Going green in the Norwegian fossil fuel sector? The case of sustainability culture at Equinor

Abstract

As the effects of climate change continue to impact society, organizations within the fossil fuel sector are seen as principal contributors to the climate crisis through their numerous practices. In the hopes of mitigating climate change at source, this study suggests that a strong sustainability-oriented organizational culture can contribute to reversing "business as usual" practices towards seeking strategic greener solutions. Such results are partly achieved by strong responsible leaders at the organizational helm in combination with a high sustainability-oriented national culture. Additionally, it critically questions the secrecy surrounding the case organization's 'choice' and 'format' of promotion and support for their operational status quo (e.g., greenwashing), to challenge the insider perspective unearthed herein. Finally, the study contributes to the newer and under-investigated field of green human resource management by better identifying the role of organizational culture as a critical lever in bringing about much-needed organizational greener policies, and offering a critical analysis less seen in green HRM.

Keywords

culture, leadership, organizations, green, fossil fuels, critique.

“We can’t change ecological limits. We can’t alter human nature. But we can and do create and recreate the social world. Its norms and our norms. Its visions and our visions. Its structures and institutions shape and are shaped by those norms and visions. This is where transformation is needed” (Jackson, 2009, p. 188).

Introduction

According to Future Earth’s *Global Carbon Budget*, an initiative produced by 76 of the world’s leading scientists from 57 research institutions in 15 countries, in order for the world to avoid climatic disaster, we must stay below the threshold of a two degree Celsius increase in global temperature, or a cumulative emissions of around 500 gigatons of carbon into the atmosphere. Unfortunately, each year we are already emitting about 40 gigatons. Here, the notion that organizations around the world play a significant role in contributing to these greenhouse gas emissions, a principal contributor to climate change, is accepted in much of the environmental studies and management literature (Crichton et al., 2021), yet less known is that a mere 100 companies are responsible for up to 71% of global emissions. Since 1988, 50% of these emissions can be traced back to just 25 organizations, the majority falling within the fossil fuel sector (Riley, 2017). This statistic is revealing, as while evidence of the existence and consequences of climate change is well-known, the identities of the principal perpetrators are not.

Further troubling, according to the *Global Carbon Budget*, the fossil fuel industry has discovered, developed, and already monetized 2500 gigatons of carbon. This excessive carbon, even though it is currently in the ground, already appears as financial assets on the books of fossil fuel corporations and sovereign funds. If these financial assets were to be physically operationalized and burned, we would far exceed even a five degrees Celsius global temperature rise, which would clearly be catastrophic for the planetary environment and global economy. Thus, the fossil fuel industry is challenged with decoupling their financial reliance on carbon and moving to more sustainable practices. In doing so, agreement exists surrounding the reality that climate change must be mitigated and that a shift in "business as usual" practices needs scaling up (Huisingh et al., 2015; Crichton et al., 2018), alongside understanding that this challenge is long term, and full-scale decarbonization of the fossil fuel industry is necessary. This type of transformation of the fossil fuel sector will take several decades, but it must be accomplished by every organization.

Many disciplines, including the human resource management (HRM) literature, have attempted to answer calls to propose new business practices, with many studies focused on combating climate change through enhanced organizational diversity (Post et al., 2011; Alazzani et al., 2017; Crichton et al., 2021), sustainability-targeted performance management (Russo and Harrison, 2005; Kolk and Perego 2014), and the re-designing of compensation systems for executives (Stanwick & Stanwick, 2001; Cordeiro & Sarkis, 2008; Lothe et al., 2002; Artz et al., 2012; Crichton et al., 2022). However, one area that has been under-examined in the relevant literature is the role of organizational culture, with a particular knowledge gap in the effectiveness of pro-environmental values, beliefs, and behaviours as levers in enhancing environmental performance (Roscoe et al., 2019). As such, this prompts the question: is a strong sustainability-oriented organizational culture a key driver in bringing about organizational environmental performance, and, if so, how? With this principal question in mind, this study aims to examine Equinor, one of the largest fossil fuel multinational enterprises in the world. Equinor has a strong organizational culture centered around sustainability and, as such, has the potential to offer key insights into the strengths and limitations of utilizing organizational culture as a driver for sustainable outcomes. The present manuscript seeks to identify these insights, offering key lessons, which other organizations can turn to as they strive to meet their own sustainability goals.

Herein, we draw on organizational culture and environmental studies literature to inform our hypothesis about the relationship of organizational culture as a key lever in enhancing organizational sustainability practices. In doing so, the structure of this paper is as follows: First, we draw from prior studies to develop our concept of organizational culture and its drivers, as well as to better speculate the potential it holds for cultivating sustainability within an enterprise. We next consider additional drivers, as identified through prior literature, which impact an organization's culture relative to its orientation around sustainability. Taken together this, then, helps us to identify Equinor as the focus company of our case study. With this in mind, we then detail our methods section, case study, data analysis and discussion. Finally, we conclude with sections dedicated to the limitations and contributions of the study, future research ideas, and practical implications.

Prior work, knowledge and practices

Change and executive influence

Organizational culture is a well understood concept within the prior literature. It is generally defined as an organization's collective work identity coming from employees' shared values, core beliefs, social interactions, and general behavioral expectations (Schwind, 1988; Warrick, 2017). This culture is built over time and guides overall organizational behavior. For the most part, the CEO and other top leaders of organizations are understood to be principal influences on the creation and development of organizational culture (Schein, 2004; Tsui et al., 2006; Giberson et al., 2009; EstradaCruz et al., 2019). As explained by the work of Giberson et al. (2009), the leader sculpts organizational culture using internal and external organizational elements, paying attention to critical HR practices that have the capacity to bring about substantial change. These leaders are organizational cultural creators and transformers, and enactors that can create a culture of strong performers and an environment where both strong employee commitment and loyalty prosper (Boeker, 1997; Linnenluecke & Griffiths, 2010). As Schein (2004) finds, as these leaders adapt their decision-making and behavior, so too does the organizational culture adapt. Therefore, an "organization's culture does not form randomly, but rather through the CEO's key strategic and operational decisions" (Giberson et al., 2009, p. 125). Nonetheless, the CEO alone cannot make the organization effective, as their role is to create an environment of shared values. These shared values, as identified by many previous studies, are a key way in which a leader can influence the performance and effectiveness of its organization (Tsui et al., 2006; Wang et al., 2011; Nikpour 2017). The existing literature also suggests that a strong organizational culture is necessary for strong financial performance too (Sorenson, 2002; Linnenluecke & Griffiths, 2010). In this way, an organization's culture, mediated by positive employee attitudes, effectively acts as an agent by which leaders can influence organizational outcomes.

Achieving sustainability goals

Given the importance demonstrated by these prior studies of organizational culture on company outcomes such as performance and effectiveness, a question arises as to whether culture can be applied as a driver in reaching sustainability goals. While this critical question is largely unaddressed by the literature, existing knowledge suggests that a leader who is engaged in sustainability-oriented values can effectively aim to disseminate these values among their employees through organizational culture (Linnenluecke & Griffiths, 2010, Jiang et al., 2021). In other words, sustainability values and principles, as they relate to organizational culture, must start at the top (Welford, 1995), and will then translate to sustainability practices throughout the organization. Preliminary studies reinforce these implications, as they have found that organizations with senior leaders who engage in corporate sustainability practices, both in their personal practices and company practices (e.g., the integration of environmental performance indicators in employee evaluations), increase employee understanding and a sense of shared values as they relate to sustainability (Linnenluecke & Griffiths, 2010; Kucharska & Kowalczyk, 2019).

A multitude of literature studies have further explored this interrelation between leader mindset and organizational sustainability. Linnenluecke & Griffiths (2010), for example, find that, in order for leaders to move organizational culture towards one that is more environmentally conscious, it is necessary for leaders "to abandon a purely economically driven paradigm and achieve a more balanced set of socially and environmentally responsible values" (Linnenluecke & Griffiths, 2010, p. 363). Epstein et al. (2010) echo this point but position the narrative differently in suggesting that sustainability performance is vital to long-term financial success, and assert that a social and environmentally sensitive organizational culture is a “must have” component for organizational sustainability performance. These authors lay out several key attributes of such a culture, which include a passionate commitment to colleagues, customers, and the community, and further posit that it is necessary for an organization to be socially and environmentally conscious too. Ergo, the weaving of environmental issues into all decision-making should be a cornerstone of organizational values (Goworek et al., 2018), which prompts the question: where do such organizational values originate?

Decarbonising the fossil fuel sector

In answering the question above, the prior literature has suggested that organizational culture is influenced by the nation where the organization resides (Lefevre et al., 2021; Stephenson et al., 2021; Wang et al., 2021). As such, a country with low carbon aspiration - where environmentally sensitive energy policies, such as moratoriums on coal, renewable energy subsidies, organizational efficiency subsides, tax credits, and even fines exist - will not only influence their organizations to be proactive (e.g., is carbon risk aware, provides transparent carbon disclosure and enhances environmentally sensitive governance mechanisms), but also influence the development of processes and products more oriented towards decarbonisation through energy materiality (e.g., low cost renewables, low-carbon electricity and enhanced wind power technology) (Geels et al., 2017; Wang et al., 2021). Furthermore, beyond just financial incentives and punitive consequences to the organization sits the necessity of country level positive discourse oriented around social and economic benefits. Such discourse has the capacity to bring about social acceptance of newly enhanced decarbonizing of businesses (Hughes & Urpelainen, 2015). Taken together, it would seem that a true accelerated low-carbon transition at the organizational culture level perhaps starts at the 'decarbonized-intent' national cultural level.

Take Norway, for example. The IEA reports that Norway stands as the world's 7th largest producer in the oil and gas industry, exports over 85% of their energy production, and supplied 3% and 2.3% of the gas and oil markets in 2020, respectively. In 2021, oil exports contributed to more than 800 billion NOK of the nation's revenues and has traditionally played a large role in funding welfare initiatives and public pension expenditures. The country has ample reserves to continue their dominance in the oil and gas industries, but such sectors contribute to around 25% of their emissions (IEA, 2022). Given the nation's historical success in and reliance upon the fossil fuel sector, the global climate crisis is particularly challenging to the Norwegian energy as they now must wean themselves off of their reserves, which pose substantial possibilities and temptation for their future.

Despite the large contribution that oil and gas has to their economy, following the Paris Agreement, the country has become a leader in the energy transition mission and has set a 2050 target to become a low emissions society. According to IEA reports, the Climate Change Act, enacted in 2017, outlines the nation's climate initiatives, which target a 90-95% reduction in emissions as compared to their 1990 levels through a combination of Climate Action Plan efforts including taxation on GHG emissions, greater informational awareness efforts, the promotion of innovation, and greater regulation on high emission sectors. The country also serves as a leader in sustainable development, as they were among the firsts to implement a carbon tax, and also agreed to assist the EU in climate legislation development in the coming years (IEA, 2022).

Focus Group Selection

As predicted by the literature, Norwegian oil and gas companies, whether out of fear of punitive damages and regulatory oversight, reputational pressures, or due to their own shared values for the environment, are exhibiting substantial progress in adopting the sustainable initiatives and goals set by their nation. Equinor, previously known as Statoil, is one of such companies. Out of 42 of the largest global fossil fuel organizations (based on market capitalization), Equinor has been a leading “green organization” based on scope one carbon emissions (analysed through descriptive analysis). These 42 organizations each participate in the process of oil and gas extraction through developmental drilling (where reserves already exist) and exploratory drilling (where reserves do not already exist). Data spanning 2008-2018 was collected from the robust Bloomberg database (greenhouse gas emissions scope 1) and the Data Stream database. In order to conduct our descriptive analysis, we drop missing observations, scale down data or take averages of the variable in order to properly make an equivalent comparison between companies. Finally, we normalize green house gas emissions based on market capitalization and number of the employee to better compare greenhouse gas emissions (scope 1) emissions according to the firms’ resources and economic scale.

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While Equinor's sustainability achievements can be attributed to many different factors, both within and outside of the companies' control (e.g., technology access, production practices, the influence of governmental policy and national industry standards), Equinor is particularly known for having an organizational culture emphasizing their commitment to environmental sustainability- and it is this variable, on top of its low emission levels, that makes the company a compelling subject for our case study. As identified by Lestan & Kubasova (2022), following the redirection of national initiatives, Equinor underwent substantial organizational change to reflect their company's commitment to national goals and shared values for the environment. Among the most evident of their changes is the adaption of their name from the oil-centric Statoil, which related to their connections to the state and oil industry- to Equinor, which represents equality, equilibrium, and Norway. This name change signified the alignment of their brand and company culture with greater sustainability for the environment (Lestan & Kubasova, 2022). Since this change, the company has seen even greater improvements in their sustainable initiatives, managing to reduce their scope one carbon emissions by 3.5 million tonnes while increasing energy production by 52 million barrels of oil equivalent (Equinor Sustainability Data Hub, 2023).

Yet, Equinor's practices are not without much debate. Some studies question if a fossil fuel organization, inherently, can be "green" given their reliance on non-renewable resources and traces to carbon emissions (Ihlen, 2009). And, while prior literature commends the company for its unique internal transformation and strong commitment to sustainable targets and practices (which perhaps outpaces competitors), they express concern as to whether this internal transformation will excel in the long term and external environment (Lestan & Kubasova, 2022). In making this argument, Lestan & Kubasova (2022) point to Equinor's lack of development in hydro power and biofuels as key factors which hold them back in the transition to sustainable, as compared to its competitors. Similarly, they suggest that their business model, in which the renewable energy segment only contributes to 2% of revenue (in 2021), implies that their "green" transition is not sustainable in the long-term. As such, when compared to competitors, Lestan & Kubasova (2022) argue Equinor is less likely to succeed in the shift to green energy. Given current literary debates regarding the company's abilities to reach long-term sustainability targets based on its current culture-driven practices, we felt it a compelling focus group to explore the relative benefits and limitations of organizational culture as a lever for sustainability.

It should also be noted that Equinor is majority-share-owned by the Norwegian state and, as such, has been suggested to "largely [act] on behalf of the Norwegian government and to some extent [represent] the country's oil and gas industry" (Lestan & Kubasova, 2022, p. 20). Given Equinor's commitment to and alignment towards sustainable initiatives, their historic success in standing out among a leading group of fossil fuel organizations via scope one carbon emissions, their continued progression towards emission reductions stemming from organizational change, and literary debate which raises the concern of the effectiveness of their culture-driven practices, the company provides an ideal focus group for further evaluating the benefits and limitations of utilizing company culture as a lever for influencing sustainable outcomes.

Methodology

Following the identification of Equinor as the focus group for our study, our research question focuses on the role of organizational culture as a key lever in driving sustainability practices. For the purpose of investigation, we employ an exploratory single case study, to offer answers through gaining a deeper understanding of the subject and more precise theory development (Flyvbjerg, 2006; Yin, 2014). This includes analysis of semi-structured executive interviews, the examination of confidential in-house documentation (e.g., KPIs for the entire executive committee), media releases, CSR reports, grey papers, and an array of reports written by, and about, Equinor. We inputted all collected data into NVivo, as this software can support the identification of trends, patterns, and interrelationships in the area of values and attitudes of interviewees - related to driving and maintaining a sustainability-oriented organizational culture. In essence, NVivo acts to cross-reference all documentation for similarities and differences, and subsequently group findings into thematic categories (Strauss & Corbin, 2008). Finally, and in conjunction with NVivo software, we conducted a triangulation assessment of similar themes, concepts, and linkages between the literature and a line-by-line transcription of our interviews (Flyvbjerg, 2006; Yin, 2014; Creswell, 2015) to help identify the relative benefits and limitations of using organizational culture as a driver for sustainability practices.

Sample participants

After securing permission from Equinor's senior management team, as well as from each employee involved, we interviewed seven employees within Equinor in total.

These employees were Norwegian nationals, residing either in Norway or the U.S. Each of the interviewed employees led teams and were part of multiple departments within the Norwegian organization, as opposed to just one. These employees range from the Executive Vice President all the way down to middle management. We strategically selected the employees and organizational sections for interviews based on their ability to promote organization-wide sustainability practices. As such, they include employees from the human resource management department (e.g., compensation and benefits and performance management), corporate social responsibility (CSR) department, renewables department, and line departments. In keeping with anonymity and confidentiality needs, we code the names, roles, as well the exact titles of our interviewees. As such, we create the following fictional titles with the aim of encompassing the spirit and role of the actual title of interviewees: Executive Vice President of Human Resources, Vice President of Corporate Social Responsibility, Vice President of Renewable Energy, Chief of New Energy Initiatives, Chief of Compensation and Benefits, Chief of Organization Learning, and Chief of Performance Management.

Findings

In summary, we note similarities in themes and concepts of all our participant interviews. The purpose of our data collection was to seek out evidence, potentially expressed through Equinor’s many practices and processes that would exemplify the benefits and limitations of utilizing organizational culture as a critical lever in influencing sustainability outcomes. In our analysis, we found that Equinor was one of the first fossil fuel organizations to acknowledge that climate change was real, including supporting the

Kyoto Protocol, and one of the first to support carbon pricing. Although many companies in the fossil fuel sector have now joined these initiatives, few have actually implemented sound sustainability practices into their business models at a level comparable to Equinor's. According to the Vice President of Corporate Social Responsibility, Equinor has leading industry technologies that are oriented at reducing carbon emissions because they "are aware of the effects that the fossil fuel sector [has] on the environment, and feel a responsibility to invest in technologies that will mitigate those effects." Here, Equinor leads the way in its carbon capturing technology, offshore wind technology (delivering wind power to 650,000 British households), and on the general renewable energy front. According to the 7th edition of the *Energy Perspectives report,* Equinor's CEO Eldat Saetre echoes this philosophy:

> Failing to transform the world's energy systems will have negative effects across the globe and for all parts of society. We support a development where the world moves in a sustainable direction where climate change targets are met along with other important sustainable development goals as set out by the UN.

The report above continues that Equinor is shifting its position to more renewable energy projects with low-carbon solutions, as by 2030, 15-20% of its annual investments will be directed towards those energy solutions. These sustainability values are present throughout the organization and are encouraged in Equinor's remuneration policy. The Chair of Equinor's Corporate Executive Committee says the following in secondary-sourced interviews:

> Our remuneration policy and terms are aligned with the company's overall values, people policy and performance-oriented framework. Our rewards and recognition for executives are designed to attract and retain *the right people - people who are committed* to deliver on our business strategy and *able to adapt* to a changing business environment.

The Chief of Compensation and Benefits concurs, adding that "sustainability and taking care of the environment is very much a part of our culture, not only at Equinor, but in Norway too. It seems like all of us, here, share that value, and yes, we are remunerated for it." In understanding this concept of remuneration as it relates to sustainability practices at Equinor, the company's *Ambition to Action* documentation becomes a key text for understanding the fundamental values and ethos at work there, as it presents their take on meeting organizational strategic objectives by linking KPIs through various actions. Within the scope of sustainability, the Executive Vice President of Human Resources states that, "sustainability-oriented practices are certainly encouraged, here. We have KPIs related to energy efficiency practices, carbon efficiency practices, reduction of CO2, and safety and sustainability, and those are linked to total executive compensation." The Chief of Compensation and Benefits echoes this rationale, too.

> Compensation (expressed through a shareholder resolution) has enhanced our sustainable practices. *I believe this position to be true* as we did see somewhat of a change on the sustainability linked KPI front post-2015 (directly after the *Strategy Resilience 2030 and Beyond* report). That said, I believe sustainability practices have always been there; it has been a big part of our culture.

The Vice President of Renewable Energy's views appear to align with this position, too:

> We collaborate across all of our business lines and with authoritative bodies to initiate and drive forward ideas merging high value oil and gas business with profitable and low carbon initiatives. Furthermore, this position on enhancing energy management whilst decreasing emissions according to targets established has created concrete projects like Hywind Tampen (a project to use wind turbines for electrification of oil and gas installations. Reduction of CO2 emissions from the five oil and gas platforms at the Snorre and Gullfaks fields is estimated at more than 200,000 tonnes per year).

Further findings according to internal Equinor documents suggest there are monetary rewards for the development and completion of projects like those detailed above, particularly when they are aligned with corporate strategy. Perhaps more enlightening (and potentially demonstrative of the cause and effect relationship that underpins such projects) is Equinor's executives' long-term income model – their restricted shares model). According to internal documentation, approximately 120 Equinor executives, globally, are obliged to buy shares for the net sum of their base salary (which equals 20% to 30% of their base salary, depending on their level) and keep them locked in for a period of three years. Notably, when asked about these executive stock-vesting practices, specifically oriented around either two-year vesting-horizons or three-or-plus-year vesting-horizons, the Chief Performance Management Officer discusses the practical similarities and differences of Equinor:

> We have a mix of both intertwined within our executive total compensation packages. And, in fact, we believe that our 3+year stock vesting-horizons model is pretty similar to the other leading organizations industry-wide. Where we might differ is in the sustainability-related strength of our organizational culture as we work hard to develop those key values, and push hard for sustainability practices through and through the organization.

The Chief of Organizational Learning provides one such example: the issue of flaring (a safety mechanism necessary to get rid of gas before it overpressures) in the oil and gas sector is notorious for its contribution to excess carbon emissions, and is rarely discussed. Indeed, in Norway flaring likely contributes to 2% of the country's total CO_2 emissions. However, at Equinor, "[they] feel it should be a valuable and much-needed conversation point as flaring reduction is considered one of the most effective ways to bring down the total climatic emissions within the oil and gas sector." As such, Equinor executives decided to develop a culture that would facilitate this reduction, as this cultural enhancement includes daily production meetings during which flaring reduction is a mandatory part of talks and also includes an internal ideas competition amongst employees for flaring reduction. In this competition, "innovative ideas that are put into practice are rewarded, to the point that today there is friendly competition to see who can reduce flaring the most." As it relates to flaring reductions alone, these cultural practices have seen an annual reduction (since 2007) of 190,000 tonnes, and this organizational commitment to sustainability practices at Equinor extends beyond internal discussions, ideas, and practices. The Chief of their New Energy Initiatives iterates this point, in stating that:

"*A sustainable living culture, quite honestly, is engrained in us*," and has perhaps been influential in Equinor joining and leading talks with eight other international and national oil companies in the Oil and Gas Climate Initiative in an attempt to collaborate on accelerating the transition to a low carbon future. There, we (the Oil and Gas Climate Initiative) discuss and implement meaningful sustainability policies. We also cooperate with the World Bank and United Nations Environmental Programme (UNEP) on carbon pricing, flaring, and methane emission reductions.

In this framework, the World Bank has now established an ambitious target to eliminate routine flaring by 2030, and Equinor was notably one of the first to work towards this target. Additionally, Equinor most recently joined the Climate and Clean Air Coalition (CCAC) Oil and Gas Methane Partnership (OGMP) as a founding partner. Further, discussions surrounding the ethos that results from either the introduction of sustainability practices into the Equinor culture, or the building of an organizational culture that encompasses sustainable living principles, occurred in our seven interviews. Here, multiple internal and external reports corroborated that this phenomenon, perhaps best summarized as the overall cultural picture at Equinor, stems from their *Carbon Disclosure Project* briefings, as: "Equinor believes that competitive returns for our shareholders are best achieved through a values-based performance culture, stringent ethical requirements and a code of conduct which promotes personal integrity."

Discussion

Consistent with the relevant literature, our findings above suggest that Equinor's organizational culture component, particularly as it relates to encouraging sustainability practices, is the aspect that stands out and distinguishes the organization among the group of 42 leading fossil fuel organizations. Again, while we acknowledge that the company's comparably low emission levels are likely due to a variety of factors- some of which may be outside of the companies' control- our findings point to specific sustainable behaviors that are likely to be driven by their cultural commitment to the environment. While these behaviors may not be the sole source of the company's success, a closer look into Equinor's culture and related practices can help yield important insights into the benefits and limitations of utilizing organizational culture as a lever to influence sustainability outcomes.

To begin, Equinor's sustainability-driven organizational culture may be a reason for the company's eagerness to adopt performance management and compensation levers that generate green practices. Our results suggest that organizational green performance is enhanced by having sustainability-oriented metrics in place (which in the case of Equinor, is achieved through their *Ambition to Action* program), as well as a compensation model that includes a 3+ year stock vesting scheme- the adoption of which may have been influenced by their cultural alignment with sustainable initiatives.

However, the other 41 organizations also share a similar derivative of this model, suggesting that other factors may influence the adoption of such practices too.

Perhaps instead, the true benefits of Equinor's cultural alignment are its interruption of traditional, emission-driving practices and attitudes and accompanying adoption of sustainable initiatives in their place, which have contributed to some impressive results for the company. In making this point, we refer to Equinor's redirection of 15-20% of annual investments towards renewable energy projects, 190,000-ton annual flaring reduction, as well as their adoption of leadership roles in embracing sustainability policies, adopting and creating green technology, and investing in green solutions and strategy to grow their renewable energy platform. Also evident in our findings are the cultural implications of opening up the opportunity for greater discussions and innovations around emission-reducing initiatives- as can be seen through their mandatory flaring-reduction meetings and employee innovation competitions; as well as the influential role it had in prompting the company to become leaders in the energy transition initiative through their involvement with CCAC and OGMP. Based on these results, it appears that organizational culture is a promising means by which corporate leaders can cultivate an organizational mindset which will initiate the shift in "business as usual" called upon by Huisingh et al. (2015). These findings align well with existing literature, which confers that Equinor excels in internal change (cf. Lestan & Kubasova, 2022), and continues the discussion by pointing to specific behaviours driven by the company's cultural orientation as a source of their internal development.

Where previous studies diverge in results is in Equinor's employee claims that the organization is fully "sustainable" given its substantial efforts in aligning its internal culture. Here, questions may arise regarding if the company is truly acting out of their own good will and concern for the environment as interviews with Equinor employees suggest. Indeed, prior literature points to leadership values as a cultivating source of organizational culture and such leaders have many different stakeholders and pressures to consider- including profit potential, competitive sustainability, public pressure, and governmental standards (Linnenluecke & Griffiths, 2010; Epstein et al., 2010; Ihlen, 2009; Lestan & Kubasova, 2022). While Linnenluecke & Griffiths (2010) suggest that these ulterior motives must be forgone in order for the company to be considered truly sustainable, our findings from Equinor's *Carbon Disclosure Project* indicate their alignment with Epstein et al. (2010)- wherein financial and environmental concerns are believed to coincide in driving sustainability.

The relevant literature also further questions the sustainability of the organization given the nature of the fossil fuel industry which relies upon the depletion of a natural resource, as well as the company's specific lack of development in hydro power and biofuels and 2% revenue stream from renewables (which is argued to be likely to hold them back in the long-term) (Ihlen, 2009; Lestan & Kubasova, 2022). When comparing our case study to the findings of these studies, the limitations of Equinor's use of organizational culture as a lever for sustainable outcomes become evident, and the issue of the conflict between environmental concern and profit motives is more prevalent. More specifically, while our findings suggest that organizational culture may help organizations achieve improvements in sustainability efforts by prompting the adoption of "green"-encouraging KPIs, compensation practices, discussion, and initial innovations and investments, the prior literature compares the company to competitors criticizes its lack of investments in long-term sustainable opportunities (e.g., biofuels and hydro power) (Lestan & Kubasova, 2022). This may be due to the influence of risk considerations and external pressures for profit (cf. Sneison, 2011), which are often more pressing when considering time-binding investments. While an organization's internal culture may be limited in its abilities to mitigate risk considerations and the influence of external pressures, which prevent the company from taking substantial risks in the energy transition upfront, our findings suggest that internal alignment is a necessary stepping-stone to opening up conversations for greater future development. This is evident in the company's redirection of investments towards renewables and progress in wind technology, which should not be discounted.

A key problem arising for Equinor and companies like it, which we argue for very strongly herein, is the lack of critical opinion that we uncovered when interviewing their staff for this study. This is not a case of reporting a perhaps, classic and even mundane finding of a lack of real 'employee voice' among such interviewees, and/or the frustrations arising for them from this circumstance (cf. Farh et al., 2022; Kougiannou, and Mendonca, 2021; Wilkinson et al., 2021). Instead, and arguably more concerning, it is the notion of employee voice *silencing* perhaps occurring too, i.e. where employees with contrary, hostile, or anti-views to the 'company line' are not selected for interview-based studies like ours, as they and their views are not 'cleared' or 'approved' by the firm. One famous example of this silencing phenomena occurred at Amazon - who threatened to fire employees if they continued to publicly speak on, and protest about, Amazon's own climate policies (Palmer, 2020).

This lack of alternative, counter opinion(s) herein is not just a matter of academic intrigue and analysis, i.e. it does not just talk to the lack of critical analysis in HRM studies overall (Collings et al., 2019) and the dearth of critical views in green HRM studies in particular (Renwick, 2020), important as they both clearly are. Instead, it also speaks to a wider concern for all organizational stakeholders arising – of so-called 'exemplar' organizations like Equinor (among others) – either practicing or appearing to practice greenwashing, or using their supposed eco-credentials as 'green camouflage' and self-promotion, to deflect attention away from the less green or non-green aspects of their operations. Here, we particularly noted from our interviewees, their comments on how they like to *"attract and retain the right people",* who are *"committed"* and *"able to adapt",* i.e. seemingly socially conservative and arguably malleable staff, who *"believe"* in things, rather than openly questioning them, a functionalist and unitarist worldview. Additionally, as such staff are also obliged to buy company shares and keep them locked in, they arguably lack agency and free-will to spend their income streams in different, alternative ways. Essentially, are such staff at Equinor locked in a gilded cage, and unable or unwilling to escape their unconvincing company pro-green hyperbole?

Lastly in this section, our qualitative findings also cohere with prior literature from the aspect that it importantly uncovers that Equinor's internal embracing of sustainable behaviors is perhaps due to the role that national culture and executive member values play on their organizational culture. As predicted by the literature, our findings show that Equinor's organizational culture is inspired and influenced by executives at the top and, more significantly, is enhanced by and unique to elements of Norway's national culture. These elements include the Norwegian population's preoccupation with, care for, and respect for the natural environment (cf., Kaltenborn et al., 2008; Vormedal & Ruud, 2009; Hanss & Bohm, 2012). The role that Norwegian culture and executive beliefs play in shaping Equinor's culture is reiterated throughout our findings as the executive employees interviewed continuously referenced their own values for sustainability, as well as the role that their national culture and policy played in shaping their sustainable goals. This "Norwegian sustainability-oriented national culture," combined with the vision of executive leadership, further appears to influence the entire organization, as Equinor workers are predominately Norwegian nationals, and thoughtful and mindful of green practices. It should be noted, though, that this sustainability-oriented organizational culture is not present *solely* because of the national culture (as suggested by our findings), but is rather *reinforced* because of it. These elements, when taken as a whole, suggest that human resource management sustainability-oriented practices at Equinor are not only perhaps better-conceived, better-developed, and more efficiently rolled-out by their leadership team, but also adhered to and truly embraced by their workers too.

Keeping this and our study's overall findings in mind, the next sections are dedicated to implications arising from the relevant research literature and other organizations, and broadly speaking what they could mean for society-seeking sustainable practices in general. As such, these key elements intertwine in the form of a summary, discussions of study contributions, limitations, future research ideas, and practical implications, respectively.

Conclusions

This study builds on previous research in the area of developing a strong sustainability-oriented organizational culture as a tool in mitigating climate change. In supporting this argument, we revisit the effects of climate change to illustrate its consequences on the lives of all beings, and the role that fossil fuel sector organizations play in this phenomenon, plus their ability to utilize organizational culture as a key step in climate change mitigation. Recent climate change findings have made it evident that a plan for the long term and full-scale decarbonization of the fossil fuel industry is necessary. As such, Huisingh et al. (2015) call for a shift in “business as usual”. Our findings suggest that a sustainability-oriented organizational culture is a critical lever in prompting this shift internally. However, it may be limited in its abilities to overcome external pressures, which keep risk and profit in check.

Contributions

The findings in this study contribute to the relevant literature in multiple ways. Firstly, and broadly, they do so within the domain of human resource management. More specifically, the findings add critical knowledge to the adjacent, but under-explored, area of green HRM within the context of green organizational culture, as well as its relevance to the interplay between environmental performance management and compensation. Furthermore, they also dovetail to knowledge in the area of the CSR literature, and clarify some misconceptions in the field, by suggesting that linking performance management and compensation practices to sustainability metrics to promote green practices is not enough. Instead, we suggest that a combination is needed, as a strong sustainability-oriented organizational culture can work to move an organization beyond the implications of performance and compensation metrics by prompting them to truly act as socially responsible innovation leaders within their fields.

Study limitations

On the initial descriptive analysis front it could be argued that self-disclosure of scope one carbon emissions are not audited, and as result could be misleading. However, we attempt to mitigate this issue by utilizing the robust Bloomberg and Data Stream databases. Here, the databases use an ASSET4 ESG framework to compare companies' self-disclosed data against hundreds of individual data points, allowing for the modification of companies' self-disclosed reports.

As a secondary limitation, our findings are heavily reliant on insight obtained from documentation provided by Equinor, as well as personal interviews approved and 'cleared' with Equinor employees. While this approach is particularly valuable as corporate documentations and employee attitudes are perhaps the best signals of the true dynamics of an organization's culture, the approach also subjects our results to sources of bias, which paints the company and its underlying culture in the best light. To combat this bias, we sought the help of prior literature, which offers critiques of Equinor's practices in comparison to its key competitors. By introducing the findings of prior literature, our discussions and conclusions offer critical insights, takeaways, and analysis of the implications of Equinor's practices and the use of organizational culture as a lever for climate change mitigation. As our study is exploratory rather than explanatory in nature, we encourage the further review of our results and welcome any critiques to our methods.

As a third limitation, because Equinor serves as the sole subject of this study and while we examine it in depth, the impact of our study will be maximized when it is considered in concert with work on several other, leading low carbon emission (scope 1) fossil fuel organizations. Multiple incidences of such findings would have strengthened this study's suggestions. However, we once again note that this case study is exploratory in nature and will thus ideally inspire future research. Additionally, as the principal investor in Equinor is the Norwegian national government, findings for this particular multinational enterprise may not apply to other multinational enterprises in the industry (i.e., those with less government ownership). This argument could arise, as Equinor may be prone to public interest pressure and less productivity of their carbon assets. However, strong Norwegian government ownership also strengthens the concept of the role and influence that national culture can play on organizational culture, and reinforces the study's overall suggested findings. Here, it is important to note that government is a reflection of its people, and a reflection of the dominant culture in that particular society. Thus, one would expect government holdings to align with societal values, especially in their practices and processes.

Future research ideas

As fossil fuel companies work to alter their energy practices and become more sustainable entities, we may observe a shift in the industry whereby the traditional, emission-producing energy sector enters the field of green energy. In this shift, multiple factors could be influenced, including the production of, access to, and allocation of resources, each company's industry positioning and contribution, etc. These factors, in addition to organizational and national culture, might also work to influence the success of the energy transition and companies' practices and attitudes therein. As such, future research may seek to explore the individual roles of micro, meso, and macro environmental factors, respectively (Stahl et al., 2023).

Future research could also expand on the examination of the role of national culture in organizational culture as it influences sustainability practices. One approach to this proposed study may be a comparative examination of multiple fossil fuel organizations in Scandinavian countries and non-Scandinavian countries. Here, studies (Hanss & Bohm, 2012; Schilar et al., 2018) suggest that multiple Scandinavian cultures hold the natural environment with the utmost respect, but the ways in which this respect informs organizational culture would be an important avenue of research, and an explanatory case study approach on this might be most helpful. Indeed, future research may usefully aim to uncover more critical, contrary opinion from staff employed at so-called 'green' organisations like Equinor (and other industry competitors), to surface issues of employee voice and staff silencing, and any disagreements, conflicts and tensions arising. Doing so could perhaps aid the development of more critical analysis in green HRM studies and provide a new and novel dataset to interrogate and explore.

Practical implications

Coupled with the findings of previous studies, our findings help to provide greater insight into the relative benefits and limitations, as observed through Equinor, in using organizational culture as a lever to influence sustainable practices and organizational outcomes. Our findings, in particular, exemplify the critical role that organizational culture can play in helping an organization to make an internal transformation to green practices by opening up the opportunity for greater discussion, innovation, and investment oriented towards sustainable initiatives. When compared to the findings of prior literature, we suggest that organizational culture may be limited in its abilities to combat external pressures to reduce risk and increase profits. However, we maintain that the internal implications are an important stepping-stone towards the right direction. As such, our findings are likely to help inform other organizations as they strive to reach their own sustainability goals. Indeed, drawing on Carpenter and Wagner (2019), our study also suggests a need for public institutions such as central and local government and trade unions to intervene at the national, regional and local (country/state) levels, to tackle environmental injustice where firms may be unwilling to do so.

These findings are particularly relevant given recent recognition of the need for sustainable change by scientists, nations, and organizations, alike. While some posit that organizations and nations should be investing in the energy transition out of concern for the environment (cf. Linnenluecke & Griffiths, 2010; Farhidi et al., 2022), greater notoriety is also being garnered towards the alignment of sustainable initiatives with financial ones (Epstein et al., 2010; Ihlen, 2009; Lestan & Kubasova, 2022). Specifically, prior literature notes the influential role of "pressure from politicians, the mass media, NGOs and consumers" (Ihlen, 2009, p. 55), as well as the desire of nations to strengthen their energy security by becoming less reliant on oil and gas which may influence a nation's attitude towards sustainable initiatives (Lestan & Kubasova, 2022). Similarly, leading fossil fuel organizations, such as Equinor, must also consider alternative energy sources in the pursuit of long-term competitiveness, as the oil and gas reserves that they depend on continue to be depleted (Lestan & Kubasova, 2022). As this issue becomes more pressing, greater attention will continue to be directed towards the energy transition and the role that organizational culture serves in initiating this transition. Thus, our aim is that our case study of Equinor herein will help to inform industry actors as they navigate this shift in “business as usual”, and open up more studies that question and challenge their practices.

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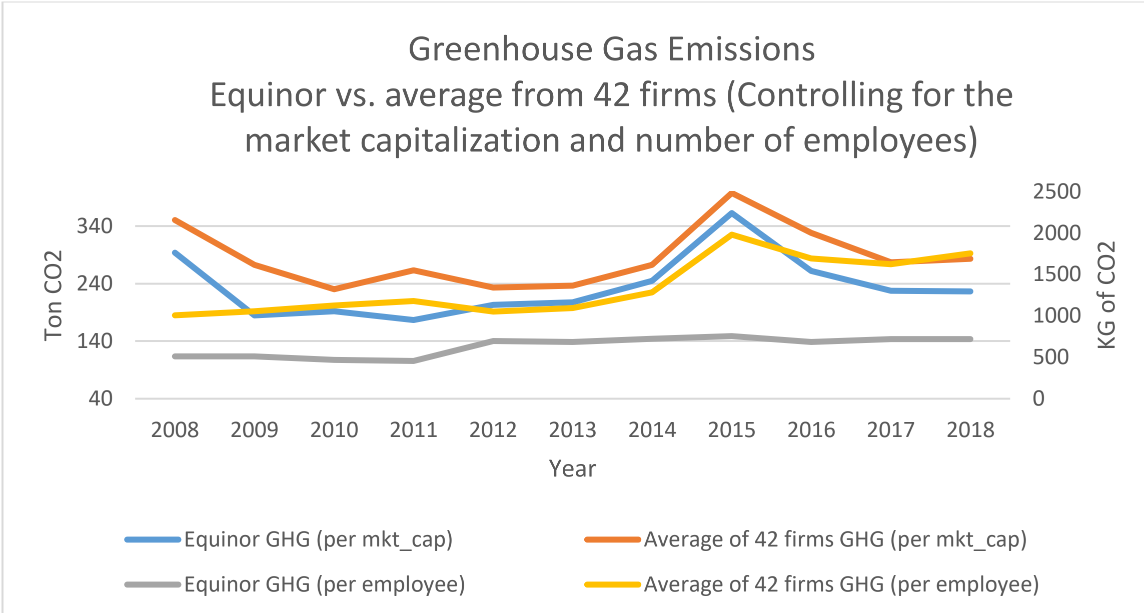

Figure 1: Greenhouse gas emissions (per market capitalization/per employee) - Equinor versus average of 42 organizations studied.