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Oil, Climate Change, and Human Rights: A Case Study of Norway with Comparative Analysis

Abstract

The Arctic region is simultaneously facing profound, negative ecological impacts of climate change and is also subject to expanding oil and gas exploration and extraction. Facing a critical decision involving Arctic oil expansion, Norway is contending with its position as a global leader in the environmental movement and its historic and continued economic reliance on the oil and gas industry. This research contextualizes Norway within the Arctic region, discusses Norway as a petroleum exporting country, and addresses how value and identity play a role in environmental policy creation. Recent human rights-based climate change litigation in Norway, People v. Arctic Oil, suggests that Norway's expansion of Arctic oil production constitutes a human rights violation, violating the right to a safe environment and the right to life, based on the negative impacts of increasing carbon emissions. This litigation is exposing Norway's paradoxical relationship to environmental responsibility and calls for real considerations of responsibility and action in regard to climate change. As a comparative analysis, this research examines rights-based climate change litigation in other parts of Western Europe and the US. Staving off dangerous climate change is a shared global responsibility, but individual nations must take action to address and reduce their own production of carbon emissions. Rights-based climate change litigation acts as an opportunity for citizens to advocate for stricter emissions regulations and more progressive, immediate climate change action on the grounds that climate change represents a real threat to human rights.

Arctic Context: Climate Change and Oil Production

The Arctic region is simultaneously facing profound negative impacts of climate change and contending with extensive oil and gas exploration and development. The Arctic region is experiencing warming at an alarming rate, about double the rate of the global average with record-breaking surface air temperature warming causing uncharacteristic, extreme oceanic and land conditions (NOAA, 2020). Global warming and climate change are fundamentally altering the Arctic ecosystem. Key impacts include rising surface air temperatures, changes to the hydrologic cycle, increases in precipitation and humidity, diminishing sea ice thickness and surface area, decreased snow coverage, and warming permafrost layers (Box et al., 2019). Further, these changes are altering nutrient flows from land into coastal areas, causing

phenological mismatch between flowering plants and pollinating species, increasing carbon cycling, causing a change in animal distribution, increasing shrub biomass, increasing wildfire incidence, and increasing conversion of land ecosystems to aquatic ecosystems (Box et al., 2019). This rapid and intense change is known as "Arctic Amplification," with the effects of climate change being seen and felt profoundly right now (Stephen, 2018). Effects like sea and land ice melt will compound climate change through changes in albedo, with newly exposed ocean and land surfaces absorbing more solar radiation and heat. Thawing permafrost will similarly amplify climate change by releasing carbon dioxide and methane back into the atmosphere.

While the Arctic circle accounts for just 6% of Earth's surface, it represents the largest geographic region for significant undiscovered petroleum reserves (USGS, 2008). Located almost entirely in offshore reserves, it is estimated that more than 90 billion barrels of oil and 44 million barrels of liquified natural gas, or about 22% of the world's undiscovered reserves are located in the Arctic region (USGS, 2008). With these significant reserves yet to be exploited and continued global demand for fossil fuels despite climate change, Russia, Canada, the US, and Norway, and to a lesser extent Iceland and Greenland, are all the major players (Figure 1) in the race for Arctic oil development (Harsem et al., 2011; Copeland & Watkins, 2013). Russia began off-shore Arctic oil development in 2014 and Norway in 2016. The US has been involved in Alaskan Arctic oil production since the early 2000's although the scale is limited and expansion is controversial (Shapovalova, 2020). Canada and Greenland, the other potential off-shore Arctic oil producers, do not have any active off-shore sites yet. As for natural gas production, Norway is the only nation with a natural gas operation in the offshore Arctic region (Shapovalova, 2020).

Climate change is actually making Arctic petroleum exploration, production, and transportation easier than ever before. Oil spills in the Arctic region are incredibly difficult to clean up, particularly because it is nearly impossible to clean up oil spills that occur in ice-covered waters using existing technology (Nuka, 2015). As such, it is becoming more feasible for companies to explore and produce oil in the Arctic with less risk involved due to declines in sea ice coverage. With major declines in Arctic sea ice, there are also larger ice-free time periods and areas that have opened up new trade routes or made existing trade routes accessible for longer time spans (Harsem et al., 2013). With this increased navigability, Arctic oil trade can be expanded to new markets, especially in Asia, and will be faster and cheaper than before (Sengupta, 2017). Conditions in the Arctic are still challenging and increase costs for oil production, but the draw to exploit untapped fossil fuel reserves remains strong. Because Arctic oil extraction requires large-scale, specialized weather-safe infrastructure and continued long-term investments, once new oil production in the Arctic has begun, it will sustain and increase oil production for the long-term in order to maximize profits (Shapovalova, 2020). Arctic oil production is expected to grow significantly even as European demand falls with stricter climate

goals being implemented. The supply of Arctic oil will likely shift to other regions with less stringent emissions policies (Shapovalova, 2020). Overall, exploration and development of Arctic oil reserves is an ongoing process with plenty of opportunity as well as controversy. The Arctic is an incredibly sensitive ecological region experiencing major impacts from climate change and yet it holds vast quantities of untapped petroleum resources that when burned, will contribute to increased climate change. At the same time, oil development has been and remains critical to the economic strength of many Arctic nations. Oil and gas remain major energy sources globally and Arctic oil development represents a major opportunity, but one that comes with considerable responsibilities as well.

Norway's Environmental Context Grounded in Identity

This case study centers on the position of Norway as a nation with a strong global environmental, climate action leadership capacity that remains economically dependent on the oil and gas industry. Norway has established itself as a nation committed to aggressive, domestic climate change action, yet continues to exploit its vast oil and gas reserves for export, contributing to global carbon emissions. Norway is perceived as an environmentally and socially responsible country, but remains one of the largest petroleum exporters in the world. By many accounts, Norway is truly a highly socially and environmentally progressive country. Norwegian identity is grounded in principles of community, cooperation, ethics, and a respect and love for nature. To understand Norway's position in this complex and paradoxical relationship to environmental stewardship it helps to understand Norwegian identity as rooted in a particular value system and physical geography.

Norway is a highly economically stable, safe, equitable, and socially supportive nation with a strong welfare system in place to politically solidify these principles (Eriksen, 2013). Grounded in its political system, Norway places a high value on "trust, accountability, democracy" and "egalitarianism" (Eriksen, 2013, 13). Norwegians highly value the democratic process, which is generally transparent, accountable, and responsive to the people's needs (Skinner, 2012). Norwegian values can also be described as "postmaterialist" and emphasize equality, morality, environmental protection, and quality of life (Skinner, 2012). Norway is recognized as a highly cooperative and community-oriented society, described by the Norwegian word *dugnad,* which means "working together for the common good" (Stoltenberg, 2009). These terms above are frequently used to describe Norwegian values, and particularly influence the structure of Norway's political and economic systems which are largely democratically socialist.

Norwegian values and identity are also highly connected to nature. There is a strong history and value placed on the protection and romanticization of nature. Norwegians value nature highly and associate rural life, life lived in nature, nature exploration with life satisfaction, quality of life, happiness, and peace (Skinner, 2012). The Norwegian "propensity to roam freely

in the woods and fields and the mountains" is a very real sentiment and one that hints at how interconnected their value system, their identity is to nature itself (Skinner, 2012). Aspects of Norwegian identity are grounded in physical geography. In Northern Norway, two characteristic landscape images emerge: one of coastal fishermen and another of indigenous nomadic Saami reindeer herders (Jones, 2008). The intense sea and fjords and the mountainous Norwegian highlands are distinctive geographical features that construe Norwegian identity. These particular landscapes are central to the national identity. Further, because of this identity, "environmental threats to these landscapes implicitly [come] to be presented as threats to national...identity" (Jones, 2008, 284). Combining Norwegian values of trust and transparency with ideas of nature protection, Norwegians tend to acknowledge that climate change is one of the most pressing global issues and they treat climate science data from the IPCC as "authoritative," recognized through personal experience with the "rapid, visible, and alarming" effects of climate change in the Arctic Nordic region (Eckersley, 2015, 12). Put simply, Norway has a lived understanding of climate change within its borders and takes climate change as a potential attack on its national identity and value system. That being said, Norway has incredibly strong domestic climate action policies and is a strong advocate for international cooperation on climate action goals.

Norway's Domestic Climate Policy and the Oil Paradox

Norway's domestic environmental policies reflect Norway's projected cultural identity and value system that is grounded in nature, community, responsibility, and ethics. Norway has one of the most ambitious carbon emissions policies, with a policy goal outlined in Norway's 2007 Climate White Paper of decreasing emissions by 30% by the end of 2020 and reaching carbon neutrality by 2050 (Eckersley, 2015). These policies were passed in 2008 by the Norwegian Parliament with the backing of six out of Norway's seven political parties, signaling an early and collective national agreement to become a global leader in climate action (Eckersley, 2015). Under the Paris Agreement, Norway's goal moved to 40% domestic emissions reductions by 2030, with aims to become a carbon neutral, "low emissions" society by 2050 (Down & Erickson, 2017). To achieve domestic emissions reductions, Norway has implemented a high carbon tax, a carbon tax on the oil and gas industries, an emissions trading program with the EU, an incentives program for hybrid and electric vehicles, and investment in carbon capture technology (Eckersley, 2015). Further, Norway has a goal of selling only electric cars by 2025, donates heavily to a global deforestation prevention program, and generates all of its electricity from hydropower (Sengupta, 2017). Norway has pursued aggressive emissions reductions primarily in the transportation and electricity sectors and has been very successful in achieving its domestic goals. Norway is also a strong advocate for international climate agreements and recognizes how wealthy, western, industrialized nations have contributed to the bulk of historic carbon emissions and must be the ones to drastically decrease their own emissions and help poorer countries achieve low-emissions economic development. So not only

has Norway proven itself to be committed to domestic climate policy, but Norway is also a strong proponent of international climate action.

Distinctively, Norway's exceptional domestic climate policy success does not reflect its export of oil and gas. Domestically, Norway has incredibly low greenhouse gas emissions. Of those domestic emissions, about a quarter are attributable to fossil fuel production in the country (Down & Erickson, 2017). Norway actually scored 9th in global 2020 Environmental Performance Index rankings, which looks at 32 performance indicators to gauge a country's environmental health, performance, and progress in reaching global environmental policy goals (Yale, 2020). Norway received exceptionally high scores in air quality, drinking water quality, waste management, pollution emissions, and climate change. However, the high marks in emissions and climate change categories are strictly accounting for domestic emissions, not including exported oil and natural gas (Yale, 2020). The climate impact of those petroleum exports is large. Emissions from Norway's petroleum exports amount to ten times the country's domestic carbon emissions (Sengupta, 2017). With goals of becoming carbon neutral by 2050, Norway explicitly excludes emissions that will come from burning exported oil and gas that it produced. While Norway has numerous notable domestic climate policies, the same White Papers that mandated emissions reductions targets also indicate that oil and gas production will continue and expand to exploit new reserves (Eckersley, 2013). Norway's increasing production also does not mean that production elsewhere is decreasing and any increases in supply will increase consumption, which will contribute to rising greenhouse gas emissions into the atmosphere no matter where the exported petroleum ends up (Down & Erickson, 2017). The simultaneous ambition of its climate policies and its maintained commitment to the fossil fuel industry presents a challenging dynamic.

Norway is very aware of its paradoxical position as a leader in climate action and a leader in oil and gas exports. Norway is one of the wealthiest countries in the world, with incredibly high standards of living and a strong social support system, but this economic wellbeing was achieved largely because of its lucrative oil and gas industry. Norway began oil exploration in the mid-1960's and over the past five decades, the petroleum industry has played a critical role in strengthening Norway's economy and allowing for a flourishing welfare state system (Norwegian Petroleum Directorate, 2020). Although Norway is a relatively small oil and gas producer, it is a major oil and gas exporter with global significance. Norway is the 15th largest oil producer globally, the third largest gas exporter globally, and supplies about a quarter of the EU's gas demands (NPD, 2020). Economically, the oil industry plays a crucial role in Norway. With high oil prices in the 1980's, oil production accounted for about 20% of Norway's GDP (Holden, 2013). The petroleum industry now accounts for 12% of Norway's GDP, 10% of the State's revenues, and 36% of total exports (NDP, 2020). Exploiting oil reserves has allowed Norway to achieve a high GDP per capita, with GDP per capita growing from below the OECD average in 1970 to 70% higher than the OECD average by 2010, one of the highest in the world

(Holden, 2013). Specifically, about 20% of Norway's increase in GDP per capita since 1973 can be attributed to its exploitation of petroleum resources, a significant contribution (Mideksa, 2013). Further, Norway views its oil wealth as a resource that should benefit everyone in Norwegian society, including future generations. Norway has thus adopted petroleum policies that reflect that sentiment. Norway imposes a major 78% profit tax on the oil and gas industry, the government has direct ownership through the State's Direct Financial Interest portfolio, and the government also has two-thirds ownership in Equinor, the largest Norwegian petroleum firm (Holden, 2013). Government cash flow from these investments is high, a major source of economic revenue for government usage (Figure 2).

The government is directly involved in managing oil resources and planning how to spread the benefits of oil production throughout Norwegian society. Norway recognizes that the end of the oil era is inevitable and not far off. Recognizing the economic difficulties of the end of oil and the current prosperity of oil wealth, the government has created a savings fund for future generations known as the Oil Fund, which is also the largest sovereign wealth fund in the world (Eckersley, 2013). This fund will help future generations achieve a smooth economic and social transition away from fossil fuels. It is undeniable that oil and gas production has strengthened Norway's economy and helped it become a thriving, wealthy nation. It is actually precisely because Norway has a strong wealth base and maintains such high standards of living that Norway has a very high adaptive capacity and is well poised to transition away from fossil fuels. Compared to other oil producing countries, Norway is better able to develop and adapt alternatives to the oil and gas industry while maintaining a stable economy and society (Down & Erickson, 2017). Eventually, Norway will have to fully transition away from fossil fuels either from a climate standpoint or because the resources are depletable. Due to the fossil fuel industry's economic importance in terms of revenue and employment, there is a critical need for a "managed reduction in supply" to enable a smooth transition away from oil and gas to other sectors (Shapovalova, 2020). Norway should be proactive in finding new revenue sources and industries to develop that do not rely on resource extraction so that they can ensure economic and social stability for generations to come. This is a tension Norway must contend with, the need to move beyond the fossil fuel era on its own terms. Norway is currently directly confronting this exact environmental stewardship and petroleum industry paradox in its legal system.

Norway's Human Rights-Based Climate Case: People v. Arctic Oil

The Norwegian Supreme Court is currently hearing a case brought forward by environmental groups Greenpeace Nordic Association and Nature & Youth arguing that Norway's continued licensing of Arctic oil exploration and development constitutes a violation of citizens' constitutional rights to a safe environment and fundamental right to life (Greenpeace v. Norway, 2020). Norway has already licensed many areas in the North Sea, Norwegian Sea, and parts of the Barents Sea, but the continued development of the Barents Sea region is the main question presented in this case (Figure 3). The case, also referred to as People v. Arctic Oil,

is one of the most recent and potentially consequential human rights-based climate change cases to be heard by a nation's highest court. Originally filed in 2016, the plaintiffs argue that the 23rd licensing round granting oil and gas companies the ability to explore for oil in the South Barents Sea is a governmental failure to preserve citizens' fundamental human rights (Duffy & Maxwell, 2020). That licensing round refers to when Norway granted oil companies licenses to explore for oil on 77 acres of the Norwegian continental shelf in the South/Southeast Barents Sea, where it's estimated that half of the shelf's undiscovered oil reserves are located (Libell & Kwai, 2020). The 2016 case argued that there are three main grounds for dismissing the 23rd licensing round as invalid: First, that issuing the licenses is a violation of Article 112 of the Norwegian constitution, which guarantees citizens and future generations the right to a safe environment (Supreme Court of Norway, 2020). The climate impact of continued oil expansion jeopardizes environmental quality and contributes to climate change to the degree that it is a constitutional violation of the right to a safe environment. Second, the continued oil expansion in the Arctic is argued to be a violation of Article 2 in the European Convention on Human Rights (ECHR) and Article 93 in the constitution, which both guarantee the right to life. In the same vein, it is a violation of Article 8 in the ECHR and Article 102 in the constitution, which guarantees a right to a private and family life (Supreme Court of Norway, 2020). And lastly, the environmental organizations argue that there were procedural errors involved, that there was no sufficient scientific research done to assess the impact of expanding oil and gas developing into the South/Southeast Barents Sea (Supreme Court of Norway, 2020). The main questions before the court center around the "geographic scope of Norway's human rights obligations" and the "threshold of risk required" to force Norway to take action to protect those rights (Duffy & Maxwell, 2020).

The Stockholm Declaration of 1972 first introduced the idea of having a fundamental right to a safe environment for present and future generations. Now, more than 110 UN member nations have a constitutional clause recognizing people's right to a safe environment, although they have varying degrees of state responsibility and enforceability (Boyd & Orellana, 2020). In 1972, this original clause was not focused on climate change, but it now serves as a basis for our understanding of climate change as a threat to human rights. Global human rights bodies have recognized since 2008 that climate change poses an imminent threat to human rights and that countries have an obligation to prevent climate change induced human rights violations by acting to reduce emissions, regulate emitting activities, and promote resiliency measures. The IPCC considers a 2°C warming the threshold for dangerous climate change impacts, with warming beyond the 2°C limit posing catastrophic and irreversible harms (IPCC, 2018). Research suggests that we have a slim chance of staying below 2°C of warming, particularly if global fossil fuel usage doesn't drastically decrease. We have already surpassed 1°C warming above pre-industrial levels and the negative impacts, including increased intensity and/or frequency of flooding, drought, severe storms, and wildfires, are already being felt (IPCC, 2018). Additionally, climate change threatens to decrease agricultural productivity, destabilize staple

crop production, increase the frequency and intensity of severe weather events and wildfires, diminish global biodiversity and ecosystem diversity (IPCC, 2018). All of these effects have real impacts for wellbeing, like forcing the relocation of coastal communities, contributing to hunger and famine crises, causing damage to critical infrastructure. Climate change thus threatens to undermine not only environmental health and wellbeing, but also the physical, economic, cultural, and social wellbeing of people globally.

Returning to the People v. Arctic Oil case at hand, the plaintiffs argued in the first hearing that continued oil expansion is incompatible with sub-2°C warming as per the Paris Agreement goals as discussed above. Further, they addressed the fact that the Arctic is an environmentally sensitive region and subject to amplified climate change impacts, so it is of the utmost importance to protect it to the highest degree possible (Greenpeace v. Norway, 2020). While any fossil fuel production increases climate change, extraction in the Arctic is especially risky and counterproductive. In 2018, the Oslo District Court ruled against the environmental organizations and in favor of the Norwegian Government. The District Court emphasized that the plaintiffs did have standing to bring forth their case as a rights-based climate change case, but found that the Norwegian government did not infringe upon citizens' rights to a healthy environment or their right to life as guaranteed under the Constitution and ECHR (Greenpeace v. Norway, 2020). In this decision, the District Court also found that emissions from exported petroleum could not be considered and are "irrelevant" and not applicable to Article 112. The case was successfully appealed, and in January 2020, the Court of Appeals agreed with the lower court in that the licenses remain valid, but stated that the exported petroleum's emissions are indeed applicable under Article 112 (Greenpeace v. Norway, 2020). Despite acknowledging that exported emissions should be included in our reading of the right to a safe environment, the Court of Appeals very frustratingly decided that the plaintiffs could not demonstrate a violate of Article 112 because "it is uncertain whether and to what extent the licenses will lead to increased greenhouse gas emissions" (Greenpeace v. Norway, 2020). To this end, the decision has been appealed again and the Norwegian Supreme Court commenced hearings in November 2020.

The case confirms that citizens do in fact have a right to protection for climate change, but it ultimately found that "the global consequences of climate change were beyond the scope of the State's obligations under the ECHR" (Duffy & Maxwell, 2020). In this sense, it seems that Norway is rejecting responsibility and culpability for its role in creating the conditions for climate change and its role in supplying fossil fuels that continue to generate emissions. The case is incredibly frustrating because it counters the narrative that Norway is a global environmental action leader and suggests that the petroleum industry is more powerful and important than reaching global climate goals and securing citizens' rights to a safe environment. The Norwegian Supreme Court has yet to release its final decision in the case, but even if the court upholds the licenses now, the arguments involved demonstrate the power of the people to bring forth future rights-based climate change cases.

Western European Human Rights-Based Climate Litigation

The People v. Arctic Oil case is just one example of recent climate change rights-based litigation, with some major European cases setting precedents for climate action. Perhaps the most relevant and important recent climate change litigation comes from the Urgenda v. Netherlands (2019) case. The Urgenda Foundation, a Dutch environmental group, sued the Dutch government, arguing that the Netherlands is not exercising its responsibility to help prevent global climate change and is in violation of Articles 2 and 8 (right to life and right to family life) under the ECHR (Urgenda v. Netherlands, 2019). The court ruled that the government has an obligation to reduce national greenhouse gas emissions by at least 25% of 1990 levels by the end of 2020 or else it would be evading its "duty of care" to protect the human rights enumerated in Articles 2 and 8 of the ECHR (Urgenda v. Netherlands, 2019). The case makes it clear that no matter how minor a country's share of global emissions, it still has an obligation to measurably reduce its emissions to help meet global goals (Nollkaemper & Burgers, 2020). This is one of the strongest rights-based climate change rulings and sets an important precedent for future climate change litigation, including the Norway case.

Also highly relevant to the People v. Arctic oil case, although this was a Parliament decision, the Danish Parliament just voted to end all future oil licensing rounds and suspend all future oil production permits, with existing oil production in the Danish part of the North Sea set to end by 2050 (Greenpeace International, 2020). Denmark is another large EU oil producer, so this represents a critical policy shift for the nation and shows how they are emerging as a leader in climate change action by imposing a hard deadline for ending oil extraction. This recent decision stands in stark contrast to the Norwegian government's push to continue oil licensing and production in the environmentally sensitive Arctic region (Greenpeace International, 2020). Norway must consider how its decision to license new oil and gas production contributes to rising greenhouse gas emissions and that even though the vast majority is exported, they still were still responsible for its production.

Another important case is more centered on a state's responsibility to enact clear and actionable mitigation plans, but also involves a human rights claim. In 2017, Friends of the Irish Environment sued the Irish government for passing the National Mitigation Plan which they argue is wildly unspecific and not designed to achieve short-term greenhouse gas emissions reductions, thereby violating Ireland's Climate Action plan, the Irish Constitution, and the European Convention on Human Rights for its infringements upon the right to life/family life (FIE v. Ireland, 2020). Ireland's Climate Act specifically mandates that Ireland become a "low carbon, climate resilient" and "environmentally sustainable economy" by 2050, which the National Mitigation Plan recognized but failed to actually address how that would be accomplished (Kelleher, 2020). In July 2020, the High Court of Ireland ruled in favor of FIE. The Court found that the Act requires a specific emissions reductions plan. However, the Court

did not find standing for infringement upon human rights (FIE v. Ireland, 2020). The ruling is significant as it signals the need for specific, actionable measures to be taken within specific time frames to actually achieve globally agreed upon climate goals.

Although this German case has not been heard yet, the case has many similarities to the Juliana v. US case (discussed below) as it is a youth-led, rights-based climate change case that is currently active and does not invoke ECHR rights (Neubauer v. Germany, 2020). A group of German youth filed a lawsuit against the German government arguing that the Federal Climate Protection Act's emissions reduction goals of 55% below 1990 levels by 2030 are not stringent enough to meet sub-2°C goals as outlined in the Paris Agreement. The youth allege that this constitutes a violation of their human rights under the German Constitution and request that the reduction quota be increased to 70% of 1990 levels by 2030 (Neubauer v. Germany, 2020). Again, while this case has not been decided, it is representative of the ability to push for tighter environmental regulations as a way of securing human rights.

Not all recent European human rights-based climate cases have produced environmentally favorable outcomes, however. Earlier this year, Switzerland's Supreme Court rejected an appeal by the Union of Swiss Senior Women for Climate Protection, maintaining that the Swiss government did not violate human rights under the ECHR through its climate policies. The plaintiffs maintain that Swiss environmental policy is not on track to significantly reduce emissions consistent with sub-2°C warming goals (McDermott, 2020; Union of Swiss Senior Women v. Switzerland, 2020). Rights-based cases are difficult to argue and do not always favor pro-environmental outcomes. However, the fact that multiple nations now uphold that climate change as a human rights violation is grounds for legal standing is a critical step.

United States Litigation: Juliana v. US

The United States departs from both Norway and the European on the issue of rights-based climate change legislation in that it is incredibly challenging to bring forth a case on the grounds of climate change representing a violation of human rights. The US has no constitutionally guaranteed right to a safe and healthy environment and is not subject to the same ECHR articles as invoked in many of the European cases aforementioned. In 2015, youth plaintiffs represented by youth environmental nonprofit Our Children's Trust filed a lawsuit against the US government claiming that its failure to act on carbon emissions constituted a violation of their right to life (Juliana v. US, 2020). The US has been aware for more than 5 decades that burning FF's, releasing GHGs into the atmosphere is causing CC, endangering the health, wellbeing, and survival of present and future generations. Yet, the government continues to support the fossil fuel industry, has failed to adequately regulate emissions, and continuously fails to enact progressive climate change policies despite being fully aware of the environmental, social (ie: public health/wellbeing), and economic impacts of climate change. Moreover, the government deliberately allows and enables fossil fuel production and combustion in spite of the

climate change evidence. The impetus for the Juliana v. US case is the approval of the Jordan Cove LNG project in Oregon, which will be the largest source of carbon emissions in the state and will contribute to global climate change, thereby also harming the plaintiffs (Juliana v. US, 2020). Past governmental failure to act on fossil fuel emissions has created dangerous climate change conditions and the Juliana Plaintiffs argue that the Department of Energy's approval of the Jordan Cove LNG project further increases harm to the Plaintiffs. The Juliana Plaintiffs, representing the interests of the youngest generation, assert that the US government, through its role in causing climate change, has violated the plaintiffs' constitutional foundational rights to life, liberty, and property (Juliana v. US, 2020).

Following the 2020 hearing, the 9th Circuit Court ruled that Juliana plaintiffs failed to meet the redressability requirements under Article III of the Constitution and therefore lacked standing to bring forth their case against the federal government (Juliana v. US, 2020). Essentially, the Court insisted that because the court's actions alone cannot "solve global climate change," that this one case cannot prevent or mitigate climate change, that the plaintiff's case must be dismissed for lack of standing (Juliana v. US, 2020). Following this frustrating ruling, plaintiffs petitioned for a rehearing. The 9th Circuit Court had ruled that Juliana plaintiffs did not have standing, particularly on the issue of redressability. Juliana plaintiffs argue that the court created a new redressability test that was politically motivated and argued that the case deals with "profoundly important issues" (ie: climate change) that affect children, who cannot defend themselves in court and have special rights (Juliana v. US, 2020). In the past few months, many Amicus briefs were submitted on behalf of the Juliana plaintiffs, including by members of Congress and law professors alleging the court erred in determining standing and redressability, by public health experts detailing climate change's impacts to children's health, by youth advocates citing the state's special judicial role and duty in protecting children's fundamental rights, and international lawyers citing the foreign precedent set in climate litigation (Juliana v. US, 2020). Plaintiffs continue to push the case through the legal system, but the outlook is far from favorable.

What feels most revealing about the difference between the US climate litigation and the European cases is how this case is argued and dismissed purely on issues of standing and redressability. Urgenda v. Netherlands (2019) case specifically addresses how despite having a small fraction of global emissions, the government still has a duty to reduce emissions further to protect its citizens' human rights in the face of climate change. The Juliana ruling is delivered without much thought as to deeper questions of the United States' culpability and responsibility for the magnitude of climate change nor the government's responsibility to protect the most vulnerable members of society from violations of their most basic, foundational right to life.

The Juliana v. US ruling speaks to a greater issue of lack of environmental stewardship by the federal government. At a time of critical need for more stringent emissions reductions and

progressive climate policy, the Trump Administration has rolled back more than one hundred environmental policies and regulations in the United States (Popovich et al., 2020). In line with the Trump Administration's pro-industry, anti-environment stance, the Trump Administration is set to auction off drilling rights in the Arctic National Wildlife Refuge on January 6th, just two weeks before President-Elect Joe Biden takes office (Hanlon, 2020). The area in question is 1.6 million acres on ANWR's coastal plain, which is 8% of the reserve but still serves as a critical habitat for vulnerable species like polar bears and other migrating wildlife (Hanlon, 2020). The timeline for the auction has been rapidly accelerated, to the point where drilling opponents may be able to challenge the sale based on procedural errors. The Biden Administration could also make the permitting process hellish for oil companies even if the Trump admin pushes the auction through (Hanlon, 2020). Ultimately this licensing auction is demonstrable of just how far out of alignment the Trump Administration's environmental policies are compared to the vast majority of other Western nations.

While much of Western Europe debates the ethics of oil licensing and climate responsibility, the Trump Administration rushes to auction off land in a protected, sensitive environmental region before a more progressive, conscious president takes office. As political polarization deepens in the US, there is growing disagreement along party lines about belief in and approaches to handling climate change and environmental protection (Dunlap et al., 2016). Amongst conservative Republicans in 2016, only 30% believed that global warming was already occurring and just 17% believed climate change to be a serious threat in their lifetime (Dunlap et al., 2016). On the other hand, the vast majority of liberal democrats showed strong belief in climate change realities and viewed it as a serious risk and personal worry (Dunlap et al., 2016). This political polarization is ideological, deeply tied to people's personal value systems and identity formations. This intensifying political polarization makes it incredibly difficult to pass environmental policies that align with globally agreed upon emissions reductions goals. In contrast to this US divide, European countries generally express less political polarization and more consistent environmental attitudes. An overwhelming majority, 95%, of surveyed EU citizens considered it essential to protect the environment with nearly 60% identifying climate change as their top environmental concern (Adelle & Withana, 2008). Ultimately meeting climate change goals is an international, cooperative effort and political polarization, particularly in the US, as well as continued investment in fossil fuel production is compromising our collective ability to meet these global emissions goals.

Conclusion

Climate change is the product of global industrial capitalism, based on resource extraction and fossil fuel usage. Industrial capitalism has demanded the exploitation of resources for the sake of development and many wealthy, western nations today have acquired their industrialized, wealthy status from this fossil fuel extraction process. We now find ourselves at a critical ecological threshold, where climate change is causing serious environmental damage

which is already and will continue to negatively impact human lives. The impacts of climate change, particularly if dramatic action is not taken, will compromise young and future generations' rights to a safe and healthy environment and to life itself. From a human-rights perspective, the core of the issue in the People v. Arctic oil case is that continued investment in, continued production of fossil fuels endangers the long-term welfare for people and the planet by contributing to climate change. Norway is in a critical moment, where it can decide to acknowledge its responsibility as a wealthy, industrialized nation to start limiting oil production or it can decide to continue licensing new oil developments, knowing that this action contributes to climate change that very directly affects them as an Arctic nation. At this point, Norway is in an incredible position to claim its role as a global climate action leader and begin seriously transitioning away from fossil fuels. Domestically, Norway has done a remarkable job of lowering emissions and is in a strong economic and social position to find alternative ways of generating wealth and economic growth, outside of the petroleum industry.

The Urgenda v. Netherlands case, that recognized the State's responsibility to reduce emissions further to protect human rights, further solidifies the Netherlands as a climate action leader and establishes an exciting precedent for future human-rights based climate change litigation globally. Similarly, the Netherlands voting to cease new licensing rounds and end all oil production by 2050 should serve as a signal to other western, industrialized nations to follow suit, to make real actionable commitments to ending fossil fuel production in order to safeguard the health and existence of people and a productive environment. The United States stands out for its general failure to take responsibility for its role in climate change and to guarantee its citizens a constitutional right to a safe and healthy environment. The United States has also failed to legally acknowledge and address how climate change poses a major threat to human rights. As a globally influential and powerful nation, the United States needs to develop stronger climate change policies and act responsibly, swiftly, and cooperatively to meet global emissions targets. The present wave of global human-rights based climate change cases represents an exciting, but challenging, frontier for pursuing more aggressive climate action. There is truly a collective responsibility to reduce emissions and these western, wealthy, industrialized nations must take responsibility for strategically moving away from fossil fuels now in order to safeguard not only their national interests, but global citizens' rights to a productive environment and life itself. Not only does this signal the need for full transitions away from fossil fuels, but climate change and its serious human rights impacts should also signal a need to critically examine our economic system of global industrial capitalism.

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Figures

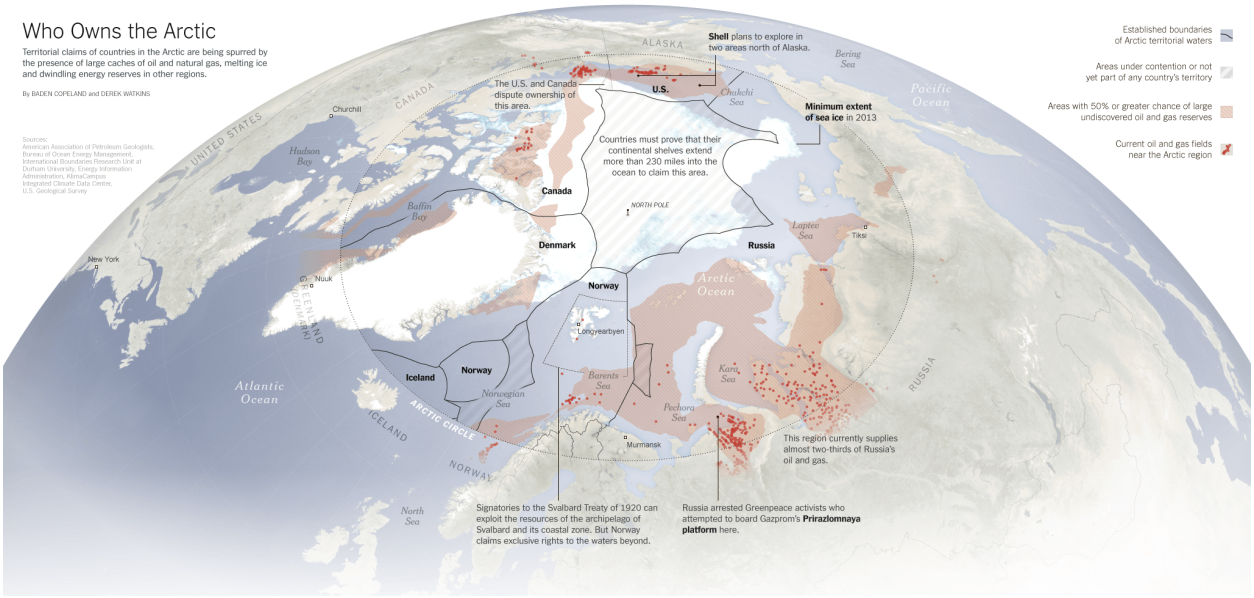

Figure 1. Arctic oil exploration and production by nations claiming ownership over current and undiscovered petroleum reserves in the Arctic region. Current production is depicted by red dots while areas with high likelihood of undiscovered petroleum reserves are shaded in light red. Countries involved in the race for Arctic oil development include Russia, Canada, the US, Norway, and to a lesser degree, Iceland, Greenland, and Denmark (Source: Copeland, B., & Watkins, D. (2013). *Who Owns the Arctic* (Sources: American Association of Petroleum Geologists, Bureau of Ocean Energy Management, International Boundaries Research Unit at Durham University, Energy Information Administration, Klima Campus Integrated Climate Data Center, US Geological Survey). New York Times. https://www.nytimes.com/2013/12/08/opinion/sunday/rushing -for-the-arctics-riches.html).

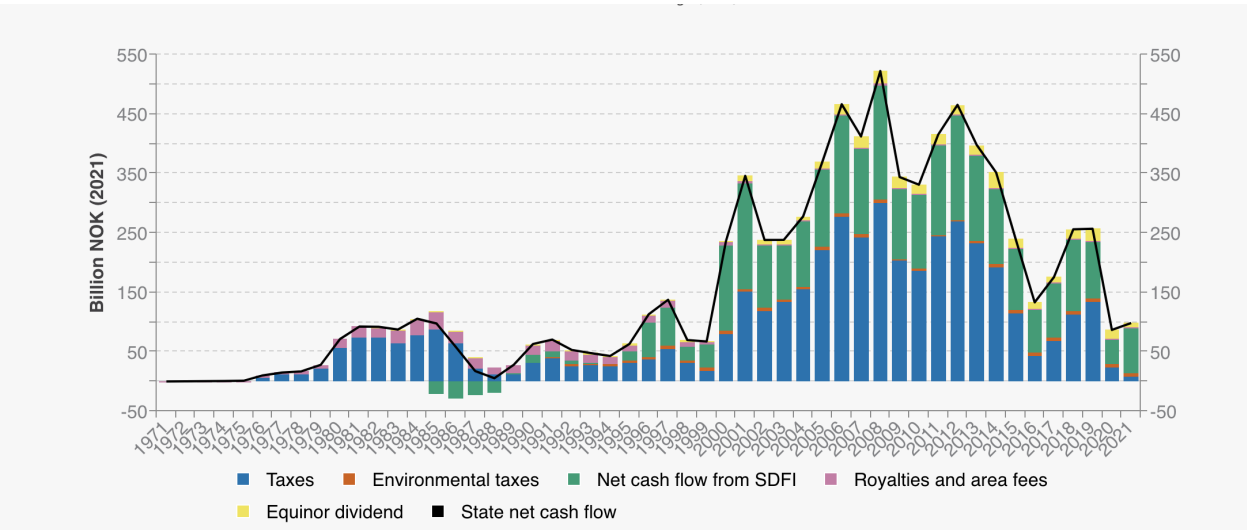

Figure 2. Norwegian government revenue from petroleum production from the beginning of petroleum production in 1971 to projected revenue values for 2021. The sources of State revenue from oil production include taxes, environmental carbon taxes, income from SDFI, holdings in Equinor, and other royalty fees. Government revenues from petroleum activities are invested into the Norwegian Sovereign Wealth Fund, colloquially referred to as the Oil Fund, which ensures that future generations have access to the economic benefits of oil production (Source: Norwegian Petroleum Directorate. (2020, February 12). *Norwegian Petroleum: Economy*. Norwegian Petroleum Directorate. https://www.norskpetroleum.no/en/economy/governments-revenues/).

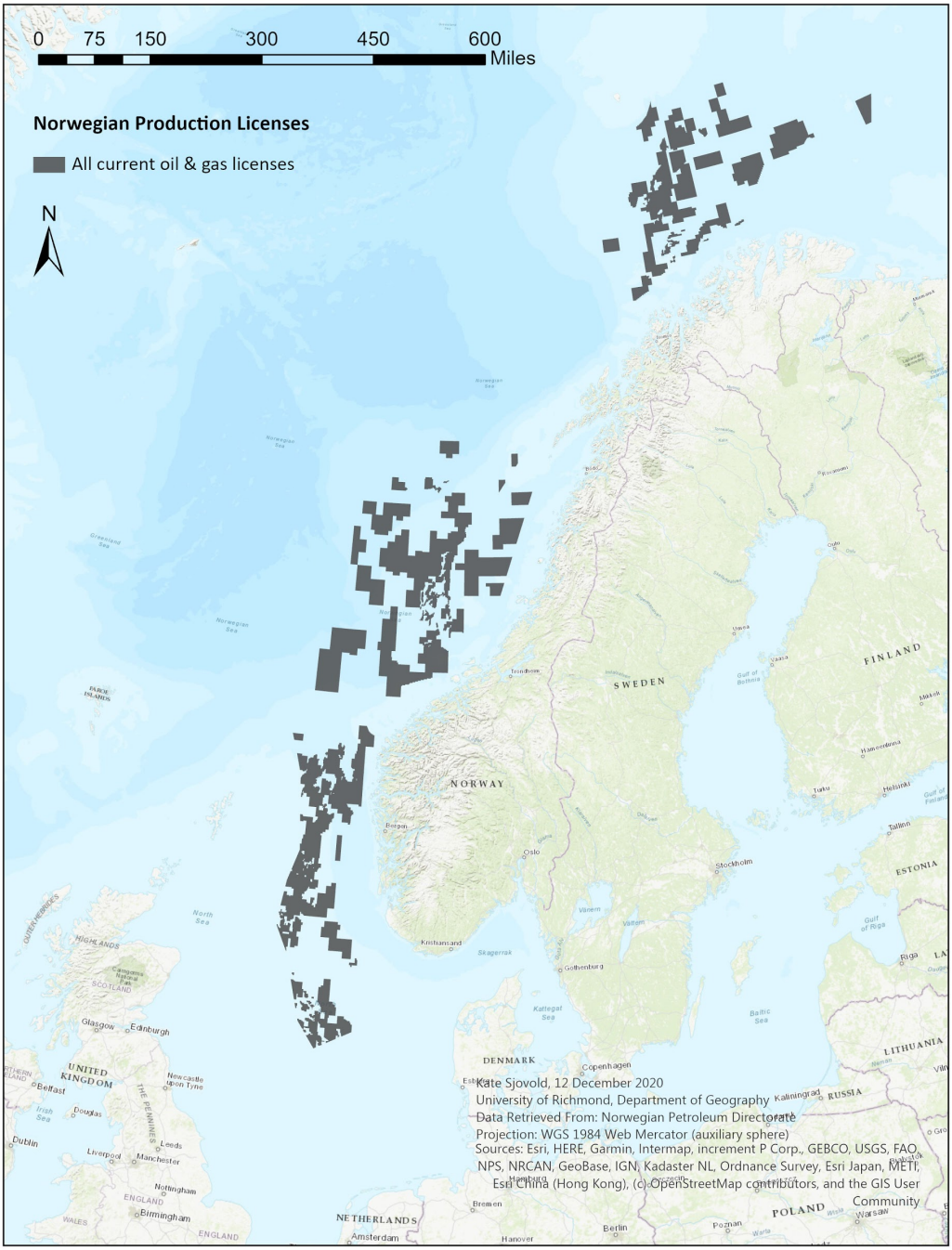

Figure 3. All current oil and gas production licenses issued by the Norwegian government are shown in grey. There are three main petroleum production regions: Production around the Southeastern tip or Norway in the North Sea, production in the Norwegian sea, and production in the South/Southeast Barents Sea in the Arctic region of Norway. Current legal controversy surrounds continued exploration and licensure for production in the South/Southeast Barents Sea. With large undiscovered reserves of oil and gas in the Barents Sea, production will likely continue to grow off the northern coast of Norway despite the issues of climate change and difficult Arctic conditions.