

# **THE AGGRESSIVE EXPLORER:** HOW NORWAY'S RAPID RAMP-UP OF OIL AND GAS LICENSING IS INCOMPATIBLE WITH CLIMATE LEADERSHIP



This briefing was written by Silje Ask Lundberg with contributions from Kelly Trout and Romain Ioualalen. Research was conducted by Silje Ask Lundberg and Kelly Trout. All are with Oil Change International.

Design: [paul@hellopaul.com](mailto:paul@hellopaul.com)

Copyediting: Abby Klionsky

For more information, contact: Silje Ask Lundberg at Oil Change International, [silje@priceofoil.org](mailto:silje@priceofoil.org).

Oil Change International is a research, communications, and advocacy organization focused on exposing the true costs of fossil fuels and facilitating the ongoing transition towards clean energy.

Oil Change International  
714 G Street SE  
Washington, DC 20003 USA  
[www.priceofoil.org](http://www.priceofoil.org)

Norway claims to be one of the climate leaders of the world, and was one of the first countries to ratify the Paris Agreement. At the same time, the country has led an aggressive policy of expanding its oil and gas industries, and has ramped up its exploration licensing exponentially over the past 10 years.

This is despite clear scientific evidence that allowing development of new oil and gas fields — let alone approving exploration for new oil and gas reserves — is incompatible with the critical aim of the Paris Agreement to limit global warming to 1.5 degrees Celsius (°C).<sup>1,2</sup>

This briefing provides new data revealing how Norway's Awards in Predefined Areas (APA) program has locked in a rapid acceleration of licensing over the past decade, and quantifies how Norway's contribution to the climate crisis could increase if exploration and new development continue apace. We identify two key steps the current Norwegian government can take in 2022 to signal that it is serious about its commitment to the Paris goals, and to begin to align its oil and gas policies with the critical 1.5°C limit: halt the APA licensing system, and reject Equinor Energy AS's bid to develop a major new oilfield in the Arctic. The Equinor oilfield would be the northernmost development in the world,<sup>3</sup> and in a vulnerable and exposed area.

Ultimately, to show real climate leadership, Norway must stop approving any new exploration or extraction, and instead focus on leading the way towards a rapid and equitable phase-out of oil and gas production.

The former Conservative Government issued a record high number of exploration licences to the oil and gas sector between 2013 and 2021. The Labour Government has an opportunity to demonstrate concrete leadership in tackling the climate crisis by aligning the country's oil and gas policies with the Paris Agreement.

## KEY FINDINGS:

- ❖ **During the last 10 years, the Norwegian government awarded as many exploration licences (700) as in the 47 years prior**, making Norway Europe's most aggressive explorer<sup>a</sup>. From 2012 to 2021, new licences issued by Norway opened up 2.8 billion barrels of new oil and gas resources for potential extraction, almost 3.5 times more than Europe's second-largest producer, the United Kingdom.
- ❖ The Awards in Predefined Areas (APA) now account for 60 percent of the blocks awarded to oil and gas companies on the Norwegian continental shelf. The number of blocks included in the APA doubled under the last government, an expansion that occurred without following climate and environmental advice from the state's own environmental bodies.
- ❖ If oil and gas industry expansion is allowed to continue, Norway's global contribution to the climate crisis could increase dramatically. **The oil and gas within fields that are already licensed, but not yet developed, could lead to an additional 3 billion tons (Gt) of carbon-dioxide (CO<sub>2</sub>) emissions. This is 60 times Norway's annual domestic emissions.** New licensing could increase these emissions by 80 percent.
- ❖ The proposed Wisting oil field could be the largest single Norwegian asset approved for development this decade.<sup>4</sup> If approved, **the 500 million barrels of oil in the Wisting field in the Barents Sea could lead to emissions of more than 200 million tons (Mt) of CO<sub>2</sub> when burned, equivalent to the annual emissions of 50 coal-fired power plants.** The climate impact of the Wisting field could be three times greater than that of the Cambo field, the controversial U.K. project paused in late 2021 in the face of massive grassroots opposition.



a Russia is not included in our definition of Europe.

# OIL AND GAS EXTRACTION ARE FUELLING THE CLIMATE CRISIS

The 2015 Paris Agreement legally binds countries to limit global warming to well below 2°C and to pursue efforts to limit it to 1.5°C. Norway was the first developed nation to ratify the agreement in 2016,<sup>5</sup> but has yet to take meaningful action in terms of its own most significant contribution to the climate crisis: the country's oil and gas exploration and production. The 2017 *Sky's Limit Norway* report found that Norway is the world's seventh-largest exporter of emissions on an annual basis.<sup>6</sup> Figure 1, updated with 2020 data, shows that the CO<sub>2</sub> created by burning exported Norwegian oil and gas remains 10 times greater than Norway's domestic greenhouse gas emissions.<sup>b</sup>

There is strong scientific consensus that ending the expansion of global fossil fuel production immediately and phasing it out rapidly is necessary to avoid the worst impacts of climate change. The latest report from the Intergovernmental Panel on Climate Change (IPCC), from August 2021, makes it clear that the main drivers of the climate crisis are the rising emissions

of CO<sub>2</sub> and methane. One of the most severe findings of the report is that, due to past emissions, all mapped scenarios lead to a warming that exceeds the 1.5°C target by the middle of the 21st century. Only one scenario allows temperatures to return below that level by the end of the century.<sup>8</sup>

The 2021 Production Gap report, supported by the United Nations Environment Programme, shows that governments are still planning to produce more than twice the amount of fossil fuels in 2030 than would be consistent with limiting warming to 1.5°C.<sup>9</sup> Despite a growing number of countries, including Norway, announcing their intentions to achieve net-zero emissions by 2050, these pledges have not translated into plans to keep fossil fuels in the ground.

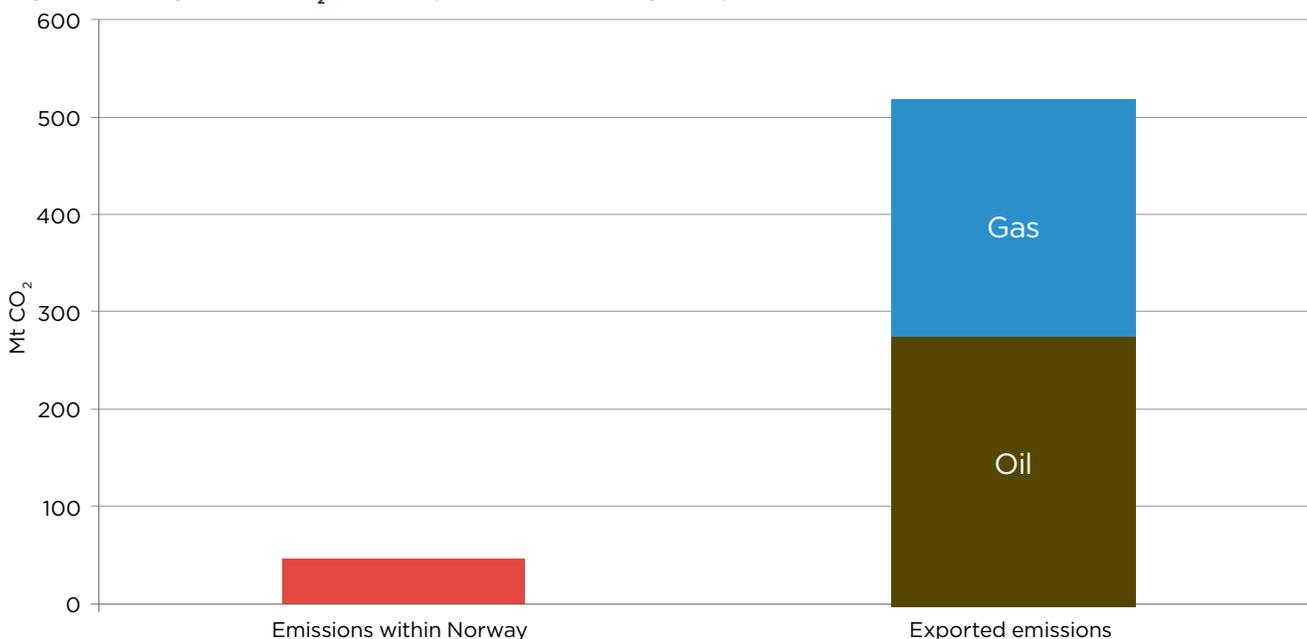
In May 2021, the International Energy Agency (IEA) produced a roadmap for the global energy sector to reach net-zero emissions by 2050<sup>10</sup> and to limit global warming to 1.5°C. The IEA's roadmap includes no new expansion of fossil fuel

production beyond projects already in development. The head of the IEA, Fatih Birol, declared, "If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year."<sup>11</sup> In October 2021, the IEA reiterated its conclusions when releasing its first-ever 1.5°C-aligned World Energy Outlook. IEA director Birol publicly dismissed the claim by Equinor Energy AS, Norway's state-owned energy company, that new oil and gas development connected to existing platforms would align with the IEA net-zero scenario.<sup>12</sup>

Previous research done by Oil Change International has shown that, even if coal is phased out overnight, the CO<sub>2</sub> emissions from oil and gas in already-operating or under-construction fields around the world could push the planet beyond 1.5°C of warming.<sup>13</sup>

In August 2021, UN Secretary General António Guterres responded to the release of the latest IPCC report by stressing that its findings "must sound a death

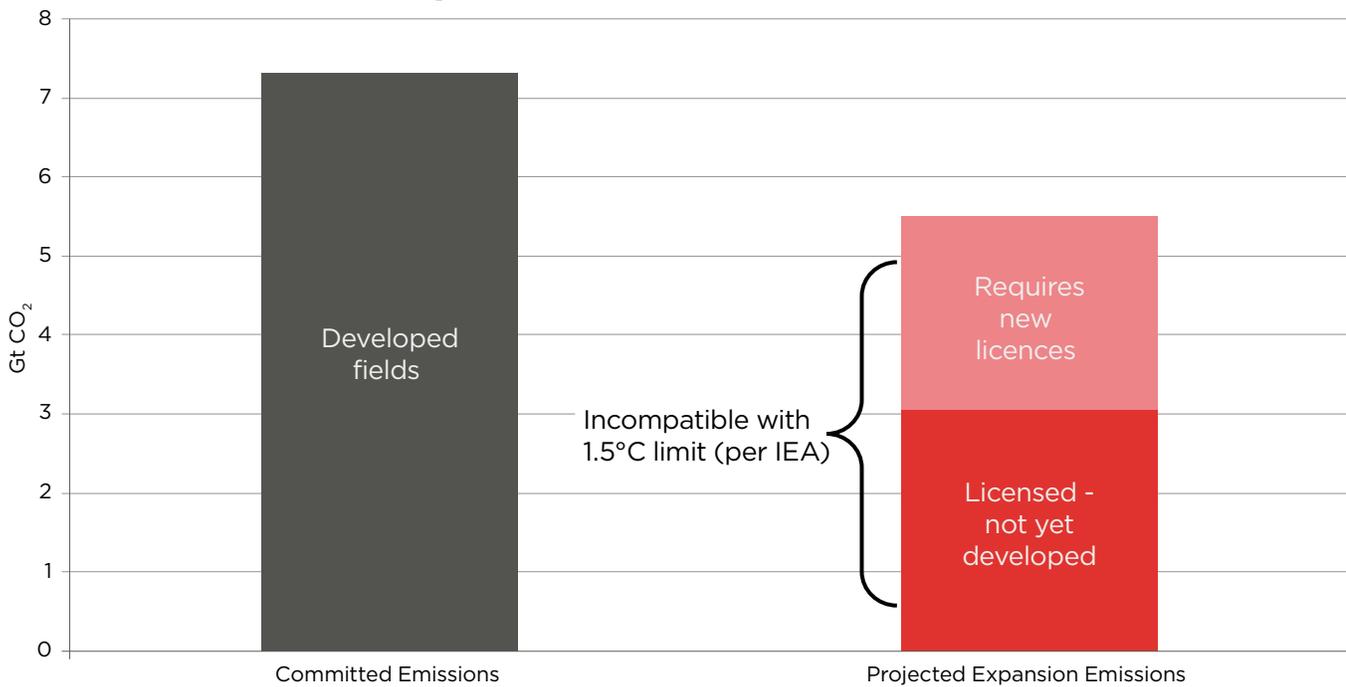
**Figure 1: Norway's annual CO<sub>2</sub> emissions, domestic versus exported, 2020**



Sources: Statistics Norway, BP Statistical Review of World Energy, Oil Change International calculation using data from Rystad Energy UCube.<sup>7</sup>

<sup>b</sup> Norway's domestic greenhouse gas emissions equalled 49.3 Mt CO<sub>2</sub>-equivalent in 2020. We calculate 'exported emissions' by first subtracting the volumes of oil and gas consumed in Norway in 2020 (and thus covered by domestic emissions) from the total amount of oil and gas produced in Norway in 2020. We apply CO<sub>2</sub> emissions factors (see Endnote 7) to exported volumes, finding that exported emissions totalled 520 Mt CO<sub>2</sub> in 2020.

**Figure 2: Projected cumulative future CO<sub>2</sub> emissions from Norwegian oil and gas resources, by stage of development**



Source: Oil Change International calculations using data from Rystad Energy UCube<sup>19</sup>

knell for coal and fossil fuels, before they destroy our planet. [...] Countries should end all new fossil fuel exploration and production, and shift fossil fuel subsidies into renewable energy.”<sup>14</sup>

At the 2021 UN climate summit in Glasgow, Scotland, the Beyond Oil and Gas Alliance (BOGA) was launched.<sup>15</sup> BOGA's constituent countries acknowledge that wealthy, diversified economies must take the lead globally in phasing out oil and gas production in order to make the transition away from fossil fuels an equitable process.

Despite the clear message from the IEA and the UN, Norway's two biggest political parties, Labour and the Conservative Party, have dismissed any changes to the country's oil policy.<sup>16</sup> Jonas Gahr Støre, Norway's new prime minister, warned that shutting down drilling would mean the end of the green transition.<sup>17</sup>

But Norway cannot credibly be part of a 'green transition' while ignoring the emissions generated globally by the country's oil and gas production.

The exploration policies championed by current and previous Norwegian governments have contributed to the global “production gap,” locking in more oil and gas production than is compatible with the critical 1.5°C warming limit. By contrast, as a wealthy country with a relatively diversified economy and the capacity to manage a rapid transition away from fossil fuels, Norway should be moving first and fastest globally to wind down fossil fuel production.<sup>18</sup>

As long as Norway continues to issue new exploration licences and approve new oil and gas field developments, it will impede the equitable global phase-out that is urgently needed.

Figure 2 shows the additional CO<sub>2</sub> emissions the current Norwegian government could be responsible for locking in if it continues the aggressive expansion policy of the previous government. The data, based on projections from Rystad Energy, show that permitting development of oil and gas fields that are already licensed but not yet in production in Norway could lead

to an additional 3 Gt of CO<sub>2</sub> emissions. This is 60 times the mass of Norway's current annual domestic emissions. Issuing new exploration licences could increase these expansion-related emissions by 80 percent. According to the IEA's 1.5°C-aligned energy scenario, all of the oil and gas represented by the right-hand column in Figure 2 should remain in the ground.

The following sections describe two key steps the Norwegian government can take in 2022 to begin to align its oil and gas policies with its commitment to the Paris Agreement: halting the exponentially expanding, non-transparent APA system of licensing; and rejecting Equinor's bid to develop the Wisting oil field.

# AN EXPONENTIAL GROWTH IN EXPLORATION

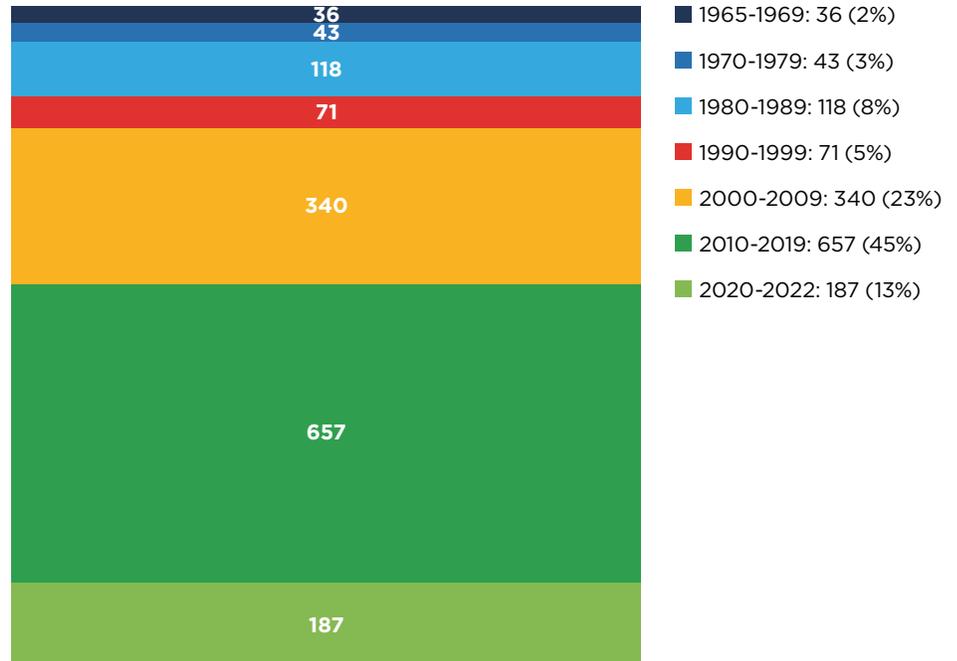
Since Norway began producing oil in the 1970s, it has become Europe's largest oil- and gas-producing country, producing 1.4 billion barrels of oil equivalent for sale to the world market in 2020.<sup>20</sup> From the beginning of exploration in 1965 until 2022, 1,400 exploration licences have been awarded on the Norwegian continental shelf. 2003 marked a significant acceleration in the award of licences, with the introduction of the APA. Over the past 10 years, as many exploration licences have been awarded (700) as in the 47 years prior (Figure 3). Over half of these were awarded after Norway ratified the Paris Agreement in June 2016.

For the past 10 years, Norway has been Europe's most aggressive explorer, licensing far more resources than any other country. From 2012 to 2021, Norway's awards have made available more than 2.8 billion barrels of oil equivalent for exploration and potential development (Figure 4). This is twice the amount of oil and gas as the next country on the list, Cyprus, and 3.5 times more than the U.K., Europe's second-largest producer (excluding Russia).

The biggest changes in the Norwegian exploration policy were the introduction of the Awards in Predefined Areas (APA) in 2003 and subsequent policy changes in 2011 that led to a lock-in of blocks for oil and gas exploration. The goal of the APA was to expand licences to so-called mature areas. In 2011, Norway's parliament passed a policy that prevented any reduction of the APA areas: "Each year, the Government considers whether the APA area should be expanded. The areas can be expanded within the framework that lies in the management plans for the relevant sea area, **but the area cannot be reduced.**"<sup>23</sup>

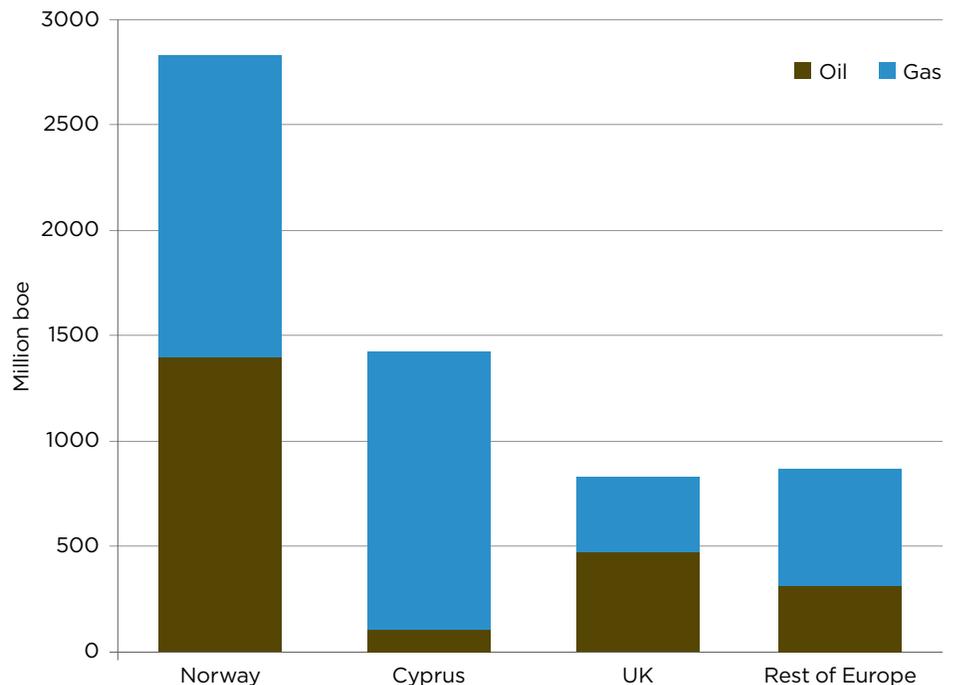
Furthermore, the Norwegian Parliament also passed a new policy that restricts the environmental advice that could be taken into consideration in public hearings regarding the environmental impacts of possible expansion of the APA. That policy

**Figure 3: Exploration licences awarded from 1965 – 2022.**



Source: Norwegian Petroleum Directorate<sup>21</sup>

**Figure 4: European oil and gas resources licensed for exploration, 2012-2021**



Source: Rystad Energy UCube.<sup>22</sup> Russia is not included in Rest of Europe. Boe = barrels of oil equivalent.

reads: “Until the update of a management plan, no further environmental and fisheries requirements will be set for petroleum activities in the area. For areas with a management plan, input is only requested in connection with whether new, important information has been added after the relevant management plan was adopted.”<sup>24</sup>

On the Norwegian continental shelf, exploration licences are granted through two different types of licensing rounds: numbered licensing rounds in frontier areas, or Awards in Predefined Areas. In numbered licensing rounds, blocks that are not issued as part of an exploration licence are relinquished and reevaluated year-to-year based on environmental reviews and public input. The APA, however, is an exponential licensing round. The fixed area available for companies to bid on

only increases. If a block is not awarded as part of an APA licence in one year, it will automatically be up for award in the next year’s APA licensing round, without being part of a public hearing process. This has led to a back-door system for expansion with little to no transparency, which the state’s own environmental bodies have warned against for years.<sup>25</sup>

This has also led to the APA taking over as the most important licensing round for gaining access to new areas on the Norwegian continental shelf. In 2009, 46 oil and gas companies applied for the blocks that were issued in the 20th round.<sup>26</sup> In 2021, however, only seven companies applied for licences in the 25th licensing round.<sup>27</sup> In the Barents Sea, where there are only two fields in current production, Snøhvit and Goliat, the areas included in APA have expanded from 27

blocks in 2004<sup>28</sup> to 352 blocks in 2021.<sup>29</sup> After the last expansion of APA in 2021, the area now covers 106.476 km<sup>2</sup>.<sup>30</sup> This is an increase of 120 percent from 2004. Thus, even frontier areas are included in the APA, and the numbered licensing round is essentially obsolete.

The Conservative coalition that controlled the government from 2013 to 2021 set record after record in expanding the areas available for oil and gas exploration. When the coalition took office in 2013, 28 percent of the blocks on the continental shelf were defined as APA-areas, and thus available to oil and gas companies to apply for licences. When that government stepped down in October 2021, 60 percent of the blocks on the continental shelf were issued as APA-areas.<sup>31</sup>



# THE WISTING FIELD IS INCOMPATIBLE WITH LIMITING WARMING TO 1.5°C

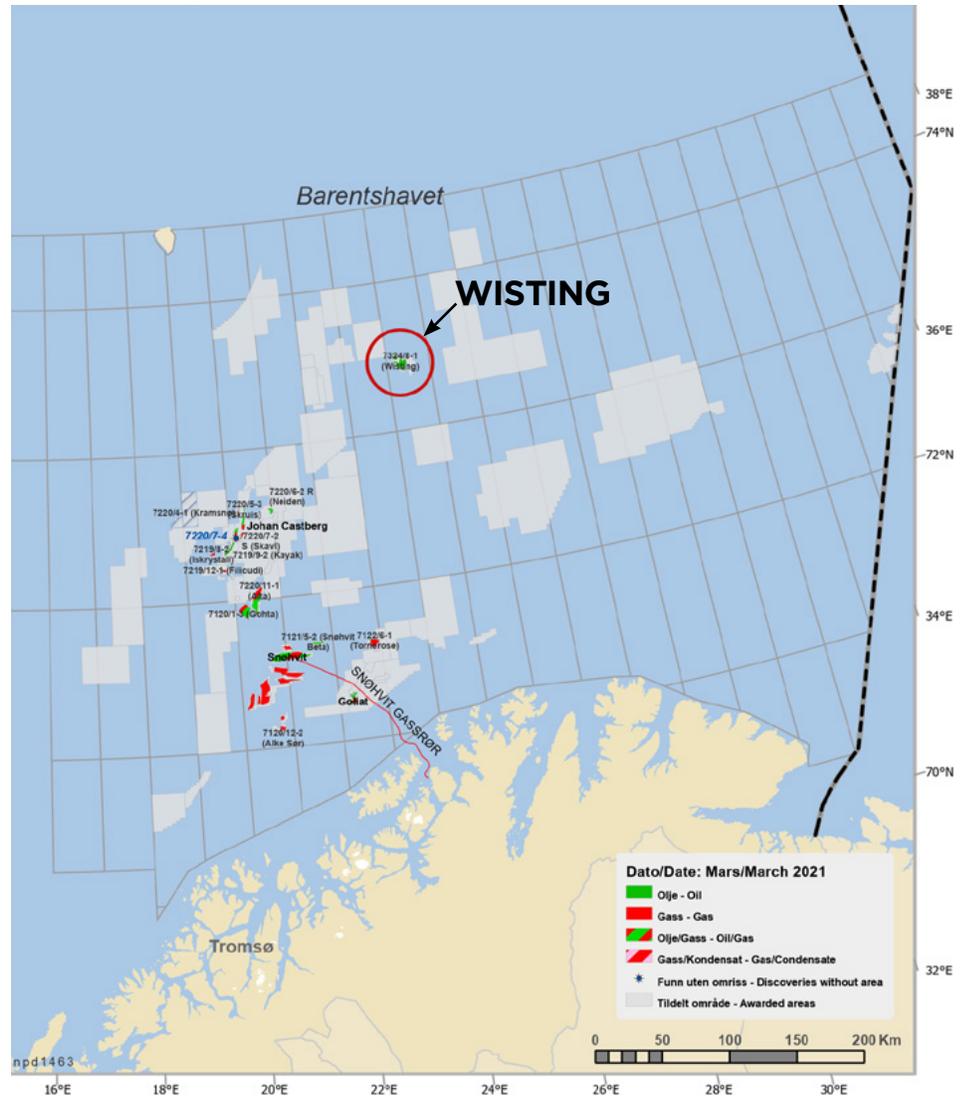
Equinor is planning to seek approval for the development of the Wisting oil field in the Barents Sea in 2022. The field is expected to produce close to 500 million barrels of oil, which would create more than 200 million tons of CO<sub>2</sub> when burned, equivalent to the annual carbon emissions of 50 coal-fired power plants.<sup>32</sup> By size of reserves, Wisting could become the largest single Norwegian oil asset approved by the government this decade.<sup>33</sup> Notably, Wisting's impact on the climate could be three times greater than that of the controversial Cambo oil field proposed in the U.K.,<sup>34</sup> which Siccar Point Energy was forced to suspend in late 2021 in response to massive grassroots resistance and Shell's abandonment of the project.<sup>35</sup>

Wisting is expected to be among the most controversial field developments considered in 2022. This is both because it will be the northernmost oil development in Norway and in the world, situated in an Arctic area with a vulnerable ecosystem, and because there have been major questions about whether Equinor is pushing through the development on a tighter timetable to take advantage of the temporary changes in the petroleum tax introduced during the Covid-19 pandemic.<sup>37</sup>

When the Norwegian Parliament discussed potential changes to the Norwegian petroleum tax, due to the Covid-19 pandemic, Equinor threatened to postpone the Wisting field development unless the tax system was changed.<sup>38</sup> Yet, Equinor was reportedly already considering postponing the Wisting field project before the pandemic crisis, due to a high break-even price and reservoir challenges.<sup>39</sup>

The Norwegian Environment Agency has warned against a rushed and rapid process with the decision-making

Image 1: Fields and discoveries in the Barents Sea.



Source: The Norwegian Petroleum Directorate<sup>36</sup>

and development processes, also considering that if approved, this would be the northernmost oil producing field in Norway, in a vulnerable area with specific safety, emergency preparedness, and environmental challenges.<sup>40</sup>

The Wisting oil field could open a gateway for additional new oil projects in far northern Arctic areas of the Barents Sea.

If the Norwegian government intends to show real climate leadership, Norway must reject Equinor's bid to develop the Wisting field. By doing so, the government will prevent the development of a new field that could lead to emissions of more than 200 million tons of CO<sub>2</sub>, in favour of taking a step toward aligning Norway's oil and gas policies with climate reality.

# CONCLUSION

Despite Norway's frequent portrayal as a green or environmentally friendly country, it is Europe's most aggressive explorer for more oil and gas, awarding 700 new licences for oil and gas exploration in the past 10 years. The awards have opened up more than 2.8 billion barrels of oil equivalent for exploration and potential development.

The exploration policies don't consider the climate crisis and the limited carbon budgets that we must abide by if we are to stay below an increase of 1.5°C in the global temperature. If approved for development, already-licensed fields, including Wisting, could lead to additional emissions of 3 Gt CO<sub>2</sub>, 60 times Norway's domestic emissions. If the current Norwegian government continues

the previous government's aggressive licensing policies, emissions from new Norwegian oil and gas development may increase by an additional 80 percent.

The APA doubled in size under the last government, a decision impossible to justify in the climate emergency our planet faces. The APA scheme works as a lock-in of future licensing areas, with little transparency and without considering either local environmental impacts or the climate crisis.

If the current government in Norway wants to be taken seriously on climate issues, it needs to review the country's oil and gas policies and align them with the goals of the Paris Agreement and with the principles of global equity.

The first steps the Labour-led government should undertake in 2022 to begin to align its oil and gas policies with the critical 1.5°C limit are to halt the APA licensing system and to reject Equinor's bid to develop the Wisting oil field.



- 1 Greg Muttitt, *The Sky's Limit: Why The Paris Climate Goals Require A Managed Decline of Fossil Fuel Production*, Oil Change International, 2016, [http://priceofoil.org/content/uploads/2016/09/OCI\\_the\\_skys\\_limit\\_2016\\_FINAL\\_2.pdf](http://priceofoil.org/content/uploads/2016/09/OCI_the_skys_limit_2016_FINAL_2.pdf).
- 2 Net Zero by 2050: A Roadmap For The Global Energy Sector, 4th ed., International Energy Agency, 2021, <https://www.iea.org/reports/net-zero-by-2050>.
- 3 Terje Solsvik, Gwladys Fouche, and Kirsten Donovan, "Equinor Plans \$8.8 Bln Development Of World's Northernmost Oilfield," Reuters, November 10, 2021, <https://www.reuters.com/business/energy/equinor-plans-88-bln-development-worlds-northernmost-oilfield-2021-11-10/>.
- 4 Rystad Energy UCube (December 2021).
- 5 Climate Action Tracker: Norway, Climate Action Tracker, November 2, 2016, [https://climateactiontracker.org/media/documents/2018/4/CAT\\_2016-11-02\\_CountryAssessment\\_Norway.pdf](https://climateactiontracker.org/media/documents/2018/4/CAT_2016-11-02_CountryAssessment_Norway.pdf).
- 6 Hannah McKinnon, Greg Muttitt, and Kelly Trout, *The Sky's Limit Norway: Why Norway Should Lead the Way in a Managed Decline of Oil and Gas Extraction*, Oil Change International, August 2017, p. 6, <http://priceofoil.org/2017/08/09/the-skys-limit-norway-why-norway-should-lead-the-way-in-a-managed-decline-of-oil-and-gas-extraction/>.
- 7 Domestic emissions: Statistics Norway, "Air Emissions," 2020 data last updated on 3 November 2021, <https://www.ssb.no/natur-og-miljo/forurensning-og-klima/statistikk/utslipp-til-luft>; Domestic oil and gas consumption: "Statistical Review of World Energy 2021," BP, 2021, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>; Norwegian oil and gas production (oil includes natural gas liquids and condensate): Rystad Energy UCube, January 2022; Exported emissions are calculated using emissions factors of 0.423 tCO<sub>2</sub>/bbl of oil and 59.7 tCO<sub>2</sub>/Mmcf of gas, adapted from: IPCC Guidelines for National Greenhouse Gas Inventories, 2006, <http://www.ipcc-nggip.iges.or.jp/public/2006gl/>.
- 8 Climate Change 2021: The Physical Science Basis, The Intergovernmental Panel on Climate Change, 2021, [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf).
- 9 SEI, IISD, ODI, E3G, and UNEP, *The Production Gap Report 2021*, The Production Gap, 2021, <https://productiongap.org/2021report/>.
- 10 IEA, "Net Zero by 2050: A Roadmap for the Global Energy Sector," 17 May 2021, <https://www.iea.org/reports/net-zero-by-2050>.
- 11 Fiona Harvey, "No New Oil, Gas Or Coal Development If World Is To Reach Net Zero By 2050, Says World Energy Body," *The Guardian*, May 18, 2021, <https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist>.
- 12 Mikael Holter, "IEA taler Equinor-sjefen imot: Ikke plass til noe oljeleting i netto nullscenarior," *Dagens Næringsliv*, December 9, 2021, <https://www.dn.no/olje/equinor/iea/det-internasjonale-energibyraet-iea/iea-taler-equinor-sjefen-imot-ikke-plass-til-noe-oljeleting-i-netto-nullscenarior/2-1-1111759>
- 13 "The Sky's Limit."
- 14 "Secretary-General's statement on the IPCC Working Group 1 Report on the Physical Science Basis of the Sixth Assessment | United Nations Secretary-General," The United Nations, August 9, 2021, <https://www.un.org/sg/en/content/secretary-generals-statement-the-ipcc-working-group-1-report-the-physical-science-basis-of-the-sixth-assessment>.
- 15 "Redefining Climate Leadership," Beyond Oil & Gas Alliance, accessed 02/02/2022, <https://beyondoilandgasalliance.com/>.
- 16 Mikael Holter and Morten Ånestad, "Ny IEA-rapport «kraftig kost» for Norge – men Høyre og Arbeiderpartiet endrer ikke oljepolitikk av den grunn," *Dagens Næringsliv*, May 18 2021, <https://www.dn.no/olje/det-internasjonale-energibyraet-iea/espen-barth-eide/olje-og-gass/ny-iea-rapport-kraftig-kost-for-norge-men-hoyre-og-arbeiderpartiet-endrer-ikke-oljepolitikk-av-den-grunn/2-1-1011828>.
- 17 Richard Milne, "Drilling Shutdown Would Mean End Of Green Transition, Norway PM Warns," *Financial Times*, October 25, 2021, <https://www.ft.com/content/cbf5bc66-660f-46da-a4f7-4f26eb752298>.
- 18 Greg Muttitt and Sivan Kartha, "Equity, climate justice and fossil fuel extraction: principles for a managed phase out," *Climate Policy* 20, no. 8 (May 2020), pp. 1024-1042, <https://doi.org/10.1080/14693062.2020.1763900>.
- 19 Projected volumes of commercial Norwegian oil and gas resources within developed, licensed, and unlicensed fields taken from Rystad Energy UCube, January 2022. CO<sub>2</sub> emissions are calculated by applying emissions factors of 0.423 tCO<sub>2</sub>/bbl of oil; 0.235 tCO<sub>2</sub>/bbl of natural gas liquids; 59.7 tCO<sub>2</sub>/Mmcf of gas, adapted from: IPCC Guidelines for National Greenhouse Gas Inventories, 2006, <http://www.ipcc-nggip.iges.or.jp/public/2006gl/>.
- 20 Production data from Rystad Energy UCube, January 2022.
- 21 Norwegian Petroleum Directorate, Factpages, accessed 02/02/2022 <https://factpages.npd.no/no/licence/TableView/Overview>
- 22 Rystad Energy UCube, January 2022. Data is based on Rystad's projection of commercially viable oil and gas resources within exploration licences awarded by European countries from 2012 through 2021.
- 23 Meld. St. 28 (2010–2011) An industry for the future – Norway's petroleum activities, <https://www.regjeringen.no/no/dokumenter/meld-st-28-2010-2011/id649699/>. Bold added for emphasis.
- 24 *ibid*
- 25 The Norwegian Environment Agency, "TFO 2018 – TFO-området og forslag til utvidelse" <https://www.regjeringen.no/contentassets/c6ee7666219143cf95458c831e578fa8/miljodirektoratet.pdf?uid=Milj%C3%B8direktoratet.pdf>; The Norwegian Polar Institute "21/186 Høringssvar - TFO konsesjonsrunde 2021 - tildeling i forhåndsdefinerte områder" [https://www.regjeringen.no/contentassets/7a3180090f5f4fa58ea1bff4a8045853/norsk-polarinstitutt.pdf?uid=Norsk\\_Polarinstitutt](https://www.regjeringen.no/contentassets/7a3180090f5f4fa58ea1bff4a8045853/norsk-polarinstitutt.pdf?uid=Norsk_Polarinstitutt).
- 26 Sverre Rørvik Nilsen, "46 selskaper har søkt i 20. Konsesjonsrunde," *Finansavisen*, November 7, 2008 <https://finansavisen.no/nyheter/energi/2008/11/46-selskaper-har-soekt-i-20-konsesjonsrunde>.
- 27 "Syv søkere til areal i 25. Konsesjonsrunde," *High North News*, February 26, 2021 <https://www.highnorthnews.com/nb/syv-sokere-til-areal-i-25-konsesjonsrunde>.
- 28 "Myndighetene utlyser flere blokker," *Dagens Næringsliv*, November 7, 2004, <https://www.dn.no/myndighetene-utlyser-flere-blokker/1-1-345139>.
- 29 Andreas Tomasgaard, communication advisor, Norwegian Petroleum Directorate, email communication, September 7, 2021.
- 30 The Norwegian Polar Institute, "21/186 Høringssvar - TFO konsesjonsrunde 2021 - tildeling i forhåndsdefinerte områder" [https://www.regjeringen.no/contentassets/7a3180090f5f4fa58ea1bff4a8045853/norsk-polarinstitutt.pdf?uid=Norsk\\_Polarinstitutt](https://www.regjeringen.no/contentassets/7a3180090f5f4fa58ea1bff4a8045853/norsk-polarinstitutt.pdf?uid=Norsk_Polarinstitutt).
- 31 Norwegian Petroleum Directorate, personal communication, September 7, 2021.
- 32 Production projection from Rystad Energy UCube, January 2022; CO<sub>2</sub> estimated using emissions factor of 0.423 tCO<sub>2</sub>/bbl of oil. Coal plant emissions equivalent is based on assuming average annual coal plant emissions of 4 Mt CO<sub>2</sub>, per U.S. Environmental Protection Agency data: "Greenhouse Gases Equivalencies Calculator - Calculations and References | US EPA," US Environmental Protection Agency, <https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references#coalplant>.
- 33 Rystad Energy UCube, January 2022.
- 34 Siccar Point estimated that the Cambo project would produce up to 170 million barrels of oil equivalent during its operational life. "Corona Ridge Area," Siccar Point Energy, accessed 21 January 2022, <https://www.siccarpointenergy.co.uk/our-portfolio/corona-ridge-area>.
- 35 Shadia Nasralla and Ron Bousso, "Analysis: UK North Sea's oil and gas future darkens after Shell's Cambo exit," Reuters, December 6, 2021, <https://www.reuters.com/markets/europe/uk-north-seas-oil-gas-future-darkens-after-shells-cambo-exit-2021-12-03/>.
- 36 The Norwegian Petroleum Directorate, accessed 02.02.2022 <https://www.norskpetroleum.no/en/developments-and-operations/activity-per-sea-area/>.
- 37 Alf Ole Ask, "Nye skatteregler kan sette rekord - aldri har et oljefelt blitt bygget så langt nord," *Aftenposten*, June 8, 2020 <https://www.aftenposten.no/norge/politikk/i/y3WPVR/nye-skatteregler-kan-sette-rekord-aldri-har-et-oljefelt-blitt-bygget>.
- 38 David V. Krekling, "Equinor-sjef mener krisepakken til regjeringen ikke holder," NRK, May 7, 2020 <https://www.nrk.no/norge/slik-gikk-det-for-equinor-i-forste-kvartal-2020-1.15007610>.
- 39 Ole K. Helgesen, "Equinor rips up the script at Wisting," *Upstream Online*, February 20, 2020, <https://www.upstreamonline.com/field-development/equinor-rips-up-the-script-at-wisting/2-1-758023>.
- 40 The Norwegian Environment Agency, "Kommentarer til forslag til program for konsekvensutredning for Wisting PL537/PL537B", page 33, 22 Marc <https://www.equinor.com/content/dam/statoil/documents/impact-assessment/wisting/vedlegg-hoeringskommentarer-wisting-equinor.pdf>.



**Oil Change International**  
714 G Street SE, Suite 202  
Washington, DC 20003  
[www.priceofoil.org](http://www.priceofoil.org)

FEBRUARY 2022