energy transitions. A summary of key arguments made in the thesis show that Norwegian energy trajectories were multiple and often conflicting. Yet I demonstrate that my interlocutors' desires for 'good energy futures' were key denominators in otherwise varied energy imaginaries. The thesis ends with an epilogue that provides insights into my post-fieldwork trip in June 2022 and details my key interlocutors' current professional and private engagements.

Chapter 2 Energy Elites in Norway: "Humble" and "Self-made"

"I'm an elite, in an elite country, in an elite business, in an elite age."

(Extract from a conversation with Rolf, an interlocutor, at the end of 2018).

The big clock in the lobby of the oil investment company I was visiting was ticking. It was a cold winter afternoon, and the last sunrays flooded through the large windows that offered a skyline view over Oslo's financial district and harbour. I was eagerly waiting to meet Jarle, whose reputation preceded him. He was known as one of the top leaders in Norway's oil investment business. He often appeared in the national and local news, where he expressed his oil predictions and cultivated an air of exclusivity around him. Another interlocutor of mine, Niko, a now retired but renown oil financier whom I knew from the Oslo Rotary Club, had arranged the meeting with Jarle.

Tick, tock, ... 15 minutes had passed since my arrival at E-nvest. I noticed that the dark-green blouse I wore already had crinkles. The treacherous ice- and snow-covered streets of Oslo, and the use of public transportation made a put-together look difficult. Perhaps this was the reason why most other companies I visited had a jeans and button-down shirt implicit dress code — even amongst the upper echelons of corporate management. In preparation for this meeting however, I was told by other interlocutors that Oslo's investment professionals emphasised a formal dress code. To blend in, I even dusted off my high heels, which I exchanged with the winter boots I had been wearing up until the entrance.

Tick, tock, ... just as I was beginning to think the meeting would not happen, a door on the other side of the lounge opened. "Hei! Jeg beklager at jeg er sen!" (Hi, I'm so sorry that I am late!) said Jarle as he walked towards me. When we shook hands, he grinned and said: "Oh, you look Norwegian, but you don't sound it! Shall we continue in English?". Before I could answer, Jarle introduced me — in English—to Martin, a young man, approximately in his late 20's who had been standing two steps behind Jarle. We briefly shook hands. Jarle continued talking and said: "Martin will be joining us today. He knows more about the energy transition than I do, and I think you two are about the same age!". Slightly surprised and unprepared for an interview with two interlocutors, I realised that Jarle most likely wanted to bring in a pro-oil youth perspective—something I observed many oil professionals do during my fieldwork.

Jarle proceeded by showing me the office spaces until we sat down in a meeting room. What was planned as an interview ended in a casual conversation in which I learned more about oil leaders' lifestyles than hydrocarbon finance. Jarle and I kept in touch after this initial meeting. He occasionally invited me out for lunch and drinks when his busy, jet-set life allowed him a few days in Oslo. We also kept in contact through video calls and text messages after the end of my fieldwork. Although we became well-acquainted, Jarle rarely spoke about his oil business with me. Whenever he did, he portrayed it with a sense of mystery; he mentioned big deals, large sums of money, and his international investor network. When I brought up the topic of oil, he kept his answers brief and then moved on to recount personal anecdotes. It seemed to me that Jarle much preferred to tell me about his lavish lifestyle; his art collection, his houses, the boats he owned, and about the moral values he noted to hold dear, such as "trust" and "being humble".

George Marcus has noted that the term elite is most often "a term of reference rather than self-reference" (1983: 9). Indeed, only few of my interlocutors explicitly identified themselves or their lifestyles as elite. Yet many energy professionals, including Jarle, emphasised their privileged modes of life and enjoyed engaging in conversations about their exclusive social networks. This correlates with popular and scholarly portrayals of elites, where people in positions of privilege and power have often been described as forming an exclusive community with shared but particular in-group interests impenetrable to outsiders (Bourdieu 1996, 2010a; Cohen 1981; Mills 2000). It has been noted that "the very idea of 'elites' suggests qualities of 'agency', 'exclusivity', 'power' and an apparent separation from 'mass society'" (Shore 2002: 4). Such portrayals of 'elites' sit analytically uneasily in scholarly examinations that seek to show nuance and multiplicity in interlocutors' self-perceptions and strive to avoid dominance of the ethnographic author voice. In this thesis, I examine my interlocutors' public and professional self-representations alongside their personal perceptions, future imaginaries, worries, and ethical considerations. This allows me to explore how they conceptualised their own roles and responsibilities beyond their privileged personal circumstances.

This chapter examines why industry professionals in Norway can be considered as energy elites. To do so, I explore how my interlocutors related to class, wealth, and their professional status. I further analyse the virtues they noted to hold dear and provide insight into their corporate and private lives. By examining the etymology and history of the term 'elite', I show how the European origins of the concept correlate with my interlocutors' own portrayals as being "self-made", with their positions presented as based on personal achievements, distinct from inherited class or aristocratic status. Besides highlighting interlocutors' shared socio-economic backgrounds, I also bring attention to the inequalities that arose amongst energy professionals. As such, I position my analysis of energy elites critically by showing that their networks were exclusionary and based in a context of widening socio-economic disparities in Norway.

Towards the end of my chapter, I arrive at a definition of energy elites that takes seriously interlocutors' own conceptualisations of their positions. I analyse energy elites as a heterogenous network of people with shared socio-economic and professional backgrounds but distinct energy imaginaries. I suggest that a categorisation of elites is not prescriptively homogenising but allows for an examination of interlinkages and interrelationships as well as differences and ruptures.

Popular Portrayals of 'Elites'

Questions of elitism, privilege, and leadership became particularly pertinent in Norway during my fieldwork with the rise of climate activism and protests. Increasingly, popular media captured the ways in which publics voiced critique against energy professionals and portrayed them as elite climate polluters who were seen to prioritise profits over environmental action. Numerous TV shows and media articles emerged that challenged the seemingly dominant positions of energy *ledere*. Outside of Norway too, as global socio-economic inequalities continue to widen (Chancel et al. 2022) and are increasingly associated with environmental and political discrimination (Lerner 2010; Scott & Smith 2017), popular portrayals of elites have been accompanied by particularly negative connotations. As Tijo Salverda and Jon Abbink have noted,

Elites are usually distant, infrequently discussed in detail, though ever present in the media and the entertainment discourse that extends globally. Vague notions and popular

beliefs about the power and the influence of elites certainly abound, but are rarely precise (2013: 9).

Contemporary fictional shows on Netflix for instance, such as "Elite" (Montero & Madrona 2018), "Snowpiercer" (Friedman & Manson 2020), "Dynasty" (Patrick et al. 2017) and "Kitz" (Reinbold & Schulz-Dornburg 2021), critically capture the 'eliteness' of wealthy, powerful people and networks. In these shows, strategically situated people are portrayed as elitist, money-hungry, and often morally ambiguous characters that enjoy extravagant lifestyles at the cost of the less privileged parts of society.

Norwegian TV series too have problematised the 'rich and powerful'. "Exit" is a Norwegian drama series based on "true stories" about the "multimillionaires" of the finance sector with "an insatiable appetite for drugs, violence, sex and gross insider trading" (Karlsen 2019). Many of my interlocutors, including Jarle, enjoyed watching the show, particularly as they were invested in identifying which characters and episodes were based on people and events with whom they were acquainted. As they analysed the show, they seemed on the one hand to distance themselves from the scandalous revelations of their friends, and on the other hand to cultivate a shared sense of belonging to their exclusive modes of life. In this way, some interlocutors chose to perpetuate narratives about their elitism, exclusivity, and the mystery of their networks and positions.

Norwegian newspapers further amplified the exclusive notions of elitism surrounding energy professionals during my fieldwork. Some articles referred to my interlocutors as *olje adel* (oil aristocracy) or *borring konge* (drilling king).⁶ Particularly one businesses man who was one of Norway's wealthiest oil conglomerate owners, featured regularly in the news. His portrayal reminded me of the Great Gatsby (Fitzgerald [1925] 2018); he was rumoured to have come from rags to riches as he started out his career on a fish trawler in the United States until he eventually worked his way up to become the head of his Norwegian oil emporium. He was depicted as, on the one hand, generous (some of my interlocutors claimed that he donated bags of expensive designer suits to a charity shop) and, on the other, enshrouded in mystique and danger. Some people even suggested that he had a history of hiring hitmen to kill his competitors.

The 'myths' about this 'Oil Man' abounded; some of my interlocutors personally knew him and were in his inner circle, others had merely heard of him. Many energy professionals seemed fascinated by him and keenly perpetuated the mystique surrounding his character. I never got to meet Norway's "Gatsby" — his assistant cancelled our meeting hours before it was meant to be held and never rescheduled — but I felt his omnipresence in the industry throughout my fieldwork. For many energy professionals he seemed to encapsulate the 'eliteness' in the industry. Often interlocutors recommended for me to speak to him, particularly when conversations broached the topic of their own 'eliteness'. I understood this as a way for energy professionals to deflect attention away from their own privileged and exclusive positions.

Anthropology of Elites

Considering the mysticism, ambiguity, and precariousness with which elites are associated in contemporary popular portrayals, it is perhaps not surprising that anthropological engagement with the concept has remained sparse. This is not to say that there exist no anthropological examinations

⁶ Please note that the descriptors of these terms "oil" and "drilling" have been changed slightly from the original terms used in the articles to protect the anonymity of my interlocutors. Both the words "king" and "aristocracy" have been kept original. No references to articles are provided to protect anonymity.

of elites, leaders, or experts; prominently Marshall Sahlins (1963) has analysed the leadership structures surrounding the "big man" and "chief" in Melanesia and Polynesia, with a particular focus on the "personal power" that gave rise to the leaders' strategic positions. Laura Nader, following her own call to "study up" (1972), has done seminal research amongst energy experts to explore scientific practices (see for example Nader 1981). Further, Abner Cohen (1981) has provided an in-depth examination of the Creole elites of Sierra Leone and significantly expanded the disciplines' theoretical understanding of elites and their roles in society. Several important edited volumes have more recently pushed forward the anthropological work on elites (Abbink & Salverda 2013; de Pina-Cabral & de Lima 2000; Shore & Nugent 2002). However, as anthropologists studying elites have noted, there continues to be a significant lacuna in the literature on the topic (Salverda & Abbink 2013; Shore 2002; see also Schijf 2013). This is not only because "generally speaking [anthropology has] continued to focus on the marginalized and the less powerful" (Salverda & Abbink 2013: 8), but also because those who study strategically situated individuals do not necessarily define or analyse their interlocutors as elites.

Studies of leaders, experts as well as finance and energy professionals in recent years have contributed significantly to the disciplines' ethnographic understanding of powerful, wealthy, and expert individuals (Field 2021; High 2019, 2022; Ho 2009; Mason & Stoilkova 2012). However, these contributions "do not tend to take forward elite theory as such" (Salverda & Abbink 2013: 8). While the studies involve ethnographic research of people in strategic positions, they neither refer to them as elites nor draw on the social science and anthropological literature on the topic to develop or critique existing theoretical engagements about their networks, influence, or cultures.

Here I counter the argument made for instance by Huibert Schijf who suggested that "anthropologists, with their traditional focus on or concern for the poor, have shown little interest in powerful people" (2013: 36). What the recent body of literature on leaders and experts demonstrates is that anthropologists *do* have an interest in studying powerful people. What is more, they illustrate that the much-cited problem of attaining "access" to elite networks is an ethnographic hurdle, which many anthropologists have since overcome. As George Marcus has noted:

Lack of attention to the internal subcultures of elites has not been due so much to the practical inaccessibility of these subcultures to researchers (this *is* a problem, but not an insurmountable one), as to the particular ideological and historical roots from which the elite research tradition has grown (1983: 18).

While Marcus did not elaborate on this point, he may have referred to the work on elites by the Italian School of Elitism working at the turn of the 20th century (see Michels 1961; Mosca 1961; Pareto 1961), whose writings were later misused by right-wing rulers as a basis for their extremist ideals (Hartmann 2006: 2–3). Particularly anthropology, a discipline which often seeks to give voice to the marginalised, impoverished, and voiceless, may be hesitant in exploring a research tradition co-opted by right-wing nationalism.

However, I suggest that the persisting lacuna of anthropological work on theorising elites relates to a wider problematisation of the terminology and its associations as such. Firstly, anthropologists tend to be wary of imposing categories onto their interlocutors that can be seen as reductive and one-dimensional. The term 'elite' may as such be perceived as homogenising. Secondly, any analytical terminology has its limitations, particularly those that may privilege the researchers' own analytical terms over emic concepts. However, I suspect that most hesitation amongst scholars with the use of the concept arises from contemporary popular news and media portrayals of elites, which have contributed to generally negative associations with the term.

Although these popular representations can highlight socio-economic inequalities and environmental harm perpetuated by privileged, wealthy, and politically powerful persons, I suggest that they tend to unreflexively 'other' elites. Popular portrayals often analogously portray elites as exclusive, powerful, and ominous minorities. In her work on religious fundamentalists and conservative Christian communities in the US, Susan Harding (1991) has highlighted that academic descriptions of fundamentalists tend to marginalise them, thereby undifferentiating them from other marginalised groups. Questioning the constitution of scholarly conceptualisations of 'the marginalised', Harding asked:

Why are the margins in studies of culture not occupied equally by politically sympathetic and repugnant cultural "others"? Why do we constantly segregate and rank them so unself-critically in our conversations, our publications, our conferences and panels? (1991: 392).

Harding called for opening up the notions of 'margins' in order to recognise and critically reflect on anthropologists' own "oppositional 'others'" (Ibid.: 392). Following Harding, I suggest that elites have similarly occupied a marginal place in anthropology, and have often been unreflexively dismissed as powerful, oppositional 'repugnant others'. Moreover, as Harding also pointed out, her effort to disrupt popular and dominant representations of fundamentalists may have been interpreted as efforts to 'consort' with them (Ibid.: 375). I argue here not for sympathy towards energy professionals, or elite communities more generally. I argue for the importance of providing analytical and ethnographic nuance to people, who are attributed power and responsibility yet remain anthropologically understudied and continue to be dismissed as needing no voice nor academic attention.

Elites, Aristocrats, and Class

In the anthropological and broader social science literature, elites are predominantly defined as people who occupy positions of power, command, or as "makers and shakers" in society (Shore 2002: 4; Scott 2003, 2008). They are portrayed as strategically situated minorities who make decisions and take command on behalf of a majority (Salverda & Abbink 2013: 1; see also Shore 2002: 2). Some scholars have strongly argued for an analytical separation between the study of elites and privileged classes. John Scott, for example, analysed only those in positions of power, and not "advantaged groups" or "wealthy classes" more generally, as elites (Scott 2003, 2008). Despite this analytical separation, Scott suggested that "elites are recruited from social classes and social estates – and they will, therefore, exhibit classed, gendered, racialized, and other characteristics. This means that in real situations it may be difficult to separate them" (2008: 35). Analysing the interrelations or distinctions between elites and classes, I suggest, is further complicated when interlocutors downplay their privilege and de-emphasise class differences.

During my fieldwork, only few of my interlocutors discussed class structures. When I directly asked, most emphasised that in Norway class differences were negligible. Particularly, experts and leaders working in the oil sector perpetuated what has been identified as dominant narratives about Norway "as a kind of welfare paradise, courtesy of oil income, high taxation and its egalitarian culture" (Abram 2018: 90). Amongst industry professionals, the concept of 'class' seemed to be associated with an outdated, non-Norwegian, historical societal model. This was in contrast to how my interlocutors perceived current socio-economic life and high standards of living as secured by the country's oil wealth via the social welfare system in Norway. According to Marianne Gullestad, who extensively

explored notions of Norwegian nationalism and egalitarianism, "Norwegians like to think that class differences are small, an idea supported by an interactional style that deemphasises differences" (1991: 483). Indeed, I found that even those interlocutors, who directly acknowledged their own privileged positions, did so by relativising it as part of a larger, Norwegian prosperity.

This was particularly well captured in one of my encounters with Rolf, a top-level manager at PetroSolutions, a Norwegian subsidiary of a large multinational oil service firm. Rolf worked in hydrocarbons but was eagerly trying to find a way out of the sector into renewables. Similarly to other energy professionals in my fieldwork, Rolf never explicitly showed off his wealth or position. He owned a cabin, a house, and a sailing yacht, but only brought this up in relation to his leisure activities, repeatedly downplaying the prestige of the things he owned. As such, it surprised me when Rolf once in conversation self-identified as "an elite". We were sitting across from each other in one of the meeting rooms of his office building when he said: "I live in a bubble. I mean, I'm an elite, in an elite country, in an elite business in an elite age". Surprised at this self-portrayal, I asked: "What are you saying exactly"? He dropped his arms palm-down on the table and took a deep breath before responding:

Look, when I speak with friends in the States, or Brazilians, there is another reality. They don't have the luxury of these discussions [on sustainability that] we have here in Norway. They just need energy to develop their society.

At the time I could not discern how Rolf conceptualised the notion of 'elite'. Based on my academic readings, the term evoked in me associations with exclusive networks and affluent minorities. Yet Rolf seemed to employ the concept as a means to situate himself as part of a thriving, prosperous Norwegian energy industry and society.

Wanting to ensure that I really understood Rolf's conceptualisation of "an elite", I followed up on this point again during our next meeting. We met at the reception of PetroSolutions, got coffee at the company's hot drinks bar, and then – properly caffeinated – sat down in a quiet meeting room with a view towards the green, forest-like back yard of the glass-in-glass office building. After a bit of small-talk, I started our chat by clarifying: "Last we spoke, you called yourself an elite – I just want to make sure I got it right – what do you mean by that?"

Rolf took a sip from his hot steaming paper cup of coffee, which read "made without fossil fuels", and replied:

I don't have to live the hardship most people have. I don't have to suffer being mistreated, stolen from, misled. I just mean that by being a Norwegian, you're so protected from tough life experience.

Rolf's elaboration confirmed to me that his understanding of being "elite" was intimately tied to an association with a particular Norwegian way of life. For Rolf, identifying as an elite was not a way to distinguish himself as a *leder* or affluent individual from others in society. Rather, it was a way for him to emphasise a shared sense of belonging to other industry professionals and the Norwegian population at large. His conceptualisations offered a global perspective, comparing Norway to other countries, whom he deemed as relatively less "well-off". As such, Rolf voiced an 'exceptionalism' that many interlocutors associated with the energy abundance and socio-economic welfare that Norway has enjoyed in the last 50 years (see Ch. 4). Being elite to him was not only a matter of being Norwegian, but also directly related to the country's production of energy, particularly oil and gas.

Rolf thus linked notions of elitism with the energy industry. Even those interlocutors who did not self-identify as elites often associated their socio-economic status with their affiliation to the energy industry. Moreover, most saw their professional activities in energy, particularly those working in hydrocarbons, as contributing to a broader Norwegian social welfare. Energy was thus a crucial component to the way leaders and experts made sense of their and Norway's prosperity. I have therefore placed emphasis on analysing my interlocutors not only as elites, but *energy* elites to highlight the importance of their energy affiliations in their self-conceptualisations.

Rolf critically noted that he saw his 'energy elite' life as part of a "bubble" – a bubble shared in different ways on different levels with family, peers in the industry, and Norwegian society at large. From later conversations, I learned that Rolf was acutely aware – contrary to many other interlocutors I encountered – that not *everyone* in Norway was living 'the Norwegian good life'. Rolf was one amongst only two of my interlocutors who lived on the East side of Oslo. Most other industry professionals I encountered had not once set foot on this side of the city, which they associated with migrants, low-income earners, and drug addicts. Based on the West side of Oslo, or in the adjacent affluent suburb Bærum, most interlocutors appeared to struggle to imagine life different to their 'bubbles'. Villas, private harbours, boats, and picket fences were part of *their* Norway. That is, the Norway many saw as built and maintained through their involvement in the energy industry.

Also living in Bærum, I was deeply immersed in ethnographic encounters on the West side of Oslo and only visited the East side after several months of fieldwork. It was a visit from my mother and her curiosity to experience what my interlocutors so vehemently avoided that encouraged our visit to the East districts Grønland and Tøyen. I experienced the East side of Oslo as a vibrant, diverse, thriving part of the city. Soon I became a regular East-side visitor. I was delighted by the wide selection of groceries that I could find at the many international minimarkets, which my interlocutors referred to as *utlendingsbutikker* (translating literally to 'foreigner shops'). It was in Tøyen where I went to get my hair cut, as it was much more student-budget friendly than the three times more expensive alternatives on the West side. The East side also offered a variety of Middle Eastern, Asian, and African restaurants as well as concerts and other art events. However, as I visited more frequently I also noticed some of the concerns my interlocutors raised about the East side of Oslo. I saw people injecting and trading drugs, came across several food banks, and observed people asking for money on the streets. In those instances, life on the East side indeed seemed different than the Norwegian 'good life' my interlocutors experienced on the West side of Oslo.

Apart from my visits to the East side of Oslo, I also went on a trip to Northern Norway that helped put into perspective the affluent and privileged lifestyles of my interlocutors. As I travelled between the islands Vesterålen and Lofoten, I had the chance to visit the family of Ebbe, my coffee break partner at Energo, whom I introduced in the previous chapter. I also encountered several locals, including fishermen and people working in the tourist industry. In our conversations, many felt that the "rich businessmen" in Oslo built their fortunes on the backs of the hard-working Northern Norwegians. Their modes of life were visibly different to those of my interlocutors. During my visit, I observed houses on the Northern islands to be smaller, often dilapidated, roads bumpier, cars older, and the shiny, new electric vehicles that most of my interlocutors drove in Oslo as almost absent in the North.

It was during these visits that I understood my interlocutors' narratives of egalitarian, affluent Norwegian society as part of *their* privileged viewpoints, not the reality of many other Norwegians.

⁷ I once was invited to visit the second interlocutors' house on the East side of Oslo for dinner. During the evening, he noted apologetically that he, unlike most of my other interlocutors, lived on the East side. He seemed almost apologetic about his housing location, indicating to me a discomfort that his living situation was different from that of his colleagues in the industry.

While Norway enjoys a low unemployment rate (3.2% in June 2022 (SSB 2022b)) and the Norwegian social welfare system provides free education, subsidises health care, and parental leave, it is important to note that socio-economic inequalities in Norway *do* exist. In her analysis of Norwegian conceptualisations of 'egalitarianism', Simone Abram similarly suggested that,

The idea of the equal society in Norway is relative (...). Income equality has indeed been stronger in Norway than any other European country during the twentieth century, but the pay gap between rich and poor has been widening for some years (2012: 252).

Her analysis has been underscored by a recent publication from the Norwegian Office for Statistics, which found that income inequality

has increased steadily since the 1980s. Estimates of a measure of affluence demonstrate that overall inequality has largely been governed by changes in the top half of the distribution and in the ratio between the mean incomes of the lower and upper halves of the population (Aaberge et al. 2020: 1).

The realities of income inequality, and the widening gap between 'rich and poor' as the income of the highest earners rises, stand in stark contrast to energy professionals' emphasis on *likhet* (sameness), 'classlessness', and egalitarianism, which they saw as deeply engrained in "Norwegian culture". I suggest that my interlocutors' emphasis on socio-economic equality is the persistence of the myth of "a classless egalitarian Norway" where "the Norwegian population appears increasingly middle class" (Abram 2012: 237). Although my interlocutors did not perceive class structures as prevalent, or indeed existing at all, I found that their privileged modes of life were in part constitutive of their membership in elite networks. However, I also engage seriously with my interlocutors' emphasis of being "selfmade" energy professionals who distinguished themselves through their personal career achievements. These self-portrayals distanced energy professionals from their exclusive lifestyles and privileged socio-economic backgrounds, and emphasised their strategic positions as a result of their "hard work".

Being "self-made" and "hard-working"

It was towards the end of my meeting with Jarle and David, the two oil brokers whom I introduced at the outset of this chapter. The sun had set, and outside of the big office windows I could see the lights of the city skyline glistened in the winter afternoon darkness. The two men had spent most of our time together sharing anecdotes and telling jokes, which created a surprisingly casual atmosphere for a first-time meeting in a formal corporate setting. It was at this point that I felt it was the right moment to enquire how Jarle and David related to the notion of 'elites'.

Carefully but assertively I posed my question by summarising one of Jarle's earlier points:

You were talking about how Norway used to be quite poor, with an economy mainly based on fishing and agriculture. You also mentioned the middle and upper classes before. Do you think the oil as a resource and industry has brought new wealth to Norway and created classes? Has it created a sort of 'oil elite'?

My head may have turned different hues of pink. It was the first time I approached the question of elitism 'head-on' during an initial meeting.

David swivelled around on his char, and then said:

There are quite a few families in Norway that have made tremendous amounts of money on the oil and gas industry, with no doubt.

He glanced over to Jarle who had remained unusually silent until now. But then Jarle added:

We have a small, super elite, very small. And we have a huge middle class – it is very big.

Enquiring further I asked: "And what determines where you are? Who are the 'small super elites'?"

Jarle smiled whilst being silent for a few seconds. He seemed to think carefully about his next answer. Then he replied:

The super elite is probably the billionaires, you know. While if you have a couple of hundred million you are still in the middle-class range. I wouldn't say you are in the super elite if you have a couple of hundred million...

Jarle and David then started discussing Sweden, where they noted "much more old traditional families who have gone through generations of wealth, and aristocrats and counts and people like that" compared to Norway. David elaborated:

The super-rich in Norway are self-made and very much related to offshore – not necessarily related to oil and gas, but shipping and offshore – at least all the people I can think of. You have a few who own groceries and resale.

"And a few landowners from the old days" Jarle added. David nodded in agreement.

Most energy industry leaders in Jarle's and David's understanding were "self-made"; people who had built their fortunes ("millions and billions" as Jarle said) through their achievements in various Norwegian industries particularly the offshore sectors. To them, being 'elite' was thus a result of both the accumulation of wealth and the attainment of strategic (energy) industry positions. It was not, as they emphasised strongly, a status owed to the inheritance of titles or possessions. As such, Jarle and David distinctly contrasted elites with landowners or aristocrats whom they saw as passing on land and money through generations. For them, as well as for other interlocutors, there was a particular Norwegian aspect to this delineation from aristocrats. As Marrianne Gullestad noted "Norway never had, in the European sense of the word, a landed aristocracy of really wealthy families" (Gullestad 1991: 483). My interlocutors attributed this to what they referred to as Norway's foreign occupancy by Denmark and then Sweden. During these eras, they suggested, Norway was ruled by foreign nobility until independence in 1905, leading to a relatively small, underdeveloped, land-owning class in Norway, and a more egalitarian culture than in their neighbouring countries.

However, Jarle and David's distinction from aristocrats, also correlates with the wider conceptualisations of the term 'elite' as it was popularised in Europe in the 17th and 18th century. Stemming from the Latin word *eligere*, the etymology of the word 'elite' dates back to 12th century Europe, when it was used in French as *élire* (elect) and *eslire* (choosen), out of which *élite* was developed and popularised later in other European languages to refer to a "selection" or "choice" (OED 2022a; Salverda & Abbink 2013: 1; Williams 2015: 72). The term was then employed to describe someone formally chosen or elected through a social process (Williams 2015: 72). Michael Hartmann has shown that the concept became significant in revolutionary France when the "aspiring French bourgeoisie" used it as "a democratic rallying cry in the struggle to break the hegemony of aristocracy

and clergy" (2006: 2). As such, "elite" distinguished those people who rose to strategic positions based on merit from those who inherited status through family origins or birth rights (Ibid. 2). Reaching commanding positions through personal achievements has thus been a crucial aspect of being 'elite' since early uses of the term.

For many energy professionals, being 'self-made' was conceptualised as a result of their "hard work". They used this notion not only to refer to their corporate achievements, but more so to describe their work ethic; their drive, ambition, and problem-solving skills. Particularly for those interlocutors who were founders or investors of companies and start-ups, being "self-made" also encompassed an entrepreneurial component. The ethical value that they placed on 'hard work' echoed "the spirit of capitalism" as Max Weber described in relation to the "Protestant ethic". According to Weber, it was through Calvinist-Protestantism that the accumulation of wealth became morally justified as an act of faith towards God through the pursuit of "hard" and "good works" (Giddens 2005: xiii; Weber [1930] 2005: 71). Although most of my interlocutors identified as atheist or agnostic, several energy professionals referred to Norway's Protestant history when citing ideals like "hard work".

Many understood their professions to involve more than the pursuit of corporate profit and emphasised that they aimed to contribute to social welfare or environmental sustainability. For them, being hard-working was thus not only an effort towards their own career goals, but conceptualised as a contribution to the 'good life' and 'good energy futures' of Norwegian society. This relates to early capitalist conceptualisations formulated by Adam Smith who argued that social welfare can be most effectively created through the pursuit of economic and moral self-interests (Newbert 2003: 251). In this vein, besides pursuing economic gain, entrepreneurs are also conceptualised as working towards "the betterment of both self and society" (Ibid. 259). A similar allusion to a societal duty of those in strategic positions can be found in the terms *noblesse oblige* (nobility obligates). While the concept specifically refers to a societal responsibility of the aristocracy, it indicates the notion that those in leading positions have an active role towards ensuring the wellbeing of the rest of society.

My interlocutors' emphasis on their hard work, personal achievement, and wider socio-economic and environmental responsibilities were part of their own portrayals as self-made Norwegian business professionals. What these narratives downplayed however, was that their careers often benefitted from their social networks to other strategically situated people in the energy industry and beyond. These were established through family, friendship, and marriage relations. Over the course of my fieldwork, I learned that several interlocutors had parents who themselves (had) occupied top leadership positions in the shipping, banking, or hydrocarbon industry as well as in politics. They left their children not only with wealth and property, but also with what Pierre Bourdieu ([1984] 2010) referred to as 'social capital' including access to strategic networks. Moreover, many of my interlocutors had partners and friends who occupied strategic positions including in media and in politics. They therefore benefitted from 'elite' networks which they could draw on due to their privileged socio-economic and family backgrounds. The term 'elite', I suggest, indicates here a social connectivity that my interlocutors' self-descriptions of being entrepreneurs, leaders, or experts cannot convey.

Besides contributing to a downplaying of their privileged backgrounds, I found that my interlocutors' narratives of being 'self-made' entrepreneurs often involved particularly gendered language. During our conversation, Jarle and David only mentioned the names of male business owners. While they positioned themselves neither as dismissive nor complimentary of "the rich" – I got the sense that they showed a particular appreciation for the 'self-made' 'Oil *Men'*. Although in Norway relatively many women work and occupy leadership positions in the oil and gas sector, there was nevertheless a patriarchal dimension to the ways in which "making it" in hydrocarbons was associated with hard

work, the *olje eventyret* (oil adventure) (Mork 2020; Tolås 2009), and what some of my interlocutors referred to as a "cowboy attitude" — a sort of 'go-getter' machismo approach to business management. While, as I will discuss further below, I met several women in executive and investor positions in the energy sector, most of the "super rich" that Jarle and David were referring to were men.

Ydmykhet (humility) and "being humble"

With his appearances in the national media and being nicknamed the "drilling king", Jarle was part of this hyper-masculine, exclusive portrayal of Norway's elite. He had been quieter during this part of the conversation than throughout the hour before. Although I knew from my pre-interview research that he was amongst the highest earners in Norway, he felt it was wrong when people flaunted their wealth. David and I had led the conversation for a while, when Jarle interjected:

But I think Norwegians in general are pretty modest. We try not to *hige* — aspire to something great all the time. You know if you go to the States, if you move up from...— If you change a couple of positions in the company, then you suddenly need to have new friends because you have become a CEO and you don't have the same friends as when you were executive vice president. We don't do that in Norway.

As Jarle had finished his sentence, David turned towards me and added:

I'm sure you have heard about this: we have this very strange, unwritten norm in Norway called *Janteloven*, which basically says that you are not allowed to show your success. To show your success is sort of a failure or it is frowned upon. If you are extremely rich or successful, you sort of hold it back and keep it to yourself and be happy with that on a personal level, but you don't go around bragging about it.

Jarle had been nodding silently while David explained to me what he understood to be Norway's socially approved way of dealing with personal achievement and wealth. With a slight smile, Jarle then started paraphrasing *Janteloven*:

'Don't think you are anything! You shouldn't pretend that you are better than anybody else!'

Jarle chuckled, then continued:

This is deeply embedded in the Norwegian culture. So, people remind each other *all* the time if you show off too much.

We also have a saying that "envy is bigger than the sex drive" – "mysolelse er store en sex listen". And envy is huge!

Both David and Jarle broke out in bellowing laughter. I smiled but, slightly confused, asked: "How does that all fit together? How can there be humility and envy?"

Jarle, catching his breath from his laughter, responded:

I'll tell you that – we find ways to show off! And actually, we are by law obliged to report if we believe our neighbour is making illegal money. *Angiverloven* – to report the next guy. 8 So, this envy is somehow fostered. We are a strange breed!

During my fieldwork, several interlocutors noted that tax records in Norway are publicly accessible. Anyone could get insights to the income streams of their friends and colleagues, with the caveat that they would be informed about who requested data access. My interlocutors usually mentioned this practice when they aimed to highlight a particular "Norwegian culture" of openness and transparency. Alongside humility and trust, they suggested that these values made Norway an ideal place to conduct business. Anders, mentioned in the previous chapter, who was my close friend and desk neighbour at Energo, and who was part of our daily coffee clique, once told me that:

In Norway trust is at the basis of social relationships. We start off with trust until someone proves otherwise. I think in other countries this is different. People distrust strangers until they prove that they can be trusted. I think this is unique about Norway and makes life and business easier.⁹

My interlocutors' suggestion of a relation between the values of trust, humility, and transparency with business conduct were also reminiscent of a "Protestant ethic" (Weber [1930] 2005). They related these values to the ability to conduct morally good as well as productive and successful energy developments. Rather than to Max Weber or Protestantism, however, my interlocutors including Jarle and David, frequently related the values to *Janteloven* (The Laws of Jante) (see Fig. 6). They are a set of social rules in a format reminiscent of the ten commandments first captured in a satirical novel by the Dano-Norwegian author Aksel Sandemose (1999 [1933]). Simone Abram critically summarised "the 'Jante' laws" as "endlessly quoted from Sandemose's nihilistic novel to characterise puritanical egalitarian Norwegians" (Abram 2018: 102). Gayle Avant and Karen Knutsen more specifically defined *Janteloven* as

the tendency to conform, with overtones of envy, jealousy, and spite toward those who do not conform. Non-conformity is looked upon as a threat to the community. In the case of *Janteloven*, conformity involves not only repressing negative and destructive impulses, but also creative abilities. It involves the denial of individualism and eccentricity (1993: 455).

While Avant and Knutsen argued that the Laws of Jante are an "apt descriptor of widely shared attitudes in Norway" (1993: 450), others, including Abram and Thomas Hylland Eriksen have pointed towards the limitations of these (satirical) social rules to capture a sense of 'Norwegianness', and critically positioned themselves against narratives that perpetuate the "myth of the homogenous Norway" (Eriksen 1993 translated by Abram 2018: 102).

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⁸ When I enquired with other interlocutors about *Angiverloven*, which they translated to 'snitching law', they referred to it as an implicit moral obligation, but not an official law. By citing *Angiverloven* Jarle, it seemed to me, wanted to dramatically emphasise how significant he perceived envy to be in Norwegian socio-cultural life.

⁹ Extract from written fieldnotes

Janteloven - The Laws of Jante:

- 1. Thou shalt not believe that thou art something.
- 2. Thou shalt not believe that thou art as good as us.
- 3. Thou shalt not believe that thou art more than us.
- 4. Thou shalt not fancy thyself better than us.
- 5. Thou shalt not believe that thou knowest more than us.
- 6. Thou shalt not believe thou art greater than us.
- 7. Thou shalt not believe that thou art a worthwhile human being
- 8. Thou shalt not laugh at us
- 9. Though shalt not believe that anyone is concerned with thee
- 10. Thou shalt not believe that thou canst teach us anything

Figure 6. 'Janteloven' (see Sandemose 1999 [1933]: 65).

To most of my interlocutors *Janteloven* represented a hyperbolic version of traditional values that in contemporary times were mostly referred to jokingly. However, when it came to highlighting certain values or pointing out "bad behaviours", they often made references to *Janteloven*. The mentioning of the laws was employed in social situations where interlocutors felt one of their friends or colleagues was showing off or lacked humility. I experienced this several times when interlocutors spoke about new purchases (cars, holiday homes), career feats, or other personal achievements.

As Jarle and David had pointed out, despite the emphasis on the value of humility, they perceived envy to be widespread amongst their social circles. *Janteloven* was thus used as a gentle, half-joking reminder to stay humble. The value also appeared to be pursued more so as an ideal than a practice. When we concluded our meeting, Jarle accompanied me on my way out of his office. As we strolled along the corridors, he told me about his beach house, his cabin in the mountains, and mentioned, in passing, a few other properties he owned. To Jarle, his pride in his possessions and achievements appeared not to conflict with his ideals of *ydmykhet* (humility). Initially confused at this apparent contradiction, I learned to understand that the values my interlocutors held were ideals that could be distinct from their practices. Cheryl Mattingly in her work on the 'good life' has suggested that ethnographic examinations must pay attention to

the way people consider and evaluate their lives in light of notions of what is ethically good or right. They may fall short, and may be seen by others as falling short, but this does not obviate the presence of such considerations (2014: 10-11).

For my interlocutors, humility, trust, and transparency were values that they held in high regard. The pursuit of these ideals – while not always successful – was deemed fundamental to thriving social relationships and business transactions. Taking seriously my interlocutors' emphasis of these ideals helped me understand that moral considerations affected the way they conceptualised their positions in the energy industry and in their social networks. As such, I suggest that as leaders and experts they aimed to 'be good' in order to 'do good'. Edward Fischer pointed out that "how we want the world to work is just as important as how it actually does work in understanding what drives us toward a particular future and what informs visions of the good life" (2014: 16). In this vein, I saw energy professionals' ideals as strongly interrelating with the kinds of 'good energy futures' that they pursued.

In a different leadership context, Stavroula Pipyrou (2014) in her study of the South Italian mafia, 'Ndrangheta, has pointed out that mafiosi conceptualise and present themselves as charismatic and

humble. While the mafia is renowned for its criminality and violence, Pipyrou demonstrated that the ideal of 'doing good' originated from their Christian faith and guided some of the activities in the 'Ndrangheta (2014: 421). According to Pipyrou, mafiosi practise *umiltà* (humility) with the end goal of achieving "saint-like status" within the wider community in which they operate (Ibid.: 421). To do so, they offer "free gifts" including acts of service that require no direct reciprocity (Ibid.: 412; 421-422). My aim here is not to compare energy professionals with mafiosi, but rather to emphasise how strategically positioned people, who are often publicly portrayed to lack ethical drive, may nevertheless embrace ideals and virtues that influence their perceptions and actions.

However, some of my interlocutors also experienced the ideals that were praised and nurtured by their peers as a confining social pressure to fit into a particular, idealised mode of life. They referred to this as striving towards *likhet* (sameness) and understood it as a series of material and social relations that were prescribed as part of the "right" or "good" Norwegian life. According to them, it included the purchase of cars, certain clothing brands, as well as owning houses on the West side of Oslo. It also involved idealised nuclear family constellations of heterosexual partnership with children. While most energy professionals portrayed these as universal Norwegian ideals, I observed that these idealised lifestyles resonated with the elite social networks and privileged socio-economic circumstances of their social circles. This was noticeable for example, through energy professionals' purchases of material assets, which was often practised – in the words of Thorstein Veblen ([1899] 2007) – as a kind of pecuniary emulation. Buying a house, cabin, car, or designer-brand clothing was socially supported if done through 'inconspicuous' consumption i.e., the acquisition of similar assets as others in their networks.

For a significant few of my interlocutors, this "pressure to belong", as they referred to it, resulted in mental health problems. Several interlocutors shared with me their personal struggles with suicide; some suffered from mental health issues themselves, others experienced suicide in their family or friend groups. In our conversations, they related psychological struggles to expectations expressed by their families, co-workers, or friends to "fit in". Variations in dress style, sexual preferences, or life choices were not openly celebrated amongst most of my Norwegian interlocutors. A perceived social pressure towards conformity also affected the experiences of many of my international interlocutors. For them, ideals like egalitarianism and *likhet* often translated in practice to social exclusion and the manifestation of inequalities.

'Diversity' and Racism

With only few exceptions, the interlocutors I encountered who occupied the most senior industry positions were white, male, Norwegians in the mid-40's to mid-60's. They were executives, investors, and board members. Most of my interlocutors who were not Norwegian occupied leadership and expert positions in lower levels of seniority as mid-level managers or consultants. Exceptions seemed to be British energy professionals, many of whom occupied upper-management positions, including one British interlocutor who was a retired executive form a Norwegian energy consulting company. Most British energy professionals had previously worked in the UK hydrocarbon or renewables sector before moving to Norway. Without exception they emphasised not feeling different or being treated differently to their Norwegian counterparts. However, many of them noted that they made a "real effort" in adapting to Norwegian lifestyles. Many had permanently settled down in Norway; they were married, had children, and owned a home. As Rob, one of my British interlocutors who occupied a top oil management position in EnergyMax, put it:

I'm not a representative [expat]. I would argue that I have actually received more chances than the average Norwegian. The reason for that is that [when] I moved to Norway, it wasn't like an expat assignment. I have actually made certain efforts to integrate myself into Norwegian society; I have a Norwegian wife. I'm applying for Dual Nationality, I'm fluent in Norwegian. I'm the best of both worlds. I've actually received preferential treatment.

Rob had started our meeting by telling me that he promoted himself in a particularly outgoing way. He understood this as distinct from his Norwegian counterparts whom he saw as being "humbler". During our conversation, Rob did come across as confident; he enjoyed emphasising his leadership position and attributed his strategic role only in part to his expertise as a geologist, but mostly to his ability to "self-promote". Rob emphasised how he was acutely aware that as a non-Norwegian, British national he was in a relatively privileged position compared to other international industry professionals. During our conversation, he elaborated:

It's embarrassing, but I represent diversity in the company. Even the fact that I'm a middle-aged white man, I'm still 'diversity', because I'm not Norwegian. But I can function in the Norwegian environment, and therefore I've actually received more..., well, I would say I am positively discriminated for. Based on the fact that I made a certain effort to integrate myself enough that I can function in the Norwegian environment, but I also represent something that's a bit different.

Rob felt that his confidence coupled with his ability to integrate into a 'Norwegian' way of life — through language and marriage — gave him a competitive edge over to other "expats". Moreover, it seemed to me that his previous work experience in the British oil sector, his educational background, and his industry connections to the upper echelons of the Norwegian hydrocarbon sector allowed him to immerse in the social and professional circles of Norwegian *ledere*. Rob's career thus appeared to benefit from these 'elite' networks.

However, as Rob pointed out, his professional experience in the Norwegian energy industry was decidedly different to that of other international industry professionals. This became most apparent to me when I spoke to Samesh, who occupied a mid-level management position as the head of several renewable energy departments at EnergyMax. Although we met on my first day at the company, as I was placed in one of the departments he oversaw, he only agreed to a sit-down interview with me towards the end of my fieldwork. Before we commenced, Samesh, as mentioned in Chapter 1, requested for me not to audio record the interview and not to share any of the contents of our conversation with his colleagues or his employees at EnergyMax. Surprised at his explicit request, I reassured Samesh that I would respect his wishes, and process his data — like that of all my interlocutors — safely and anonymously. A few minutes later, when I asked a general question about his career, and Samesh instead brought up his experiences with racism, I understood that for him the purpose of our talk was to alert me to the inequalities he and others experienced working in the Norwegian energy industry.

Samesh, now around 50 years old, commenced by telling me that his parents had emigrated to Norway from South Asia when he was a child. He emphasised that he had received all of his schooling in Norway, including university education for electrical engineering. Samesh sighed deeply, before elaborating.

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¹⁰ The excerpts of dialogue with Samesh are from written fieldnotes.

I have two cars, a large home, a holiday apartment in the Mediterranean, and a good job with a good salary. And there is envy. They [Norwegians] don't mind having immigrants who are integrated and hard-working, but they don't like when they are better off than themselves.

Samesh looked at me and moved one of his hands below the other as he said:

They don't want us to be here [shaking his upper hand] when they are there [shaking his bottom hand]!

What Samesh told me was reminiscent of what Jarle had noted about envy in Norway. Though compared to Jarle's privileged position as a wealthy white Norwegian 'Oil Man', Samesh experienced this envy as deeply discriminatory. He continued by telling me about the difficulties he encountered in his professional life, based on – as he noted – the colour of his skin and his name.

I struggled to find a job after I graduated. That's why I started working as a teacher, even though I was overqualified for the job. When I sent out applications, some companies actually straight-out told me that they didn't want me because I was a foreigner, and they preferred a Norwegian workforce.

Samesh looked uncomfortable. I nodded understandingly and waited silently until he continued speaking.

At NAV [The Norwegian labour and welfare administration] they actually suggested for me to change my name. But I thought: 'What's the point?' – as soon as they will see my face, they will know I am not Norwegian.

Samesh explained that he felt there was little tolerance for difference in Norway, particularly visible cultural differences. He added:

If you are brown, you are Muslim. And if you're Muslim, you could be a terrorist. I am not Muslim, but I am brown.

This moment rendered me speechless. It was the first time I had heard about such explicit encounters of racism in Norway. After a brief moment of silence, I asked Samesh:

"Do you have children?"

Yes.

"Do you feel they, at this time, continue to be treated differently? Do you worry that they may face similar glass ceilings and encounters of racism as you have?", I further enquired.

Samesh answered without hesitation:

Yes, I fear and sense so.

I have a friend who bought himself a nice car. You know, we were not able to afford cars back where we came from or when we first arrived here. So, the dream was to be able to have a nice car. A small house – but a nice car. Norwegians cannot understand this.

He worked very hard. He did not take holidays, until one day he could afford a car. And you won't believe this, but his Norwegian friends of years, ended up smashing his new car.

It was then that I understood that Samesh, his family, and friends not only experienced inequalities, but at times worried that their loved ones would be personally threatened. Rather than a Norwegian egalitarianism, Samesh had throughout his career been confronted with exclusionary and unequal work environments. He also expressed deep worries that his daughter, who was soon to graduate university, would experience similar difficulties as he did professionally. However, Samesh seemed even more worried that her wellbeing and livelihood would be threatened by those members of Norwegian society whose desire for *likhet* was so strong that they could not accept socio-cultural differences.

Samesh's experiences indicated to me that he perceived his personal and professional life as highly precarious. Although I observed that Samesh was well-respected for his experience, leadership style, and expert knowledge at EnergyMax, he did not seem to have the same access to professional and social networks as his Norwegian colleagues. This was not limited to Samesh, but also applied to some other interlocutors I encountered with international backgrounds. While most dealt with more job precarity than their Norwegian counterparts, I observed that through their expertise they remained influential in enacting energy trajectories and formed parts of larger decision-making processes in the Norwegian energy industry.

Most of my other interlocutors – irrespective of their nationality – expressed that they felt a relatively high level of job security. They were offered long-term contracts, were members of strong labour unions, had savings to fall back on, and were offered compensation packages or job alternatives when companies re-organised employment. Only a few of my interlocutors were 'expats' without permanent residence in Norway. Yet their coveted skills, knowledge, and expertise as senior industry professionals provided them with a job security that other employees with lower levels of education, skills and junior positions did not have.

While most of my interlocutors felt job secure, it was primarily male, Norwegian energy professionals who enjoyed the highest career mobility. They frequently changed jobs when they were headhunted by other companies who offered them new projects or higher salaries. Many also moved to self-employment and started their own companies. As several female energy professionals noted, this was not always the case for women in the energy industry.¹¹

Gender Inequalities and Work-Life Balance

One afternoon in the large open floor office at the renewables department of EnergyMax, I overheard a conversation between three of my interlocutors about gender roles. Almost outraged, Christian, the head of a wind power project, said:

Whenever we go to my in-laws, my wives' mother always asks me about my job and how it's going. She only ever asks my wife how the kids are. And we both basically have the same job!

When Christian and I spoke a few days later during an interview, I mentioned that I had overheard his conversation and expressed curiosity in how he perceived gender roles in the industry and beyond. Christian responded by noting that

¹¹ None of my interlocutors identified as gender non-binary or transsexual. As such my use of the terms "male" and "female" as well as "man/men" and "woman/women" correspond to how my interlocutors self-identified and related to others.

Generally, I don't think there is much difference, no. Not really, no. We are privileged in that way in Norway, I think. That's not to say that no women experience being treated adversely in the industry.

Christian continued by analysing his relationship to his wife and noted:

I think we at least strive to be taking equal shares. That's not to say that she changes the tires of the car while I'm cooking. It's not like that. It's simple because we went to the same school, we have the same type of job, we make exactly an equal amount of money. We are credited the same time, we work in the same company. She works here [points towards the other side of the office building]. She's a geologist.

Although Christian and his wife seemed to share their obligations equally, his descriptions suggested an inequality between male and female industry professionals in their careers and personal lives. Over the course of my fieldwork, I noticed a pervasiveness of genders norms that associated women with responsibility over household and family matters in Norway. As several of my female interlocutors noted, this significantly impeded their career trajectories in the energy industry and impacted their work-life balances.

Anthropological scholarship on women in elite and leadership settings has been relatively scarce. When gender roles in exclusive and strategic workplaces are analysed, scholars highlight that women are confronted with both social and organisational inequalities (Ho 2009; Nader 1981b; Ortiz 2013). In her analysis of finance professionals on Wall Street, Karen Ho (2009) has for instance analysed gender inequality as part of larger institutional barriers such as a lack of access to "elite schools" and discriminatory corporate practices. Similarly, Horacio Ortiz in his work on global financial elites has noted that

there is a considerable majority of male employees at the top level, and among the women occupying top positions whom I interviewed, often long arguments developed concerning the different strategies and gender roles that this male preponderance called and allowed for, not only in decision making but also in salaries and bonuses (2013: 191)

Most of my interlocutors commended the Norwegian energy industry for what they perceived as a relatively high number of women employees, also in leadership positions, compared to energy industries in other countries. I found that gender employment statistics on energy companies, and the industry more generally, were not readily publicly available. Equinor, Norway's largest mixed energy company, did not openly publicise that 30% of their total workforce was female and 70% male. This statistic was told to me by one of my interlocutors. Similarly, Norway's *Olje- og Energidepartementet* (the Ministry of Petroleum and Energy) upon request told me they had no gender statistics available. Based on my own data, out of 109 interlocutors in total, 28 people were women. Out of them, three women were positioned as top industry leaders; one woman was the CEO of an oil company, another female interlocutor the COO of a mixed energy company, and one woman a board member of an oil company. Most other female interlocutors occupied upper management jobs and some – particularly my younger interlocutors – were based in consulting or expert positions. ¹²

During my fieldwork, I enquired with both men and women how their professional roles in the industry were affected by gender identity. Most cited equal pay, parental leave, state kindergartens, and an

¹² Please note that these figures are not representative. They are included to give readers a sense of my interlocutors' demographics.

educational emphasis on gender equality amongst the institutional efforts that supported women in Norway who wanted to pursue corporate careers. Indeed, Norway is consistently ranked amongst the world's most gender equal countries (WEF 2022). However, a significant number of female interlocutors noted that they were nevertheless confronted with glass ceilings related to gender norm expectations.

Irene was amongst the female interlocutors I encountered who most vocally highlighted the gender inequalities she perceived in the energy industry to me. I first mentioned Irene in the previous chapter as she helped me attain the internship opportunity at EnergyMax. We met through her daughter Brit, whom I became close friends with at Energo. Irene occupied an upper-management position at EnergyMax, and during my fieldwork at the company we frequently met for afternoon coffee breaks. In our conversations, Irene often problematised gender inequalities. She was particularly concerned that her daughters, as well as other women in "younger generations" perpetuated rather than pushed against what she identified as continuing patriarchal behaviours in and outside of the workplace. Once, during conversation, she elaborated:

In some respects, there are no differences, and you get the same possibilities. But I think it's more the unsaid, biased opinions that maybe we're not aware of. Like, if a man says something [in a business meeting] with a deep voice, his views are taken more seriously – they are believed more. And the other men can relate to a man because he's the same gender. So, it's the unsaid things.

"Aside from the 'unsaid things'", I asked Irene, "are there also tangible differences like unequal pay?"

When you start up, it's the same but once you get a raise each year – or hopefully each year – then you start to see a difference.

"Because...?", I asked to encourage Irene to elaborate.

Because maybe they [men] are more satisfied with their work. And women are away when they have children. I also see that men often put more effort into the work they do in the sense that it means something more for them status wise.

I think maybe women are more balanced in that they really would love to spend time with their children and the job is important to develop but it's not a status symbol like it is for lots of men. And status – that's a very good driver to perform.

I think a lot of women that have been asked to take senior positions actually say "no" or just take them on for a year or two. I think that the price is too high compared to how much time you get with your family.

It's quite a different aspect than for a man. If they get a job position that's very exciting but time-consuming, they say yes because they know they have someone at home.

According to Irene, pay gaps emerged not because Norwegian energy companies compensated women and men at different salary levels, but because women would be less likely to ascend to higher-salaried positions. In my understanding, Irene did not attribute this to women working less hard than men, but to women differently prioritising family and career goals. Irene felt that men pursued their careers for status, whereas she perceived women wanting to balance corporate ambitions with their family life (see Fig. 7).



Figure 7. Women and work-life balance. Sketch by Nicola Rauter

Irene also suggested that this related to a societal expectation for women to be responsible for family and household, discouraging the prioritisation of their careers over family. During another meeting, Irene once noted: "If you have a career, you're a bad mother. If you're a stay-at-home mum, you're not ambitious enough. It's really difficult to make it right!". 13 Irene aimed to convey to me that striking a work-life balance between a woman's career and family life was difficult. Her perceptions were not only based on her own life experiences, but also on what she observed amongst her girlfriends. Back at our coffee break meeting, she continued our conversation by recounting that

A friend of mine said that her husband is going in and out of the dad role while she's staying in the mother role all the time, I think that's summing it up. Like when a man is working, he's working, and when he's coming home, he's tired, but all the things you need to do at home, it's more like they [men] are being told what to do.

Irene took a sip of her coffee, and then continued:

¹³ Extract from written fieldnotes.

You know, now the men are home quite long with their children during paternity leave. But I think it's still a different attitude. [For them] it's like having a holiday while for the woman it's more like a job.

Irene felt that societal expectations of a woman's role in the family and household impinged on their corporate ambitions. Despite the child-support infrastructure in Norway, Irene suggested that women who want to devote time to both their families and jobs are relatively disadvantaged compared to men who can prioritise their career if they have partners who take care of family responsibilities.

During our conversation, Irene mentioned that she chose to prioritise her family life over her career, even though she would have been interested in taking on more senior roles, particularly the executive positions that were offered to her throughout her career. As such, it was not that she was lacking ambitions but rather that Irene felt she was missing the opportunity to explore these ambitions due to the responsibility she felt for her family. According to Irene, gender inequalities at the workplace resulted both from women's own prioritisation of family life over their careers, but also, and crucially so, from societal (and male) expectations that associated the female gender role with a responsibility over household and family matters.

Irene's analysis corresponds to findings in the regional literature on gender inequalities. Cathrine Seierstad and Gill Kirton (2015) examined through qualitative interviews how women based in "high commitment careers" in politics and in corporations experienced work-life balance in Norway. The perception of the politicians and board members quoted in the research publication strongly echo the experiences some of my female interlocutors shared with me. In the study, many women noted that "the practical and emotional 'burden' of family still fell to women" (Seierstad & Kirton 2015: 396). Moreover, many experienced that their career choices were challenged by societal expectations, resulting in them feeling the need to justify to colleagues and constituents that they are 'good mothers' (Ibid.: 397). Further, "a considerable number of participants reported disparities in the male/female share of household duties" (Ibid.: 399). Added to this were long working hours, and last-minute job meetings that did not consider women's family time (Ibid.: 398). Some women also noted their exclusion from important decisions when meetings were held after office hours (Ibid.: 398). Overall, the scholars suggested that although

Norwegian women's capacity to combine work and family is strengthened by the progressive national welfare regime, (...) [it is] simultaneously weakened by the somewhat traditional gender culture/ideology within the workplace and wider society, where women are still perceived as the main family carers (Ibid.: 401).

Only a few of my female interlocutors noted that they did not experience or feel impacted by gender inequalities in their work in the energy industry, or in Norway more broadly. This included the three most senior female industry professionals I encountered who commended Norway and their companies as being gender equal. These women, as I learnt, also had extended, transnational professional and social networks similarly to their male, Norwegian counterparts.

By contrast, other female interlocutors noted that as women they were disadvantaged in their workplaces through exclusionary male social networking. Irene and other female energy professionals mentioned the existence of *gutteklubben* (boy's clubs) — exclusive social networks between strategically positioned men from different sectors of the Norwegian economy and politics that would meet regularly and "help each other out" professionally and socially. 'Women's clubs' with the same level of networking and corporate influence, according to my interlocutors, did not exist. As a female researcher I never had access to *gutteklubben* but first became aware of their existence at a Rotary

Club meeting in which some of the male members happily discussed their previous "Fellow's" gathering. Curious, and at the time unaware of the male-only membership, I asked what this club was about. Promptly I was told: "Sorry, but we can't tell you. You're a woman". When I interviewed men situated in the upper echelons of the energy industry, I often asked them about these clubs. Some denied their existence, others argued that they were just "friendly social circles" and not at all "nepotistic". Again others simply smiled, ignored my question, and moved on to the next topic.

Karen Ho (2009) noted in her fieldwork on Wall Street exclusionary social practices relating to difference in race, gender, and seniority. Such exclusion, according to Ho, took the form of certain finance professionals not being invited to country clubs or golf courses (Ibid. 112), as well as not being part of "the 'testosterone factor' of working with 'awesome' guys who (...) [visit] gentlemen's clubs" (Ibid. 88). My interlocutors shared similar educational backgrounds, lived in the same prestigious neighbourhoods, owned similar objects of prestige (cars, boats, cabins), and were strategically situated within the energy industry. Yet some energy professionals due to gender, nationality, age, or seniority were excluded from the socio-professional activities and networks of other energy professionals. It is precisely because of this fusion between shared backgrounds and socio-professional inequalities, that I analyse my interlocutors as part of a heterogenous energy elite community.

Analysing and Defining 'Energy Elites'

Whenever Jarle and I met, he made sure to choose an exclusive location at the centre of town. It seemed to me to amplify the air of big business around him. Always dressed in a suit with a pocket square his appearance on this day was particularly eye-catching: wearing a black coat, leather gloves and his pink tie tucked into his shirt, he appeared in front of the restaurant on a little, orange electric scooter (see Fig. 8). With snow on his shoulders, a red face and quite out of breath, he briskly walked into the restaurant, where I had been waiting for the better half of an hour: "I'm so sorry I'm late, I had a meeting with people from Dubai – and it ran over time. I then got one of those city scooters because I assumed it would be the fastest way here", he explained laughing.

I had grown accustomed to Jarle's busy and international schedule, and did not mind waiting for him in one of Oslo's oldest eateries; the interior was marked by dark wood panelling, warm, cosy lights and candles, as well as formally dressed waiters surrounded by white, starched and ironed tablecloths. Once we had both ordered our food, Jarle started recounting his "humble career beginnings".

My first job was as a plumber! Can you believe it? And then I worked as a waiter in a catering company for some time – I actually served food to the King one evening!

Later, as you know, I got into real estate. And then one day I sold a summer house and was offered a job as a rig broker. The guy I was selling the summer house for, my client, he wanted me to start working for him, and he was a rig broker, so he hired me – persuaded me I should do this instead. I thought that could be interesting. And here I am! But you know it is basically the same that you do as a real estate agent. The asset is just a lot more expensive...

Jarle laughed and then added:

But you know, I'm just a humble broker! 14

Jarle featured frequently in this chapter. Not only because he was amongst Norway's most senior hydrocarbon professionals, but because his self-portrayals, his descriptions of others in the industry reflected the dominant, male, success-oriented perspective of many of my interlocutors. Yet, the ideals he advocated and represented, however dominant, could not encapsulate the heterogeneity and variety of perceptions and imaginaries I encountered amongst other interlocutors. I analyse energy elites beyond a representation of an ideal- or stereotype. Mindful of tensions, inequalities, and shared socio-economic backgrounds, this chapter's final section arrives at a definition of energy elites.



Figure 8. Jarle on a scooter. Sketch by Nicola Rauter

This chapter commenced with an examination of the popular portrayals of energy professionals in Norway. I demonstrated that they were associated with exclusive, affluent, elite lifestyles as well as with mystery and scandal. The remainder of the chapter examined how my interlocutors conceptualised their own positions, roles, and responsibilities. I have shown that most energy professionals distanced themselves from an association with privileged, upper classes and aristocratic succession. With their emphasis on "hard work" and personal achievements, my interlocutors positioned themselves as "self-made" energy professionals and thereby echoed conceptualisations of capitalist entrepreneurs and a 'protestant ethic'. I demonstrated that some interlocutors' distinction of their positions from aristocratic inheritance patterns, resonated with historic conceptualisations of the term 'elite', where elite distinguished those who attained strategic positions based on merit. Mindful of their own positioning, I nevertheless suggested that my interlocutors' socio-economic background, lifestyles, and professional positions show their belonging to an exclusive, privileged part

¹⁴ Jarle recounted the story of his career beginnings on several occasions. This retelling is composed of audio recordings and written fieldnotes (from two separate meetings).

of Norwegian society. I thus argue that energy professionals' class backgrounds featured as part of their elite status.

Further I examined how energy professionals' private and professional conduct was guided through their ideals of transparency, trust, and humility. I argued for the importance of examining our interlocutors' ideals, even if they may fall short of their pursuit. However, I also pointed out the inequalities that arose when ideals like egalitarianism and *likhet* (sameness) were not fully enacted. Some energy professionals experienced racism in their professional and private lives. Many noted a lack of diversity within the Norwegian energy industry. Moreover, many pointed towards the continued prevalence of unequal gender norms that impeded women in their pursuit of career goals and often complicated their work-life balances. By highlighting these inequalities and discriminatory practices, I aimed to show that despite shared socio-economic backgrounds and professional affiliations, energy professionals' experiences of their workplaces highly varied.

What connects my interlocutors beyond their workplaces and socio-economic status was their desire to bring about 'good energy futures'. Many voiced a feeling of responsibility to provide energy supply and income to Norway's social welfare system and many assumed accountability for the environmental and climate impact of their industrial activities. However, my interlocutors felt that they shared the responsibilities of developing energy futures with a wider system of decision-makers. It has been suggested that elites have a tendency to "deny that they are powerful" (Mills 1956: 17). Most of the industry professionals I encountered – from managers to affluent investors and board members – understood their own positions as deeply intertwined with other actors and larger structures around them.

I see energy professionals as interconnected and interdependent with other (human and non-human) agents. Here I too note that "in a world where we are all constituted by our interactions with other beings, humans are far from the only agents on the political [and economic] scene" (High 2013: 765 [my edit]). While in the context of her research, Mette High has explored how spirit beings feature in Mongolian cosmologies, in Norway my interlocutors understood market trends, investor preferences, market economic principles, and political directives as forces and drivers – what I also refer to as 'non-human agents' – that deeply interrelated with their work activities. I found that energy professionals' perceptions and actions were deeply influenced by social norms, neoliberal market structures underpinned by socialist politics, and a socio-historical context influenced by a Nordic protestant tradition. I suggest that the professional activities of my interlocutors may be best understood as a process of mediation or relation between other agents and processes.

James Laidlaw (2010) conceptualised agency in relation to responsibility. He suggested that "agency is created, not as an inherent quality of which individuals may have more or less but as an aspect of situations in which people may find themselves, and how this effect is created by attributions of responsibility" (Laidlaw 2010: 147). For Laidlaw, the source of agency is not only within an individual; it may take the shape of an event, or non-human actor which he conceptualised as an "intermediating agent" (Ibid.: 152). As such, he suggested that people can be responsible for events and processes they "did not or could not have carried out" (Ibid.: 152).

I draw on Laidlaw here not as a means to reduce energy elites of accountability. Rather, I encourage an understanding of them as intermediating agents; as actors manoeuvring complex systems made up of corporate and political actors, citizens, voting structures, investor, and market dynamics. In these systems, energy professionals carried responsibilities for their actions while they negotiated their interests with other actors. In a context marked by increasing climate concern, rising demand for energy supply, calls for energy transitions and socio-economic welfare, energy elites – in the words of

Laidlaw – were part of "relational processes" (2010: 155). They led teams, influenced corporate strategy, financed the development of new energy technology, and ordered continued exploration of oil and gas – and they did so in relation to, and together with, a multitude of other actors and processes. George Marcus has noted that elites "are the force behind institutional processes in which others – the masses, nonelites – participate with them" (1983: 9). I suggest that energy elites are in positions of responsibility in which they develop energy trajectories in relation to other human and non-human actors.

As such, I arrive at a definition of energy elites as heterogeneous network of people with leadership and expert positions in the energy industry, who share socio-economic and educational backgrounds, and occupy common modes of life. These shared dispositions do not preclude inequalities and conflicts to arise within elite networks. Therefore, I adopt the plural, "elites", to emphasise the heterogeneity as well as unique life-paths of elites within the exclusive spaces they share. I analyse energy elites as motivated by personal and corporate achievements, ethical values, and a sense of responsibility for developing 'good energy futures'. While they have distinct energy imaginaries, and different levels of seniority, they are in strategic positions to advance energy trends, with an accountability towards, and relation to, a wider decision-making system.

Chapter 3 Oljeavhoppere (Oil Leavers) and Elite Energy Transitions

Rolf looked outside the window pensively when he said:

Everyone should ask him or herself regularly when looking in the mirror in the morning. "From society's perspective, what problem are you solving?"

Rolf and I had been talking for the better half of an hour. He noted that he had grown increasingly frustrated with his own involvement in the fossil fuel sector. During our regular meetings in his office at PetroSolutions, he often shared with me his reflections on climate change, energy transitions, and his own position in the energy industry. On this particular afternoon, we met over coffee, when mid-conversation Rolf started recounting his "daily dialogue in front of the bathroom mirror" as he referred to it. Rolf had propped himself up on his chair, cleared his throat and then continued by rhetorically asking out loud:

What problem am I solving?

In response to his own question, he exclaimed:

I'm actually creating a problem!

Now turning towards me, Rolf mimicked standing in front of his bathroom mirror and continued reenacting the reflexive dialogue with himself (see Fig. 9):

I can say what I am solving: I'm developing this nation, the welfare of this nation, secure income, making sure that we have solid welfare. I'm contributing that we make money that can give everyone a good life. I can say that, of course.

Then the follow-up question is: Couldn't you do that without the side effect of pollution?"

"Yes, I could."

"Why aren't you doing it?"

"I'm a coward." [chuckles].

Turning towards me with a slightly uncomfortable smile on his face, Rolf questioningly said:

I'm sure I'm not the only one who has these kinds of discussions in the bathroom...

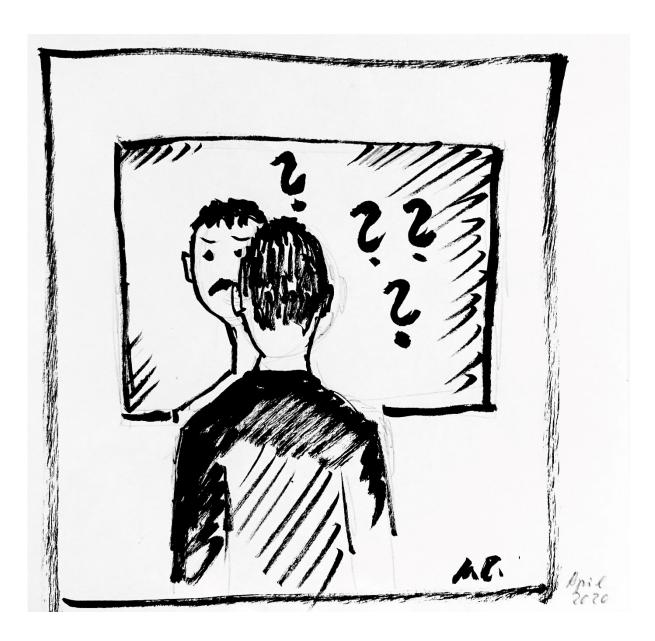


Figure 9. Rolf looking at his bathroom mirror. Sketch by Nicola Rauter

Throughout my fieldwork a significant number of my interlocutors, including Rolf, no longer wanted to work in the hydrocarbon sector. Amidst rising public climate change concerns and growing demands to decarbonise the energy industry, many started to reconceptualise oil and gas production as a polluting, sunset industry with which they no longer wanted to be associated. Others saw technological, business, and career opportunities in the growing renewables sector. In their career-mobile and flexible leadership and expert positions almost a third of my interlocutors decided to leave their hydrocarbon jobs (see Fig. 10). These industry professionals became popularly known as *oljeavhoppere* (oil leavers).

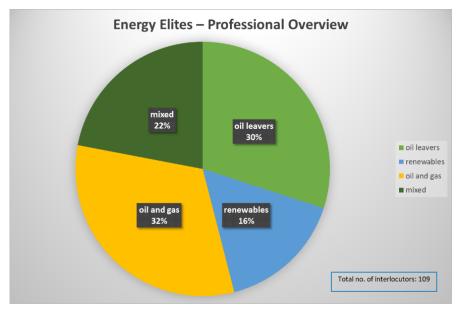


Figure 10. Overview of my interlocutors' professional affiliations. 30% were oil leavers, 32% stayed in hydrocarbons, 16% worked in renewables, and 22% worked with both renewables and hydrocarbons.

While some of my interlocutors left oil before the commencement of my fieldwork, and *olje avhopping* (oil-leaving) continued in the years after I left Norway, energy professionals' career reorientations reached significant industry attention throughout 2019 and early 2020. Oil leavers' moves away from fossil fuels – amplified by media attention following these career reorientations – publicly challenged the Norwegian reliance on, and celebration of, hydrocarbon production. It signalled that many professionals in the top echelons of the energy industry increasingly envisioned futures powered by renewable energy production.

This chapter examines the perceptions, motivations, and ethical ambitions behind the career reorientations of oil leavers. While their reasons for career changes varied, I suggest that the increasing popularity of jobs in the renewables sector was intimately related to the association of renewable energy with "good energy futures". Future imaginaries and energy transitions are intimately tied together. As Benjamin Sovacool has noted, "how people imagine energy technologies and their futures is clearly important to understanding how and why people invest in them, financially, personally, professionally, and otherwise, and it is thus a critical social facet of energy transitions" (Sovacool & Brossmann 2013: 211). Energy visions may entail "fantastic futures" and "grand future utopias" (Ibid. 204; 210; High 2022) but they may also become part of more short-term, strategic, and personal choices of how people position themselves towards their immediate futures. I suggest that my interlocutors' career reorientations away from hydrocarbons can be understood as shifts or indeed

'transitions' in the energy outlook of industry elites. These 'elite energy transitions', I argue, promoted renewable energy transitions within the energy industry and throughout society at large. As such, I posit that essential to the structural shifts towards low-carbon energy futures are 'transitions' of strategically situated industry actors who demonstrate the tangibility of renewable energy futures.

Elites and Changes

Rolf and I shared a passion for the outdoors. Besides being an avid sailor, Rolf was also a keen collector of mushrooms with a knowledge of the species so broad that it paralleled that of an encyclopaedia. In the autumn months we each spent hours individually wading through the deep forests behind Oslo on the hunt for the delicious and colourful delights. We kept in touch via phone. And whenever I felt uncertain about a specimen I had found, I would upload a snapshot to our mobile chat and ask Rolf for his opinion. In this way he prevented me more than once from putting a poisonous mushroom in my basket. When we met for coffees in his office, we would share our "hunting" stories, discuss the optimal places for specific specimen, and talk about recipes and the best way to prepare and preserve our bountiful harvests (see Fig. 11)



Figure 11. Bountiful mushroom harvest. Photo taken by author

Through this I got to know Rolf outside of his capacity as an energy professional. It helped me trust that the conversation cited at the outset of this chapter was not simply an 'act' to show me – a researcher interested in sustainability and energy transitions – that he 'cared' about reducing carbon emissions and mitigating climate change. The better I got to know Rolf, the more I understood how deeply conflicted he felt about his professional activities in the oil and gas sector and about his ideals of reaching a "clean", emissions-free, and sustainable energy future. While he had started adapting some of the social and environmental practises in the department he led – "micro-changes" as he referred to them – he felt that the "climate crisis" required immediate, large-scale action. Bringing about larger environmental shifts in the Norwegian energy industry, required, in his view, for him to leave his oil leadership position.

According to Marshall Sahlins, societal or 'cultural' change occurs when people

Learn to hate what they already have, what they have always considered their well-being. Beyond that, they have to despise what they are, to hold their own existence in contempt – and want, then, to be someone else (Sahlins 2005: 38).

Over the course of my fieldwork, I encountered several oil leavers, who along the lines of Sahlins, came to condemn their previous involvement in the oil and gas sector. Many energy *ledere* and *eksperter*, like Rolf, actively tried to pursue environmental sustainability "changes" in their companies and in the energy industry more broadly. Particularly towards the end of my fieldwork, the language of change became omnipresent amongst my interlocutors as energy companies started to integrate renewable energy projects into their corporate strategies and advertised their businesses as leading energy transitions. Narratives of 'change' were part of energy professionals' evocative language and marketing with which they situated themselves as part of the *energiomstilling* (energy transition). Notions of transitions or 'reform' in the energy industry were also employed by my interlocutors to position themselves as moral actors who were conscious of, and proactive towards, energy dilemmas (see also Smith 2019). 'Change' thus became intimately associated with corporate and ethical reorientations of energy professionals in Norway towards more renewable energy futures.

Given this emphasis on change amongst my interlocutors, I was surprised to find that there is a tendency in the social science literature to depict elites as resisting changes, and as adamant on protecting the status quo (Bourdieu 2010b; Cohen 1981; Pareto 1961). Pierre Bourdieu, for instance, focussed on examining the means by which elites maintain their 'distinct' positions in society. His work on education and cultural capital – class specific, socially-acquired, and symbolic behaviours including deportment and manners – explored how elites secure their societal positions by distinguishing themselves from others via exclusive social reproduction means (Bourdieu 1996, 2010b). In a similar vein, Abner Cohen suggested that elites aim to maintain their positions and status "by claiming to possess rare and exclusive qualities essential to the society at large" (Cohen 1981: 1). With elites being portrayed as aiming to secure their own privileged positions, there seems to be an implicit consensus amongst many scholars that "a shared trait among [elites] is their resistance to change" (Salverda & Abbink 2013: 10).

In this vein, Georg Simmel, who examined societal changes in relation to class structures, noted that

the highest classes, as everyone knows, are the most conservative (...). They dread every motion and change, not because they have an antipathy for the contents (...), but simply because it is change and because they regard every modification of the whole, as suspicious and dangerous. No change can bring them additional power, and every change can give them something to fear, but nothing to hope for (Simmel [1904] 1957: 555).

Simmel, who saw societal changes vested in the middle classes, linked elite, upper-class conservatism to an ascribed desire to preserve power, status, and position. Similarly, Tijo Salverda, argued that "elites especially in the face of change, tend to defend their interests and privileges as a reaction to external challenges to their position" (2013: 117). Salverda, who has written extensively on elite cultures, often drawing on his fieldwork amongst Franco-Mauritian economic elites, further distinguished that in order to maintain the status quo, and avoid the alteration of a situation, elites apply power defensively (Ibid. 118). He contrasted this to "subalterns" who, according to him, apply power proactively to challenge a given power structure (Ibid.: 118). Contrary to this argument, I show that many energy professionals in Norway challenged the fossil fuel status quo including their own

contributions to it. Particularly oil leavers and their career reorientations, I suggest, became symbolic for a decisive and reflexive decoupling from the oil and gas sector.

Most oil leavers I encountered moved into equivalent or slightly higher leadership and expert positions in the renewables sector. This career flexibility has been associated by scholars as a particular privilege amongst elites, where "many members of the elite follow a lifelong career by switching from one sector to another (...) for instance, ministers of finance might become bankers or vice versa, or a trade unionist becomes a prime minister" (Schijf 2013: 32). Although most oljeavhoppere secured their strategic positions in the Norwegian energy industry, I suggest that their career reorientations publicly demonstrated a shift away from dominant energy trajectories. Oil leavers chose to distance themselves from Norwegian hydrocarbons, which had for decades been associated with high-income jobs as well as the source of national welfare. Whether purposefully or not, oil-leaving ledere and eksperter signalled to other industry professionals and publics that they discouraged the continuation of the oil status quo and instead promoted low-carbon energy futures. Moreover, for many energy professionals leaving oil involved more than the pursuit of professional career targets. Their moves into the renewables sector were also motivated by ethical, environmental, and larger politicoeconomic aims to promote 'good' and 'better' energy futures. In some instances, as I will show, my interlocutors prioritised their environmental ambitions over securing their leadership positions. As such, I challenge the generalising assumption that elites' thwart changes in order to preserve their power and status positions. Instead, I suggest that the promotion of change and preservation of strategic positions is not mutually exclusive.

Indeed, I argue that elites' strategic and privileged positions situate them ideally as promoters of socio-economic, political, and environmental changes. During my fieldwork, I observed that energy professionals' job-secure, advantaged socio-economic backgrounds and career-mobility enabled their career reorientations into renewables. Oil leavers moved into renewables because they were able to and because they deemed it desirable. Their career mobility also allowed them to exemplify 'successful' career reorientations into renewables, and thereby promote a 'sacrifice-free' transition towards renewable energy futures where continued socio-economic well-being could be ensured. Oil leavers thus symbolised the possibility and desirability of renewable energy futures.

I conceptualise elites in this chapter particularly as promoters rather than leaders of changes. This is in line with my argument presented in the previous chapter, where I suggested that elites are 'intermediating agents' as part of a large, multi-actor system of decision-making. Mindful of the multitude of human and non-human actors and processes that shape transitions in the Norwegian energy industry, I argue that oil leavers popularised energy transitions, but did not necessarily spearhead them.

Problematising the 'Oil-Elephant' in the Room

When I first started my fieldwork in September 2018 energy – particularly hydrocarbon companies – had started increasing their investments into renewable energy technology and commenced their large-scall roll-out of corporate re-branding as environmentally sustainable energy providers. However, I encountered energy professionals at that time – particularly those working in hydrocarbons – as rarely questioning the underlying dilemmas between the continued reliance on Norwegian fossil fuel production and growing concerns for anthropogenic climate change. Instead, they emphasised the importance of their extractive activities as a source of revenue for the Norwegian

welfare state. At the time, my observations reflected Kari Marie Norgaard's ethnographic conclusions about climate change engagement in Norway. According to her, climate change amongst her interlocutors was "an issue about which people care and have considerable information, but one about which they don't really want to know and in some sense don't know *how* to know" (Norgaard 2011: 207). In this vein, the start of my fieldwork was marked by climate change being a concern largely acknowledged by my interlocutors, yet widely avoided as a topic of reflection.

Over the course of my research, however, this changed drastically. By the summer of 2019, climate change concerns had grown significantly in Norway – in, as well as beyond, the energy industry. In the public sphere, as mentioned, students had created momentum by regularly protesting for the climate (skolestreik for klima) and thereby contributed to what grew into a transnational movement headed by climate activist Greta Thunberg (see Fig. 12). Flyskam (flight shame), a term originally coined in Sweden (flygskam) in 2018 was increasingly used as a rhetorical device to discourage people from flying. The concept developed into a transnational anti-flight movement, which grew popular beyond the borders of the Nordic countries as "flight shame" (Gössling et al. 2020; Hasberg 2019). In Norway, feeling and even attributing shame spilled over to other parts of enviro-social life as various non-environmental behaviours started being monitored by colleagues and friends alike. Moreover, the Norwegian green party (Miljøpartiet De Grønne, MdG), with its platform of phasing out fossil fuel production, gained significant traction and won new seats during the municipal elections in September 2019, making them coalition partners in several large Norwegian cities.



Figure 12. Student protestor in Oslo with a placard translating to: "oil-elephant in the room". Photo credit: Sebastian Dahl

Within the energy industry, particularly in the hydrocarbon sector, the corporate atmosphere had also changed significantly. Fossil fuel production and its contribution to climate change had become the inevitable elephant in the room, to which the collective corporate response was the promotion of "low-carbon" and "new energy solutions", as they were termed by my interlocutors. Adapting business strategy to low-carbon energy visions was no longer a mere side hustle but became

engrained in the very structure of the energy businesses where I conducted fieldwork. Whilst hydrocarbon companies particularly prioritised the reduction of carbon emissions, other sustainability projects were also launched, including infrastructure lifespan extension, recycling, and investing in technological innovation. During this second half of my fieldwork, oil and gas businesses re-positioned themselves as companies with the skills and technology available to find climate-sustainable energy solutions. This repositioning was captured by the CEO of a Norwegian hydrocarbon company, when he told me:

We need to come up with solutions that address and solve the CO2 problems. The oil and gas industry can be a key enabler because we have the technology, and we are working on it. We need to, and we want to, be part of the solution rather than – how we are perceived today – as a big part of the problem.

During the latter half of my fieldwork, industry voices favourable to oil and gas were increasingly drowned out by the growing advocacy of renewables technology. This marked a decided shift from the centrality hydrocarbons occupied in the energy industry in previous years. In a thorough analysis of energy governance in Norway, Guri Bang and Bård Lahn demonstrated that it took five years (from 2013-2018) to redefine only slightly the long-held understanding of "oil as welfare" to a conceptualisation of "oil as risk" (Bang & Lahn 2020: 998). In contrast to this, many of my interlocutors noted an accelerated sense of change in the industry in 2019, which they attributed to companies' commitment to energy transitions. I observed that energy professionals' own reflexive and critical repositioning in the industry challenged the dominance of the fossil fuel sector. In the context of growing investments in, and development of, renewable energy technology, it was particularly the career moves of oil leavers that amplified a heightened sense of change as they rendered visions of renewably produced energy futures increasingly feasible.

Proud of, and "Addicted" to, Oil and Gas

When Rolf and I first met, he told me that he had left oil once before. A few years ago, he had quit his hydrocarbon job in order to start working for an environmental NGO, which I refer to here as EnvioNor. He spent five years at the NGO until he received an offer to take back a leadership position in his former workplace at PetroSolutions. Rolf occupied this latter position throughout my fieldwork.

When Rolf first mentioned his past career reorientation, he did not share the exact circumstances of his decisions with me. But as we got to know each other better, he eventually seemed comfortable enough to tell me the details of this career interlude at EnvioNor.

Smiling, yet moving around on his chair slightly uncomfortably, Rolf started by saying:

Actually, this is a bit personal maybe but in the middle of my job at EnvioNor I had a total breakdown. I had to be off work for a long time.

Rolf had stopped smiling; his face turned serious. While I nodded my head understandingly, Rolf continued:

I was painfully divorced. I changed work from oil to this environmental NGO. There were so many changes, so many dramatic changes, both painful and positive.

And even though I believed in the goals of EnvioNor – save the globe – I didn't always enjoy going to work because there was not a lot of trust, not a lot of helping attitude [amongst the colleagues]. It was a half poisonous workplace.

Before I could follow up, Rolf concluded his explanation by saying:

Going back to this company [PetroSolutions] – it was all these memories about the colleague culture, this helping culture, which I think is quite strong in this company. At least it used to be. It was those memories that were pulling me back here.

Rolf's career changes, like those of many other interlocutors, were not straightforward. He was juggling, as he noted, personal issues and his visions for renewable energy futures with corporate power struggles. Although leaving oil had been an important ethical and environmental endeavour for him, Rolf chose to return to PetroSolution at a time of personal difficulties because he associated this workplace with an encouraging corporate culture. As he recounted his career changes, Rolf fore fronted his ethical and social motivations. This demonstrated that 'non-material' qualities significantly informed what he perceived as a 'good' workplace. As the following section will demonstrate, energy professionals' decisions to leave their hydrocarbon jobs was underpinned by their visions for a 'good' and 'better' life for them, their families and Norwegian society at large. I suggest that oil leavers career reorientations were fundamentally shaped socio-ethical aspirations that involved inter-personal relations and their wider social networks.

The energy professional whom I initially experienced as one of the most fervent proponents of the oil and gas sector, David, later became the first oil-leaver I encountered. David and I initially met in early October 2018 at Energo. At the time, David, who was in his mid-40's, occupied an upper management position in business development at the company and had worked in the hydrocarbon sector since he graduated from university. At a meeting over coffee, he vocally expressed his pride in working for the Norwegian oil and gas sector. In a celebratory tone, he told me:

I have always been very proud of being part of the oil and gas industry. It has built the country and is also seen as a high-tech industry where a lot of innovation is driven. The perception of the industry here is very different from what I have seen in other countries. Because in Norway it is considered a special industry; it's a very valuable industry. It's the most important industry in the country. And it is where the best people try to get a job; the smartest and most hard-working are employed in hydrocarbons. It's very high status. That's why I have always been very proud of working in it.

This excerpt captures well the kind of exceptionalism with which the fossil fuel sector was treated by many industry professionals when I commenced my research. For them, as for David, working in hydrocarbons was considered a status symbol; it was associated with being "smart" and "hardworking" in a sector perceived as highly innovative and viewed as a crucial contributor to Norway's socio-economic welfare. As our chat continued, David did note the start of a shift in perceptions within and outside of the industry – away from the seemingly unquestioned appreciation of hydrocarbons towards a more critical and sustainability-oriented stance.

David's reflections were representative of the ways other industry professionals at the time conceptualised the growing tensions in the energy industry between the continued production of hydrocarbon and promotion of renewable energy. On the one hand, it seemed my interlocutors were "[perpetuating] their grasp of the present and future by monumentalising the past" (Herzfeld 2000:

234), in that they continued to see the production of oil and gas as a crucial component of energy futures. On the other hand, they dealt with the growing uncertainties of a future which they increasingly saw as unable to sustain life in the way it had done in the past.

David concluded our first coffee meeting by saying that:

We are addicted to oil and gas both in the way it is used and in the value it creates. [...] Even if you would like to [get away from fossil fuels], it's hard to do it because of their physical properties but also because we are so used to the resource (see Fig. 13).



Figure 13. "Addicted to Oil". Sketch by Nicola Rauter

David continued by justifying oil and gas production as satisfying not only people's energy but also material needs including for instance in plastics as part of every-day objects. He referred to what Jessica Smith (2019) has described as the "ethics of material provisioning". In her fieldwork in the US on mining and hydrocarbon professionals, Smith observed that her interlocutors ethically justified the need for extractive industries "by foregrounding the necessity of meeting current energy and material demand" (Smith 2019: 808; 811). By appealing to an "ethics of material provisioning", Smith suggested, her interlocutors positioned themselves as material providers and thereby moral actors (Ibid.: 812). Smith encouraged scholars not to dismiss their interlocutors' self-positioning, but rather to explore how people in "controversial industries" conceptualise the "the good" of their work (Ibid. 808). Many of my interlocutors, including David, understood oil and gas production as crucial contributors to the Norwegian social welfare system and as a geo-politically important supply of energy to other (mostly European) countries. Similarly to Smith, I understand the pride my interlocutors expressed working for an industry that others saw as polluting, as relating to a broader sense of societal duty. David and many others conceptualised their occupations as "good" and "valuable".

Considering his strong advocacy of the oil and gas sector at the time of our first meeting in 2018, I was surprised by the following exchange between David and I in mid-January 2019. We met in passing in the corridors of Energo where, after initial greetings, David smiled and said: "This is my last month at Energo. I'm moving to Wilfred Energy – have you heard of them?" I shook my head. "They are one of the biggest Norwegian renewables companies. I'm going to start working in renewables!", David elaborated excitedly. I laughed and replied: "You are going to be working in renewables? Wow, that's unexpected!" Recalling our meeting a couple of months back, where David spoke so proudly of the oil and gas sector, I was intrigued by his decision to move to the renewables sector. We agreed to set a time for a catch-up meeting once he had settled into his new job.

When we met again in late March 2019, David seemed very comfortable in his business development position at Wilfred Energy – an equivalent, yet seemingly more senior leadership position to the one he previously held at Energo. When asked what had motivated his professional reorientation, he responded:

Of course, the renewable aspect was definitely significant when it came to my career-change. I see that the oil and gas sector has a very determined future and sooner or later it will end, it's just a matter of when that will happen. But that was not my only motivation for seeking another opportunity.

David emphasised throughout our follow-up chat that he still thought the oil and gas sector was an important source of value creation for the Norwegian economy and society, and he underscored that he had not changed his view on hydrocarbons. However, I did notice alterations in the way he spoke about the sector. His statement on the inevitable end of fossil fuel production felt decidedly different to his comments a few months prior when he had hardly been able to envision a future free from an 'addiction to hydrocarbons'.

In this follow-up chat, David also described his experiences working in the renewable sector as being more institutionally supported by government, investors, and authorities compared to working in hydrocarbons. He explained that:

What I notice is that when working with renewables you have [...] more tailwind. This is different from when I was working in oil and gas. With renewables the attitude is more: 'Is there anything we can do [to help you]?'. It's much more supportive.

It seemed that David, since our last encounter, had experienced the energy industry's shifting focus towards renewable and low-carbon energy production. He began to question the extent to which fossil fuels would feature in energy futures. Increasingly David seemed to view oil and gas as a sunset industry, and consequently positioned himself at the forefront of what he came to understand as the "new energy future".

David never explicitly elaborated on the other reasons for his new professional affiliation. Based on our conversations, it seemed to me that his new job in renewables was a conscious career move; motivated by his reoriented expectations about energy futures and his personal corporate ambitions of pursuing higher leadership positions. It was not, it seemed to me, an ethical reorientation. David conceptualised both the renewables and the hydrocarbon sector as providing people with the energy they needed, thus ethically justifying both of their production and his place in either industry.

Soon after I encountered David's career move, I observed that increasingly many of my interlocutors decided to leave their hydrocarbon jobs. Eventually industry professionals' career orientations gained so much traction that it was picked up by the Norwegian media in early 2020. One article in particular, published in the magazine version of Norway's financial newspaper "Dagens Næringsliv" brought significant attention to the exodus of senior industry leaders away from the oil and gas sector (Røise Kielland 2020). It was forwarded to me by several of my interlocutors — those who themselves went through career changes, as well as by those who kept their oil and gas jobs. The article popularised the term *oljeavhoppere*, which directly translates to "oil-off-jumpers" or simply "oil leavers", and from that point onwards was widely employed to describe particularly leaders (but also other industry professionals) who left the fossil fuel sector. The notion of *oljeavhoppere* was used by the media and my interlocutors to describe industry professionals who moved away from oil and gas in order to work in renewables or in sustainability-oriented professions, rather than industries not related to energy. It was a powerful image broadcasted to the public; that energy leaders and experts who were formerly deeply established in the hydrocarbon sector, a business that for decades had been associated with Norwegian welfare and wealth, reoriented themselves to work for a different branch of the industry.

"I don't have a solution, but at least I'm trying"

The news article traced the career 'jumps' of four top leaders, and focused on the ethical and environmental considerations that prompted them to pursue alternative, climate-conscious, and sustainability-focused career paths (Røise Kielland 2020). These considerations were detailed along the lines of a moral-awakening that led the oil leavers to disentangle from their oil and gas professional roles. While all of my interlocutors, including David, listed climate concerns and visions for low-carbon energy futures amongst their motivations for switching careers, only few of the oil leavers I encountered explicitly stated them as their main reason for leaving their fossil fuel jobs. One of them was Malin, a woman in her mid-forties who had been leading a long and successful career in the upper management echelons of a hydrocarbon supplier firm.

Malin was introduced to me via another interlocutor – a female industry professional who had been friends with Malin since childhood. When she initially mentioned her friend Malin's career-change to me, she did so with both admiration and a sense of belittlement. To her, leaving a well-paid top leadership position in hydrocarbons for a job in an environmental start-up seemed praiseworthy yet a little too idealist for her tastes. To Malin, however, changing jobs was an urgent matter; working in a sector she understood as directly contributing to climate change was something Malin felt she could

no longer ethically justify. In a meeting over after-work drinks, Malin explained to me what changed her energy outlook:

I used to think it was really cool to work in the oil and gas sector, and I was proud of it. At the time I started, 20 years ago, we were not thinking about the environmental effects at all.

What changed my attitude? Well, the protest movements headed by Greta Thunberg, but mostly my children, who are aged 17 and 20 and are really engaged in the climate and environment. My children and I worry that we are heading at full speed into something we don't know the effect of. I share my children's concern for the climate future, and I no longer want to be in a position where I feel responsible for polluting the planet.

Instead, I'm trying to save the world. That sounds pompous, and I don't have a solution. But at least I'm trying. I'm trying to make a difference with this new job. 15

Malin was the only oil-leaver I encountered who accepted a new position that was not at an equivalent level of seniority to her previous hydrocarbon job. She knew that taking on a non-leadership role at a start-up was a risky choice professionally. Yet her newfound convictions about the importance of becoming an active part of energy transition and climate mitigation efforts were, as she noted herself, more important to her than preserving her top-management status. Malin's professional reorientation was amongst the few, which was also accompanied by a change in personal lifestyle choices. She decided to limit her flying – both privately and for work – and chose, together with her family, to adopt a predominantly vegetarian diet.

The changes she pursued in her professional and private life, as Malin noted, were deeply influenced by her children and climate action movements. In Norway, energy professionals' decisions to leave oil must be seen as enabled by a social and professional environment that grew increasingly favourable to renewable energy production. The advancement of energy transitions is thus not only an 'elite matter'; I suggest that oil-leaving was a result of energy professionals' engagement with, and reaction towards, growing societal climate change concerns. Yet energy elites' leadership and expert roles, I argue, imbued them with a public voice that allowed them to promote energy transitions within and beyond the energy industry. In Malin's case, the friend who introduced us and continued working in hydrocarbons, noted that Malin's actions had inspired her to advance climate and emissions targets in her own job. They ways in which oil leavers promoted energy transitions amongst their social networks, within the energy industry, and to wider publics, suggests that elites can and want to mobilise changes that may advance societal transformations. In some cases, such as with Malin, this applies even if the pursuit of transitions may involve compromising elites' own leadership status.

In our conversation, Malin noted that before leaving her hydrocarbon job, she requested to fly less and not to be put in charge of oil and gas exploration projects in Arctic waters, a location which she deemed particularly environmentally precarious. And while she recounted that her executives accommodated some of her requests, they also asked Malin to work on some projects which she deemed environmentally unjustifiable. Although Malin was in a strategic leadership position, which provided her with a sense of freedom in choosing her work projects, she ultimately felt that her hydrocarbon employer would not pursue the sustainability changes she deemed necessary in light of

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¹⁵ Extract from written fieldnotes.

her climate change concerns. Malin thus decided that leaving oil was the best way she could reconcile her corporate ambitious with her environmental aspirations.

In her fieldwork in the US, Smith (2019) similarly observed that some of her interlocutors' environmental conservation ethics led them to critically reflect on their 'ethics of material provisioning' (2019: 812). Smith noted that her interlocutors perceived a conflict between their love for the outdoors, and the damage they observed their extractive activities to do to the environment (Ibid. 812). Similarly to Malin, some of Smith's interlocutors attempted to engage their workplaces with reflexive and industry-critical questions, but when these were met with resistance, they eventually decided to leave their jobs (Ibid.: 813). These observations demonstrate that an essential part of industry professionals' ethical reorientations was a desire to be evaluative, to share their own reflexive considerations with others in their professional and corporate networks. This corresponds to the insights from the anthropology of ethics, in which scholars suggest that people are not inherently good or ethical, but that they are evaluative (see Laidlaw 2014: 3). Malin, and other energy professionals did not consider their career changes as the end goal. During our conversation, Malin repeatedly stated that she did not have solutions to environmental and climate problems, but that she was trying to be proactive. As such, Malin's career change was a decided move away from what she considered 'bad' or 'wrong' energy production, towards an uncertain but more environmentally sustainable career position where she felt able to explore how 'good' energy futures could be shaped.

Popularising Renewables

While some of my interlocutors decided to leave their hydrocarbon jobs, others aimed to reform their corporation's energy and environmental practises from within their workplaces. Determined to create a sustainable impact beyond their own careers, two of my interlocutors worked on establishing "grassroot changes" (as they referred to it) in the hydrocarbon sector when I first met them at the end of 2019 (see Fig. 14). Under the leadership of Harris, with the assistance of Nina, the strong duo had been working tirelessly on a plan to incorporate what they called "green technologies" – offshore floating wind combined with hydrogen production – into the business ventures of the fossil fuel service firm, PetroSolutions, where Rolf also worked. Harris and I got to know each other well, particularly so as we continued to stay in touch after the end of my fieldwork. Harris, whose father had also been an "oil industry leader", had spent most of his career in leadership positions within the hydrocarbon sector. He was an avid hunter and enjoyed spending his free time outdoors in the forests near his mountain cabin. In most of our conversations, Harris mentioned the importance of preserving "balance in nature", which he had come to understand as disrupted by extractive industries and other industrial activities.

When Harris and I first met, he was amidst his first career reorientation. Convinced that energy production and consumption in Norway and beyond needed to become more environmentally sustainable, Harris stepped out of his oil and gas career trajectory in order to pursue his plans for a 'new energy' section within PetroSolutions. Joined by Nina — an enthusiastic and determined energy expert in her mid-thirties who initially began working on the project in her spare time — they eventually managed to establish a renewables department within the formerly purely hydrocarbon-focused company. As the head of the newly established offshore wind and hydrogen department, Harris was able to provide jobs for a group of 15 former oil and gas employees who were incorporated into his

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¹⁶ Rolf, Harris, and Nina knew each other, but worked in different branches of this large, multinational company.

renewables project. During a post-fieldwork video catch-up call in March 2021, Harris proudly told me that he and his team had successful managed to grow the department into a renewable energy subsidiary of PetroSolutions.



Figure 14. Growing grassroot changes. Sketch by Nicola Rauter

In the process of their own career moves, Harris and Nina encouraged other hydrocarbon professionals to move into renewables. With the establishment of their subsidiary, they opened job opportunities for people with transferable skills and an interest to work in renewables. Particularly in the second half of my fieldwork, jobs in the renewables sector became increasingly coveted. Some recruiters told me that especially graduates and young professionals were interested in jobs in their companies' renewables departments yet refused to work on hydrocarbon projects. In mixed energy companies, employment in the renewables sectors rose dramatically as new projects and increasing investor interest made new workplaces available. In comparison, my interlocutors observed that it was increasingly difficult to find skilled, experienced industry professionals who wanted to take on new jobs in the hydrocarbon sector.

During my stay at EnergyMax – the mixed-energy production company where I was based for the second part of my fieldwork – I witnessed almost daily the introduction of new employees to the renewables section of the company. Whilst some of these new employees were graduates, quite a significant number were people who switched from a career in hydrocarbons to renewables. This in turn included employees moving within the company i.e., from the hydrocarbon department to the renewables department, as well as external professionals who had previously worked for different hydrocarbon firms. Whilst they almost always noted that they too were concerned with climate

change and wanted to be part of energy transition efforts, many argued that their main motivation for the switch was the excitement of a new technical challenge. This is reflected in the following excerpt of a conversation I had with Christian, whom I mentioned in the previous chapter on the discussion of gender roles. When I first met Christian, he had recently switched from a job in hydrocarbons at PetroSolutions – where Harris, Nina, and Rolf worked – to a position in renewables at EnergyMax. In one of our conversations, he told me:

There was the environmental perspective to my choice of course. But I'm not going to pretend like that was the main driver. I spent 11 years in the subsea [hydrocarbon] industry, saw tremendous technological development, which was very exciting. But that is not going to continue in the next ten years. Now it's more about doing things more cost-effectively, et cetera, which is important but not so exciting.

Christian crossed his legs while looking at his watch before continuing:

To go into [the renewables] field where everything is developing very fast technologically, where there's new solutions coming all the time, that's extremely interesting in itself. It's a field where I can contribute with my knowledge, experience, and really make an impact as well. The environmental perspective is important, but it also is extremely motivating just to see that our work in the offshore wind industry is changing things globally.

Christian's perspective showed me that the industry's energy transitions efforts created a particular corporate environment that made a career reorientation towards renewables attractive to energy professionals. Following new opportunities and driving innovation in renewables was seen as exciting, and as such perhaps comparable to how people had previously experienced employment in the oil and gas sector. Working in extreme conditions on the frontier of technological challenges used to be part of the *Oljeeventyret* (oil adventure), which my interlocutors associated with the early development of Norwegian hydrocarbons (Mork 2020; Tolås 2009). However, with increasing pressure to reduce carbon emissions voiced by vocal publics, Green Party (MdG) members, and sustainability-oriented investors, enthusiasm for Norwegian hydrocarbons seemed to be waning. Increasingly energy professionals like Christian started to perceive renewables as "new" and "exciting", and hydrocarbons as "polluting", bureaucratically challenging, and "not so exciting". Renewables, I suggest, were taking up the former position of hydrocarbons particularly in terms of the way they were perceived as innovative and frontier.

Returning to Oil and Gas

Despite the increasing popularity of renewable energy production, the oil and gas sector remained a prominent workplace in Norway. In 2020, it was estimated that 163'000 people were directly or indirectly employed in the Norwegian fossil fuel sector, which made up 6% of total employment in the country (Norskpetroleum 2022b).¹⁷ And although a significant number of energy professionals left their job in hydrocarbons, some of my interlocutors eventually returned to their fossil fuels careers. Others, particularly executives and senior managers working in mixed energy businesses, switched

¹⁷ An equivalent statistic for employment in the renewables sector was not available. Norway's statistics office (SSB) lumps together employment in electricity with "water supply, sewerage, waste management" (SSB 2022c). Moreover, scientific and IT jobs, which may involve work in the renewables sector are in different categories. It is also likely, as with some of my interlocutors, that some industry employees work in mixed energy businesses. The lack of an employment statistic for jobs in the renewables sector alludes to the continued dominance and significance of the oil and gas sector within the energy industry (see Ch. 4).

seemingly routinely between leading hydrocarbon and renewable sections of their companies. With this leadership flexibility they highlighted an inter-connectedness between the different kinds of renewable and hydrocarbon energy their companies produced.

During my fieldwork, I met one executive in particular who co-led one of Norway largest mixed energy companies. This person, who shall remain nameless and genderless in this chapter to protect their anonymity, moved from leading a hydrocarbon branch of the company to heading the renewables department, until eventually moving back to lead an oil and gas branch of the corporation. These moves seemed to reflect the company's mixed energy branding and corporate strategy. The executives' career changes publicly demonstrated that all parts of the business – even the fossil fuel branch – were involved in the corporate goal of contributing to a low-carbon energy future (see Ch. 4 on 'clean oil'). Such positions, specifically when represented by an executive from a large energy company, provided a sense of reassurance to those remaining in hydrocarbon sector at this time of transitions. It emphasised that amidst the growth of renewable energy projects, oil and gas would continue to be an important energy source in the future, and thus be a secure place of employment. It also suggested that some energy professionals, like this executive, were acutely aware that their strategic positions allowed them to promote their desired energy visions within their companies, the industry, and to publics more broadly.

Some of my interlocutors were also convinced that working for a big mixed energy company producing both hydrocarbons and renewable energy allowed them to have a bigger impact on encouraging low-carbon energy transitions than working in a company with a sole focus on renewables. Fredrik – a man who had led a successful career in diplomacy and politics – first made a move into the energy industry when he was offered a high-level management position in a large renewable energy production company I refer to as RenPower. A few months prior to our first meeting, he opted for another career move; this time into EnergyMax. Over coffee in the white-in-white, marble, glass, minimalistic cafeteria of his new office building, he detailed his incentives for moving careers to a company producing both hydrocarbons and renewable energy:

Some people say: "You work at EnergyMax, you cannot be serious about the climate." They say: "I don't understand why you chose to work there!".

Fredrik shrugged his shoulders, raised his eyebrows, and moved his head side to side to express a sense of exasperation with those types of enquiries.

You know, I came from RenPower, which is one of the largest producers of renewable energy in Europe. I think I can do more with CO2 emissions working in EnergyMax than I can do in RenPower. The competence, the creativity, the engineering brains, the will to invest and the ability to invest is larger in this company than in any other Nordic or at least Norwegian company. But let's face it: the emissions here [at EnergyMax] are very big. There is still more to be done.

While Fredrik's job reorientation was quite different to those of Malin, Harris, or Nina as it followed a career trajectory from renewables into a part-hydrocarbon company, Fredrik's professional move was similarly driven by his motivation to push for more sustainable, low-carbon energy production. In his case, it was both an ethical and a strategic choice to work for a company where he believed he could have the biggest impact to pursue his climate and energy visions. Fredrik, as he emphasised in multiple conversations, identified as a committed *energipåhopperne* ('energy-on-jumper' or 'energy joiner'), a term coined in response to the popularisation of the notion 'oljeavhoppere'.

Shortly after Dagens Næringsliv had released their oil leavers article, a response article appeared in the paper, which was sponsored by Equinor, Norway's formerly largest hydrocarbon company turned mixed energy business (see Grepp Knutsen et al. 2020). The article, as it detailed, was written by three Equinor employees — all in senior public and sustainability relations positions — who had recently chosen to join the company. They suggested, similarly to Fredrik at EnergyMax, that their moves to Equinor was motivated by their belief that the company was best positioned to deliver "clean energy" and mitigate climate change. While recognising fossil fuels as a "large part of the problem" of anthropogenic climate change, the industry professionals suggested that oil and gas would be required for several decades to come (Grepp Knutsen et al. 2020). Equinor, they advised, was best placed to produce these hydrocarbons with low CO2 emissions — an allusion to the notion of "clean oil", which will be explored in the following chapter. The 'energy joiners' article was thus a strong appeal towards the future viability of both renewables and hydrocarbons in the energy mix. It was a response to the momentum oil-leaving had created in the energy industry, and a means to emphasise that oil and gas — at least for now — were here to stay.

Concluding Remarks

Every time Rolf and I met, he would enquire whether my other interlocutors seemed to understand the gravity of the climate crisis in the way he perceived it. Particularly towards the end of my fieldwork, Rolf appeared to grow increasingly keen to leave the oil and gas sector. As he noted himself, he felt deeply ethically conflicted working in a job, which he understood as gravely contributing to the climate crisis, rather than utilising his skills in a way that could bring about energy transitions. Towards the end of 2019, Rolf started applying for jobs in the renewables sector. But he noted that he found it difficult to find a position at the equivalent level of salary compensation and responsibility to what he was holding in his fossil fuel job at the time. When I left Norway in early 2020, Rolf – the person who I experienced throughout my fieldwork as most vocally wanting to leave his oil job – still worked for PetroSolutions.

Several months later, during a video catch-up call in late 2020, Rolf told me that he finally left oil. However, it happened differently than either of us had expected. PetroSolutions had terminated the contracts of many employees as the effects of the COVID-19 pandemic put a financial strain on the oil service provider. Rolf was caught up in this process; the department he was leading was dissolved. As a result, he was given the options of either continuing to work in a leadership position in a different part of the company or taking a compensation package and leave PetroSolutions altogether. Rolf opted for the latter. He told me that the money he received as compensation was so generous that he could start his own consulting business. Moreover, he was able to continue working on some of his previous work projects as an independent consultant for PetroSolutions.

Rolf was the only oil leaver I encountered who lost his previous oil position. But even in this moment, he experienced a high level of privilege; Rolf was not let go, but rather presented with two alternatives both of which would have allowed him to preserve his leadership and socio-economic status. During our video-call Rolf appeared to be thrilled; while he noted an increased sense of risk and responsibility in being self-employed, he seemed relieved that he no longer worked in hydrocarbons. He was now able to pursue energy projects he deemed as 'good' and as actively contributing to low-carbon energy futures.

However, Rolf's career orientations also demonstrated to me that oil-leaving was not similarly straightforward and mobile for all energy 'ledere' and 'eksperter'. In his mid-50's, Rolf was amongst the older 'oljeavhoppere' I encountered. He had attributed some of the difficulty in finding a new position in the renewables sector to his age. Rolf had also blamed himself for being a "coward" as he worried that leaving his well-paid leadership position at PetroSolutions would jeopardise his ability to financially care for his family. In the words of Smith (2019) he had been torn between an ethics of financially provisioning for his family, providing energy and welfare for his country, and his increasingly strong desire to contribute to environmental sustainability. Losing his position at PetroSolutions thus allowed him, as he noted himself, to reconcile his environmental ambitions with his professional activities.

I found that Rolf's career reorientations represented the ethical conflicts other interlocutors also perceived, and more broadly the energy dilemmas that the industry as a whole was facing. As the following chapter will explore, despite growing climate change concern and the increasing adoption of renewable energy projects, many energy professionals continued to support Norwegian hydrocarbon production as they fundamentally associated it with enabling a high level of Norwegian socio-economic welfare.

In this chapter I have suggested that oil leavers were instrumental in promoting the desirability of energy transitions in Norway. Except for Malin, energy professionals' career moves away from hydrocarbons into renewables were rewarded with equivalent or in some instances higher positions and pay. I argue that oil leavers' career reorientations can be seen as 'elite energy transitions', through which strategically situated industry professionals indicated that in a career in renewables 'having it all' was possible. Through their career-flexible positions, and with their emphasis on environmental sustainability, oil leavers preserved their positions whilst promoting a change in energy trajectories towards, cleaner, renewable energy. I suggest that their career orientations corresponded to broader ambitions in the energy industry to synergise and make possible environmental sustainability alongside, or indeed through, continued economic growth (Ch. 5 further discusses sustainable growth ambitions).

For many of my interlocutors, oil leaving was a way to reconcile their environmental aspirations with their professional ambitions. Contrary to the dominant literature, which suggests that elites tend to resist changes (see e.g. Abbink & Salverda 2013; Salverda 2013; Simmel 1957), I have argued that the preservation of elites' status and their promotion of societal changes is not mutually exclusive. Indeed, I have highlighted throughout this chapter that my interlocutors' career-mobile, and relatively jobsecure positions situated them ideally as promoters of renewable energy transitions. Moreover, I demonstrated that in moving careers, some *ledere* like Harris and Nina, opened opportunities for other hydrocarbon employees to change careers into renewables. As more employees became oil leavers they animated other hydrocarbon professionals to become more receptive to the adoption of environmental sustainability measures in their jobs. This was demonstrated by the impact of Malin's career move on her friend in hydrocarbons, who noted that she too started adopting low-carbon energy initiatives in her oil and gas projects.

However, I have also noted that my interlocutors career reorientations were not as straightforward as they were portrayed by popular media. For some, oil leaving was easier as their families, corporations, and institutional environments supported their career shifts. Indeed, I have suggested

that oil leavers' career moves were encouraged by an environment that grew increasingly favourable to renewable energy production and started questioning the oil status quo. As such I have situated oil leavers in senior industry positions as promoters, not leaders of energy transitions. The promoted changes at a time where these were being demanded by publics and increasingly encouraged by the energy industry. As such, energy elites were not as resistant to changes as some scholars have suggested, but most, with the exception of Malin, promoted energy transitions and renewable energy production when it did not threaten their professional status.

Oil leavers positioned themselves as well as the Norwegian energy industry as future-oriented, sustainable, and climate-proactive. This low-carbon, renewables-embracing image to some extent allowed the hydrocarbon sector – and those energy professionals who stayed in it or returned to it – to continue to thrive. Whilst many oil and gas companies advanced low-carbon initiatives including the electrification of platforms, or carbon capture and storage programmes, Norwegian oil and gas production and its emissions continued to flourish. Why and how hydrocarbon professionals continued to promote oil and gas in Norway as energy transitions increasingly gained momentum will be explored in the following chapter. Fossil fuels, as I will demonstrate, continued to be perceived and promoted as socio-economically desirable for the energy industry and beyond.

Chapter 4 'Surviving' Energy Transitions: Welfare and 'Clean Oil'

Seniority and ambition sometimes seemed to go hand in hand with my interlocutor's availability for meeting with me. Particularly those people in the process of climbing the corporate ladder seemed incredibly busy, running from one meeting to the next, with little time for an interview not directly related to their business tasks. I noticed that it was often only through mutual friendships and connections that these interlocutors agreed to chat with me. So too Egil, who occupied a high oil and gas leadership position at EnergyMax just under the level of the executive roles. Our mutual connection was one of his team members, Leif, who himself was a senior leader in the company.

It was morning in late 2019. I had just arrived at the office when I got an E-mail from Leif informing me that his boss Egil had agreed to an interview with me, which would take place at some point in the afternoon on that day. After lunch, I kept myself busy whilst waiting for the meeting by typing up fieldnotes. Soon I saw my phone buzzing. It was Leif telling me that Egil had to rush out for another meeting, but that he could spare a few minutes down in the lobby while he was waiting for his car to the airport. A little disappointed that this much anticipated interview was going to be cut short, I quickly grabbed a pen, laptop, and my notebook and asked one of my colleagues to escort me down to the reception area of EnergyMax.

Egil was already there. On the chair next to him was his winter coat, scarf, and a small, black leather carry-on suitcase. Between hectically tapping his tablet, he was vigorously typing and scrolling on his phone. After greeting the security at the reception desk — whom I had become well-acquainted with by now — I walked over to the lounge chairs and introduced myself to Egil. As he offered me a seat, Egil said: "I'm sorry, but I'm really busy. I have to speak at a conference tomorrow and promote our carbon capture and storage (CCS) project. So, I don't have much time. The taxi is on its way. We have about 20 minutes."

Minding the limited time, I decided to skip the usual small-talk and jumped straight to asking Egil about his work on CCS. Before I could finish my first question, Egil declared:

We, who deliver fossil fuels to the world, are being blamed for climate change. This is unfair!

Greta is making fun of what we do. Politicians are becoming more careful to express their support of our industry. But we depend on the political framework!

We are being shamed for what we do. But what's important to get across, is that we are just as worried as all others [about climate change]. What is a shame, is that we are being blamed for it!

But we can choose to be producing clean energy instead of dirty energy!¹⁸

Egil had started a monologue. It almost seemed to me that he was practicing his speech for his upcoming business conference presentation. His sentences were carefully chosen, emotive, and reminiscent of a sales pitch. In a few words, he had summed up the shifting energy industry context increasingly favourable towards renewable energy production discussed in the previous chapter. Being shamed, receiving decreasing political support, and being scrutinised by the

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¹⁸ Extract from written fieldnotes

protests of activists and students headed by Greta Thunberg (whom Egil only mentioned by first name, unlike most other industry professionals I encountered) were factors that strongly affected Egil and his colleagues working in the oil and gas sector, which he was so vehemently defending. Egil and other hydrocarbon professionals felt "unjustly vilified for working in an industry that delivered a crucial commodity to the world" (Destrée 2023: 8). They were convinced that the oil and gas sector could contribute energy and climate solutions that would allow hydrocarbon production to be part of energy transitions and futures.

During my fieldwork, oil and gas continued to be explored and produced in Norway. Yet, between 2018-2020 the fossil fuel sector, and those working in it, were challenged by the momentum that low-carbon renewable energy production had gained. Egil, along with the one third of my interlocutors who continued working in hydrocarbons, were confronted with a shifting energy context where politicians and investors increasingly distanced themselves from oil and gas production. Against the outcries of vocal publics, protesting students, and climate activists like Greta Thunberg, many oil and gas *ledere* and *eksperter* were, as they noted themselves, fighting for the "survival" of their sector.

In the previous chapter I demonstrated that industry professionals can promote energy transitions by becoming part of these changes through career reorientations. In this chapter I analyse *why* and *how* the leaders and experts of Norwegian oil and mixed energy companies continued to promote hydrocarbons in a context where many of their colleagues were leaving oil. I argue that advocating the continued exploration and production of oil and gas was not simply a matter of preserving their own status and positions, as the dominant scholarship on elites would suggest (see for example Salverda 2013; Salverda & Abbink 2013; Simmel 1957). These industry professionals, as I will demonstrate, appealed to a collective, indeed societal, need for oil and gas. They promoted fossil fuels not only as an energy and petrochemical substance, but particularly as the source of national socioeconomic welfare. Their welfare narratives thus appealed to a sort of 'ethics of financial provisioning' (see Smith 2019) where hydrocarbons were imagined as the financier of the 'good life'.

Industry professionals often broadly and ambiguously employed the term *velferd* (welfare) to denote the generally high living standards in Norway, which many saw as enabled by *oljepenger* (oil money) or *oljerikdom* oil wealth.¹⁹ Particularly those interlocutors working in hydrocarbons (from now on hydrocarbon professionals) linked the notion of welfare with 'oil money', suggesting that revenues from oil and gas production directly financed public institutions such as education and healthcare. During my fieldwork, national dependence on oil and gas income to finance the welfare system became increasingly questioned. Several of my interlocutors suggested that Norway's economy and society was no longer reliant on new streams of fossil fuel revenues and that their production could be phased out. As increasingly publics and industry professionals started questioning the narratives and realities of a socio-economic dependence on oil, I observed that my interlocutors adapted their advocacy of continued oil and gas production.

Hydrocarbon professionals started promoting visions of "clean oil", which they saw as technologically 'cleansed' oil and gas production with low carbon emissions at the point of production. At the root of this notion of 'low-carbon hydrocarbons' was a techno-optimism, which promised that technological innovation and development could convert fossil fuels into a viable, low(er)-emissions energy source for the future. As such, hydrocarbon professionals aimed to secure a place for fossil fuels in energy

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¹⁹ Most of my interlocutors used the terms in English, not Norwegian.

futures by *adapting* oil and gas production to ensure its longevity. While still providing national welfare as a reason for the continuation of oil and gas production, they advocated that technological innovation – "clean oil" – could be the means to make hydrocarbons part of energy transitions *and* energy futures.

While oil leavers demonstrated with their career reorientations the plentifulness of renewable energy futures, hydrocarbon *ledere* and *eksperter* were advocating that 'having it all' was possible. They not only suggested that "what is good for the commercial economy and the corporation is also good for society" (Oka & Kuijt 2014: 36). They also implied that socio-economic welfare based on fossil fuel production can be made environmentally sustainable. Through this, they extended long-held narratives of Norwegian hydrocarbon developments as an exceptional 'success story'. Endeavouring to make hydrocarbons 'clean' and 'sustainable' can be seen as an attempt to resolve the aforementioned Norwegian 'double bind' (see Eriksen 2016; Stensrud & Eriksen 2019): the conflict between continued hydrocarbon production and low-carbon climate sustainability actions. Continuing the 'successful' exploitation of oil and gas through adjusted, more environmentally sustainable means was envisioned to remedy energy dilemmas and ensure the 'survival' of the oil and gas sector. In this chapter I thus examine the socio-ethical and technological appeals hydrocarbon professionals employed to situate oil and gas in 'good energy futures'.

Narratives of 'Oil Success'

Over the course of my fieldwork most of my interlocutors mentioned at least once Norway's "special" and "exceptional" energy, and particularly hydrocarbon, history. What made Norwegian oil and gas production so unique to them, was that the revenues from resource extraction benefitted Norwegian society at large and not just led to the enrichment of the few. A uniqueness which has also been pointed out in the literature, where Norway is often heralded as one of the few countries that developed its oil and gas reserves to the benefit of society at large (Karl 1997; Moses & Letnes 2017; Reyna & Behrends 2011).

With criticism towards fossil fuel production rising throughout 2019, many hydrocarbon professionals wanted to render explicit the interrelation between hydrocarbons and welfare. So too, Alex, a retired oil executive who continued working as an independent consultant. Introduced through a mutual acquaintance, Alex offered to visit me one afternoon at Energo, where we met over sparkling water and a coffee. During a one-and-a-half-hour conversation, Alex praised not only his own expertise and work in the sector, but particularly advocated for the continued importance of oil for the socioeconomic welfare of the Norwegian population. Taking a large sip of water, he asserted:

We have this extreme income and this welfare system. People by now have gotten used to this stable income over the years so they take our welfare for granted. They haven't thought about where it's coming from, really. They just know it's there.

Alex, as well as other hydrocarbon professionals, lamented that particularly those people who criticised the oil and gas sector had no appreciation for, and little knowledge of, its history and contribution to Norway's welfare system. Throughout my fieldwork, I observed that Norway's hydrocarbon developments and socio-economic contributions were frequently and popularly discussed in the energy industry and beyond.

The Petroleum Museum in Stavanger for instance, is dedicated to preserving and rendering public Norway's oil history. The centre of its main hall leads to a dramatically lit, relatively large showcase containing a bottle of the first produced Norwegian oil (see Fig. 15). Hydrocarbons have been similarly venerated in documentaries such as "Olje!" (Tolås 2009), which detail in six episodes the establishment of Norway's "Oljeeventyret" (oil adventure). Moreover, in 2018, the national channel NRK1 first broadcasted the drama series "Lykkeland" (State of Happiness) (Næss 2018). The show depicted how the oil discovery and the influx of oil wealth in the late 1960's and 1970's affected and enriched the society in Stavanger, known as Norway's "oil capital".

Alongside hydrocarbon-critical media releases like 'Ragnarøk' discussed in the introduction, I found that popular portrayals of Norway's fossil fuel history had a particularly valorous, adventurous undertone in their narratives, expressing a continued sense of admiration and pride for Norwegian oil and gas production. Through their presence in the news, media, and history accounts, I thus observed Norwegian fossil fuels to have an omnipresence in Norway's socio-economic life, despite their distant production offshore. What Alex perceived as a lack of acknowledgment for oil and its contribution to welfare, I instead interpreted as the re-evaluation of the significance of, and place for, oil and gas in Norwegian society at a time of shifting energy trajectories.



Figure 15. Bottle containing first crude oil extracted offshore Norway. Displayed at the Norwegian Petroleum Museum in Stavanger. Photo taken by author.

The contribution of oil and gas to the Norwegian welfare system is often cited as an illustration of how Norway – in comparison to many other so-called petrostates²⁰ – has not suffered from "oil's crazy curse" (Reyna & Behrends 2011). Norway's hydrocarbon developments are contrasted to the natural resource exploitation of other countries where conflicts, corruption, economic decline, and even war are associated with fossil fuel extraction (Karl 1997). Conversely, Norway is portrayed as exceptional; as a country that has been "least cursed" by fossil fuel discoveries and their development (Karl 1997;

²⁰ Petrostates are "capital-intensive oil exporters with high ratios of oil to total exports; petroleum industry enclaves; and enormous rents or royalties (from oil sales), which accrue directly to the central government (Reyna & Behrends 2011: 5).

Reyna & Behrends 2011: 20). Where the resource curse literature ends and paints Norway as something akin to an 'oil utopia', literature detailing Norway's success story begins. The 'Norwegian model', as it has become known, is portrayed as inspiration – perhaps even *the* model – for future oil successes (Moses & Letnes 2017) ²¹. While "'the Norwegian model' has become a byword for avoiding the negative effects of large-scale oil and gas production on a nation's market and social fabric" (Logan & McNeish 2012: 3), Norway's glorified oil narratives have also been questioned.

Helge Ryggvik is largely credited as one of the few scholars who has provided a more nuanced account of Norway's petroleum history. He highlighted that the establishment of socio-economic benefits for Norwegian citizens from oil production derived from the "presence and significance of conflict between oil actors and society, and the importance of society's determination to secure its own power and positions vis-à-vis the big companies" (Ryggvik 2010: 113). According to Ryggvik, the Norwegian oil sector managed to assert itself amidst the big international oil corporations through strategic state ownership of national companies, the expansion of local technological knowledge and skills, as well as strong bureaucratic institutions (Ibid.: 111). Moreover, he argued that a tripartite model in which companies, the state, and labour unions negotiated interests further allowed for a socio-economically beneficial and relatively egalitarian production of Norway's oil and gas reserves (Ibid. 111).

Ryggvik described the Norwegian petroleum development as an "overall success" noting that

Norway has managed to ensure that most of the economic rent from oil has gone to the state, and hence society. Although [...] the income differences between a rich elite and the majority of the population have grown, the core of the Norwegian welfare state model is still intact. A significant portion of the oil fortune has gone to expand and improve it [the welfare system] (Ryggvik 2010: 111).

Similarly to Ryggvik, Thomas Hylland Eriksen has noted an interrelation between hydrocarbons and welfare, stating that "the high level of prosperity, trust and equality enjoyed by Norway is financed by a growth economy currently based on oil and gas" (Eriksen 2016: 147). Eriksen critically evaluated this association of prosperity, equality, and trust with hydrocarbons and its implications on environmental sustainability (see Eriksen 2022). Ryggvik similarly expressed concern that the Norwegian oil and gas sector increasingly lobbied to open up environmentally protected areas including the Lofoten and Vesterålen islands for exploration. To promote the growth of the oil sector, some of my interlocutors too advocated exploration in environmentally volatile areas highlighting the contribution new areas of production could make to the social welfare system and Norway's economy. These narratives often overshadowed the environmental implications of continued and new hydrocarbon developments.

Scholars have also problematised that portrayals of Norway's oil developments as largely successful have failed to encapsulate the negative externalities that have emerged from Norwegian oil corporations' activities in other countries. Alluding to the international business activities of Equinor and Norway's sovereign wealth fund, Owen Logan and John Andrew McNeish have pointed out that

Whilst Norway is a country of wealth and peace, its ownership of a company and fund that is increasingly involved in questionable investments and dealings abroad [...] must raise questions about the continuing validity of a benign 'Norwegian model' (Logan & McNeish 2012: 8).

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²¹ See also Manley (Manley 2021) who writes about how the Scottish independence movement utilises the notion of a 'Norwegian oil and social welfare utopia' as inspiration for their independence calls.

Placing their analysis within a broader critique against the resource curse literature, the scholars voiced concerns over the portrayal of the 'Norwegian model' as ethically superior and non-exploitative. During my fieldwork, such socio-environmental concerns over the impact of continued Norwegian hydrocarbon production in Norway and beyond were increasingly voiced and revaluated against their national socio-economic contributions.

Hydrocarbon's Contributions

In 2022, oil and gas made up almost 60% of the total value of Norway's exports of goods, contributed 28% to GDP, and accounted for more than a third of the state's revenues (see Fig. 16). The state's income from oil and gas is in its entirety invested into Norway's sovereign wealth fund, commonly referred to as the "Oil Fund" (Regjeringen 2022). There it forms part of the Fund's capital with the aim of being invested to generate returns and "to ensure responsible and long-term management of revenue from Norway's oil and gas resources, so that this wealth benefits both current and future generations" (NBIM 2022).

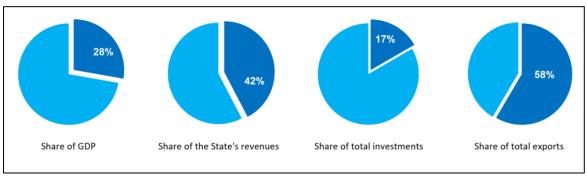


Figure 16. Macroeconomic indicators for the petroleum sector 2022 (Norskpetroleum 2022c)

Norway's sovereign wealth fund is the largest of its kind; it is invested in over 9000 companies and owns on average 1.3 percent of all listed companies of the world (Myhre 2020, 2021; NBIM 2022). To most of my interlocutors, the Fund was a guarantor of "oil wealth" for *future* generations. A closer look, however, highlights that the Oil Fund is both an investor of national hydrocarbon revenues and a mediator between these revenues and state expenditure on public services i.e., the welfare system.

The fund transfers annually the equivalent of the real return on the fund, which is estimated to be around 3 percent per year, to the government budget (Myhre 2020). This is so that "only the return on the fund is spent, and not the fund's capital" (NBIM 2022). The real returns of the Oil Fund cover about 20 percent of the fiscal budget, with the remaining 80 percent deriving from other revenue streams and tax receipts (Myhre 2021: 170). The returns of the Oil Fund thus cover a share of national expenditures and therefore partly finance "expenses for health care, higher education, infrastructure, defence, diplomatic services, development assistance, and social benefits—including public pensions" (Myhre 2020 n.p.). This contrasts how many of my interlocutors portrayed oil and gas as directly financing *all* of Norway's welfare infrastructure.

Indeed, in an effort to avoid resource dependence and protect against volatile hydrocarbon markets, the Oil Fund was specifically devised as a means to financially disassociate the Norwegian state from its 'oil wealth'. The Fund, is therefore intended to

reallocate mineral wealth in the ground into a financial fortune invested abroad. It replaces an unstable revenue stream from oil and gas with a more stable cash flow from the world's corporations. As such, it diversifies the national wealth, and reduces its risk and exposure to the oil-price (Myhre 2020 n.p.).

This financial mechanism has created an Oil fund that is now up predominantly made up of the fund's returns on investments, not oil and gas revenues. The website of the fund states that:

Although revenue from oil and gas production is transferred to the fund, these deposits account for less than half the value of the fund. Most of it has been earned by investing in equities, fixed income, real estate and renewable energy infrastructure (NBIM 2022).

Despite efforts to create a financial system independent of volatile market oil revenues, hydrocarbon professional's narratives that advocated oil as welfare communicated a dependence on fossil fuel extraction. To my knowledge and surprise these narratives of dependence on hydrocarbons have not yet been examined in the regional or broader literature. During my fieldwork however, with growing environmental and climate concerns surrounding the production of fossil fuels, some of my interlocutors increasingly scrutinised the relationship between hydrocarbons and welfare. Citing the financial mechanisms of the Oil Fund, these oil-critical interlocutors suggested that Norway had grown independent of fossil fuel income and that their production could thus be phased out. It is in this context of shifting petroleum sentiments that I analyse in this chapter hydrocarbon professionals' strategic positioning and advocacy of their sector. Taking seriously their deep worry that life "as we know it" would cease to exist without oil, I examine how hydrocarbon professionals constructed, communicated, and perpetuated the significance of oil and gas as a guarantor and financier of the Norwegian 'good life'.

Elites and Wealth

One cold winter afternoon, Rolf invited me to his office in the corporate-industrial district of Oslo. After our usual pit-stop for hot drinks at the café in the lounge area of PetroSolutions, Rolf and I sat down in one of the meeting rooms nearby and started chatting. While balancing back and forth on his wiggly chair, Rolf told me how commendable he found it that Norwegian oil and gas revenues are invested for the benefit of all citizens rather than monopolised by the few for their personal enrichment. Making his point in a series of rhetorical questions, he said:

There is actually an extremely interesting thing, and that is: what other country, what other people would accept winning the lottery, and then allow the state to take the whole sum and put it in the bank? This is what the oil fund is, right? You don't get to use anything, but it is invested for everyone for the future.

Rolf particularly pointed out the role of Norway's sovereign wealth fund as a guarantor of wealth for future generations. For him it was important to highlight that oil and gas revenues in Norway were diligently managed to serve a purpose beyond the enrichment of the few.

Rolf's straightened his posture, took a sip of coffee, and then continued:

Where else would this happen? Think about all these riches that we could have had! We could have been Saudi Arabian sheiks all of us, but despite this we think it is okay. Most Norwegians are okay in giving that money up for the good of all!

Elites tend to be associated particularly with their private wealth and fortunes. Although some scholars have warned against conflating elites with "wealthy classes" (notably Scott 2003, 2008) others conceptualised elite status as intimately related to affluence. In an analysis of political elites in Indonesia, Deasy Simandjuntak has for example identified elites as "distinguishable from the masses by their wealth as well as their luxurious possessions and lifestyle" (2013: 96). She further added that "signs of superiority, both in the forms of wealth and embodied qualities, function to assist elites to further political interests" (Ibid. 96). Others have also related elite's financial capacities to the ways in which they exert socio-political influence and yield economic power. Sean Field in his work on oil financiers in the United States has similarly shown that wealth enables industry experts "to exert control on the world around them through the purchase and ownership of assets, companies and labour" (2021: 307). Field's analysis suggests that for elites, wealth can be a means to extend their corporate influence and manifest their status and position. He further noted that

wealth (especially extreme forms) enables individuals' capacity for elite agential social action – it can release individuals from the necessity to work to earn money, give them the capacity to exert social influence through philanthropic activities, and endow them as aspirational symbols of prestige (2021: 307).

Field interpreted wealth as a self-perpetuating extension of elite's agency, as their assets generate further income and thus solidify not only their financial positions but also their status as elites. Field's notion of a wealth that works for itself, that "releases individuals from the necessity to work", is reminiscent of Thorstein Veblen's ([1899] 2007) portrayal of the leisure class. Veblen defined people of "leisure" as those who engage in a "non-productive consumption of time" with the "pecuniary ability to afford a life of idleness" (2007: 33). Veblen contrasted these to the "industrious class" whose "ordinary means of acquiring goods is productive labour" (Ibid. 28). In both Veblen's and Field's cases, wealth is presented as a type of *perpetuum mobile* that not only continuously aggregates but also frees individuals from the necessity of having to actively work. Wealth for people in these affluent positions, is thus portrayed as foundational to their 'elite' mode of life.

By contrast, many of my interlocutors emphasised not their own wealth, but portrayed a collective oil wealth as essential to secure the 'good life' for Norwegian society at large. Rather than self-identifying as affluent, interlocutors like Rolf underplayed their own enrichment from oil and gas and instead highlighted Norwegians as "rich", "super-rich", "privileged", and Norway as having "the biggest economy", and being "the richest country in the world". This collective wealth, the wealth of "us" – to phrase it in terms of Janteloven (Sandemose 1936) – was seen as socially appropriate to highlight and indeed a reason for being collectively proud.²² Frequently emphasising their own "hard work" in oil and gas, hydrocarbon professionals identified their oil and gas activities as crucial contributors to Norway's socio-economic welfare. While, as discussed above, there have been examinations of elites' relation to their own, personal wealth, scholarship thus far has not explored how elites may identify a broader societal responsibility to provide a 'collective wealth' for socio-economic welfare.

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²² See Ch. 2 for discussion of *Janteloven*.

While I explore in the following section how notions of a Norwegian 'oil wealth' and 'oil welfare' were advocated by hydrocarbon professionals, I do not intend to conceal my interlocutors' privileged positions and their own, personal vested interests in the continuation of the hydrocarbon sector. However, I aim to demonstrate that elites' promotion of oil and gas trajectories encompasses many reasons including personal and corporate ambitions as well as ethical and societal aspirations. In this vein, Pauline Destrée (2023) in her work on hydrocarbon production in Ghana, has pointed out that industry professionals' motivation to work in the oil and gas sector goes beyond a mere accumulation of profits and involves wider aspirations including the pursuit of freedom, love, and family life. As such, I suggest that it is essential to explore the ethical and societal ambitions that underpinned hydrocarbon professionals' corporate narratives of 'welfare through oil', to understand how fossil fuels featured in their visions of 'good energy futures'.

Why Oil? Wealth, Luck, and Fortune

For many of my interlocutors the influx of wealth resulting from hydrocarbon production was intimately associated with luck and fortuity. In the vignette above, for example, Rolf described oil as a 'lottery win', signifying not only the scale of wealth but also its chance occurrence. Another interlocutor, Martin, once metaphorically portrayed oil as a gold treasure. Martin was amongst those interlocutors who most vocally supported fossil fuel activities in Norway. He worked in upper management for one of Norway's largest privately owned oil operating companies. While the big (partly-state owned) corporations like EnergyMax had reoriented their strategy towards becoming a mixed energy, low-carbon business, Martin's company proudly and adamantly marketed itself as a through-and-through oil business exclusively centred around hydrocarbon production. Its high-level employees, including Martin, represented this pride in, and devotion to, fossil fuels.

Martin and I first met early one morning at his office in the industrial area of Oslo where the company headquarters were located. It was winter, and still dark at 8.30 in the morning. The smell of coffee penetrated the corridors of the building. The office décor was marked by hard wood, bronze metal detailing, with high ceiling lamps, and reminded me more of the entrance of a Swiss bank than a hydrocarbon firm. The look of this company was decidedly different from those of the state-owned and partly state-owned corporations. The latter too, invested in representative interior architectural design with an emphasis on grand, spacious, naturally lit lounges and conference rooms. Yet, the design of the state-owned businesses seemed more geared towards representing the pragmatism and engineering of its business endeavours. By contrast, Martin's company design oozed an air of private corporate success.

After showing me around his offices and introducing me to some of his employees, Martin and I sat down in a small meeting room, equipped with steaming cups of coffee that were embossed with the logo of the business section Martin headed. In our conversation I asked Martin about the much-debated oil and gas extraction in the High North of Norway, where untapped, large hydrocarbon reserves were expected in Arctic Waters. Discussions on whether these reserves should be produced had recently re-appeared in the Norwegian news. Martin was supportive of Arctic oil and gas activities. In his view, all potential Norwegian hydrocarbon reserves should be explored so that maximum extraction of fossil fuels could continue to generate income flow. To illustrate this, he asked me to "imagine this for yourself: there is a pot of gold over there!" He pointed with his index finger across the room towards a blank greyish-white wall, animating me to use my imagination to visualise a gold treasure. He continued:

You can choose to go take it, or you can choose not to. Whatever you choose, it won't affect the richness of the world. But it will greatly affect *your* richness. The path to that gold might have some risk, and it might incur a cost to mitigate the risk. This may make the gold less valuable because you have to pay a bit extra to get there. But nevertheless, it makes sense for you to get it.

Martin took a deep breath and leaned back on his chair before concluding:

So, for Norway, yes, absolutely, if we want that free gold up North, then we have to go for it. For Norway, it's a huge effect, because it's money for Norway (see Fig. 17).

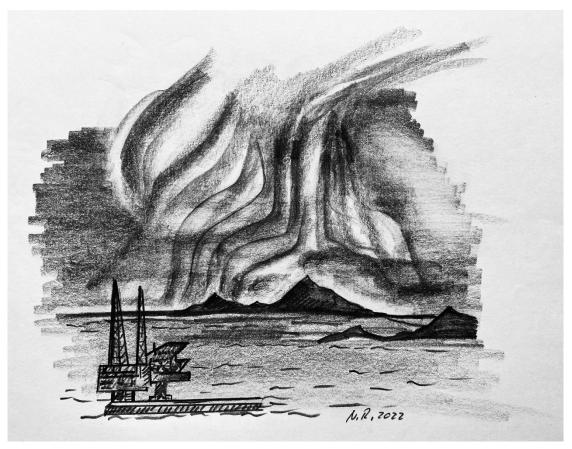


Figure 17. Arctic hydrocarbon production. Sketch by Nicola Rauter

Martin as well as some of my other interlocutors saw Arctic oil as an economic opportunity not to be missed. By asking me to imagine "a pot of gold" and by describing oil as "free gold", Martin encouraged an understanding of oil as a lucky fortune similarly to how Rolf had identified oil as a lottery win. Notions of luck, wealth and fortune were thus not only associated with past and present hydrocarbon production, but also potential future discoveries. Drawing on this adventurous notion of an undiscovered fortune, Martin relativised the cost of hydrocarbon production to an elusive "risk", and thereby portrayed Arctic oil and gas extraction as an overall economic benefit for Norwegian society. In conversation, he even pointed out that due to the drastic effects of climate change, Arctic surface sea ice formations were declining, thereby making oil and gas extraction in the High North more accessible. As such he conceptualised the effects of climate change as an economic opportunity and enabler of future oil and gas activities (see Fig. 18).



Figure 18. Melting glacier in Svalbard, better known as 'Spitzbergen', an archipelago in the Arctic Sea under Norwegian territorial sovereignty. Although I was told by locals that these types of glaciers undergo cyclical processes of 'calving' i.e., melting into the sea, the regeneration of sea ice has been affected by higher temperatures related to climate change in recent years. As my tour guide during a Svalbard visit explained, glacial melting is now taking place at an unprecedented speed. Photo taken by author in June 2019.

Martin and other interlocutors seemed to associate fossil fuels with a particular type of economic fortuity; a "pot of gold" is not only a lucky find, but also an economically enriching discovery. For other interlocutors, luck extended to Norway's societal welfare and relatively high standards of living. Once during a conversation Katerina, a consultant at EnergyMax, told me:

[In Norway] we're just so used to having it so well. We can afford so many things. We have a combination of personal wealth and this fantastic welfare state [...] We don't realize how lucky we are.

Katerina associated both personal wealth and societal welfare deeply with Norway's hydrocarbon production. For her, hydrocarbons seemed to be a sort of 'bearer' of privilege and luck. Scholars have suggested that luck can be seen as a "spiritual form of wealth" (Rakopoulos & Rio 2018: 285). In the Oxford English Dictionary, luck is defined as "gain, profit, financial advantage" (OED 2022b: 1). It is also described as "the chance occurrence of situations or events" (Ibid. 2a). These definitions seem to link luck with a pecuniary, financial dimension. By extension, I suggest that hydrocarbons, and consequently "oil wealth", can be conceptualised as the physical embodiment of luck. To many of my interlocutors, oil was more than business and profit; it was understood as the substance that brought fortuity to Norway through its discovery. My interlocutors however conceptualised the resulting fortune as a result of their "hard work" in producing that oil and gas. As such, to them Norway's "oil success" and associated social welfare was not only the result of luck, but particularly of diligent work and of prudent resource management.

This is similar to what Mandana Limbert (2015) observed in her work on oil in Oman, where the discovery and production of hydrocarbons was deeply associated with the influx of wealth. As Limbert

noted however, predictions about oil-depletion amongst her interlocutors led to understandings of oil wealth — and resulting fortunes — as fleeting and transitory. One of her ethnographic encounters in Oman resembled the ways in which some of my interlocutors envisioned the end of the oil and gas fortune in Norway. Limbert detailed that

One elderly and wealthy man that I knew [...] built a palm-frond hut in his back garden explaining to me that he did this because his children had no understanding of where they came from. [...] [His] point was that society had been poor. His incentive however, for building the palm-frond hut in his garden was not to educate his children about the past. He said he built it because "this is where we came from and this is where we will return" (2015: 350).

According to Limbert's analysis, this ethnographic encounter reflected an anticipation of an energy future in which the end of oil production would be accompanied by an end in wealth and privilege. As such, Limbert's work suggests that oil, similarly to luck, is a substance that can bring momentary financial gain. But as it disappears, so does the good fortune – both metaphorically in terms of luck and physically in terms of a loss of oil income. In Norway my interlocutors envisioned similar scenarios about the end of oil.

The End of Oil as the End of Welfare?

With increasingly vocal public demand for phasing out oil and gas production throughout 2018-2020, my interlocutors particularly voiced concern over a lack of future demand for hydrocarbons. Although some seemed troubled about the prospect of oil depletion, the majority felt that the "survival" of their sector depended on their ability to advocate a continued need for oil and gas. So too Ketil, who was the head of fossil fuel investments at one of Norway's largest banks. Ketil argued that the members of the public who called for the termination of hydrocarbon activities in Norway were conjuring their own "social and economic suicide". With this, he aimed to illustrate that the shut-down of the oil and gas sector would most of all affect Norwegian society, and not just those employed in the sector. In a conversation at the offices of his bank in the modern, financial district of Oslo, Ketil painted a dramatic picture:

That argument which sometimes pops up in the national debates is that you should just cut out oil and gas.

This would be social and economic suicide! Some researchers and young politicians, the youths, are seriously suggesting to shut down everything!

Visibly distressed only by the suggestion of an end to hydrocarbon activities in Norway, Ketil loosened his tie, drank a sip of water, and then, after a deep breath elaborated:

If we do this, we will lose everything! We have 30%, 40% of everything in Norway in terms of private employment, in terms of investments, in terms of tax income from the oil and gas industry. It would be our collective suicide!

Ketil imagined a potential end of the Norwegian oil and gas sector as an apocalyptic event; he envisioned such a shutdown would not only entail the demise of the sector itself, but as having particularly detrimental effects on the social and economic welfare in Norway. To Ketil the success of

the oil and gas industry intimately related to the flourishing of the social welfare system, to the creation of workplaces, as well as to economic growth. Similarly to Limbert's (2015) interlocutor, Ketil anticipated that both the presence as well as the absence of oil would deeply influence Norwegian society. Illustrating this contrast, he continued:

In Norway we have a big pension fund. We also have a very high standard of living because we have a very good social system. But this system needs to be financed. So, even if it may be possible to do without the oil income, it would mean a big change in the everyday life in all regions in Norway.

Ketil opened his eyes wide to give his statement extra emphasis. He moved closer to me and lowered his voice slightly to say:

Particularly the more challenged end of the social spectrum, and the people that are more dependent on state support, they would suffer the most.

The rich people, they would get by no matter what. They don't need the pension fund at all.

Leaning back towards his seat, looking decidedly more comfortable than earlier, he concluded:

From a social point of view, I think the responsible thing is to continue to have that [oil] income for the benefit of the Norwegian population.

Ketil, like other interlocutors, saw hydrocarbons as enabling Norway's high standards of living — not only for energy elites but for all of Norwegian society. In his description of a future without fossil fuel income, however, he envisioned a breakdown of what he currently conceptualised as an 'oil-funded', egalitarian socio-economic system. It would be a grim future where inequalities and differences would reign and socio-economic distinction between rich and poor would start to emerge. Suddenly elites, and "rich people" would be distinguished as such, and those without money would be left without support. In this dystopian future without oil and gas, Ketil imagined the shared privilege from social welfare financed by 'oil wealth' would break down.

The apocalyptic visions of a Norway without oil and gas provide insight into not only how Ketil envisioned the future, but also how he saw the present as dependent on hydrocarbons. This indicates a perceived omnipresence of fossil fuels, where even the absence of the substances is expected to have an effect on society. It also suggests that oil and gas are perceived and communicated as more than a wealth generator; Ketil portrayed hydrocarbons as the source and enabler of a privileged, relatively egalitarian society. Fossil fuels for Ketil were the financier of the 'good life'; an equaliser between classes and remover of hardship and social barriers. As such, Ketil situated himself as the promoter of continued oil and gas production not primarily for his own benefit – because his economic status, he implied, would be secure no matter what – but for the welfare of society at large. In this way, hydrocarbon professionals like Ketil were able to legitimise the continued relevance of the oil and gas sector in Norway at a time of mounting public criticism against Norwegian fossil fuel activities and increasing deployment of renewable, low carbon energy solutions in the energy industry.

Although hydrocarbon professionals like Ketil perceived and communicated an interrelation between continued fossil fuel production and the upkeep of Norway's social welfare system, narratives of "oil as welfare" (Bang & Lahn 2020) were increasingly questioned outside and within the fossil fuel sector.

With growing support for energy transitions, energy professionals gradually scrutinised the validity of hydrocarbon-dependent welfare narratives. So too Katerina, the aforementioned consultant at EnergyMax, who previously occupied a position in the company's hydrocarbon department but since had moved into their renewables section. During an interview she told me that her teenage daughter struggled with Katerina's job at a company still involved in fossil fuel production. Although Katerina had left oil and was now only working with offshore wind energy, her teenage daughter was critical of EnergyMax's marketing as a broad energy company. In an effort to introduce her daughter to the renewable energy projects the company was working on, she brought her into work one day. According to Katerina, this was a disappointing experience for both of them (see Fig. 19). Contritely Katerina recounted:

My daughter started crying, she thought we were doing a lot more [at EnergyMax]. For me, that was a bit hard. I was quite sad after this discussion but at the same time, she's young, she has a right to see things as she sees them. She doesn't sufficiently appreciate how long time it takes to turn—

Katerina appeared to struggle finding the right words. She briefly paused, and the continued by saying:

You can't do a 360 with this kind of company. You can't, and it wouldn't be right either.



Figure 19. Katerina and her daughter. Sketch by Nicola Rauter

Although Katerina expected energy transitions away from fossil fuels to be a long-term endeavour, she empathised with the urgency her daughter associated with the decarbonisation of the energy industry. Similarly to Malin introduced in the previous chapter, who was in large part inspired by her children to become an oil-leaver, Katerina also noted that her daughter had an impact on her energy views. Throughout our conversations, I observed for example that Katerina frequently used the terms "dirty money" to describe oil revenues. This, as I later learned, was an understanding she adopted from her daughter. According to Katerina, "in Norway, every school, kindergarten, hospital is touched by the dirty money". Katerina, like many other interlocutors, conceptualised a direct link between public spending and the revenues from Norwegian hydrocarbon production. As she increasingly saw oil and gas activities as harmful and polluting to environment and climate however, she started to perceive the revenues from hydrocarbon production – and by extension their contribution to social welfare – as "dirty".

In her work on gold extraction in Mongolia, Mette High (2013: 681) observed that money accrued from mining activities was considered "dangerous", "heavy", and "polluted" as it disturbed cosmological divisions. High described how mining workers engaged in rituals whereby they sought the help of Buddhist lamas to cleanse the 'polluted money'. If the 'polluted money' could not be cleansed, High detailed that it was invested in perishable goods like food and alcohol in an effort to break the material chain of pollution (Ibid. 681-682). According to High, "polluted money [underscored] the moral strains that many people face[d] when manoeuvring within economies of mineral extraction" (High 2013b: 677). High (2017) further demonstrated that in Mongolia extraction of natural resources not only had a direct socio-economic and environmental impact at the site of their extraction, but also formed part of socio-cultural dynamics throughout the money's entire supply chains.

In Norway, the process of investing national hydrocarbon revenues into the sovereign wealth fund to benefit the current and future Norwegian society, could similarly be considered a means of moral purification. Yet interlocutors like Katerina considered the income generated from oil and gas production to be "dirty money" irrespective of how this revenue would be spent or invested. Similarly to how High detailed the perception of pollution throughout supply chains, Katerina too imagined "dirty money" to permeate society and economy via the social welfare system. While other interlocutors ethically justified continued fossil fuel production because national revenues could be used for the "good of all", Katerina came to understand this argument as a fallacy. During our chat, she elaborated:

It's not just oil, oil isn't everything! This is also a misconception.

Katerina sighed deeply, and then lifted her fingers to indicate quotation marks while paraphrasing in a sarcastic tone of voice:

"Without oil we'll go into complete economic crisis"

Putting her hands down, she instead suggested:

I don't believe we will, but it will change our lives!

Katerina did not imagine the end of hydrocarbon production in Norway as a dramatic socio-economic shock in the way that Ketil had done. But she too expected that along with the phasing out of oil and

gas production, and thereby a loss of the "dirty money" revenue stream into the social welfare system, average living standards amongst Norwegians would decrease. Katerina's reflections demonstrated the pervasiveness of 'hydrocarbons as welfare' narratives to the extent where even those interlocutors who questioned the relationship, imagined futures without fossil fuels as adverse compared to the present with oil and gas.

The dominance of hydrocarbon-related welfare narratives was critiqued by other interlocutors, including Ludvig, who was an economist leading a corporate strategy team at EnergyMax. He was amongst those industry professionals who became convinced that in the short run the oil and gas sector needed to become more sustainable until it would eventually be rendered obsolete altogether. As such, he welcomed increasing public criticism of oil and gas production, once telling me – rather contentedly – that:

Public opinion and the citizens will be the main driving force behind the energy transition. This might be the case especially for this company because we are partly owned by the Norwegian state, and basically, if we do something that doesn't harmonise with the public view, we are likely to get some interference from that. Though so far, the public has never done this.

Basically, up until now we could have done whatever we wanted, but now that has changed. If we do some deals, if we buy into some – in 2011 for example we bought into some oil sands – that was a terrible investment, and environmentally unsound. If we had done that today, we would be gone.

This excerpt reiterates the argument I have made in previous chapters; that elites' energy decisions must be seen as part of a wider decision-making system consisting of a wide range of actors and processes, including publics. Ludvig highlighted that continued oil and gas production in Norway required continued public support, which — as he observed — however seemed to be dwindling. This perceived need for public support, I suggest, is one of the reasons why hydrocarbon professionals like Ketil so strongly promoted narratives of the interrelationship between welfare and hydrocarbons. Ludvig however argued that Norway's social welfare system was not as reliant on oil and gas revenues as it was made out to be by some of his colleagues.

Ludvig continued:

Norway is the one Scandinavian country producing large amounts of oil and gas. But all of the Scandinavian countries are rich to almost the same extent. Basically, it comes down to how we are politically and bureaucratically organised.

Going forward we *need* to transition. We need to change. If we are lucky, we can transition into renewable energy sources, and can continue with the same level of consumption, maybe not at the same level, but at a fairly good level without polluting too much.

Ludvig was convinced that the success of the Norwegian welfare system relied on its organisational frameworks and not necessarily on oil and gas revenues. This understanding mirrors what has been noted in the literature. Terry Lynn Karl in her seminal work "The Paradox of Plenty" (1997) related Norway's prudent management of hydrocarbon resources to its bureaucratic foundations, which had been in place before the discovery of oil. Moreover, contrary to the narratives perpetuated by many

interlocutors, which suggested that Norway was a relatively "poor country" prior to hydrocarbon production, Karl argued that:

Norway in the 1960s was already one of the world's wealthiest, most equitable, and most democratic countries. The most thinly populated country in Europe was characterized by relative cultural homogeneity, relatively low levels of urbanisation and a diversified economy based primarily on agriculture, forestry, fishing, shipping and manufacturing. Unemployment was close to nil, growth had been steady for two decades, and poverty was virtually eliminated by a welfare state supported by a diversified tax base (1997: 216).

According to Karl, Norway had a "highly developed state bureaucracy" upon the discovery of hydrocarbons in Norway distinguishing it from other petrostates (Ibid.: 217). Karl's analysis of the prehydrocarbon era in Norway, suggests that it was bureaucratic state institutions that had established the welfare system and significantly impacted the relatively equitable management of hydrocarbon revenues. Although Ludvig may not have read Karl's analysis, his arguments aligned with her work; suggesting that at the root of the Norwegian welfare system sat a democratically run bureaucracy that has existed before hydrocarbon extraction and may well continue when hydrocarbon production is phased out.

Moreover, to Ludvig, encouraging a low carbon energy transition took precedence over a continuation of the current standards of living. As a critic of capitalism's infinite growth model, Ludvig identified high standards of living and lavish lifestyles as invariably part of the climate problem. To him, the desire for continuous and increased consumption was inextricably linked to increasing emissions. As such, he viewed the upkeep of the social welfare system via the continued production of fossil fuels as ethically – and particularly environmentally – questionable. According to Ludvig, keeping up the same level of welfare in Norway could only be justified if it was done in a way that would not be harmful to the climate and environment, such as through revenues from renewables rather than oil and gas, and with more sustainable patterns of consumption.

Ludvig envisioned an energy future disentangled from oil and gas production and from the high-emitting consumption patterns he associated with a hydrocarbon lifestyle. Stephanie LeMenager, in her analysis of oil's cultural significance in the US, has argued that "the centuries of work we've done as modern humans to immerse ourselves in oil means that in fact we are loathe to disentangle ourselves or our definitions of life from it" (LeMenager 2014: 7). Many of my interlocutors noted that they could not and did not want to imagine a future free of fossil fuels. They saw a deep-rooted interconnection between hydrocarbons and the 'Norwegian way of life'. As Norgaard has noted, in Norway "economic prosperity and way of life are intimately tied to the production of oil" (Norgaard 2011: 70).

In his study of cultural and political significance of oil in the United States, Mathew Huber (2013) conceptualised oil as the "lifeblood" of American society. With this notion he described oil's deep entanglements with socio-political, and economic life in the US. He noted an "addiction" to oil beyond its material and energy use, arguing that oil has been deeply engrained into everyday life practises as well as geo-political ambitions (Ibid. xii). According to Huber, oil in the US occupies a socio-cultural space in people's ways of thinking and feeling deeply associated to their ideals of "freedom" and "individualism" (Ibid.: xi). In Norway too, hydrocarbon professionals' narratives of 'oil as welfare' suggested an understanding of hydrocarbons as Norway's "lifeblood" with fossil fuels serving a deeper

societal purpose beyond economic profits. I argue that hydrocarbons were associated with enabling an egalitarian and plentiful Norwegian way of life.

With increasing criticism towards Norway's oil and gas production however, narratives that associated hydrocarbon incomes with national welfare started to be questioned by industry professionals and wider publics. These critical reflections were captured in the aforementioned study (Ch. 1), commissioned by the Norwegian Oil and Gas Association (*Norsk Olje og Gass*), which found that particularly younger generations could not relate to the oil sector's welfare arguments in the face of climate change (Ali et al. 2018). Many hydrocarbon professionals – as Alex in the excerpt at the outset – lamented that publics and particularly younger generations did not show an appreciation for hydrocarbon's contribution to socio-economic wellbeing in Norway. Gradually my interlocutors felt that their welfare arguments no longer resonated with their colleagues, families, and wider publics. Refocusing their advocacy, hydrocarbon professionals started promoting notions of "clean oil and gas" as solutions and supplements to energy transitions. "Clean hydrocarbons", as the following section will discuss, was the premise of technologically purified oil and gas to lower their carbon emissions. Deemphasising welfare narratives, my interlocutors started to promote a techno-optimism through which they saw hydrocarbons as viable future, low-carbon energy sources.

Promoting "Clean Hydrocarbons"

Back in the Lounge at EnergyMax, Egil, whom I introduced in the vignette at the beginning of this chapter, had just hung up the phone and briskly walked back to his chair. "Where were we?", he asked as he jotted something down on a notepad. Before I could respond, he continued:

Oh yes, that's right! We are labelled as those who don't want to solve this. But we, the industry, can make an impact!

Egil checked his watch before elaborating:

Look, there are two types of energy: the energy that is consumed right now like an ice cream, which includes wind and solar. And then there is energy that has been stored for millions of years, which we extract from the ground. These molecules are attractive because they are stored energy. Finding another form of stored energy with no CO2 is difficult, almost impossible.

Egil checked his watch again and started speaking faster.

But with fossil fuels we can manage the CO2 – we can capture it! Making clean fossil fuels is easier than storing renewables and can be done on a larger scale!

Let's compare: WindyShores is the biggest offshore windfarm with 300 turbines, each with a base the size of the Eiffel tower. They produce as much energy as one well on Thor [large oil platform].

If we can clean up fossil fuel, we can be low carbon! We can do so much more, with higher impact than renewables!

Before I could follow up with Egil's statement, he continued:

You know, it's harmful to have high profile people like Greta to talk down the efforts of the industry. And anyway, there is no way to reach the climate targets without carbon capture solutions.

Without pause, Egil forcefully argued:

If we are prevented from bringing these solutions, the loser is the environment! We would survive! Because renewables are not sufficient, and shrinking the economy, downsizing, is not an option. So, the effect of disqualifying clean fossil solutions would be to have dirty fossil solutions.

But we see in our sector that we have to do something different!

We are the bad guys coming with the good solutions!

With these big statements Egil concluded our chat. His taxi had arrived, so he quickly packed up his tablet, grabbed his coat, said goodbye, and briskly walked out the front door. Before I had finished jotting down my last notes, his taxi had already left the parking lot. ²³

The conversation with Egil replayed in my head for several days. While I had encountered quite a few interlocutors who advocated the notion of 'clean oil' and 'clean gas', none had done so quite the way Egil did. His emotive statements, sweeping generalisations, and deeply ethical register with which he delivered his monologue communicated to me his strong conviction that hydrocarbons could and should be part of low-carbon futures. What also stood out to me was that Egil did not suggest a continuation of the status quo, but an adaptation of the oil and gas sector that would allow it to continue by aligning with low-carbon energy visions. This view was seconded by Egil's team member Leif, who once told me in conversation: "I'm particularly proud that we're not leaving oil and gas, but that we're transforming oil and gas". Leif's remark seemed not only directed towards his colleagues in the energy industry who left their oil and gas jobs to work in renewables, but particularly to businesses who opted to seize their fossil fuel activities. While I knew of no such businesses in Norway, my interlocutors often cited the former Danish hydrocarbon company Ørsted, which reoriented from being an oil and gas company to become a renewable energy producer with a specialisation in offshore wind power. Leif seemed to distinguish between a radical change – which to him was leaving oil for renewables - and adaptive change, where hydrocarbons were technologically transformed and integrated into energy transitions.

For interlocutors like Leif and Egil, such a transformation could happen by de-carbonising hydrocarbons through carbon capture and storage (CCS). This is a process in which the CO2 that is released during the production phase of oil and gas is captured, and then injected into empty wells where it is estimated to be safely stored for at least 1000 years. Both Egil and Leif worked on a large, transnational industry venture awaiting financial support from the Norwegian government that would

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²³ Extract from written fieldnotes.

not only store CO2 emitted during hydrocarbon production but also the carbon emissions released in other industrial processes, such as concrete manufacturing. Advocates of CCS, including Egil and Leif, argued that carbon targets could only be reached via the large-scale deployment of CCS technology, which would allow hydrocarbon businesses and other carbon-intensive sectors to continue operations.

Norway has had past experiences with a large-scale, government incentivised carbon capture and storage project. In 2006 the first CCS project was launched as a joint industry venture supported by the government and public funding (Haarstad & Rusten 2016). It was referred to as Norway's "moon landing" because of "its ambition to develop ground-breaking CCS technology" (Haarstad & Rusten 2016: 341). As Håvard Haarstad and Grete Rusten have summarised: "Converting Mongstad – Norway's single highest point source polluter – into an international showcase for innovation in carbon capture and storage (CCS) was the main environmental and climate-related project of the government of Jens Stoltenberg" (Ibid.: 341). However, the CCS venture was terminated in 2013, after the Stoltenberg government had lost the election and was strongly criticised for mismanaged and misappropriation of public funds in the project (Ibid.: 341).

My interlocutors who worked in CCS preferred not to speak about this part of Norway's carbon capture history. Others outright called it a "complete failure", belittling not only the former project but also voicing criticisms towards the renewed CCS efforts of their colleagues in the industry. During my fieldwork, I observed that industry talk about CCS came in waves; during my pre-fieldwork trips in October 2017 and April 2018 I noticed that CCS projects were gaining momentum again. Though when I entered the field in September 2018, the chatter around carbon capture had largely discontinued. This changed once more towards the end of my fieldwork, when in late 2019 and early 2020 CCS gained traction with the growth of the aforementioned transnational, and multi-industry CCS project on which Egil and Leif were also working.

Several interlocutors, including the executives of EnergyMax, communicated that carbon capture and storage was one of the most crucial solutions in mitigating climate change and in ensuring the continuation of the oil and gas sector throughout energy transitions. When Leif and I sat down for a chat over coffee one afternoon, he argued:

It's easy for any company to say: "We used to do that [produce hydrocarbons] and now we are green and clean" or "we're a start-up and we're doing apps." [But they] are doing nothing for the world actually!

Laughing sarcastically, Leif continued:

People tell us [at EnergyMax]: "You should just stop doing oil and gas and just do wind."

I think we should continue to transition the company, and transition the energy system, and transition oil and gas into a clean future. It's much more important that it's clean than that it's non-fossil.

Leif nodded towards me, looking for a sign of confirmation on what he was suggesting. Before I could respond, he rhetorically asked:

I don't understand why not! If you do perfectly clean and safe fossil energy, what's the problem?

I challenged Leif by asking him what he considered to be "perfectly clean and safe fossil energy". Backtracking slightly, Leif acknowledged that no energy, including hydrocarbons, would ever be

perfectly safe nor clean. He insisted, however, that "harm to the local environment and emissions" could be limited through CCS and argued:

[CCS] is the only way to do a fossil fuel industry clean. That's why I think it's an extremely strategic technology for the oil and gas company and for the world. Because so much energy is still fossil.

According to Leif, energy transitions seemed to be a practical and technological matter with a focus on reducing carbon emissions. His premise was that if the hydrocarbon sector could produce fossil fuels without emitting CO2, it would – similarly to renewable energy sources – become 'low-carbon'. Leif and Egil, as well as most of my other interlocutors, appeared to prioritise reducing CO2 rather than other greenhouse gases that were also released during the production of fossil fuels. Moreover, their attention was directed at reducing emissions on the production side of fossil fuels. More specifically, my interlocutors referred to these emissions as Scope 1, 2, and 3 which are the direct and indirect GHG emissions released as part of a companies' operations (GHGProtocol 2022). Leif and Egil noted, however, that part of the CCS efforts at EnergyMax were also to reduce emissions at the consumption end of hydrocarbon use. Yet these were early-stage projects, which they told me very little about.

Despite a strategic business choice, the promise of "clean hydrocarbons" through CCS for interlocutors like Egil and Leif was also a way to perpetuate and underscore notions of Norwegian success and exceptionalism in hydrocarbon production. Though they avoided making grand statements like Stoltenberg had done by announcing CCS as a "moong landing", they presented CCS as an opportunity for Norway to continue to be a leader in innovation and energy technology developments. Similarly to my interlocutors, Dinah Rajak (2020) has noted that amongst the hydrocarbon professionals she worked with there was a strong advocacy of technology as the solution to climate and environmental problems. Rajak analysed this "techno-optimism" critically and suggested that corporate solutions to climate change "rely on the power of magical thinking: a 'machine fetish' that imbues technology with the miraculous potential to resolve a crisis engineered by humans, while veiling the human (and corporate) agency in its creation" (Rajak 2020: 15). Rajak found that her interlocutors strategically positioned their companies' technological innovation as climate mitigation solutions, thereby overshadowing alternatives that did not involve hydrocarbons (Ibid.: 14). Rajak forcefully argued that

[When] it comes to corporate responsibility for climate change, techno-optimism works more as convenient fiction than a blind faith. The deus ex machina of techno-optimism brings discursive salvation to oil companies against the political crisis of climate change in the short term, rather than actual solutions to the existential crisis of climate change. It (...) overstates the capacity of oil engineers to conjure some techno-wizardry (2020: 15).

Rajak's critical interpretation of her interlocutors' advocacy of hydrocarbon technology allows little space to explore what wider social and ethical aspirations motivated hydrocarbon professionals' endorsement of corporate solutions. According to my interlocutors, CCS was more than a technical and strategic answer to energy transition efforts. They also portrayed it to be a sustainable and ethical choice in light of climate mitigation and welfare aspirations. CCS they suggested, would ensure the continued influx of hydrocarbon revenues to the Norwegian state, and sustainably satisfy energy demand transnationally. Moreover, many industry professionals promoted CCS alongside renewable energy technology, thereby acknowledging the existence and importance of promoting multiple low-carbon energy technologies.

Nevertheless, I too found that through "clean oil and gas" narratives, hydrocarbon professionals aimed to strategically position their extractive activities as ethically and environmentally conscious industry practices. At this point it should be noted that the 'clean hydrocarbon' concept was employed both in relation to oil and to gas. Contrary to oil, however, natural gas seemed to be perceived in the industry as a "naturally cleaner" source of fossil fuel energy, although financially less valuable than oil. Industry professionals argued that gas released fewer emissions into the atmosphere compared to coal or oil during its combustion. As one interlocutor put it:

I see that at the end, the emissions from gas are much less than burning the equivalent amount of crude oil. But regardless of that, I think oil and gas in a very long-term perspective have to be replaced by new renewables.

Particularly in combination with emission reduction measures at production, including CCS, Norwegian fossil fuel companies marketed their gas as *the* transition fuel that could support coal-dependent countries during their energy transitions. By comparison, oil was considered more financially valuable but also more polluting. As such I observed that hydrocarbon professionals appeared to prioritise a need to produce "clean oil", which provided both a business and environmental case for technological 'purification'.

Aside from CCS, oil companies also introduced the electrification of platforms, formerly powered through natural gas, as a means to reduce emissions during fossil fuel production. This either involved installing renewable capacity at the platforms such as wind turbines, or connecting offshore hydrocarbon installations to the onshore decarbonised power grid. This was a highly debated measure amongst industry professionals, as many argued against the cost-effectiveness of powering oil and gas production with electricity generated from renewable energy sources. In their conceptualisations, it made little difference to total emissions whether some fossil fuels would be consumed on the offshore platform for power generation or later when it reached the end consumer.

Moreover, most of my interlocutors already perceived Norwegian oil and gas as "cleaner" than fossil fuels produced in other countries. They related this to the relatively higher carbon taxes their companies paid to produce hydrocarbons, which they saw as a financial compensation to the negative externalities their extractive activities caused. They also referenced the quality of Norwegian crude oil, referred to as Brent crude oil, which they cited as a lighter oil in need of less refining during its production into fuels. Hydrocarbon professionals further portrayed Norwegian oil and gas production as "safer" than elsewhere. Elusively citing oil nations in "Africa" or "South America" they suggested that a Norwegian emphasis on protecting the safety of offshore workers and insisting on stringent environmental reporting and surveying, minimised the socio-environmental impacts of hydrocarbon production in Norway. They referred to this as their diligent adherence to health safety and environmental guidelines (HSE). Compared to "developing countries", my interlocutors also felt that less corruption and fair work conditions positively impacted Norwegian hydrocarbon production. Strict adherence to environmental, societal, and governance (ESG) requirements, they argued, improved not only work processes for employees but kept negative externalities to a minimum. In our conversations, industry professionals thus often advocated Norwegian hydrocarbon activities as relatively less harmful than those of other countries. With the notions 'clean' and 'cleaner' fossil fuels they underscored these narratives of low(er) socio-environmental impact.

The rhetoric of 'low-carbon' hydrocarbons, "clean fossil fuels", and "safe oil and gas" employed by many hydrocarbon professionals represent what Peter Benson and Stuart Kirsch (2010b) have referred to as "corporate oxymorons". According to the scholars, such terms are used by corporations to legitimise their businesses activities that may have socially and environmentally harmful

consequences (2010b: 45). Benson and Kirsch suggested that corporations strategically employ corporate oxymorons to "conceal the contradictions of capitalism and promote business as usual" (Ibid.: 45-46). This way, the term used as a preface to the concept, for example "clean", works to conceal the critical term "hydrocarbons" which, according to the scholars, allows corporations to neutralise critique (Ibid.: 47-48). While Benson and Kirsch highlight the importance of questioning companies' communication and marketing, their focus on corporate narratives gives little consideration to the ways in which industry professionals within these corporations personally relate to these terms. During my fieldwork, I have found that several hydrocarbon professionals conceptualised such seemingly contradictory concepts to mirror the dilemmas they identified in their energy activities. To them the notion of "clean hydrocarbons" reflected their simultaneous efforts to preserve one of Norway's main sources of economic income, whilst contributing to climate change mitigation. However, a significant number of my interlocutors were also highly critical of the "clean hydrocarbon" rhetoric.

The "Gimmick": Industry Critique against 'Clean Hydrocarbons'

Critics of the "clean" and "cleaner" oil and gas narratives were not just those energy professionals who advocated a shutdown or phasing out of Norwegian fossil fuel activities. Interlocutors like Alf, who thought that hydrocarbons would continue to feature in energy transitions, were also not convinced of their colleagues' "clean oil and gas" marketing. Alf had been involved in the early development of hydrocarbons in Norway. After a long leadership career in the sector with deployments across the world, he decided to leave oil and reorient careers to work in offshore wind energy. Alf was amongst those oil leavers who had switched careers a couple of years prior to my fieldwork. From the first time we met, he had positioned himself as critical of the notion of 'clean hydrocarbons', but it was only during one of our later encounters that I encouraged him to tell me more about his "issue" with the concept. "I don't think it's all that much cleaner", he responded,

It's just gimmick. It's a gimmick used to stop the debate on when we should stop producing oil and gas. If we don't do it, some bad guy in the Middle East will do it and pollute even more than us. Yes, but we're still polluting, both of us.

Despite Alf's moral valuations between Middle Eastern and Norwegian oil producers, he clearly delineated the notion of "clean oil" as a marketing narrative. As our conversation proceeded, Alf specified that in his understanding too, Norwegian hydrocarbon producers observed health, safety, and environmental regulations more so than elsewhere. Yet to him a relatively cleaner oil and gas production did not render hydrocarbons "clean" in absolute terms, particularly as he identified emissions at production relatively small in comparison to emissions at the point of consumption. Alf also positioned himself critically against the notion of gas as a transitional fuel. To him, both oil and gas were "polluting" substances, which he considered in large part responsible for anthropogenic climate change. Despite this, Alf envisioned hydrocarbons to continue to feature prominently in the energy mix as he identified oil and gas as closely intertwined with people's everyday lives.

Other industry professionals not so much challenged the premise that oil could be "clean" but questioned the need for Norwegian decarbonisation of the oil and gas sector in the first place. So, too, Daniel, the chief economist at EnergyMax, who considered the initiatives to reduce emissions in Norway a "waste of money". In a conversation, he told me:

We spend too much money in Norway on trying to reduce our emissions. We spend too little money elsewhere.

Daniel paused for a moment, to give his point extra emphasis. He then continued:

When you take into account the fact that all our energy at home is electricity, and is decarbonized already, there's no wonder why we haven't been able to reduce our emissions. It's because we started-- ultimately, we start at the point where nobody else is.

Look at how much countries like Germany or the UK or the Netherlands now struggle with the easy part of the energy transition, which is to decarbonize the power sector. Imagine how difficult it will be when they reach our levels and have to do what we had to?

I raised my eyebrows in anticipation for an elaboration, as Daniel posed another rhetorical question:

Where do we have to reduce our emissions? It's in sectors that are extremely difficult to decarbonize. Either because they're enormously profitable, like oil and gas, or because they have serious impacts on people's habits as in transport for example.

Daniel imagined multiple stages in energy transitions. Given Norway's renewable electricity supply, he considered the country to be in a relatively advanced stage, where further emissions reduction made little sense to him until other countries too decarbonised significantly. His valuations were reminiscent of the aforementioned 'exceptionalism' with which many of my interlocutors associated Norwegian hydrocarbon production.

Daniel suggested that rather than investing in "clean" hydrocarbon technology, the capital would be better invested elsewhere in support of other countries' transitions to renewably produced electricity. For Daniel reducing emissions was about "getting the most bang for the buck. It's about where we should put our money to make sure that we reduce our emissions globally". Crucial to Daniel's cost-benefit analysis was his assumption that reducing emissions in other countries could be done by improving the populations' living standards. His solution to CO2 related climate change mitigation was about "making people rich, lifting GDP levels, reducing income differences where it matters." Other interlocutors similarly suggested that increasing economic growth and development of "poor countries", as they referred to them, would combat rising CO2 emissions. They advocated that this could be done by lowering coal consumption and substituting it with (Norwegian) gas and renewable electricity generation. I will further discuss the interrelation between growth, sustainability, and energy transitions in Chapter 5.

Here I want to point out the strong moral valuations that accompanied my interlocutors' future energy visions. Hydrocarbon professionals like Daniel perceived and portrayed coal as 'bad energy' with high emissions and (Norwegian) oil and gas as relatively better or even 'good'. To them, good (energy) futures entailed hydrocarbons, where a phasing out of oil and gas threatened visions of the 'good life'. It seemed to me that interlocutors like Daniel perceived decarbonising hydrocarbon production as a first step towards an eventual end of oil and gas. In our conversation, he specified himself that ultimately reducing emissions in Norway was about shutting down high emissions sectors including fossil fuel production. As such I suggest that rooted in the utility calculations of Daniel, was the concern that a future without fossil fuels would be worse than the present with oil and gas.

Other hydrocarbon professionals who were critical of "clean hydrocarbon" narratives, only saw the continued and decarbonised production of hydrocarbons as justified if the resulting oil and gas was not used as an energy source. Oskar, a seasoned subsea engineer at EnergyMax, strongly advocated a preservation of hydrocarbons for material use such as in plastics. We were sat over the obligatory coffee in an office meeting room decorated with seemingly out-of-place nude photographs. The art on the wall of this conference room had proven to be a good conversation starter in first-time meetings, particularly with interlocutors like Oskar who I first encountered as relatively timid. Over the course of our conversation, Oskar grew increasingly vocal in sharing his insights especially when we broached the topic of 'clean oil and gas'. We were deep in conversation when Oskar told me:

We are actually enabling a product to the market that we know ultimately is the major contribution to the emission of greenhouse gases. That's the dilemma, especially if you are concerned about climate change.

But the rationale of doing that [decarbonising hydrocarbon production] is that you can at least – from EnergyMax's point of view, which I also share – do the production as efficient as possible. That's the nature of our interest, I would say.

[We are] doing the process design as efficiently as possible without spoiling [wasting] energy. But my dilemma is that we are actually selling this as our clean energy by committing to a neutral CO2 production within 2050, which is the message from the management.

In many senses, that is like providing 'clean' heroin to the market. It doesn't become a more positive product.

Oskar was amongst several interlocutors who compared the fossil fuel sector with the tobacco industry or a drug addiction. He and other industry professionals understood hydrocarbons as a "dirty", "polluting", "dangerous", and "addictive" substance (see also Rutledge 2005).²⁴ In our conversation, Oskar argued that decarbonising hydrocarbon production alone would have little effect on overall emissions, unless a concurrent decarbonisation in their consumption would take place. Oskar identified as the root of the problem the continued use of hydrocarbons as a source of energy. He elaborated:

One concern is actually that we are producing a highly valuable product for the market and just burn it. Hydrocarbons are a tremendously interesting resource, but we are wasting these resources by just burning them, leaving just 30%, 40% of the energy to the people and the rest is excess heat not utilized.

According to Oscar consuming hydrocarbons as a source of energy was not only a misallocation of resources, but also inefficient, resulting in the loss of energy through the biproduct of heat. In anticipation of an elaboration, I asked him: "So, you think hydrocarbons would be better used in --?" I could not finish the sentence as Oskar had already interjected: "Materials, yes". He went silent for a moment and then added:

Materials, but also chemicals, medicines... People are spoiling a very valuable resource when producing electricity [from hydrocarbons]. And in the process, they are actually wasting two-thirds of the energy!

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 $^{^{24}}$ See previous Chapter 3, particularly the section where David describes an "addiction" to oil and gas.

Oskar strongly advocated a material need for hydrocarbons. In so doing he situated himself, other hydrocarbon professionals and the oil and gas sector as essential – and ethical – material provisioners (Smith 2019). Particularly at the mentioning of hydrocarbons in medical equipment, pharmaceutical and cosmetic products, Oskar portrayed oil derivatives as indispensable. In conversations, other interlocutors often pointed towards the products I was using – my pen, laptop, phone, even my lipstick – all of which, as they argued, were made up in small or large part from hydrocarbons. Oil and gas, they forcefully asserted "is everywhere".

Indeed, over the course of my fieldwork I learnt that petrochemicals derived from oil and gas are crucial components in agricultural fertilisers, pharmaceuticals, cosmetics, plastics, and construction materials (including for renewable technology) to name only a few. Many hydrocarbon professionals I encountered were expecting that eventually the demand for oil and gas as an energy source would decline. Most, however, were convinced that oil and gas would continue to be a coveted raw material for non-energy usages. Although some hydrocarbon professionals saw the increasingly favourable industry sentiments towards renewable energy as threatening the "survival" of the oil and gas sector, very few interlocutors expected an imminent end to oil and gas activities in Norway. Most envisioned that fossil fuel production would continue for decades, if not centuries, to come. During my fieldwork this view was underscored by Norway's prime minister Erna Solberg when she publicly announced in late 2018 that:

Den som skal slukke lyset på norsk sokkel, er ennå ikke født (Gjerde 2018).

(The person who will turn off the lights on the Norwegian shelf has not yet been born.)

Conclusion

In this chapter I have demonstrated why and how the Norwegian fossil fuel sector continued to flourish at a time when energy transition efforts gained significant momentum in Norway. Many hydrocarbon professionals, as I have shown, fundamentally perceived and communicated Norwegian oil and gas production as safeguarding continued socio-economic welfare and high living standards in Norway. Despite protests from publics and an increasing association of hydrocarbons with emissions and climate risks, interlocutors continued to advocate for "oil as welfare" (Bang & Lahn 2020). They perceived collective, societal wealth as an extension of their 'hard work' in the sector and a result of the 'successful' management of hydrocarbon resources. For my interlocutors, I have suggested, oil was more than the source of their own enrichment. Oil was a 'lucky' substance, enabling Norwegian society to amass a fortune that could be used for the benefit of current and future generations. However, as much as they associated oil and gas with luck, wealth, and fortuity, the changes in the energy industry also affected how they perceived hydrocarbons. Gradually many interlocutors felt that promoting fossil fuels by communicating 'oil as welfare' could no longer ethically justify the continued production of a substance they too increasingly understood as "dirty", "dangerous", and "polluting".

Concurrent with wider energy industry changes, hydrocarbon professionals adapted the way they marketed and produced oil and gas. They argued that fossil fuels, if technologically 'purified' i.e., decarbonised at the point of production, could be part of energy transitions and continue to fund the Norwegian welfare state. However, not all hydrocarbon professionals embraced the 'clean oil' and 'clean gas' narratives and technologies. Several interlocutors positioned themselves critically against CCS projects. They were concerned that this decarbonisation method would lead to another failed

"moon landing". Other interlocutors challenged the cost-efficiency of investing in CCS. Moreover, many industry professionals objected to the costs and disputed the benefits of large-scale electrification projects of hydrocarbon platforms. Instead, they advocated investing in emissions reductions elsewhere. And several hydrocarbon professionals saw "clean hydrocarbons" as a "marketing gimmick", that justified the continued production of a highly "polluting" and "addictive" substance.

I demonstrated that hydrocarbon professionals employed welfare and "clean hydrocarbon" narratives in an effort to protect the "survival" of the oil and gas sector and their place in it. I have also highlighted that they saw the longevity of fossil fuel production as intimately related to the preservation the 'good life'. In their advocacy of oil and gas they situated themselves as ethical provisioners of energy and by extension of national income. While environmentally polluting, they perceived their hydrocarbon activities as socio-economically constitutive of a Norwegian way of life.

The changing narratives and technologies that hydrocarbon professionals employed to safeguard the "survival" of their sector were accompanied by their own reflections about the environmental and ethical implications of continued hydrocarbon production in light of anthropogenic climate change. Along with the exodus of oil leavers described in the previous chapter, these revaluations had an effect on the overall energy industry. In the following chapter I will explore how increasingly critical engagements with hydrocarbon energy trajectories also impacted the way my interlocutors came to questions the impacts of renewable energy technology. With efforts to decarbonise hydrocarbon production and businesses, the boundaries between low-carbon energy sources became increasingly blurred; 'clean hydrocarbons' promised to make oil and gas more sustainable for the future, and renewables were scrutinised for their socio-environmental impacts. I show that an atmosphere of change was not only enabling energy transitions, but also allowed multiple energy trajectories to coexist. Through these examinations, I aim to illustrate that energy transitions are liminal processes with conflicting energy trajectories, providing space for the co-existence of many energy sources.

Chapter 5 Impossible Ideals? Renewables, Purity, and Sacrifice in Energy Transitions

"How then, is it possible to live by impossible ideals?" (Laidlaw 1995: 7)

"Come!", said Edgar, waving encouragingly across the large open-floor office. It was my first day at EnergyMax, one of Norway's largest mixed energy companies. I was provided desk space at their renewable energy department and had just made the rounds with the section head to be introduced to the offshore wind team. As I returned to my seat and looked around, Edgar invited me to his desk for a brief chat. I was surprised at this initiative, remembering how it took several days to arrange a first chat with an interlocutor at my previous host company Energo. Edgar was a business development manager working in offshore wind. He was originally from Ecuador and had lived in Norway since childhood. Before working in wind energy, his career was based in the hydrocarbon sector. Just as I started to elaborate on my research project's connection to energy transitions, Edgar interrupted me: "There is no 'clean' energy", he forcefully argued. He must have seen the surprised look on my face as a reaction to his statement – after all, we were in the renewables department of an energy company. This encouraged him to elaborate:

It's a circle, and it depends on where in the circle you place yourself. For renewables you need turbines, nice new, clean turbines, but they are made in a not clean way. For wind turbines the base is made from iron ore, which is extracted with dynamite and processed with carbon. The rotors include balsa wood and neodymium. The wood is rainforest wood. Neodymium extraction is so harmful to the environment and people that it is no longer allowed in the US. Now it's sourced in China. So, with renewables it depends on which part of the cycle you look at.

Edgar was referring to the lifecycle of renewables, particularly the production, installation, and decommissioning of wind turbines. As I will show in this chapter, he and other industry professionals understood renewable energy production to have wide-reaching socio-environmental impacts in Norway and beyond. In a hushed voice, Edgar concluded our conversation. "We'll talk more at the end of your stay here!", he determined. "I'm curious to find out if you still believe in 'clean' energy by the time you leave".

Questions about long-term sustainability, environmental impact, emissions, and equitable energy developments permeated the energy industry as energy transitions in Norway gained momentum throughout my fieldwork. With the hydrocarbon sector increasingly scrutinised in and outside of the industry, various energy professionals also started to question the sustainability of renewables. Edgar, along with other industry professionals simultaneously promoted and challenged renewable energy production. While they saw the increase of renewables as the key component of contemporary energy transitions, they expressed uncertainty that their mass-scale deployment would lead to 'cleaner', more sustainable, and more equitable energy futures. In this chapter I analyse how my interlocutors perceived and managed uncertainties and dilemmas in their work with renewable energy production.

In the previous chapter I analysed why and how hydrocarbon professionals continued to promote the production of Norwegian oil and gas in the context of changing energy trajectories. I demonstrated

that they conceptualised national oil and gas revenues as the 'financier' of the Norwegian 'good life'. In order to continue to promote "oil as welfare" (Bang & Lahn 2020), hydrocarbon professionals advocated notions of "clean oil and gas". As I have shown, some industry professionals grew increasingly wary of the ways Norwegian oil and gas was advertised as a "clean" source of socioeconomic welfare. Many questioned not only the validity of those narratives, but also advocated a gradual phase-out of hydrocarbons as a source of energy.

With a particular focus on those leaders and experts working in the renewables sector (from now on renewables professionals), I analyse in this chapter the ways they critically promoted renewable energy production emphasising at once their socio-economic and environmental "benefits" as well as severe impacts. Some worried that renewable energy production would reinforce rather than resolve the socio-environmental harms and inequalities they associated with oil and gas production. This concern is also highlighted in recent scholarship on "green extractivism", which identifies exploitative, extractive patterns of resource accumulation within renewable energy production (Kramarz et al. 2021; Riofrancos 2019). This body of literature, as I shall explore in the beginning of this chapter, has brought to attention the socio-environmental and economic effects of renewable energy technology and production on people, biodiversity, and environments. With a focus on those suffering from renewable energy production, the scholarship's analysis of industry professionals, however, has remained limited. It is the elite lifestyles and capitalist endeavours of people strategically situated in the energy industry which this scholarship deems in large part accountable for precarious extraction of natural resources (Kramarz et al. 2021; Riofrancos 2019).

After a critical examination of the scholarship on extractivism, this chapter explores how 'elite', strategically situated industry actors conceptualised and revaluated sustainability, renewable energy technology and production in light of rising environmental and climate concerns. I examine how energy *ledere* and *eksperter* perceived the impacts and shortcomings of renewable energy deployment as a socio-economic and environmental "sacrifice" in the name of energy transitions. Here I shall discuss how conflicting ideals of 'purity' and 'sustainability' challenged conceptualisations of energy transitions. This will lead me to analyse industry professionals' problematisations of current energy trajectories in the final part of the chapter. The conclusion will offer some provocations on the interrelationship between sustainability and contemporary energy transitions.

Extractivism and Energy Elites

As an area of scholarly investigation, 'extractivism' highlights what are deemed 'unsustainable' practices and mindsets that link infinite economic growth aspirations to the extraction of natural resources (see Acosta 2013; Jalbert et al. 2017). Extractivism is understood as the ideological mindset that underlies extraction, where extraction is "the removal of resources from their points of origin" (Jalbert et al. 2017: 6). Scholars have specified that "extraction is about benefiting from resource removal, extractivism is about rapidly removing everything possible to maximize profit. It is the logic of accumulation and global economic development" (Ibid.: 6). Extractivism thus broadly links resource extraction with capitalism as it has been defined as a "mode of accumulation", which is seen to provide the material basis for market economics activities, including the production and consumption of energy that fuels economic growth (Acosta 2013: 62). The concept of extractivism encompasses a wide range of activities, including agriculture, tourism, forestry and fishing, as well as mining for minerals and metals and hydrocarbon production (Acosta 2013, 2020).

Recently, scholarship has also conceptualised the production of renewable energy as a "green extractivism" (Kramarz et al. 2021; Riofrancos 2019). It is defined as "the subordination of human rights and ecosystems to endless extraction in the name of 'solving' climate change" (Riofrancos 2019: 167). Scholars have not only highlighted that the construction of renewable energy technology requires extractive practises, such as the production of plastic from oil or the extraction of rare-earth minerals and metals, but also point out that renewable energy sources themselves may eventually deplete (Acosta 2013; Riofrancos 2019). Moreover, there is a recognition that renewables too have socio-environmental impacts on human and non-human agents (Aronoff et al. 2019; Kallis et al. 2020). Seen in this light, renewable energy production runs the risk of replicating the exploitative and unsustainable economic practices found in the hydrocarbon and other extractive sectors (Aronoff et al. 2019; Kramarz et al. 2021; Riofrancos 2019). As Thea Riofrancos noted:

Building a low-carbon world carries its own environmental and social costs: every wind turbine, solar panel, and electric vehicle requires vast quantities of materials mined from the earth, transported in container ships over great distances, manufactured in factories likely still powered by coal, and transported again to consumers. This globally dispersed supply chain, like any other under capitalism, facilitates a race to the bottom, as capital perpetually seeks cheaper labour and cheaper nature (2019: 169).

Riofrancos conceptualised the production of renewable energy as intimately spurring infinite, unsustainable economic growth. This is in contrast to how Norwegian energy corporations portrayed wind, solar, hydro-power, and other renewable energy technologies as low-carbon solutions that could fix energy dilemmas. Many of my interlocutors, however, increasingly problematised the socio-environmental implications of renewable energy production. Such critical reflections by energy professionals on their own industrial activities are rarely discussed in the scholarship of extractivism.

While the literature on extractivism highlights injustices, socio-economic exploitation, environmental degradation, and obstacles to energy transitions, its efforts to make sense of the interrelationships between a multitude of practices spanning across the globe means that it remains a rather broad concept. Importantly its examinations of 'brute realities of extraction' (Jalbert et al. 2017: 3) bring attention to the injustices incurred by human and non-human actors along the supply chains of resource extraction (see for example Healy et al. 2019). Yet this focus has resulted in particularly one-dimensional and accusatory examinations of corporate leaders and experts in extractive industries. In her recent review of the literature on hydrocarbon extraction, Mette High has pointed out that

Up until now, a major area of scholarship has offered important insights into how oil and gas production is experienced by communities located near production sites. Scholars have examined how local inhabitants, both human and nonhuman, have felt or have been treated as marginal and voiceless, if not endangered, in confrontations with companies and governmental institutions. (...) This literature brings attention to those affected or angered by energy production. Yet in doing so, scholars have rendered people working in the oil and gas industry noticeably absent from their accounts (2019: 33).

Similarly to High's analysis of literature of hydrocarbon extraction, I have found that in scholarship on green extractivism the descriptions of industry professionals have remained flat. Referring to them homogenously as "suits", Thea Riofrancos for example portrayed "executives, consultants, and peddlers of information" in lithium mining as "elite alliances" who are "lubricated by money and airplanes, smartphones and endless hors d'oeuvres" (2019: 162; 167). Others scholars have suggested that international efforts to promote renewables coincide with the entrenchment of elites who perpetuate "processes of dispossession, degradation, and more generalised forms of conflict and

corruption" (Kramarz et al. 2021: 8). In this chapter I will offer an in-depth analysis of how industry professionals reflected on their and others' responsibilities in renewable energy production. I show that despite their privileged, elite positions, they critically assessed the impact of their renewable energy production leading some to advocate – similarly to scholars in extractivism – a decoupling of market economic growth logic from the provision of energy (see e.g. Aronoff et al. 2019).

The ways in which industry professionals conceptualised, managed, and aimed to counteract the impacts of their energy production is essential to understanding how they envisioned energy transitions and energy futures. Future energy visions involved what High (2017) has referred to as "cosmoeconomic understandings", ethical valuations, and moral dilemmas. In her work on the hydrocarbon industry in Colorado, United States, High (2019) has demonstrated that oil industry professionals rooted their work in Christian ideals and saw "oil work as intimately interrelated with ambitious projects of 'doing good'" (2019: 37). While in Norway, as I mentioned before, most of my interlocutors considered themselves to be "agnostic" or "atheist", I have found that they too associated their work with larger 'cosmo-environmental' ambitions'. They aimed to provide low-carbon energy to develop "clean" energy futures and to ensure an "untouched" and "unspoiled" nature to thrive. These future ambitions were imagined as requiring "sacrifices", which intimately tied understandings of energy transitions and future energy visions to moral projects.

As I explore these conceptualisations, I show how energy transitions are underpinned by deeply ethical considerations of how good energy futures can be established. I argue that deeper explorations into the ways industry professionals relate to their businesses' extractive activities can provide nuance to the literature on extractivism and to the scholarship on elites more broadly. As such I position my ethnographic findings critically towards scholarship that often portrays strategically situated industry professionals as profit-oriented, amoral corporate representatives, insistent on the status quo and resistant to changes that may threaten their privileged positions (Hughes 2017; Rajak 2020; Riofrancos 2019; Salverda 2013; Simmel 1957). I experienced that most of my interlocutors were "animated not [only] by homo oeconomicus but by what one might call homo relationalis, not by self-interest but by fellow feeling, not [only] by a rational entrepreneurial subject but by a compassionate one" (Muehlebach 2012: 6). In their privileged positions in the upper echelons of the Norwegian energy industry they tried to envision and produce 'good' energy futures for themselves, for society and for future generations. Yet, as this chapter will discuss, many industry professionals increasingly questioned the environmental sustainability of their energy imaginaries. They grew increasingly concerned that the plenitude of their current lives would have to be "sacrificed" in energy transitions, resulting in futures that may be worse than the present.

Rethinking and Defining Sustainability

On a cold autumn afternoon, my friend Brit came over to my 'hybel' (apartment) for dinner after work. The doorbell had rung just before I finished preparing my risotto, and so I asked Brit to join me in the kitchen until the meal was ready. Brit, whom I mentioned in Chapter 2, worked as an energy IT consultant at Energo. She had started her job there around the same time I began fieldwork. We were about the same age and quickly became friends. As she observed me haphazardly separating the leaves of Brussel sprouts and discarding the stems in a designated food waste bin, she recounted an anecdote from a dinner party she hosted the previous weekend. Brit told me that one of her friends came into her kitchen to check whether she had separated her rubbish properly. Turning towards me, Brit exclaimed frustratedly: "This was just going too far. I'm done with all the shaming. I mean, it was MY

kitchen and MY rubbish!". Brit cared, as she emphasised, about the environment and climate. But she felt that her friend had violated her privacy in policing her environmental practises. The "shame" that Brit was referring to related to the 'flyskam' movement I discussed in Chapter 3. Brit noted that beyond an ethical condemnation of frequent flying, some of her friends had started 'shaming' her for what they deemed a lack of environmentalism in her daily practices.

While I garnished the Risotto bowls with the now pan-fried Brussel sprouts, Brit started questioning the extent and purpose of environmental sustainability action. She rhetorically asked about the definition of sustainability, as it seemed to her that actions like separating rubbish were rather performative. "I read in the news that after collection, the trash in Norway gets all mixed up again and is then sent to Eastern Europe. Is that sustainable?". As issues of environmentalism, climate change, and energy production were increasingly discussed in popular media and in the private circles of my interlocutors' networks, industry professionals started to question concepts they had previously taken for granted. The following section will explore key terminology and how my interlocutors revaluated these concepts in light of their confrontation with growing climate change concerns in and beyond the energy industry.²⁵

During my fieldwork I observed the notion of sustainability to be a 'buzzword' in Norway. Its uses ranged from corporate branding and marketing, individual's lifestyle choices, to calls for alternative, de-accelerated socio-economic systems. Anthropologists have described the concept as "notoriously fuzzy" and criticised the "contradictions, abuses and politically motivated uses of the term 'sustainability'" (Brightman & Lewis 2017: 3;1). The first recorded use of the concept dates to the early 18th century in Saxony where the term *Nachhaltigkeit* (German for sustainability from *nachhaltend*, lasting) was employed to criticise deforestation and thus related to an environmental understanding (Brightman & Lewis 2017: 3). Although many interlocutors often used the term 'sustainability' in English, its Norwegian counterpart *bærekraft* provides important insights.

One interlocutor, Ella, in particular pointed out to me its meaning when she said: "It's funny, right? The term literally means power (*kraft*) to support (*bære*)". Ella, an engineer in her early 50's had worked in hydrocarbon exploration for most of her career and enjoyed doing so. She often emphasised that she felt no moral ambiguity working in fossil fuels, as this job provided her and her family with a stable and good income. She however thought that other industry professionals felt the need to defend their privileged lifestyles by overemphasising sustainability commitments. While the term, as she noted, implied a dynamism and call to action, she perceived its use as a performative narrative lacking real-world implementation. This is critique that has also been voiced by anthropologists, including Anna Tsing (2017), for whom sustainability refers to a thriving interrelation between species, and is particularly rooted in a flourishing of plants and animals. Tsing argued that

'Sustainability' is the dream of passing a liveable earth to future generations, human and nonhuman. The term is also used to cover up destructive practices, and this use has become so prevalent that the word most often makes me laugh and cry" (Tsing 2017: 51).

As this chapter will show, my interlocutors' varying environmental sustainability concerns and the way these were prioritised, was a matter of much debate within and beyond the energy industry. Moreover, industry professionals' environmental and climate targets often sat uneasily in relation to their personal and professional socio-economic pursuits. The concept of *bærekraft* was predominantly used by my interlocutors in the environmental sense of sustainability, where they referred to (re-

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²⁵ Extract from written fieldnotes.

establishing) a "balance in nature". Nature in turn related to the outdoors including non-human species and landscapes such as the forests, mountains, lakes, and rivers where most of my interlocutors spent their free-time skiing, hiking, hunting, and fishing. Yet, the term *bære* (support) also corresponds to their wider socio-economic aspirations of safeguarding Norway's welfare, discussed in the previous chapter. As Thomas Hylland Eriksen has pointed out, sustainability refers not only to an environmental-, but also an economic and a social dimension (2022: 1). The notion of the 'power to support' (*bærekraft*) encapsulates well these three scopes of sustainability.

An examination of official definition of 'sustainability' demonstrates not only a particular anthropocentric focus, but also an emphasis on the pursuit of sustainable economic growth and development. In this vein, anthropologists have pointed out that the "institutionalization of sustainability is dominated by a preoccupation with economic considerations and a tendency to address cultural, social and ecological concerns in ways compatible with economic growth" (Brightman & Lewis 2017: 5). The United Nations, as formulated in the 1987 Brundtland Commission, defines sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations 2022a; United Nations Brundtland Commission 1987). Similarly, the Norwegian constitution in Article 110b states:

Every *person* has a right to an environment that is conducive to health and to natural surroundings whose *productivity* and diversity are preserved. Natural resources should be made use of on the basis of comprehensive long-term considerations whereby this right will be safeguarded for future generations as well (Constitution 2020, [my emphasis]).

Both the United Nations and Norwegian definitions have a particularly people-centric focus. This includes the UN sustainable development goals (UNSDGs), in which only 3 out of 17 do not directly relate to human well-being (UN 2022)²⁷. Moreover, as Thomas Hylland Eriksen (2022) pointed out, the concept of sustainable development introduced in the UN Brundtland report

is irresistible in its optimism and conjuring power. It was presented, and still is widely understood, as a magic bullet enabling humanity to continue on the path of economic growth and expansion, while simultaneously ensuring ecological viability. It is often argued that the fulfilment of all 17 sustainable development goals would be impossible, that a main problem consists in the continued commitment to growth, and that the only sustainable option is degrowth (2022: 4-5).

In the words of Eriksen, sustainability coupled with economic growth "seems to indicate that you can have your cake and eat it too" (2022: 8). Many of my interlocutors felt that various sustainability and economic targets were not that easily combined. They conceptualised conflicts between sustainability and growth as intimately related to the dilemmas they identified in energy transitions. Many saw energy transitions as a means towards 'sustainable' energy futures which would restore "purity" and "balance" to nature. For some sustainability was both a means and an end; energy transitions needed to be sustainable and lead to sustainable futures. For others, it seemed that the goal was sustainability, whereas the means towards this end would include socio-environmental,

²⁷ The UNSDGs are: 1. No Poverty 2. Zero Hunger 3. Good Health and Well-Being 4. Quality Education 5. Gender Equality 6. Clean Water and Sanitation 7. Affordable and Clean Energy 8. Decent Work and Economic Growth 9. Industry, Innovation and Infrastructure 10. Reduced Inequalities 11. Sustainable Cities and Communities 12. Responsible Consumption and Production 13. Climate Action 14. Life Below Water 15. Life on Land 16. Peace, Justice and Strong Institutions 17. Partnerships for the Goals (United Nations 2022b).

 $^{^{26}}$ Gro Harlem Brundtland, who headed the Commission, served three terms as Norway's Prime Minister in the 1980's and 1990's.

'unsustainable' "sacrifices". Sacrifices, as I shall discuss in the second part of this chapter, were imagined as means to justify perceived 'unsustainable' actions to resolve energy dilemmas.

Are Renewables 'renewable'?

With increasing attention on the energy industry and their sustainability efforts, many energy professionals carefully worded their public communication and narratives. This not only applied to the "clean hydrocarbon" rhetoric discussed in the previous chapter, but also to renewables energy production. My interlocutors used various words interchangeably to denote renewable energy, and often adapted these to the specific context of their mentioning. The most popular terms included *ren energi* (clean energy) and *grønn energi* (green energy). They also used the terms "sustainable energy", and to a lesser extent "emissions-free energy" or even "free energy", when speaking to me in English. "Emissions-free energy" and "clean energy" were concepts often employed by people working in the hydrocarbon or mixed energy industry who used them interchangeably with renewables and hydrocarbons. This terminological flexibility in turn allowed industry professionals to promote their energy businesses as broadly sustainable.

Other industry professionals referred to renewables as *ny energi* (new energy) and named the renewables departments of their companies their "new energy" sections. This terminology communicated an uncoupling from hydrocarbon energy trajectories as it promised "new" and improved energy production. As such, it seemed to set itself apart from oil and gas, which by extension were rendered old or outdated. Despite this terminological break from fossil fuels, however, particularly hydrocarbon professionals felt that renewables had not uncoupled from oil and gas. In mixed energy companies several interlocutors working in the fossil fuel departments noted that they felt "oil and gas money" paid for the companies' renewables projects. In their view, deploying for instance wind and solar capacity was a show of corporate environmental responsibility to attract those investors and appease those publics who increasingly demanded a move away from carbon-intensive energy production.

These statements, which were sometimes also voiced in the companies' internal online chat system, led to the disgruntlement of those working in the renewables departments. The latter emphasised that their projects were both financially viable and sustainable options for energy generation and were indeed "making profit". Alf, the aforementioned business development manager who left the hydrocarbon division to head an offshore wind project at EnergyMax, felt particularly provoked by statements that undermined the financial viability of renewable energy projects. "That's misinformation!" he exclaimed. Foregrounding his own project, he stated:

I'm not familiar with all the renewables projects [at EnergyMax] but we are making profit at WindyShores [large offshore wind park]. Otherwise, we wouldn't do it! We couldn't do it because we have shareholders who expect us to make money!

Indeed, renewables professionals often noted that with the fast development of technology particularly in wind and solar energy, renewables projects were becoming increasingly financially profitable and cost-efficient. This, they suggested, was also evidenced by the decision of several European governments, including the UK, as they reduced their state subsidies that had been employed to attract new projects. Renewable energy deployment became so popular, my interlocutors observed, that there were more projects in planning that there was demand to execute them. Without exception, those interlocutors who worked in renewables production countered the

arguments that oil and gas revenues were financing their businesses. Many did note, however, that renewable energy technology was dependent on petrochemical substances, like plastics, as well as rare earth minerals, metals, and concrete, which they recognised as necessary building blocks but as largely 'unsustainable'. As they grew increasingly sensitised to environmental and climate concerns, interlocutors scrutinised the relationship between renewable energy technology and its material parts in their conceptualisations of renewables.

So did Francois, an expert-turned-leader with a background in petroleum engineering and work experience in the hydrocarbon sector. When I met him, he jetted around the world for the development of a new wind power project by EnergyMax. Francois frequently spoke about his elite school background and intellectual lifestyle. He was an avid collector of luxury watches and – besides energy matters – keenly enjoyed a chat about extravagant luxuries. Conversations with him were fast-paced and always involved the citation of a variety of elusive experts he had just read a paper from or heard on a podcast.

Over lunch in the canteen of EnergyMax, Francois often provided provocative conversation starters. During one particular lunch conversation, he posited that "people lack an understanding of what energy really is". We were sat around a table for six on high bar-stool type chairs that together with the high, rectangular shaped table was intended for a quick lunch only. The other people who were part of the conversation – all men in their mid-40's occupying senior expert or middle-management positions – had already finished their meals. From experience I knew that during their *lunsj* (lunch) they usually preferred to speak about business meetings or upcoming weekend skiing and cabin trips. And so, Francois' provocation elicited but a meagre response from the others. Although Francois did not get a chance to elaborate on his statement at the time, I followed up with him later during one of our chats in the shared office spaces. "So, what is energy to you?" I asked. Smiling and taking a deep breath, he replied:

Very few people have the correct definition of what energy is. They talk about energy, but for most it's just their electricity bills.

Energy is what quantifies the amount of change we are doing to an environment. Every time we use energy, we change the environment. We build a table, we burn something – this is what energy is.

Having previously expressed issue with the word renewables, I encouraged him to tell me more about the ways he conceptualised specific energy sources and technologies.

I think the word renewables is good enough for the public. Renewable means a permanent energy that you can extract from the environment. I would say a true renewable would be water, for example, but even this one [pointing at the picture of a wind turbine on the wall beside him] is out of material, and a hydro-electric dam cannot last forever either.

I think the *resource* can be renewable. But the machine to extract it will never be forever basically. The machine depends on an industry, which depends on materials, and materials are just a set amount in the earth's crust.

Francois differentiated the sources of renewable energy — water, wind, sunlight — from the mechanisms which generate renewably produced energy — hydro-electric dams, wind turbines, or solar panels. He pointed out that the source of energy can be renewable, but the means by which this energy is produced depend on material parts made from minerals, metals, concrete, *and* hydrocarbons. As such, Francois conceptualised the source of renewable energy as infinite, whereas

he saw its technology as bound by material scarcity and a limited lifetime. His use of the word 'extract' shows that Francois identified and problematised renewable energy production as an industry based on extractive practices. While some of my interlocutors used "extraction" as a technical term without scrutinising it, others, like Francois, critically engaged with the interrelation between renewable energy technology and the extraction of its material parts.

At this point in our conversation, Francois enthusiastically moved around on his swivel chair and added:

There is another interesting thing, which I heard about from one of the experts I listen to.

People will tell you, 'The sun is free. The sun, the wind, the water – it's free because the sun shines, the wind blows, it's from the environment, you don't have to pay for it.'

It's the same thing for the coal, the oil, and the gas. These were created by mother nature, and we don't have to pay for it. It's just in the ground. Just like the wind is in the air, these are in the ground. They have been created by mother earth, and we don't have to pay for it!

But we have to pay to *extract* it. Just like we pay to extract the oil, we pay to extract the wind. It's the same thing. Whenever someone tells you, "The wind is free, the sun is free," well, so is oil. We did not have to pay anybody to create that energy.

And this expert is absolutely right, God damn it! He's one of my favourite experts actually.

Francois as well as other industry professionals compared and drew interlinkages between hydrocarbons and renewable energy production. In the case of this excerpt, Francois alluded to the shared extractive practices required to produce renewable or hydrocarbon energy. While this established a likeness across energy sources, Francois's intention was not to 'greenwash' hydrocarbons, but rather to point out that he understood renewable energy production as less carbon intensive, yet not as less environmentally impactful than oil and gas production.

The excerpt also illustrates how industry professionals drew on expert knowledge to shape their understandings of energy matters. Arthur Mason and Maria Stoilkova (2012) have pointed towards the importance of experts in the knowledge provision and decision-making of policymakers and business leaders. Energy professionals, like Francois, employed expert knowledge to increase their own expertise and make sense of the energy dilemmas around them. Via the unnamed expert, Francois came to distinguish the source of energy from the means to produce energy. This in turn made him think about the costs of resource extraction. He continued:

With wind or water energy you need massive amounts of space. Also, a lot of metal. That's a thing, which is not discussed at the moment.

There is also this problem with metals. At the moment, it's all good because we don't have issues *yet*. But the metals are getting harder and harder to extract from the earth. When it's getting harder and harder, we need more energy to extract the metal. It's a 'catch 22' because to get more renewable energy, we need more metal but to get more metal, we need more energy.

For Francois, renewable energy production was anything but 'free'; during our conversation he emphasised that building renewable energy capacity comes at great financial and environmental costs. Referring to it as 'catch-22', Francois identified an interdependence between rising energy demand for renewable energy and the resource extraction needed for the production of this energy.

This interrelationship can be conceptualised as an energy dilemma; rising demand for renewable energy requires the supply of minerals and metals, which in turn necessitates greater economic activity, which needs to be powered by more energy. An 'unsustainable' growth spiral ensues, culminating in greater and greater economic activity, but also more and more environmental impact all led by the promise and vision of climate action. Moreover, as Francois had pointed out, the materials needed to build the technology to extract renewable energy are also finite. This includes plastics derived from hydrocarbons in wind turbines and solar panels, as well as metals and rare-earth minerals. Renewable energy production as such draws on finite, non-renewable resources with socio-environmental impacts, which may ultimately lead to their depletion.

Francois distinguished between the means of extracting renewables and the source of renewable energy, which he noted "can be renewable". Yet, as Alberto Acosta has pointed out, renewable energy sources can also become non-renewable:

Because of the huge scale of extraction, many renewable resources, such as forests or soil fertility, are becoming non-renewable. This is because the resource is depleted when the rate of extraction is much higher than the rate at which the environment is able to renew the resource. Thus, at the current pace of extraction, the problems of non-renewable natural resources may equally affect all resources, renewable or not (2013: 62).

Acosta identified a potential for some renewable energy sources to deplete. In our conversation, Francois primarily spoke of solar, wind, and hydropower power, which arguably are infinite. Yet, as has been well documented, extraction of these energy sources has been connected to profound impacts to local ecosystems and societies (see for example Kelly 2019; Nuru et al. 2022; Rudolph et al. 2017). As such, the production of renewable energy can have the triple effect of risking the depletion of some renewable energy sources, socio-economic impacts, and environmental consequences of extracting natural resources needed for the construction of renewable energy technology, which ultimately be also be depleted.

Although for the most part, renewables professionals including Francois saw renewable energy production as financially independent from hydrocarbons, many identified between renewables and fossil fuels a material interdependency and shared extractive dilemmas. While less carbon intensive, they conceptualised renewable energy production in its current form — reliant on the extraction of various finite resources and based on market economic growth pressures — as unsustainable. Moreover, many also saw hydrocarbons as an important supplementary source of energy. This will be explored in the following section, where I discuss how the interrelationship between renewables and hydrocarbons was envisioned as a "sacrifice" in the name of energy transitions.

Purity and Sacrifice

Only some of my interlocutors were convinced that renewable energy technology in its current state of innovation would be able to satisfy global electricity demand. Even fewer thought that renewable energy production could ever satisfy total energy demands. Most were concerned that, compared to hydrocarbons, renewable energy was difficult to store, required large acreage, and made less profits. In comparison they identified with fossil fuels, besides high greenhouse gas emissions and a threat to the climate, higher energy density, easy storage, and much greater revenues. While many acknowledged and promoted low-carbon energy transitions, they thought hydrocarbons continued to

be required to supplement renewable energy production. So too, Einar, who was working in business development in the upper management echelons at RenEnergi, one of Norway's largest renewable energy production companies with operations spanning the globe.

I was introduced to Einar by his stepdaughter Brit, mentioned in the previous vignette, over dinner at their family home in one of Norway's most prestigious neighbourhoods. Over the course of my fieldwork, Brit brought me into contact with many of her family members, most of whom also worked in energy businesses. This included her mother Irene, with whom I had many interesting chats about gender roles in the industry and who helped me attain the internship opportunity at EnergyMax (see Ch. 1 and Ch. 2). Equipped with a bottle of wine (the preferred gift at dinner parties in Norway), I arrived at their villa on a cold Saturday night in the middle of winter. During the dinner, Einar and Irene teased each other about their work in different branches of the energy industry. While Irene maintained that her company, EnergyMax, provided fossil fuels to satisfy global energy demand and contributed to Norwegian welfare, Einar promoted RenEnergi as providing "pure" energy solutions in the era of climate change. As I expressed curiosity about this notion of "pure energy", Einar invited me to his office a few weeks later to learn more about his company and his work.

When researching RenEnergi prior to our meeting, I learnt that the company, alongside solar, wind, and hydropower, was also involved in natural gas power plants. Einar, in the discussion with his wife at dinner, had been particularly dismissive of EnergyMax's production of hydrocarbons while applauding his company's generation of "pure" energy. In an effort to understand how natural gas — a hydrocarbon — fit into the portfolio of a company that advertised itself as a *ren energi* (pure energy) provider, I challenged Einar to elaborate on his points during our meeting. After the usual small-talk, I smiled at Einar and provocatively asked: "So, what does your company stand for? Is it a producer of renewable or mixed energy?" Einar reciprocated my smile with a broad grin and said:

The way we work to position the company is actually directly to providing pure energy, and pure as in clean.

Perhaps Einar saw from my facial expression that I was not particularly satisfied with the convoluted response. Before I could ask for clarifications, he elaborated:

Maybe I should start by explaining what differentiates the electricity business from the oil and gas business. For oil and gas, you – to a certain degree – produce for storage. For electricity, the grid is such that you have to put in exactly as much power as what people are taking out. When many people switch on a lamp at the same time, as in the mornings, you have to be able to regulate up and down. If you don't, then the grid will go black, and everyone will lose power.

As I nodded, Einar continued by explaining why RenEnergi as a renewables company was involved in hydrocarbons.

Traditionally, the gas-fired power plants in Europe have been used as peakers. Wind power you can use when it blows and solar power you can use when the sun shines. That leaves very few sources of energy, which really are able to balance the grid. Hydropower is one of them, gas-fired power plants is another one of them, and we have always been looking for the assets that are flexible so that they can regulate up and down. We have two gas power plants in Europe, but we don't intend to have any more.

Einar saw his company's gas power plants as a way to resolve intermittency issues in their renewable electricity production. It offered, as he noted, a source of electricity generation when the wind does

not blow, or the sun does not shine. According to Einar, the smooth functioning of the electricity grid relied on the availability of natural gas or hydroelectric dams. As such, he conceptualised gas as part of the support system to the 'pure energy' that RenEnergi claimed to provide. With this, he suggested an inter-dependence between hydrocarbons and renewable energy sources. When asking if he felt conflicted about providing 'pure energy' supported by hydrocarbons, he replied:

Pure for me is clean. The gas portfolio has always been motivated by saying that there are places in this world where it's useful to have gas, it will make the energy supply more clean, more *pure* than it is today. You have the alternative to run coal but with coal you release a lot more CO2 into the atmosphere per megawatt-hour than you do for gas. That is why we're saying that gas-fired is acceptable within our realm.

Einar seemed to understand "pure" and "clean" as relative, comparative notions more so than an ideal to aspire to. Natural gas to him was a key to electricity generation that was "more clean, more pure" than the use of coal. In this vein he employed the notion of 'purity' through natural gas as an ideal of improvement. Mary Douglas ([1966] 2001) in her seminal work "Purity and Danger", examined 'purity' in relation to 'dirt' and 'pollution'. Rather than defining 'purity' as an ideal type, she analysed the symbolic relational processes between 'pollution' and 'purity' and their impacts on socio-cultural practices. She noted:

For I believe that ideas about separating, purifying, demarcating and punishing transgressions have as their main function to impose system on an inherently untidy experience. It is only by exaggerating the difference between within and without, about and below, male and female, with and against, that a semblance of order is created (Douglas 2001: 4).

For Douglas it was not 'purity' alone that created order, but it was the ideal of 'purity' in relation to the 'polluted' or 'dirt' that created a categorisation and thereby order. With Douglas's symbolic conceptualisations in mind, Einar's practical understanding of energy transitions can be viewed as a state of 'disorder' or uncertainty, supplemented with natural gas to create "more clean, more pure" energy trajectories and to provide a sense of 'order' or certainty. According to Einar, natural gas in conjunction with renewable energy production ensured a smooth functioning of the electricity grid. In other words: it safeguarded order.

However, achieving this order, i.e., to advance energy transitions required, in Einar's own words, "sacrifice". After he had explained to me why his company supplemented their production of renewable energy with electricity generated from natural gas, he argued:

I'm definitely pro-electrification. I'm definitely pro-reduction in carbon emissions. But it plays out this way: to obtain something, you have to sacrifice something. Someone has to lose so that someone else can win.

Although various interlocutors employed the term 'sacrifice' when speaking about energy transitions, I was astounded by the way Einar presented the concept as zero-sum processes that produced 'winners' and 'losers'. Before I could interject, Einar redefined slightly his earlier statement and said:

Maybe it's not fair to say lose and win, but you must make some sacrifices to obtain something else. Maybe that's a better phrasing.

The words that Einar chose in his first statement – 'winners' and 'losers' – seemed to suggest that something or someone is 'sacrificed' for the 'greater good' of energy transitions. Einar appeared to imply that the act of sacrifice was the continued emission of CO2. The sacrificed, in this view, would

be the climate, environment, and people affected by the emissions. By extension, those who determine the sacrifice are governments, corporations, and their leaders who choose to support and continue to generate energy from hydrocarbons.

The literature on extractivism has highlighted an unequal, exploitative relationship between resource extractors and what is conceptualised as 'sacrifice zones'. The concept denotes places, environments, and communities that are exposed to the socio-environmental and politico-economic costs of resource extraction (Lerner 2010; Scott & Smith 2017). Sacrifice zones, by extension of Einar's statement, may thus form within energy transitions, where the continued use of hydrocarbons affects not only those at the sites of extraction but 'sacrifices' the health of the global climate. More recently sacrifice zones have also been related to the "political economy of green energy" (Scott & Smith 2017: 861). As discussed above, the production and deployment of renewable energy entails socio-environmental impacts in which the wellbeing of human and non-human actors is 'sacrificed' in the pursuit of low-carbon energy futures. Here sacrifice is considered an involuntary act imposed by industry professionals or 'extractors'. However, in my understanding of Einar's and other interlocutors' statements, this was not how they conceptualised 'sacrifice' nor their own roles in energy transitions.

Einar's revised statement, where he noted that "you must make sacrifices to obtain something else" (my emphasis) demonstrated that he understood energy transitions as involving opportunity costs, where something is forgone to receive something else. By his choice of the plural "you" he seemed to attribute the burden of sacrifice to everyone and everything involved in energy transitions. Einar conceptualised 'sacrifice' as a type of trade-off, where he considered emissions from natural gas as short-term loss for long-term gain.

In the seminal literature, sacrifice has similarly been associated with transitions, particularly social transformations and rites of passages. Robert Hertz ([1960] 2004) identified sacrifice as a crucial component of death rites in Indonesia. While far removed from the Norwegian case in time, space, and context, Hertz's analysis of burial rites is insightful as he saw the conclusion of transitional mourning periods necessitating the offering of a sacrifice.

Hertz, writing in the early 20th century with data he predominantly gathered at the British Museum (Evans-Pritchard 2004: 11) detailed that the death of a person in Indonesian societies was followed by a preliminary "provisional" and "temporal" burial (Hertz 2004: 29–30). After this, the family of the deceased underwent a transitional period, which Hertz referred to as an "intermediary period" and a "period of waiting" (Ibid.: 29; 31). Bringing this period to an end required, as Hertz detailed, a human (slave) sacrifice to perform the final death ritual (Ibid.: 40). According to Hertz "sacrifice is indeed an indispensable condition for the conclusion of the mourning period, but is part of a complex whole and is bound up with the final burial" (Ibid. 40). There is a distinct order to the way in which Hertz described these burial rites, which he depicted as highly organised with a clear distinction between roles, approved sets of rituals, and a pre-defined end to the transition period.

The circumstances of "sacrifice" in energy transitions in Norway were not clear-cut nor predefined. Most of my interlocutors did not specify how they envisioned the end of energy transitions beyond being "low-carbon" or "renewable". Moreover, the object of the "sacrifices" they envisioned was a matter of debate. In Hertz's case, the sacrifice had a specific purpose — to end the transitional mourning period and lift death related taboos — and as such perhaps justified the high cost of offering a human life. Yet many of my interlocutors expressed uncertainty that low-carbon, renewable energy futures would ever come into being. While broadly pointing towards a purpose for energy transition as mitigating climate change and achieving environmental sustainability, the parameters of energy

transition remained vague and debated. Energy transitions thus appeared liminal, indefinite, and precarious processes with the risk of harming a variety of human and non-human actors.

During our chat, Einar made a point to tell me: "I think the zero-emissions society is not viable!". For him, energy transitions were a means to reduce overall carbon emissions, but not a pathway to establishing 'pure' 'unpolluted' futures. According to Einar therefore, some pollution and some environmental impact was inexpungible from 'cleaner' energy production. This is reminiscent of Douglas's conceptualisations where purity and pollution co-exist in a dialectical relationship constituted and ordered by their contrasts. In this sense, one necessitates the other rendering a state of absolute purity impossible. James Laidlaw (1995) in his exploration of Jainism in India similarly analysed how seemingly impossible ideals coincide and are upheld. He noted:

Where ideals are unrealizable, and where incommensurable values are in conflict, and I take it that this at least is always to some degree the case, then living in the light of an ideal must always be something more subtle and complex than merely conforming to it. How then, is it possible to live by impossible ideals? (1995: 7)

Laidlaw described how in Jain communities in India the ascetic lifestyles of Jain renouncers represent an 'impossible ideal' that community members seem to venerate more than aspire to achieve. Similarly, most of my interlocutors – those working in hydrocarbons as well as those in renewables – were guided by ideals of low- or zero-carbon energy futures in their work. In their daily practices, however, their jobs involved energy production with carbon emissions and socio-environmental impacts. As such, their professional work entailed what Laidlaw would call 'impossible ideals'. Many interlocutors idealised 'clean(er)' and 'pure(er)' energy futures whilst being critical that such a future would ever come about. This deeply affected the ways they engaged with energy transitions and conceptualised them as processes requiring "sacrifices" or "trade-offs". In their pursuit of potentially unattainable futures, they situated sacrifice as the key to pursuing the impossible. This, I suggest, rendered energy transitions as liminal, almost mythic rites of passages that hinged on the willingness and ability of human and non-human actors to (self-)sacrifice. This rhetoric thus broadly and vaguely distributed responsibility to achieving "good" and "better" energy futures to everyone and everything and thereby shifted the focus away from energy producers.

Prioritising Sacrifices

Amongst renewables professionals who saw "trade-offs" as an inherent part of energy transitions, the object of such "sacrifice" was a point of contention and remained largely ambiguous. Some felt that local environments and societies had to endure the costs of renewable energy production for the benefit of the climate. Others prioritised protecting local environments over the deployment of renewable energy technology and global climate mitigation. Einar, who in our conversation identified hydropower production as a key component of climate change mitigation efforts, was amongst the former. Aside from natural gas, Einar cited hydropower as an important supplement to renewable electricity with the ability to solve the intermittency and storage issues of wind and solar power. Hydropower installations involve the use of dams, which can store and release water within seconds depending on electricity demand at a given time. Despite relatively low carbon emissions and reliable supply of electricity, Einar also pointed out hydropower's impacts on local populations and environments:

Hydropower has quite severe consequences on the local environment. If you ever get a chance to move around in the Norwegian mountains, you'll see some of these huge lakes with a dam and you'll see the dry riverbed below, and that is an environmental impact.

In my mind, that is the price that Norway pays for having a very, very clean electricity supply, which is the reason why people leave the lights on in the toilet and have warm houses.

Einar seemed to understand the socio-environmental impacts of hydropower as an exchange or indeed 'sacrifice' towards Norway's low-carbon, renewable electricity supply (see Fig. 20). As discussed in the introduction, the construction of hydroelectric installations in Norway had led to widespread opposition in the 1970's and 80's. Many Norwegians voiced their concern over impacts on tourism, fishing, and local environments as well as on the livelihoods of Sami populations living in Northern Norway where key hydro-installations were built (Andersen et al. 1985). Einar was quick to point out, however, that "severe consequences on the local environment" as well as socio-economic effects on local populations were the "price" Norwegians paid for reliable, low-carbon electricity supply.

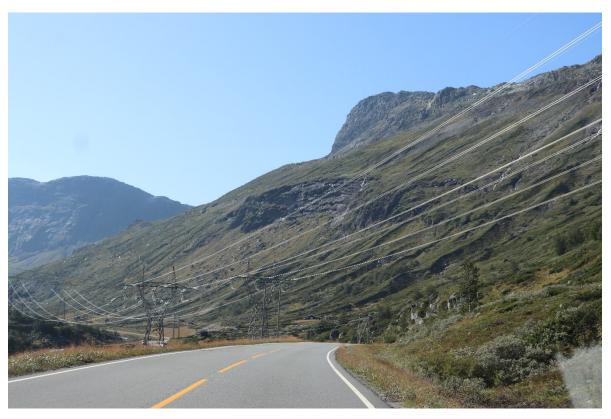


Figure 20. Power cables and masts bringing electricity from a hydroelectric dam to Oslo. Location: Hardangervidda, ca. 4hr. car-ride away from Oslo. Photograph taken by author.

Discussions about the extent to which impacts on local environments are justified by the efforts in building low-carbon, renewable energy capacity culminated in the aforementioned national wind power debates in the summer of 2019. Disputes were sparked by the government's publication of demarcated sites for potential onshore wind farm construction in various places around Norway. After weeks of heated discussions, the government eventually decided to abandon the allotment plans entirely. Arguments against onshore wind installations were plentiful but most prevalently, people including many energy professionals, were worried that the space needed for wind farms would

impact what they perceived as the pristine, "untouched" and "pure" Norwegian nature. Nature in this sense seemed to be idealised as a "sacred places" which ought to "be protected from defilement" (Douglas 2001: 7). Oskar, introduced in the previous chapter, who worked as a subsea engineer at EnergyMax, illustrated how he perceived a conflict between the onshore wind power plans and environmental protection when he told me:

The wind debate is complex because ultimately, we want to focus on all environmental issues – not just on the global warming – but also on preserving the nature to best extent possible.

For me it's important to experience unspoiled or untouched nature as much as possible. So, I don't want windmills up on Kolsåstoppen [small mountain top outside Oslo].

Oskar summed up the dilemmas that many of my interlocutors perceived between different sustainability goals. They wanted to "preserve nature", including the climate, as "clean" and "pure". Yet to do so, and to reduce carbon emissions, required in their view the deployment of renewable electricity capacity. As experts working in the field, they were aware of the socio-environmental impacts and limitations of renewable energy technology, which they perceived to stand in direct conflict with their ideals and imaginaries of 'purity' in nature. Oskar too struggled with this dilemma; protecting at once nature, the climate, and local environments seemed to him to be an "impossible ideal". Moreover, industry professionals like Oskar were confronted with the multiple dimensions of sustainability discussed at the outset. They saw a need for environmentally sustainable energy developments. Simultaneously they identified welfare needs, which corresponded to the socio-economic dimension of sustainability. Many interlocutors thus found it difficult to identify what dimension to prioritise under the larger scope of 'sustainable growth and development'.

The onshore wind power debate brought these complex interrelationships and conflicts to the forefront. For industry professionals, the discussions were not just a corporate matter, but a deeply emotional and personal issue. Many had strong feelings about the topic, leading them to clash with other colleagues as well as family members or friends. It seemed to me, that this debate illustrated for them in a particularly immediate way the dilemmas found also in other energy development projects to which they usually had a professional and physical distance, such as offshore wind or hydrocarbon infrastructure. As such, the onshore wind power debates highlighted that industry professionals' work entailed "moral conflicts and complexity" (Laidlaw 1995: 12), which intimately related to the ways they envisioned energy transitions.

During this time, I also spoke to Katerina, who worked at EnergyMax's renewables department, and whom I first introduced in the previous chapter. She too felt conflicted about the government's onshore wind allotment plans, which led her to reflect more deeply on the "sacrifices" for sustainability that she saw as inherent in energy transitions. We were sat in one of EnergyMax's meeting rooms. Katerina had argued that people outside of Oslo, particularly in the rural parts of Norway "don't get the gravity of the [climate] situation". Similarly to other interlocutors, Katerina felt that there was a widespread unwillingness amongst the majority of the Norwegian population to accept what she referred to as the "green vision". For her, this seemed to entail adjusting living standards to climate or environmental needs, including accepting renewable energy infrastructure expansion, such as onshore wind turbines. Emotionally Katerina told me:

For me, if I had to prioritise, I would probably be ready to sacrifice some of the environmental... or accept some environmental impacts such as on birds, if it could benefit the climate.

They [wind turbines] kill birds, yes, but not in the quantities that some people suggest, and I think that's a sacrifice that we, unfortunately – I love eagles as well, I think eagles are beautiful – but I think that those trade-offs and sacrifices will unfortunately have to be made.

Katerina felt that environmental impacts of wind power infrastructure were an acceptable "trade-off" for climate mitigation. Similarly to Einar, she conceptualised "sacrifices" as an exchange or an opportunity cost where the socio-environmental implications of energy production are accepted for the larger environmental sustainability goals of emissions reductions, energy transitions, and climate change mitigation. As such, "sacrifices" can also be understood as a compromise, which for Einar was the use of natural gas, whereas for Katerina it was the deployment of onshore wind power. While the object of the "trade-off" or "sacrifice" amongst my interlocutors varied, many felt that energy transitions required some sort of renunciation or relinquishing.

In this vein, Thomas, who was a wind-power expert with whom I shared desk space at Energy Max, once told me: "In the life we live, we need energy. So, you have to sacrifice something". During the conversation I was unsure if his variations in the use of personal pronouns was deliberate or unconscious. It seemed to suggest that the Other (you) has to sacrifice for the group (we) similarly to how sacrifice is conceptualised in Hertz's (2004) understanding or the literature on 'sacrifice zones' (Klein 2014; Scott & Smith 2017). Yet, as I got to know Thomas over the course of my stay at EnergyMax, I found that his statement had a different implication. He not only seemed to understand sacrifice as an inherent part of energy transitions, but as a means to justify and preserve Norwegians' socio-economic status. Thomas appeared to imply that the high standards of living and the rising demand for energy would not be sustainable – environmentally, socially, or economically – unless something was relinquished.

Energy Elites and Sacrifice

My interlocutors rarely mentioned Norwegian mythology in our conversations. Yet one of the most foundational stories of the Norse Gods is a tale about sacrifice. It reflects the way my interlocutors defined sacrifice as a 'trade-off'. The story was recounted to me by Steinar, one of Norway's most senior hydrocarbon business leaders. He was a tall, lean man in his early sixties with piercing blue eyes. To me, he had somewhat of a regal presence; his calm yet determined demeanour and the way he carried himself exuded an air of authority. Steinar had occupied several CEO positions throughout his career until focusing his work on investments and board member positions. He was incredibly well connected, with a reach beyond Norway. Once in passing, after I had mentioned to him my home country, he told me that he regularly went on hunting parties with one of our royals. Steinar, whom I met with several times throughout my fieldwork, was also instrumental in connecting me to some of Norway's most senior industry professionals.

Steinar co-owned The Well, a recently established oil exploration and production company, backed by private equity. During our conversation, I enquired into the founding of Steinar's new company and asked about its name. "Is there a story behind the company's name? I've looked up 'the well' in Norwegian mythology and saw that there is a well of wisdom."

Steinar grinned approvingly, and simply responded with:

Exactly.

I hoped Steinar would elaborate. But after a brief moment of silence, I followed up by asking encouragingly: "So why have you chosen this name?

That's exactly why we chose it.

Another moment of silence passed. I felt encouraged to ask a leading question: "So what kind of wisdom do you hold?". This got Steinar to elaborate.

In Norse mythology Mime is the guardian of the well of wisdom. I think we're not guarding any wisdom – we're trying to use the wisdom correctly.

Steinar smiled slightly as he continued:

We're not sure if we're willing to sacrifice our eye, which is what happened to Odin. Odin was the god who drank from the well and he succeeded with knowledge to become the main God. But for this he had to sacrifice his own eye.

I nodded and followed up by asking: "You're more in the role of Odin then?" With his face turning serious, Steinar replied:

Yes, we want to build on competence and knowledge (see Fig. 21).

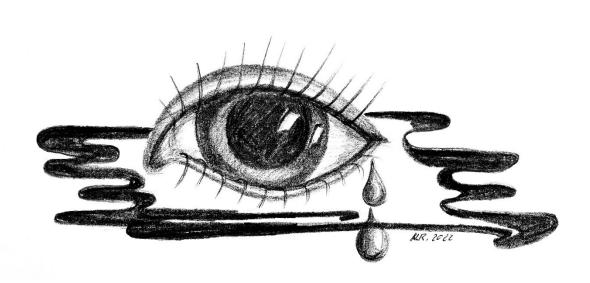


Figure 21. Odin's sacrificed eye. Sketch by Nicola Rauter

Steinar had co-founded this company at a time when other industry professionals chose to leave the hydrocarbon sector and instead pursued renewable energy production. As Steinar himself had observed, this time was also marked by investors increasingly turning towards funding "green projects" in the renewables sector. Steinar, however, was convinced that there would be a continued demand for hydrocarbons for decades, if not centuries, to come even at a time of energy transitions. In line with this, he envisioned The Well to be a company which would use the knowledge of its expert employees

to carve out remaining reserves in oil wells that had been left by the big operators as they were deemed no longer profitable. Steinar explained to me that this required precise calculations that could estimate remaining yields. As such, his company's branding reflected not only the business's ambitions, but also demonstrated that knowledge – and to some extent foresight – was a particularly coveted resource in the oil and gas business at this time.

Steinar helped me to understand, that the notion of 'sacrifice' not only features in current conceptualisations of sustainability and energy transitions, but also has a deeper mythical and historical context in Norway. Considering that my interlocutors understood sacrifices as part of receiving knowledge, profits, higher living standards, and 'sustainable', 'clean' energy futures, this left me wondering, who then did energy professionals expect to make sacrifices?

During my fieldwork, notions of self-sacrifice and renunciation came to the forefront with the proliferation of climate protests and the *flyskam* movement (see Ch. 3). Activists and protesting school children encouraged a sort of 'eco-diet', advocating less flying and meat consumption alongside promoting the phasing out of carbon intensive energy production and consumption. I encountered several industry professionals who made changes in their lifestyles and professional careers to meet their visions of 'sustainable' energy futures. The career reorientations of Malin, Harris, and Nina (detailed in Ch. 3) for example involved hydrocarbon professionals leaving their comfortable oil and gas positions to promote energy transitions. In the process, Malin gave up her leadership role to work for a renewables start-up, and Nina and Harris provided new jobs in the renewables sector. Some interlocutors also limited the amount of meat, fish, and dairy products they consumed as well as plastics and single-use items they used. A few became vegetarian or vegan, and again others limited their flying as much as possible.

Then there were interlocutors who separated their professional low-emission energy ambitions from their private lifestyles. Leif, the manager working on CCS at EnergyMax whom I introduced in the previous chapter, once told me: "I live a very normal life. I'm trying to be part of developing big green solutions. My life is just normal. I drive a lot and fly a lot." For leaders like Leif, pursuing low-carbon energy futures professionally but continuing a high-carbon and energy intensive lifestyle privately was not seen to be at odds. They did not struggle with 'impossible ideals' because in their understandings, energy transitions should not come at the expense of their socio-economic wellbeing. It is thus crucial to emphasise that not all industry professionals personally desired low-emission, 'clean' energy futures, particularly not when those were imagined to entail making personal 'sacrifices'.

This unwillingness of some industry professionals to make 'sacrifices' for energy transitions was criticised by some of their colleagues in the industry. Several energy professionals noted that energy transitions required both industry professionals and wider society to make trade-offs. This view was particularly vocally represented by Marit, the COO of a leading mixed energy company, whom I was introduced to through a mutual acquaintance towards the end of my fieldwork. She was amongst those leaders who switched between leading hydrocarbon and renewable energy businesses. As such she was an avid promoter of low-carbon energy transitions, but also understood hydrocarbons as an essential, yet transitional source of energy. She described to me how surprised she felt at industry professionals' and publics' reactions to the national onshore wind power debates in 2019. Marit's otherwise soft, determined tone of voice became agitated when she said:

I think that the discussion in Norway about the onshore wind is surreal! It's amazing to see how emotional people get. I think in Norway we are proclaiming to be very forward leaning and progressive and rational. We all think climate change is very important but as soon as it gets a little bit closer to home and it has an effect on your cabin or whatever, people disregard the bigger picture and just see the effect on their personal surroundings!

Marit thought that some of her peers in the industry, and publics more generally, were not willing to make personal sacrifices in their living-standards towards decarbonising the energy system. While interlocutors like Einar or Katerina understood the impacts of renewable energy deployment particularly as an environmental 'sacrifice', Marit emphasised a socio-personal dimension. For her, energy transitions required a degree of personal renunciation or self-sacrifice such as the acceptance of audio-visual impact of wind turbines. Yet, as she told me during our chat, she found that in the instances where such a 'sacrifice' was required, even those people who were proponents of renewable energy developments were unwilling to personally commit.

For other interlocutors too, a reluctance to 'sacrifice' for energy transitions was related to an insistence on preserving socio-economic wellbeing. In our conversation, Oskar argued that the energy industry, particularly his employer EnergyMax, was more engaged in energy transitions than Norwegian publics, with whom he identified a general unwillingness to make energy transition-related 'sacrifices' that would impact their lifestyles. He said:

I think EnergyMax has taken a lot more aggressive development towards this change [energy transitions] compared to most Norwegians.

Because my perception of the people in Norway is that we are actually not willing to sacrifice three trips to Spain per year or reducing our use of cars to drive to our cabins.

Oskar did not exempt himself from his judgement; his use of the pronoun "our" indicated that he too was "not willing to sacrifice" privileges like holidays or car drives to reduce carbon emissions. This reiterated the emphasis Oskar and many other interlocutors placed on maintaining high levels of socio-economic welfare in Norway throughout energy transitions. Alongside hydrocarbon professionals' promotion of continued oil and gas production to finance the welfare system, many renewables professionals also argued that energy transitions should not disrupt existing standards of living. EnergyMax, according to Oskar, produced both hydrocarbons and renewable energy, thereby promoting energy transitions whilst still ensuring hydrocarbon income to support the upkeep of the Norwegian welfare system. In Oskar's conceptualisation, corporations like EnergyMax thus made the compromise and trade-offs that publics were not willing to make. However, as several interlocutors problematised, these energy corporations promoted energy transitions by advocating the possibility of "green growth".

Plentiful and Sacrifice-Free

Most industry professionals suggested that sustainable, low-carbon, and plentiful energy futures could only be established by pursuing "sustainable growth" or "green growth". According to them, energy production needed to become 'clean' and continue to be profitable. Some however, were critical of future energy visions in which renewable energy technology would be used in conjunction with an infinite growth based economic model. They saw an opportunity in energy transitions to not

only create more 'sustainable' means of energy production and consumption but build a more equitable, environmentally-, and climate-friendly socio-economic future. As such, they feared that the current mode of renewable energy production — without a simultaneous reconfiguration of economic systems — would lead to environmental impacts and amplify existing socio-economic inequalities. So too, Ludvig, the economist introduced in the previous chapter, who managed a team of consultants that advised EnergyMax's business strategy. During my fieldwork, Ludvig and I had several chats in which I got to know him as a particularly reflexive, socialist-minded person who thought critically about the current economic context in Norway. For Ludvig, energy transitions required more than a switch towards renewable energy production; he argued for the need of a more conscious, less growth-focused way of living and consuming. During one of our conversations, he critically reflected on Norway's role in energy transitions and noted that:

[In Norway] we are basically at peak consumption. I don't see how we could possibly consume anything more. At least we don't need it.

But as long as they can afford it, it seems like people will continue with their behaviour. People are consuming whatever they can, most people anyway.

For me, renewables is just a new way to make business. My view, my honest view, is that we can make better business in renewables than we can in oil and gas going forward.

Ludvig saw the market economic system powered by hydrocarbons as responsible for environmental and climate crises. In his distinct use of personal pronouns ('we are at peak consumption' versus 'they will continue to consume') he separated himself from his critical analysis of other 'people's behaviour'. While in his view a transition towards low-carbon, renewable energy futures would entail a change in the means of energy production, they would nevertheless perpetuate – perhaps even increase – the continuation of 'unsustainable' capital accumulation.

Ludvig and other interlocutors conveyed to me over the course of my fieldwork that renewable energy technology and low-carbon energy transitions were not inherently "good" or "better" than the status quo. They saw in their work that environmentally harmful, socially unequal ways of extracting and producing energy could continue even with the end of the hydrocarbon sector. As such, some energy *ledere* and *experter* argued that renewable energy transitions had to be about more than a change in energy technology and a reduction in greenhouse gas emissions. They advocated the need for socioeconomic changes that, at their core, would restructure market economic growth patterns. This resonates with the assertions of scholars who critically positioned themselves against the notion that large-scale deployment of renewable energy technology is ecologically sustainable (Aronoff et al. 2019; Eriksen 2022; Kallis et al. 2020; Riofrancos 2019).

Besides the environmental implications of building renewable energy capacity, my interlocutors also highlighted the impacts of decommissioning of renewable technology. They particularly emphasised their short longevity (for example between 25-40 years for a wind turbine), and the lack of recycling options for various components in renewable energy technology. As their companies focused on the deployment of renewables, and most projects had not yet reached the decommissioning phase, interlocutors noted that significantly less emphasis was placed on innovating the means of recycling compared to construction. In a conversation with Francois, I once asked him whether wind turbines could be retrofitted, to which he responded:

No, it's the whole thing. It's an entire piece. I know some people say, "We will just repower. We remove the turbine and we put the new one." Bullshit. No. The whole thing including what we call the foundation is affected [by wear and tear]. There are two things,

there's the fatigue, the loads, the stress we put on the structure, and the other one is the corrosion. These metals, we protect them from corrosion but there is a limit. It's a set life.

Limited recycling options of renewables technology were seen by industry professionals like Francois as another hurdle in ecological sustainability efforts. This led them to argue that climate and energy dilemmas cannot be resolved by a shift towards renewable energy technology alone. They saw the issue deeply rooted in growth-based approaches to sustainability. Harris, first introduced in Chapter 3, who left his job in hydrocarbons to lead a renewable energy subsidiary, was particularly vocal about the way he envisioned sustainable (energy) futures. During one of our conversations, he told me:

I don't really believe in green growth. I think consumption has to be reduced in general, which means that, really, economies must cool down. But I think in the transition we're looking at here, there are areas that you can grow.

Harris continued to explain that economic growth could be redirected away from capital accumulation towards improving the quality of services and goods and increasing socio-economic equality. He envisioned that sustainable, low-carbon energy futures could only be established via 'degrowth'; lower levels of consumption and production of goods and services, particularly natural resources. The concept of degrowth can be broadly defined as "a planned downscaling of energy and resource use to bring the economy back into balance with the living world in a safe, just and equitable way" (Hickel 2020: 23). Degrowth is envisioned in a multitude of ways; some advocate a complete abandonment of growth-based models (Kallis et al. 2020), others suggest that some sectors (particularly education, renewable energy production, healthcare) are grown whereas others are down-scaled or even phased out (such as fossil fuels and arms) (Hickel 2020).

Degrowth aspirations oppose the premise put forth by governments and intergovernmental institutions like the United Nations, which assert that economic growth and development can be sustainable. In this vein, Thomas Hylland Eriksen has pointed out that

for the sustainability concept to be useful, it must (...) be divested of its connection to an impossible idea of development as growth and should instead be defined as the ability of a system to reproduce itself indefinitely without undermining the conditions for its own existence (Eriksen 2022: 9).

During our conversation, Harris reached a similar conclusion:

I don't see that our economic model today, which is really purely based on growth, is sustainable at all. Basically, I don't think that the free-market economy and growth are the solutions for the future.

I nodded and asked Harris to elaborate on how he would envision an alternative future, particularly in Norway. He smiled, drew a deep breath, and placed his elbows on the table before answering.

I think this society needs to reduce its resource level in general. It has to happen to become sustainable, in my mind. In Norway we can reduce consumption and still have a good life. Actually, I think that the only way we can have a good life for future generations is to bring down consumption.

Harris's statement about ensuring a "good life for future generations" at first sight reflects the prescriptions of sustainability advocated in the Norwegian constitution detailed in the beginning of this chapter. Yet the way he envisioned how to reach this "good life" vastly distinguished itself from

the *Grunnlov* (constitution), as well as from those industry professionals who advocated continued hydrocarbon production to finance and grow Norwegian welfare. Instead, Harris suggested that relatively high standards of living and the economic security provided by the 'Oil Fund' ideally situates Norway as a country that could reduce its 'unsustainable', extractive economic activities. For Harris, this was about more than ending oil and gas production; he advocated an overall slow-down of production and consumption, particularly of natural resources, but also of goods and services more generally. Similarly, scholarly advocates suggested that 'degrowth' "impels moves to build good lives for all, and shows how existing resources can be shared and invested differently to secure good living with less money, less exploitation, and less environmental degradation" (Kallis et al. 2020: 1).

In Harris' vision of sustainable (energy) futures, he imagined a society that could be plentiful and low-carbon without 'sacrificing' comfort and quality of living. Contrary to some of his other colleagues, who presumed that most Norwegians would be unwilling to commit to sustainability efforts due to a worry that such a change would affect their living standards, Harris noted:

I think most Norwegians would not have a problem to go down on consumption, and now I'm thinking about just mentally, status-wise, and actually doing it.

If I take my son, who's 27 years old now, he's like of a new generation era. He consumes very little, he's very happy. He's got high conscience of what he does, of what he consumes, where electricity comes from, how much air travel he does...- all of these things!

In my understanding of Harris's statement, he crucially did not conceptualise 'degrowth' as a matter of 'sacrifice', particularly as Harris observed that his son's low-carbon, low-consumption lifestyle did not come at the cost of his personal fulfilment. As such, Harris seemed to imagine a general willingness amongst Norwegian society to partake in de-accelerating consumption and production of goods and services. Degrowth for Harris, and other interlocutors who advocated it, seemed to be understood as a solution that no longer imagined energy transitions as an act of relinquishing. Scholars too have pointed out that "degrowth is not forced deprivation, but an aspiration to secure enough for everyone" (Kallis et al. 2020: 18). Compared to economic growth, which is associated with socioeconomic inequalities and requiring sacrifices (Ibid. 24), degrowth is imagined as sacrifice-free as resources and other conditions for the flourishing of human and non-human life are imagined to be equally distributed.

On multiple occasions Harris told me that he aimed to be a leader who puts human and inter-species relationships before economic profits. To me, he as well as other interlocutors represented what Andrea Muehlebach (2012) has referred to as *homo rationalis*²⁸; persons motivated by care for others as their guiding principle for a 'de-accelerated', 'sustainable' economy, which in my interlocutors' own words would be in "balance with nature". In this vein, Harris and as well as other similarly minded energy professionals conceptualised energy transitions not as zero-sum games that produce 'winners' and 'losers', but instead as potential turning points and opportunities to challenge the status quo of energy- and market economic systems. In this view, pursuing environmentally, socially, and economically sustainable energy futures were not mutually exclusive and did not require sacrifices. These industry professionals identified in energy transitions the potential to lead to 'good lives' for all.

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²⁸ Homo rationalis is in contrast to homo economicus where the latter is conceptualised as persons with the aim of maximising their material, individual gain (Kallis et al. 2020: 15, Muehlebach 2012).

Conclusion

In this chapter I have demonstrated how industry professionals scrutinised the place for renewable energy technology and production in their visions of sustainable energy transitions and 'good energy futures'. With growing environmental concerns, my interlocutors increasingly problematised the socio-economic and environmental implications of renewable energy production on human and non-human actors. While less carbon-intensive they found that renewable energy may replicate the extractive dilemmas they associated with hydrocarbons, and produce unequal, environmentally harmful energy futures.

By analysing how my interlocutors problematised renewable energy production, I have aimed to provide nuance to the literature of extractivism. In its effort to highlight socio-economic and environmental injustices involved in natural resource extraction, I have found that the scholarship's portrayal of industry professionals tends to be one-dimensional and accusatory (see Kramarz et al. 2021; Riofrancos 2019). During my fieldwork I experienced many energy professionals as evaluative and reflexive about their corporate activities and energy developments. Most of my interlocutors did not see energy transitions as a simple choice between 'good' and 'bad' options. To them, energy transitions were complex, conflicting processes, involving a multitude of interest groups whose demands could not be satisfied with the substitution of hydrocarbons with renewables. They experienced in their professional lives a direct confrontation with what they perceived to be 'impossible ideals' of pursuing simultaneously socio-economic, environmental, and climate targets.

As I have shown, some leaders and experts saw a continued need for oil and gas in the current and future energy mix. Oil, and particularly gas, were conceptualised as a supplement to renewable energy production and as a "sacrifice" for the greater good of preserving socio-economic welfare and establishing a "clean", "pure" energy future that would be "in balance with nature". Other interlocutors, by contrast, were critical of hydrocarbon's role in energy transitions, and also noted that renewable energy production would not be a guarantor for "sustainable" and egalitarian energy futures. They recognised that the deployment of renewable energy technology would entail farreaching impacts on local communities and environments in the name of climate change. As they saw a need to set priorities between protecting environments versus the climate, they too associated energy transitions with sacrifices.

In that vein, many industry professionals justified the means of energy transitions by their ends; they envisioned the process as one of sacrifices; whether in the shape of carbon emissions from continued hydrocarbon production or in the form of socio-environmental impacts of renewable energy technology. In their view, unsustainable means could ultimately lead to sustainable energy futures. Who would determine what sacrifices would be taken was a matter of disagreement amongst interlocutors. Whilst some thought sacrifices for energy transitions involved personal acts of renunciation, others vaguely placed sacrifices as environmental, social, and economic burdens carried by 'all'. Again others, argued that energy transitions should not come at the cost of personal living standards. They promoted the ideal of 'sustainable growth', in which 'clean' energy solutions could perpetuate 'life as we know it'.

However, energy transitions, as some energy professionals suggested, present the opportunity to bring about a turning point in socio-environmental and economic trajectories. Several interlocutors did not inherently see energy transitions as requiring 'sacrifices' for 'purity' or as producing 'winners' and 'losers' as in a zero-sum game. To them, energy transitions efforts presented a unique opportunity to establish a more sustainable and more equitable economic system. They were convinced that

moving towards sustainable energy futures would require more than the deployment of renewable energy capacity. For them, this included individual and collective actions concerning a deacceleration of the production and consumption of goods and services beyond energy. In this way, energy transitions were imagined as processes towards socio-economic and environmental sustainability in which life would be plentiful and sacrifice-free now and for future generations as resources would be equally distributed. As we turn to the final chapter, I shall explore how re-imaginations of a 'better future' feature in energy transitions and societal transformations.

Concluding Remarks and 'Good Energy Futures'

During my fieldwork, I only got to meet Daniel once. He was the chief economist at EnergyMax, whom I first mentioned in Chapter 4. For me it was a long-anticipated meeting, for which I had prepared several days in advance. Daniel was a public figure and I found numerous TV interviews, newspaper articles, and social media posts about and from him. His media experience showed during our chat. His statements were emotive, dramatic, and relatable. Most of our conversation centred around the changes Daniel observed in the energy industry and in public sentiments in response to what he perceived as mounting climate change concern. In a low, booming voice, Daniel argued that the climate debate

has become a massive movement, and it's a political movement that thrives in a polarized world. [In Norway] we've seen a quick change in discussion as a consequence of something that has built up over a long time. The changes have gradually crept upon us [in the industry].

Daniel paused for a moment, cleared his throat, and then continued:

One of the reasons why the climate debate becomes so heated is that we have become more or less completely secular in the West. We don't believe in God anymore. Even the Catholics don't worry about it. So, we're extremely materialistic and secular.

That means we don't believe in God, which means that hell is irrelevant. So, we don't worry about the devil, but we need something to worry about, and that has become climate Armageddon.

Curious about what I perceived as a particularly bold assertion, I double-checked if I had fully grasped the extent of his argument by asking: "So, you understand climate change as the 'new devil'?"

Without hesitation Daniel answered:

Armageddon, yes. The reason we worry is that it's our alternative of hell. This [climate change] has become religion in a sense. In the way it impacts us and our discussions.

Daniel's perception of the prevalence of climate change concern reiterated to me the momentum that climate and sustainability matters had gained in Norway throughout my fieldwork. In likening climate change to mythic-religious beliefs, he appeared to downplay its very real implications for the Norwegian energy industry, society, and environment. Climate change, as I observed, had become omnipresent not only in the way people observed changes in the physical realities around them, but perhaps even more so in the way climate change mitigation featured in their private and corporate considerations. Attention to environmental and climate sustainability featured increasingly prominently alongside socio-economic deliberations in the daily corporate activities of energy professionals in Norway. The prospect of climate crisis and the increasing acknowledgment of a necessity for energy transitions, required a re-conceptualisation of how 'good lives' could be preserved in 'better' energy futures.

In the last two months of my fieldwork, one of the most frequent conversation topics was the lack of snow in Oslo. All throughout December 2019 and January 2020 it had barely snowed. The weather

while cold, was unusually dry, which was particularly noticed by the many interlocutors who were keen skiers. Even those industry professionals who had been critical of anthropogenic climate change, as well as those suggesting that Norway was amongst the few countries who would remain largely unaffected by "global warming", seemed increasingly concerned. Then finally, on the last day of January, it snowed. The onset of the white, fluffy, frozen water particles, however, did not dissipate my interlocutors growing climate-environmental concerns.

Daniel's notion of 'Armageddon' in the excerpt above reflected how some of my interlocutors perceived the era of anthropogenic climate change as the "end of life as we know it". They started to worry that future generations would be exposed to freak weather like lack of snow, environmental disasters, and socio-economic decline. In these dystopic visions, the future appeared worse than the present. Others found a sense of salvation in a techno-optimism, with which they imagined that future technological innovation would ensure reliable, profitable, and environmentally sustainable energy production and consumption. Irrespective of their varying energy imaginaries, most of my interlocutors came to understand energy transitions as crucial in ensuring 'good' energy futures. In this final chapter, I analyse how industry professionals' energy visions stood in contrast to their energy transitions efforts, which remained, as some interlocutors referred to it 'schizophrenic'. Despite an increasing realisation that hydrocarbon production and consumption could not be sustained, and indeed contributed significantly to anthropogenic climate change, many of my interlocutors promoted oil and gas alongside renewable energy production. Despite advocating a need for "sacrifices", most of my interlocutors thus appeared to want it all: socio-economically plentiful and environmentally sustainable energy futures, with sacrifice-free energy transitions.

I commence this conclusion with a discussion of the preceding chapters in this thesis. I show that as my interlocutors felt confronted with 'impossible ideals', they increasingly problematised their and the industry's role in energy dilemmas. Despite their revaluations and professional reorientations, I argue, however, that energy transitions remained largely undefined processes towards vaguely 'better' energy futures. I capture this ambiguity with the term 'liminality', which I discuss in relation to the notion of 'futures' in the second part of this chapter. As I conclude my analysis, I explore the limitations of my study, and provide suggestions for future research. In particular, I encourage future studies of energy and other elites to attain a better understanding of the larger decision-making systems and processes involved in energy transitions. I end with an epilogue that outlines key interlocutors' current engagements, provides insights into my recent post-fieldwork trip to Oslo, and highlights some of my own reflections on energy transitions.

Energy Elites and Energy Transitions

"We are the bad guys with the good solutions".

I began this thesis by highlighting in the title and in the opening vignette my interlocutors' own ethical reflections on their corporate activities. Through this I aimed to demonstrate that energy professionals in Norway situated their corporate activities in light of larger ethical projects in which they wanted to create sustainable and plentiful energy futures not just for themselves and their families but for Norwegian society at large. I detailed the context of their professional activities by highlighting the history of energy production in Norway and the debates that had arisen in the process. Publics' apprehensions over energy developments were not new in Norway but became increasingly vocal during my fieldwork with rising climate change concerns. In this context, industry professionals felt

increasingly criticised, and thus more strongly positioned themselves as well-intentioned, ethically, socially, and environmentally minded individuals set on resolving energy dilemmas through "good solutions".

I provided an in-depth overview of my methodology and fieldwork experiences in my two host companies Energo and EnergyMax. My access, I suggested, was in large part enabled through an emphasis on empathetic and respectful interaction with interlocutors. While I engaged with energy professionals' self-representations and assertions critically, I aimed not to dismiss their reflections. Instead, I paid attention to what my interlocutors deemed 'good' and 'right' and how they positioned their work within larger efforts of establishing 'good lives' for themselves and others. I positioned my analysis against scholarship that I find unreflexively dismisses industry actors as oppositional 'Others' who need no academic intention. Instead, I argued for the importance of providing analytical and ethnographic nuance towards energy corporations, industry professionals, and elite networks more generally.

In Chapter 2 I explored popular portrayals and existing scholarship on elites. I analysed how energy professionals defined their own and their colleagues' socio-economic status and positions in the industry. My interlocutors distinguished themselves as "self-made" and saw their status as leaders and experts in the Norwegian energy industry as a result of their personal achievements. Mindful of their own positioning, I suggested that my interlocutors were able to draw on their privileged socio-economic class backgrounds and a network of strategically situated people which enabled their own elite status. I also explored the ideals of trust, humility, and transparency which guided, as my interlocutors often emphasised, their personal and corporate conduct. While I noted the importance of exploring such values, I also examined instances where their principles fell short.

I problematised that energy elite networks were highly exclusive and often discriminatory. In the second part of the chapter, I explored in detail the role of women in the energy industry. While most women acknowledged institutional support towards gender equality, many noted that they felt persistent gender norms restricted their access to male elite networks and constrained their career mobility. I also observed differences in status, career-mobility, and access to elite networks between Norwegian and international interlocutors. Some international energy professionals felt, as they noted, "positively discriminated for" and perceived their workplaces as well as their Norwegian colleagues as encouraging their careers in the industry. Others, however, noted racial discrimination, which they perceived as impeding their career opportunities and – in some instances – to threaten their personal safety. Pointing towards differences in seniority as well as inequalities in my interlocutors' social and corporate networks, I defined energy elites as a heterogeneous network of people with leadership and expert positions in the energy industry, who share socio-economic and educational backgrounds, and occupy similar modes of life.

In chapter 3 I continued my analysis of elites by critically examining scholarship that identifies elites as 'conservative' and as resisting societal changes. I have suggested that elites' preservation of their socio-economic status is not mutually exclusive with their promotion of societal transformations. To illustrate this, I examined the career reorientations of industry professionals who left the hydrocarbon sector in pursuit of jobs in renewables. Throughout my fieldwork, such career reorientations became so prevalent that oil-leaving industry professionals were popularly referred to as *oljeavhoppere* (oil leavers). Enjoying a high level of career mobility, most of my interlocutors moved into equivalent or senior industry positions in renewables. Their successful career reorientations, which I have referred to as 'elite energy transitions' promoted moves towards the renewable energy sector as socio-economically desirable. At the same time their oil-leaving was encouraged by an industry and public

context favourable towards renewable energy technology. I thus situated oil leavers as promoters, not leaders of energy transitions.

However, I also pointed out that some career reorientations of energy professionals were not straightforward as some struggled to find careers in the renewables sector. Other industry professionals switched careers seemingly routinely between hydrocarbons and renewables. Their flexible career moves embodied the narratives of mixed energy businesses which portrayed both oil and gas as well as renewables as essential to energy transitions. I thus suggested that the prevalence of oil leavers alongside the corporate promotion of renewables situated the energy industry as future- and low-carbon oriented despite their continued advocacy of oil and gas production.

Given the momentum that energy transitions gained throughout my fieldwork, I asked in Chapter 4 why and how some industry professionals continued to promote Norwegian oil and gas production. I have suggested that at the root of continued support for hydrocarbons was a perceived dependence on its revenues to 'fuel' Norway's social welfare system. For many hydrocarbon professionals, Norwegian fossil fuels were more than a source of their own enrichment. To them, oil and gas represented luck, fortuity, and a Norwegian way of life. I suggested that in their oil and gas jobs, hydrocarbon professionals situated themselves as the ethical provisioners of income and security for Norway's socio-economic wellbeing. As such, some imagined the end of Norwegian oil and gas production as "social and economic suicide". Other interlocutors however increasingly understood hydrocarbons as a "dirty" and "polluting" substance whose production they felt they could no longer ethically and environmentally justify. Moreover, they suggested that through the successful management of oil income, the Oil Fund had largely disentangled the Norwegian welfare system from new hydrocarbon revenue streams. They expected that the financial backing from the Oil Fund, and a strong bureaucratically organised democracy, would safeguard the Norwegian social welfare system throughout a phasing out of oil and gas production.

As 'oil as welfare' perceptions and narratives became increasingly scrutinised in the energy industry and by publics, hydrocarbon professionals reoriented their advocacy of fossil fuel production. They suggested that through technological innovation, they could make hydrocarbons "clean" at the point of production. "Clean hydrocarbons" became a buzzword in the fossil fuel sector and entailed measures like electrifying hydrocarbon platforms as well as capturing and storing carbon (CCS) to reduce CO2 emissions. To ensure the "survival" of the oil and gas sector, hydrocarbon professionals thus appeared to provide a 'new outlook' for 'old energy'. Some of my interlocutors, however, positioned themselves critically against "clean hydrocarbons", worrying that CCS and electrification efforts were a costly marketing "gimmick" with little overall environmental improvements.

In this context where past energy practices were re-examined and future technologies increasingly scrutinised, I explored in Chapter 5 how interlocutors critically reflected on renewable energy production. Industry professionals identified two key problems with the large-scale deployment of renewable energy infrastructure. The first related to intermittency issues. They argued that when the wind does not blow, or the sun does not shine, energy supply needed to be supplemented with alternative ways of energy production. While in Norway and other water-rich countries this could be done via hydropower, in many other places energy supply, they argued, was reliant on hydrocarbons.

Secondly, they problematised that resource extraction, including hydrocarbon production, was required to create the material parts of renewable energy technology. Ranging from rain forested balsa wood for wind turbine panels, concrete for hydroelectric dams, plastic from hydrocarbons, and neodymium extraction for magnets, these materials, and substances, they noted, are sourced, and produced with socio-environmental impacts for landscapes, humans, and non-human species. A

significant number of my interlocutors were deeply concerned that the large-scale deployment of renewable energy technology required to transition away from hydrocarbons would perpetuate rather than alleviate the environmental impacts of current energy production. For them, energy transitions required more than a swap in energy production technologies. In their advocacy of 'degrowth' some industry professionals proposed a rethinking of the economic systems and incentives that underlie the energy and climate dilemmas. Energy transitions, they suggested, could only happen via a break from the hegemonic economic structures surrounding the energy industry.

In Chapter 5 I problematised the one-dimensional portrayals of industry professionals in the scholarship on extractivism. I have aimed to demonstrate that my interlocutors were reflective and evaluative of their energy production, and analysed energy dilemmas with nuance, noting often that there is no "good" or "bad" energy production. Many energy professionals claimed that all energy technology required trade-offs in the form of social, economic, or environmental impacts on human and non-human agents. They conceptualised these trade-offs as "sacrifices". I demonstrated that their notions of sacrifice had roots in Norwegian mythology, where an eventual gain (like Odin's knowledge) could only be attained if something was given or sacrificed (Odin's eye). My interlocutors remained largely vague and undecided on who or what would carry the cost of sacrifices in energy transitions. This I suggested related to a wider uncertainty and liminality in energy transitions, which entailed vaguely defined parameters, and the ambiguous end-goal of establishing "low-carbon futures". It is this indeterminateness in energy transitions, which I will explore in the next part of this conclusion.

Energy Transitions and their Liminality

In referring to energy transitions as liminal, I denote a period of uncertainty and potentiality in which past understandings are re-evaluated and future visions developed. Liminality is a vast concept, that runs the risk of being so broadly employed that it loses meaning (Thomassen 2014: 7). However, it can also be used to shed light on the complex and seemingly conflicting processes that emerge out of societal transformations. While my interlocutors introduced technological changes and "new energy" projects in the industry, reoriented their careers, and re-evaluated the limitations and impacts of the energy they produced, many continued to advance multiple CO2 emitting, environmentally harmful energy trajectories with the end goal of establishing "clean" energy futures (see Fig. 23). This, I suggest, reflects a multi-potentiality, liminality, and uncertainty in energy transitions that is unlike other social transformations, which usually follow pre-determined phases to reach a defined end goal.

As such, the liminality I describe in energy transitions distinctly differs from the ways individual and societal changes have been theorised in classical anthropological examinations such as in Arnold van Gennep's Les Rites de Passages ([1909] 1960). Van Gennep explored crucial moments in individual's lives as "life-crises" or "rites of passage", which included marriages, funerals, and birth (van Gennep 1960; Kimball 1960: vii–viii). For van Gennep, rites of passage consisted of largely pre-determined patterns in which an individual first undergoes a separation from society ("rites of separation"), followed by a liminal stage ("transition rites"), and ends with their re-incorporation into society ("rites of incorporation") (van Gennep 1960: 11). After the transition, individuals could return to the group and to their customary routines of life (Kimball 1960: ix). Van Gennep also explored rites of passage within larger societal contexts when he considered that "the universe itself is governed by a periodicity (...) with stages and transitions, movements forward, and periods of relative inactivity" (Van Gennep 1960: 3). He thus explored how "celestial changes" such as transitions in seasons or years, were experienced and ritualised by societies (Van Gennep 1960: 3-4). Whether on an individual or societal

level, van Gennep described transitions as having determined end and starting points. The kind of liminality I observed amongst energy transitions in Norway, I suggest, was more uncertain and openended.



Figure 22. Promoting multiple energy trajectories. Sketch by Nicola Rauter.

This particularly related to different conceptualisations of what energy transitions entail and when if at all - they commenced. Some industry professionals, for example, argued that rather than transitions, current energy developments involved 'additions' in which more energy is produced both via renewable energy technology and through hydrocarbons – to feed ever growing demand. Although renewable energy production was increasing in Norway and beyond, they suggested that renewables were complementing rather than substituting hydrocarbons. As such, these interlocutors were still anticipating the commencement of energy transitions, which would entail an eventual move from 'adding' energy to 'transitioning' away from hydrocarbons. Whether such additions were part of energy transition processes or prevented energy transitions from developing was not only a point of disagreement amongst interlocutors, but it also created uncertainty. This uncertainty was amplified through the multitude, and often conflicting, ways in which various industry professionals envisioned energy futures. While broadly speaking, my interlocutors imagined energy futures to be low in carbon emissions, some advocated that this could be achieved with hydrocarbons, while others only saw space for renewable energy production. Again others imagined a total transformation of economic and energy systems. This ambiguity coupled with a sense of infinite potentiality, I argue, makes contemporary energy transitions in Norway liminal processes.

Here I follow Bjorn Thomassen's understanding of liminality as a time-space in which "there is no certainty concerning the outcome" (2014: 7). In a book devoted to the concept, Thomassen first traced the anthropological development of the concept from Van Gennep to Victor Turner, and then explored liminality in early modern time periods, including the Renaissance. Thomassen further analysed the implications of liminality in contemporary culture and leisure through an examination of gambling and bungee-jumping practises. He described liminality as

Any 'betwixt and between' situation or object, any in-between place or moment, a state of suspense, a moment of freedom between two structured world-views or institutional arrangements. It relates to change in a single personality as well as social change and transition in large-scale settings (2014: 7).

Thomassen further noted that transitions may not have definitive end points, and thus suggested that liminality relates to "a displacement, a process of transformation undertaken, but not yet finished" (Ibid.: 13). According to Thomassen, transitions can therefore become ongoing processes, continually perpetuated without an end in sight. He referred to this as the "permanization of liminality" or a "permanent liminality" (Ibid.: 14).

The ways in which my interlocutors conceptualised and engaged with energy developments, suggested to me a perpetuation of the liminality of energy transitions. This, I propose, may happen in those instances where the act of transitioning becomes the end goal, rather than a means to an end. For many of my interlocutors, narratives and marketing of 'low-carbon energy" transitions justified the 'addition' of hydrocarbon energy in the near future as part of the process to achieve transitions away from oil and gas in the imagined far future. This seemed to create a complacency in the energy industry, where industry professionals were highlighting intentions and downplaying the lag in achieving results. While my interlocutors often proclaimed ambitious environmental targets, cited new investment projects, and emphasised progress on renewable energy deployment, these announcements involved narratives of promise that indefinitely delayed the achievement of such low-carbon futures. It therefore seemed to me that "infinity appear[ed] in the horizons of the liminal" in energy transitions (Thomassen 2014: 2).

While the "when" of energy transitions was a matter of debate amongst my interlocutors, my observation was that the simultaneous pursuit of hydrocarbon and renewable energy trajectories under the narrative of 'energy transitions' became a "permanization of liminality". Energy transitions neither had a clearly defined endpoints nor set guidelines for how to get there. This enshrouded energy transitions in an uncertainty with the potential to negate future outcomes. As industry professionals promoted renewable and 'low-carbon' energy futures, there was a distinct sense that the present may barely be the beginning of the future. As such, the energy transition imaginaries of industry professionals involved vague future visions where end dates were seemingly loosely cited to denote the 'arrival' at 'a green future', which many seemed to doubt would ever come into being. The future thus appeared compromised by the multiple and conflicting interests of the present. Or, differently put: industry professionals' multiple and conflicting future imaginaries seemed to lock in a liminal, indeterminate present.

Hirokazu Miyazaki has suggested that people reimagine "the present from the perspective of the end" (2006: 157). But what happens when the end is a 'utopia of imagination' or a 'fantastic future' that seems unattainable and undesirable in the present? For many of my interlocutors, fossil fuel free futures were not only perceived as practically unfeasible for the foreseeable future, but also as socioeconomically undesirable. The narrative of energy transitions allowed them to safeguard and promote hydrocarbon production by introducing incremental, adaptive changes to satisfy present popular

demands for low-carbon energy futures. As such, visions of a 'cleaner energy future' were instrumentalised by some industry professionals to justify the liminal present state.

Even those interlocutors who deemed low or zero-carbon energy futures desirable raised concerns that these futures may be unattainable. This related particularly to their considerations beyond Norway. Industry professionals often pointed out to me that energy transitions required a transnational effort. If Norway alone would phase out oil and gas, they argued, it would have little effect on global emissions. However, some interlocutors thought that Norway could be a role model for other countries. Contrary to the way van Gennep (1960) imagined transitions following a predetermined pattern within given frameworks, for Norway there seemed to be no clear pathway for "rites of incorporation". From the perspective of my interlocutors, there was no country that had yet successfully completed energy transitions, and therefore no larger entity to 'incorporate' into. Energy professionals often emphasised that their companies already went well beyond the European Union and United Nations emissions targets. As such, they saw themselves as leaders of energy transitions, and in their roles as pioneers they did not, and could not, follow pre-established frameworks. Norwegian energy transitions were thus imagined by these industry professionals as affected by a broader, global uncertainty pertaining to energy and climate futures.

From Transitions to Futures?

For many of my interlocutors, uncertainty was associated with future crisis relating to climate change and its unknown effects on industry and life, while the present was understood as relatively certain and rich. As already mentioned, my interlocutors frequently cited various elusive studies that suggested Norway would be amongst the few countries which would be least and last affected by changes in the climate. Although freak weather occurrences like the lack of snow in the winter of 2019/2020 cited in the vignette above challenged this assumption, their climate change imaginaries shaped the time horizons and perceptions with which my interlocutors approached energy transitions. Most envisioned climate and resulting socio-economic and political crises as a thing of the future, not the present. However, their uncertainty pertaining to such ambiguous, looming futures, I suggest, prompted a prioritisation of the more tangible 'now' and near future, and postponed the pursuit of the far future indefinitely.

Some interlocutors argued for example, that as many Norwegian hydrocarbon resources as possible should be exploited before a potential end to the sector. This seemed to be a sort of 'hamstering', an accumulation of resources in the present not only as an 'insurance' for the future, but also to 'live the good life' in the present. In this vein, energy professionals' expectations of future decline appeared to foreground the plenitude of the present. In her work on Oman, Mandana Limbert has similarly observed amongst her interlocutors that future expectations about oil depletion led to a perception of the present as "Oman's golden age" (2016: 148). Limbert noted that over the course of 40 years, prediction's about oil depletion were continuously deferred, but led her interlocutors to understand Oman's future as uncertain, and there presents as liminal (Limbert 2015: 343). According to Limbert, most envisioned that a future without oil would involve a return to the poverty people recounted from the pre-oil era in Oman (Limbert 2015, 2016). As such, similarly as what I observed in Norway, Limbert's interlocutors too appeared to imagine the future as potentially worse than their present.

Despite their future uncertainty, my interlocutors felt that the Oil Fund protected them to some extent against future financial precarity. As discussed in Chapter 4, the Oil fund aims to safeguard oil wealth

for future generations, while also supporting present socio-economic welfare. This commitment to preserve future wealth has often reminded me of the story of "Momo" by Michael Ende (1973). The renowned fictional novel with magical realist elements is based on the premise that time – similarly to wealth or money – can be preserved for future use. In the story, 'grey men', homogeneously dressed bankers, promise to store people's 'saved time' for future occasions. Not keeping their end of the deal, however, the grey men materialise time in the form of cigars, which they themselves smoke to prolong their own lives. In the process they harm the people who have entrusted them with safeguarding their lifetime. Aside from critical reflections on capitalist mechanisms, the story offers insights into the fleetingness of (life)time as well as social commentary about the place of material and pecuniary objects in society.

In "Momo" the protagonists are incentivised by the notion that time can be preserved. Similarly, many of my interlocutors – particularly hydrocarbon professionals – were incentivised to produce more oil and gas to grow and safeguard Norway's oil wealth for themselves, Norwegian society, and for future generations. Often it appeared to me that the primary target of wealth accumulation side-lined the costs to environment and climate. For many hydrocarbon professionals however, the continued production of fossil fuels added a measure of certainty to a time-space they envisioned as increasingly uncertain in the future. To them, the flourishing of the oil and gas sector in the present was not considered to be at odds – or even harmful – to the pursuit of "green futures". On the contrary, fossil fuels for many hydrocarbon professionals were the guarantor that the pursuit of such a "clean(er) energy future" could be financed, technologically advanced, and materially constructed.

As I mentioned, I observed that many industry professionals seemed to want it all: to preserve plentiful energy presents and work towards abundant energy futures. They were "proponents of ecological modernisation" who expected that "ecological crises are overcome via the efficiency of the market through economic growth and innovations in technology" (Sze 2015: 16). For them, energy transitions needed not only to mitigate climate change, protect landscapes, species, and environments, but also ensure continued 'sustainable' economic growth. These efforts are similar to what Julie Sze has identified in the ecological visions of urban planners in Shanghai in response to an increasing problematisation of climate change (Sze 2015: 9). Her work in particularly explored plans for the construction of an eco-city in Chongming island outside of Shanghai with the target of building a "zerowaste" and "carbon-neutral" metropolis by 2050 (Ibid.: 2). Sze demonstrated how the "eco-city" project entailed visions of fantastic futures in which ecological sustainability could be combined with economic growth. Rooted in these future visions, were "eco-desires", which Sze described as "the fusion of desire, projection, profit, and fun in certain top-down versions of eco-development" (Ibid. 16). Though energy developments were seldom, if ever, referred to as 'fun' by my interlocutors, many energy professionals in Norway advocated the possibility of sustainable development. As discussed in Chapter 5, this contrasts the incompatibility other interlocutors saw between environmental sustainability and sustained economic growth.

Energy Transitions as Ruptures?

For those industry professionals who were critical that environmentally sustainable energy futures could be brought about through economic growth mechanism, 'eco-desires' were of a different kind. They perceived the need for a radically different non-growth focused socio-economic system "in balance with nature", focused on compassion and inter-species care. More than an 'addition' of renewable energy or a switch away from hydrocarbons, they advocated the need for a drastic socio-

economic transformation. Scholars have examined such an uncoupling from past trajectories to create new, distinct futures. Nikolai Ssorin-Chaikov (2017) for example examined multiple temporalities in his comparative ethnographic study of time, in which he analysed the collapse of the USSR as experienced by an indigenous Evenki hunter, and the relationship between Vladimir Lenin and American businessman Armand Hammer in the 1920's (Ssorin-Chaikov 2017: 8). Through these seemingly disparate socio-historical contexts, Ssorin-Chaikov advocated a temporal multiplicity and defined time as "a relation between things" (Ibid.: 6-7). According to Ssorin-Chaikov, time frames and eras are intimately related, where "each is what it is through the lens of others" (Ibid.: 7). This relates to how some of my interlocutors worried that energy transitions would replicate the extractive tendencies of hydrocarbons, and thus not allow for a disentanglement from past environmentally harmful practises in energy futures. Ssorin-Chaikov noted, however, that societal transformations may take place as "relations of rupture", in which a "change from one temporal framework to another (...) renders a preceding framework untrue completely" (2017: 9). Rupture in this sense may be necessary to bring about the kinds of energy futures uncoupled from past extractive, high emitting energy trajectories that some industry professionals imagined.

Similarly, but in Marshall Sahlin's words, drastic energy transitions away from growth-based hydrocarbon trajectories would be examples of 'discontinuous change', grounded in 'humiliation' as people come to see the socio-economic value they place in hydrocarbon trajectories as environmentally unsustainable and unethical (Sahlins 2005; Robbins & Wardlow 2005). As I cited in Chapter 3, discontinuous change, according to Sahlins, happens when people

Learn to hate what they already have, what they have always considered their well-being. Beyond that, they have to despise what they are, to hold their own existence in contempt – and want, then, to be someone else (2005: 8).

I argue that at the very core of rupture or discontinuous change is a change in perceptions. As I analysed throughout this thesis, some industry professionals came to fundamentally re-evaluate their understandings of their own roles in the industry. Malin in Chapter 3 noted that while she was initially proud to work in hydrocarbons, she increasingly felt ashamed working in a sector that she came to understand as a major contributor to climate change. This led her to reorient her professional and private affiliations away from oil and gas. Harris, a formerly successful oil business leader, became increasingly critical of his and society's role in energy futures after switching away from hydrocarbons into a leadership position in renewables. In his new position, he aimed to create a business in which 'energy ethics' as he came to refer to it – ecological and social sustainability considerations – were to be viewed as important, if not more important, than growth and profits.²⁹ These reorientations of perceptions, in which people came to view their previous conceptualisations as ethically and environmentally 'wrong', marked a decided shift from the liminality of energy transitions in which multiple energy trajectories – 'old' and 'new' – were accepted and promoted. For Malin and Harris, energy transitions were idealised as discontinuous change, not endless liminality.

Where does this leave 'elite energy transitions' in Norway?

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²⁹ Harris became very interested in the Centre for Energy Ethics, and actively engaged in some of our events and activities. Since our fieldwork encounters, he often made use of the concept of "energy ethics" in our continued (post-fieldwork) conversations, conveying with the term his own desires and efforts to make his business more ethically and environmentally sustainable.

I have suggested that during my fieldwork from 2018-2020, industry professionals redefined and reevaluated their conceptualisations of, and relations to, Norwegian energy production. Whether hydrocarbon or renewable — increasingly energy trajectories were being questioned within and outside of the industry. While not all of my interlocutors pursued big changes in their careers or private lives in response to climate concerns and emissions targets, most came to re-examine their own roles and the industry's positions in energy futures. These reflections, the various future energy visions, alongside the multitude of different technologies and innovations being developed, created not only uncertainties but also infinite future potential. As such, I have chosen to refer to this period of energy transitions as one of liminality; a time-space scale in which multiple energy trajectories flourished without a definitive pathway or end point. Although some of my interlocutors saw energy transitions in Norway as partly completed — particularly in light of the decarbonised electricity sector — I suggest a conceptualisation of energy transitions as processes in the making. Key to these processes, I have argued, were changes in perceptions of strategically situated industry professionals. As energy elites contemplated, reoriented, and concretised their future energy visions, they laid the groundwork for socio-economically and ecologically sustainable energy futures.

Avenues for Further Research

Energy Elites do not operate in a vacuum (Salverda & Abbink 2013: 16). In this thesis I have noted how interpersonal connections between industry professionals, their families and friends shaped energy leaders' and experts' professional decisions. During my fieldwork, I also attained insights into energy elites' networks beyond the industry. Aside from professional and personal connections to financial and media professionals, this included particularly networks involving political leaders and bureaucratic authorities. As I have noted in the introduction, the Norwegian energy industry and the state are strongly interconnected. The state has direct financial interests in Norway's energy infrastructure, is partial and full owner of several energy companies, and through an intricate system of taxation and subsidies encourages certain energy developments. Many of my interlocutors saw future energy trajectories as highly dependent on political directives and governmental decisions. To showcase this, some of my industry contacts connected me to their friends in state positions, encouraging me to enquire about their perceptions and expectations of energy transitions. Particularly towards the end of my fieldwork, I met several leaders from governmental departments and political parties who in turn offered to connect me to some of their colleagues. This became a potential turning point for my study, as I considered deviating from my initial research objectives to examine in depth the interrelations between political and industry elites. At the time, such a deviation seemed particularly relevant as the onshore wind power debates took place in Norway, which highlighted industry, political, and public entanglements.

Considering however, that the opportunity to do research amongst political leaders arose only towards the latter half of my fieldwork period, I was concerned that a change in research focus at that stage would prevent me from gaining deeper insights into my industry field site. Choosing depth over breadth, I therefore decided to continue to concentrate my attention on energy industry leaders and experts. Future studies of energy transitions could benefit from an examination of the interrelationships between the state and the energy industry. This is particularly the case in Norway, a country with a deep historical relationship between state and energy developments (see Moses & Letnes 2017; Ryggvik 2010). In Norway such an examination could involve various institutions including energy and environmental government departments, political parties, as well as labour

organisations and industry employer associations such as *Norsk Olje og Gass* (Norwegian Oil and Gas). Examining interrelationships, tensions, and conflicts in personal perceptions, assumed roles and future imaginaries of leaders and experts in these sectors can shed light on the complex decision-making processes surrounding energy developments. Particularly those scholarly assertions that hold energy leaders and experts responsible for perpetuating energy and climate dilemmas (e.g. Hughes 2017; Riofrancos 2019) warrant future studies that further examine the roles, accountabilities, and inter-connections between strategically positioned people in energy transitions. Even beyond Norway, energy dilemmas, which take place in most energy transition contexts (see introduction), require explorations of what decisions give rise to the liminalities and conflicts between renewable and hydrocarbon energy trajectories.

Dominic Boyer has coined the term "energo-power", loosely defining it "as a genealogy of modern power that rethinks political power through the twin analytics of electricity and fuel" (2014: 325). Boyer encouraged further development of this "provocative placeholder" (Ibid. 325). I suggest an analysis of the relations between energy and political elites — professionally and privately — can contribute to this task. This raises questions of how to study and represent the 'energo-power' relationship. On the topic of studying strategically situated leaders and experts, Karen Ho, reflecting on her analysis of Wall Street bankers, has noted that:

Studying the powerful (...) turns anthropological notions of distance upside down. One could argue that it is precisely the centres of power that have been furthest removed from the anthropological lens, and are thus "the most distant." When the powerful escape scrutiny and build up exclusive social, cultural, and political walls to limit access, they become representationally invisible (2012: 33).

I have suggested in this thesis that it is not only elites' alleged exclusivity that has limited their study and complicated their representation. It is also the way that anthropologists have often studied and described elites as enshrouded in 'mystique' that created analytical and ethnographic distance to 'the powerful' (see e.g. Cohen 1981). Further ethnographic studies, I argue, are required in order to bring nuance to descriptions and analyses of elite cultures and their influence on energy and societal structures. Such studies could make visible the 'energo-power' relations between industry, politics, as well as other influence groups (including for example financial stakeholders).

With the question of representation in mind, future studies may also explore employees' and publics' perceptions of energy elites. Further research can examine how industry professionals and their business decisions are perceived outside of their networks, and how these perceptions may impact energy elites' decision-making in energy transition contexts. Throughout my fieldwork, I noted tensions in the ways my interlocutors self-represented their roles and how their families, other industry professionals, as well as publics viewed energy leaders' and experts' responsibilities. Future studies could trace the reverberations of industry professionals' business decisions within wider industry and societal circles to get a more detailed understanding of how and for whom industry professionals can be key promoters of energy transitions.

Moreover, future research outside of Norway could further explore how energy elites aim to encourage certain energy trajectories, and how they may hinder or prolong energy transition processes in other countries. In this study I have suggested that hydrocarbon professionals adapted narratives, marketing, and technology of oil and gas production to align the sector's continuation with energy transitions goals. Future research could examine the extent to which energy transitions feature in hydrocarbon narratives of business leaders and experts in other petro-states. This will not only contribute to the study of leaders' and experts' involvements in energy transitions, which continues

to be sparse, but will further explore the socio-cultural and economic values associated with hydrocarbons.

Epilogue: Where are they now?

The end of my fieldwork was brought about more abruptly than I had anticipated. The onset of the Covid-19 pandemic meant that I was unable to return to Norway after a short visit to my family in February 2020. This required me to cancel the end of fieldwork party I had organised, in which many of my interlocutors would have met each other for the first time. Aside from being a final research opportunity, I had planned for the party to be a gesture of appreciation towards my interlocutors who welcomed me into their lives and devoted time to this study. It was not until two years after, in the summer 2022, that I returned to Oslo for a post-fieldwork trip.

Over the course of a short, five-day stay I was able to meet several of my key interlocutors and friends, many of whom I had stayed in touch with virtually throughout the pandemic. One of my interlocutors, with whom I used to go ice swimming at Energo, had become an oil-leaver. After almost 20 years working in hydrocarbons, he switched jobs to a renewables-only company. He was excited to work in a new professional environment and emphasised that his career reorientation was motivated by a sense of responsibility to move away from oil and gas towards "cleaner" energy. Another interlocutor from Energo I met with for after-work drinks during my post-fieldwork stay, told me proudly that he stayed in his hydrocarbon positions. This, he told me, had not been easy as several hundred employees were let go in 2020 as the pandemic put a financial strain on the company. In his expert position as a seismic sound specialist however, he was able to keep his position.

My interlocutors at EnergyMax did not share with me stories of large-scale employee layoffs. However, many noted that the pandemic had changed their work routines. Initially people worked from home, then work was organised in shifts with some employees at the office, while others worked from home. When eventually all employees were encouraged to return to the company offices, some found it difficult to adjust to work away from their families. Ella, whom I met for afternoon tea during my post-fieldwork trip, told me that the pandemic-related home-office had made her work-life balance easier. She now continued to work from home one day per week. Ella too, kept her hydrocarbon job, and continued to feel, as she noted "happy and satisfied" in her position. However, Ella did perceive that exploration for new oil and gas reserves in Norway seemed to be declining. In her job, she noted that exploration was confronted with increasingly many regulatory and bureaucratic hurdles that made new projects less attractive, thus leading her company not to pursue them.

I met Harris twice during my post-fieldwork trip. Once for a hike in the marshy forests outside of Oslo, and a day later for lunch at Frognerparken – a popular park in the centre of the city. Harris had opted for another career switch in the summer of 2021 where he became the co-leader of a start-up company producing hydrogen fuel infrastructure for the Norwegian shipping industry. Incentivised by Norway's announcement to make short-distance ship travel hydrocarbon-free by 2025, Harris is now working tirelessly on establishing their hydrogen business to "make a difference", as he said, in the industry. For Harris, 'making a difference' continued to be "about more than profits" as he placed emphasis on a supportive work environment and finding ways to bring about "sustainable energy futures". Harris was amongst the few interlocutors during my post-fieldwork trip who continued to

raise climate change and environmental concerns. As I will discuss below, most other interlocutors seemed more concerned about what they identified as an impeding energy crisis.

I got to meet my friend Brit and her baby Lola for a sunny afternoon walk in the park. Brit and her partner had married in 2020 and got their first child in the beginning of 2022. After seven months of parental leave, Brit decided to leave her job at Energo to a pursue her career in a food-service company where she continues to work in IT. She noted how thrilled she was to be part of a "young work environment" but fondly looked back at her time at Energo. She continued, as she said, to stay in touch with her former colleagues at the company. Her mother Irene and stepfather Einar, she told me, were also well and continued to work at EnergyMax and RenEnergi respectively.

Jarle and I met for lunch at one of his favourite restaurants. The pandemic, as he had told me over several video calls throughout 2020 and 2021, had drastically deaccelerated his professional and private life. From previously traveling across the globe almost weekly, he too started conducting most of his business from home (or rather from his several homes as he switched between working from his town house, summer villa, and his winter cabin). With the drop in oil prices in 2020/21, his business had slowed down, leaving some of his international assets stranded and him seemingly worried. However, when the oil prices increased dramatically in 2022 his business picked up again. When we met in Oslo, he was back to his busy jet-set lifestyle. After lunch, we walked across the city, when he received a phone call. Once he hung up, he told me that he had just made a 400-million-dollar oil deal.

Fredrik and I also stayed in touch throughout the pandemic. I mentioned him in Chapter 3 in relation to his career switch from a renewables-only company to EnergyMax. We had arranged to meet during my post-fieldwork trip to Oslo, but unfortunately failed to do so due to a last-minute scheduling conflict. During out virtual meetings in 2020 and 2021, Fredrik noted that he struggled with the isolation from working at home during the pandemic. He was particularly excited when Norway loosened Covid-19 restrictions and he could return to the office spaces of EnergyMax. In 2021 he was promoted to one of the company's most senior management positions, "one step under the executive team", as he referred to it.

I'm sad to note that I have lost touch with Rolf. When we last spoke in 2021 during a virtual meeting, he enthusiastically told me about the progress of his new consulting business. He mentioned several health problems, and eventually stopped responding to my messages.

During my post-fieldwork trip I also met with Anders, who became one of my closest friends over the course of my fieldwork. I only briefly mentioned him in Chapter 1, but his contribution to my research was significant. Anders and I became friends at Energo, where we were seated next to each other in the big open-floor office. He and his work friends welcomed me to join them for lunch and coffee breaks, they organised after-work drinks and dinners as well as a sailing trip to which they invited me. Anders and I also once kayaked together, went to the opera, and regularly met for dinner at our favourite Indian restaurant. With over 30+ years of work experience in the oil and gas sector, Anders was instrumental in broadening my understanding of the Norwegian energy industry. With a background in philosophy and a keen interest in socio-cultural matters, Anders also helped me to discover the intricacies of Norwegian social life. Our conversation topics ranged from discussing Janteloven (see Ch. 2), to Protestantism, depression and suicide cases, and energy company reputations. When I entered the field, Anders was approaching retirement. For a long time he continued to work as an independent consultant for Energo. On the day we met during my post-fieldwork trip, he had concluded his last work project and was officially retired. We continue to be in touch and discuss energy matters and beyond.

Concluding Reflections

My impressions of the Norwegian energy industry post-fieldwork are that the expectations of most of my interlocutors were partly met – irrespective of their energy sector. Particularly the oil and gas professionals I encountered during my fieldwork from 2018-2020 had predicted that hydrocarbons would – despite the momentum gained in energy transitions towards renewables – soon boom again. Two years later, with the 'double whammy' of the Covid-19 pandemic and the outbreak of war in Ukraine, both renewable and hydrocarbon developments have been accelerated. While hydrocarbon professionals could not have anticipated the effects of the COVID-19 pandemic, which initially resulted in a bust in the oil sector (as international travel and trade slowed down drastically), their predictions of a boom on the horizon were confirmed. During my post-fieldwork trip the oil price rose to 120\$/barrel, a number that had not been reached in almost a decade. Until the time of writing, 60% of total value of Norway's export of goods have been made up of oil and gas (Norskpetroleum 2022). A decided increase from the 50% or lower in the previous years. At the same time as oil and gas production was booming again, renewable energy professionals noted that their businesses in 2022 were advancing with new projects expanding renewable energy technology in and beyond Norway.

However, as many interlocutors pointed out during my post-fieldwork trip, many parts of Norway had experienced unusual dry spells during the spring and early summer of 2022. During my hike with Harris, I noticed the effects of the drought on the surrounding flora. The moss had dried up, blueberry bushes had turned a burnt orange colour, and the surrounding lakes' water level had decreased significantly. Indeed, low water levels were a nation-wide concern, as the lack of rainfall meant that many water reservoirs in hydro-electric installations could not fill up. Despite this, my interlocutors noted, that utility companies continued to export electricity generated from hydro-electric power to other European countries. This caused an uproar as many industry professionals anticipated an electricity shortage in the winter if droughts were to continue. Moreover, despite agreements in place that would ensure supply of European electricity, my interlocutors worried that in the context of war in Ukraine, European countries would not be able to deliver on the promise as they themselves were approaching electricity scarcity. As such my interlocutors worried that utility companies prioritised short-term economic gain over saving water reserves for a potential "energy crisis" in the winter.

With what my interlocutors identified as a "hyper-focus" on oil and gas production and securing electricity supply, they found that climate change discussion within the media and in public discussions had largely dissipated. One interlocutor rhetorically asked me: "Where is Greta Thunberg now? She seems to have disappeared!". Harris and other energy professionals however still noted that they strongly promoted climate mitigation and energy transitions in their personal and professional industry activities. While, as they perceived, immediate energy concerns had taken away focus from environmental sustainability matters, they continued to feel a responsibility to promote 'green' and 'good' energy futures.

On my post-fieldwork trip, energy developments in Norway continued to feel liminal, and indefinite. Energy futures were still vaguely imagined by interlocutors as 'low-carbon' or 'carbon neutral' in which "balance to nature" would be 'restored'. Energy transitions were pursued in a multitude of ways, and both renewable and hydrocarbon trajectories continued to be promoted. As I have reflected on my own positionality during the writing process of this thesis, I too find myself, along with my interlocutors, deeply intertwined in the liminality of energy transitions. I am conflicted and perplexed by the choices I feel responsible to make, frustrated when those choices are uncomfortable or feel

impossible, and deeply satisfied in those instances I perceive myself as climate and environmentally proactive.

One of the reasons, I think, why my interlocutors and I generally got along well during my fieldwork, was that I openly problematised my own 'unsustainable', oil-dependent practices during our conversations. Equally though, I also explored together with industry professionals the changes we made in our lives to distance ourselves from fossil fuels. This included the installation of solar panels on rooftops, walking and cycling to and from work, eating largely vegetarian, picking up plastic trash at the beachfronts, and engaging in critical self-reflections. It was these contemplations and open discussions that kept me motivated throughout my fieldwork. As I continue to engage in critical and reflexive conversations with interlocutors post-fieldwork, I remain optimistic. We are advancing our thinking about, reflecting on, and assessing our place in society and the world at this time of perceived fundamental changes. While reflection, I like to think, is the first step towards action, I continue to worry however, that our pace and capacity for societal transformation may be outpaced by climate and environmental conditions that make life as we know it for humans and other species increasingly difficult (see Fig. 24).



Figure 234. A melting iceberg in the Arctic Sea from a melting glacier. To me this is a visual illustration and reminder of the reality of anthropogenic climate change. Photo taken by author in 2019.

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