



equinor



# Equinor's energy transition plan and profitability in a 1.5-degree world

April 2023

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# Summary of key findings



- Equinor's energy transition plan lacks information on how the company plans to meet its carbon intensity targets in 2030, 2035 and 2050. It is impossible for outsiders to determine whether this will happen by reducing oil and gas production, increasing renewable or hydrogen production, or buying carbon offsets.
- The Norwegian government has recently updated its expectations to state-owned companies, asking them to set targets and implement measures in the short and long-term to reach the goals of the Paris Agreement. The targets should be science based when possible.
- WWF Norway has used data from Rystad Energy to calculate the Equinor portfolio's compatibility with the Science Based Target initiative (SBTi) 1.5°C-aligned pathway. We find that in order to stay within a 1.5°C pathway, Equinor cannot initiate any new oil and gas projects, or proceed with any new exploration activities.
- Equinor has stated that it plans to continue oil and gas production at the same levels in 2030 as in 2022. The company would thus exceed the SBTi 1.5°C-aligned pathway with 75% in 2030.
- Equinor has stated that the company is prioritizing development in areas where they already have activity and existing infrastructure, and that frontier exploration will be limited. WWF Norway finds, however, that over 50% of the discoveries and exploration licences in the Equinor portfolio is located more than 50 km away from existing Equinor infrastructure. Furthermore, some of the most controversial projects in the Equinor portfolio, like the explorations off the coast of Argentina, outside Suriname, the Wisting field and exploration activities in the Arctic, and Bay du Nord in Canada are located in frontier areas and ecologically vulnerable territory.
- Compared to companies like Shell, BP and Total, Equinor has a far more optimistic view on the future oil price development. While Rystad Energy, a world-leading analysis company for the oil and gas (O&G) industry, expects the oil price to drop towards 35 USD/bbl (2023 value) in 2030, Equinor expects the oil price to stay at 75 USD/bbl (2023 value). If Equinor's price expectations turn out to be too optimistic, it could result in a massive loss and potentially stranded assets for the company and its investors.
- WWF-Norway has utilized data from Rystad Energy to stress-test the Equinor portfolio in low oil-price-scenarios. Our findings suggest that the risk of stranded assets, from fields that are already producing or under development, is low. But that the portfolio value could be reduced with over 50% in a 1.5 °C-aligned price scenario compared to Equinor's price assumptions.
- The value of the unsanctioned discoveries in the Equinor portfolio turns out negative in both low-price scenarios. New developments presents a much bigger risk of stranded assets, the same for new oil and gas exploration. The risk of economic loss is even bigger when looking solely at the international portfolio. Investors should question whether the money could be invested more wisely, for instance in renewables or as an alternative, given back as dividends to its shareholders.

# Why do WWF-Norway care about Equinor?



WWF-Norway has a long history of challenging Equinor and encouraging the company to make better decisions for the people and the planet. We have campaigned for the company to divest from tar sand production in Canada, to improve its climate reporting and to implement better measures to protect vulnerable nature in their operations.

Equinor is the biggest company in Norway and its majority shareholder is the Norwegian government (67%). The actions of Equinor, has thus also a major impact on Norway's reputation abroad. During the last couple of years WWF-Norway has been contacted by several environmental NGOs who are concerned about Equinor's expansion plans in their countries. We see a growing resistance against Equinor's international projects like the Rosebank field in UK, Bay du Nord in Canada, the Bacalhau projects in Brazil as well as shale gas extraction in Vaca Muerta and frontier exploratioan in Mar del Plata in Argentina. Last year in Norway, environmental groups mobilized against the Wisting field in the Arctic and successfully the investment decisions for the project has been postponed until 2026. We hope that this means that the project will never be implemented.

The reason we keep challenging Equinor is not because they are the worst oil and gas company in the industry. On the contrary, Equinor has on many occasions shown their willingness to listen and change its actions due to the involvement from civil society. Given that the company is majority owned by the Norwegian public, we see it as our role to influence it to operate in a way that doesn't harm the nature or the climate.

This is why we, together with Greenpeace, have submitted a proposal to the Equinor Annual General Meeting (AGM) where we ask the company to reduce the emissions from its value chain in line with the 1.5 °C target. We urge Equinor to intensify its investment in renewables instead.

We hope you as a shareholder will support this suggestion and vote for our proposal at the AGM.

Best regards,

A handwritten signature in blue ink that reads 'Karoline Anden'.

Secretary general WWF-Norway



# Our AGM proposal: compliance with the 1.5°C target



WWF-Norway and Greenpeace Nordic have [submitted a shareholder proposal](#) to the Equinor Annual General Meeting (AGM), taking place on 10 May 2023. We ask Equinor to set a target to reduce greenhouse gas (GHG) emissions in line with the 1.5°C target for its entire value chain and implement the necessary measures.

This proposal is aligned with the expectations from the Norwegian government to state-owned companies in the [white paper on state ownership](#). The government expects companies to set science-based targets, defined by [the Science Based Targets initiative \(SBTi\)](#), when available. While there is currently no SBTi criteria for oil and gas companies, the SBTi criteria presented in the white paper require companies to present *credible plans* for emissions cuts towards 2030 and 2050. A company should first reduce (absolute) emissions from its own operations (scope 1 and 2) and value chain (scope 3), before it can start purchasing carbon credits and offsets. A company will be climate *neutral* when its total GHG emissions are reduced in line with the 1.5°C target, and any remaining emissions are offset by the *permanent* removal of equivalent volumes of GHGs from the atmosphere.

Although Equinor is required to follow the directions from its majority shareholder, the Board of Equinor has advised the General Assembly to vote against our proposal. The Board argues that Equinor depends on governments, customers and other key stakeholders to accelerate their response to the energy transition. Furthermore, the Board argues that absolute emission targets will only be achieved by selling or shutting down profitable oil and gas production, thus shifting indirect emissions from end use to other producers. The Board claims that such a focus will also fail to incentivize companies like Equinor to accelerate investments in new forms of (clean) energy.

WWF-Norway finds these arguments *insufficient* to justify a vote against our proposal. Our proposal reflects actions taken by the Norwegian government to accelerate the transition of its state-owned companies, with which Equinor does not want to comply. If Equinor wants to accelerate investments in new forms of energy, it would need to start allocating more capital to renewables and [stop spending 86 percent of its investments on fossil fuel production](#).

## Item 9 for Equinor's annual general meeting 10 May 2023

### Proposal from shareholders that Equinor identify and manage risks and possibilities regarding climate, and integrate these in the company's strategy

Shareholders WWF and Greenpeace have proposed the following resolution:

*"Equinor identify and manage risks and possibilities regarding climate, and integrate these in the company's strategy. The company sets targets and implements measures to reduce greenhouse gas emissions over a short- and long-term period in line with the target to limit global warming to 1.5 °C, and report to shareholders on progress against these targets. Targets and measures include the entire supply chain (scope 1, 2 and 3) and entails an absolute reduction in greenhouse gas emissions."*

## 11.4 Climate

The State expects that:

- The company identifies and manages risks and opportunities relating to climate and integrates these into the company's strategies.
- The company sets targets and implements measures to reduce greenhouse gas emissions in both the short and long term in line with the Paris Agreement, and reports on goal attainment. The targets shall be science-based when available.
- The company reports on direct and indirect greenhouse gas emissions and climate risk, and uses recognised standards for reporting greenhouse gas emissions and climate risk.

From Meld. St. 6 White paper «Greener and more active state ownership»

# Equinor has to stop new oil and gas investments



[The most recent IPCC Synthesis Report](#) was launched in March 2023 and emphasized once again the code red for humanity and the planet. Humans have already warmed the planet by 1.1°C, which is causing dangerous disruptions in nature and dangerous impacts on people around the world.

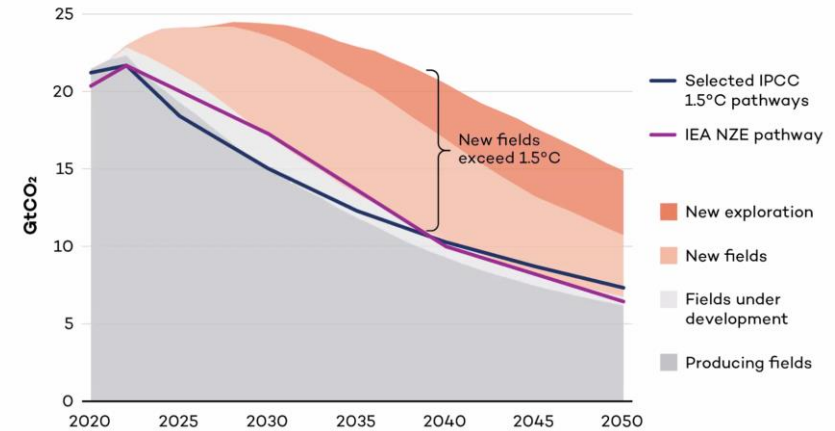
According to the latest IPCC reports the global community must reduce emissions by 43 percent before 2030, to limit global warming to 1.5°C. This requires faster and more significant cuts in emissions than what is currently expected.

The International Institute for Sustainable Development (IISD) [has made an analysis](#) of different climate and energy scenarios, including from the IPCC and IEA. They find that none of the 1.5°C pathways are compatible with developing new oil and gas fields, as illustrated in the graph to the right.

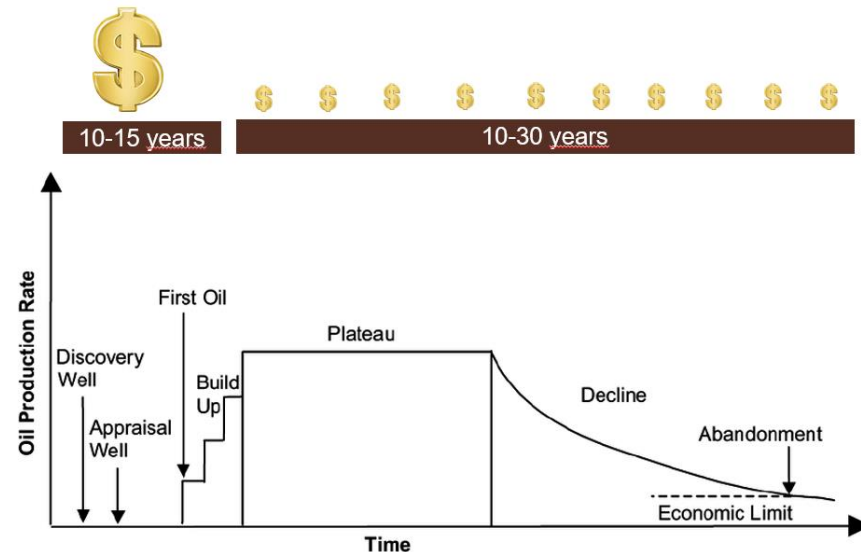
Investing in new oil and gas infrastructure and new fields presents a major risk due to the long-time perspective of conventional oil and gas extraction. In Norway, it takes on average 16 years from a discovery is made until production starts. The ongoing exploration would hence lead to the start of oil and gas production in the early 2040s, which is less than a decade before the global community has committed to achieve net zero emissions.

It is important to stop new oil and gas investments now, to avoid stranded assets and a major carbon lock-in. Conventional oil and gas resources require a substantial amount of capital expenditure before production begins, but after that, variable operational costs are quite low. If the oil price drops below the investor's expectations, oil and gas production will continue as long as the price does not drop below the variable operational costs. This means that investment decisions made during the next couple of years, has a huge risk of locking in carbon emission for many decades ahead. The potential over-supply of oil and gas, if demand is reduced will further, reduce the profitability of those assets and increase the risk of stranded assets.

1.5°C-consistent oil and gas phase out pathway



From International Institute for Sustainable Development (IISD): [Navigating Energy Transitions: Mapping the road to 1.5°C](#)



# Why should investors be concerned about climate change?



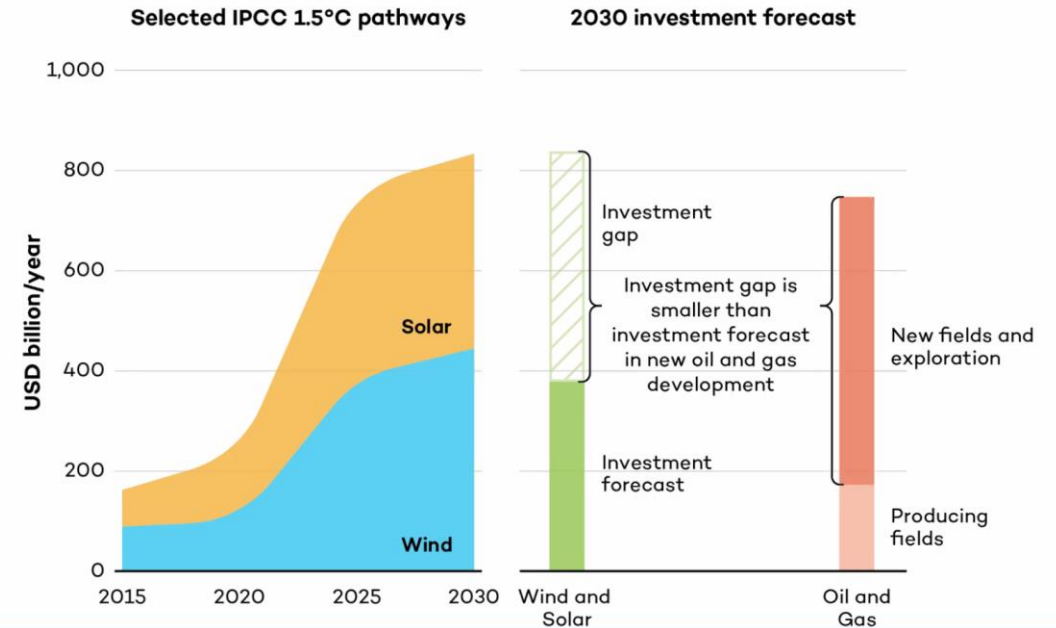
A global temperature increase of  $>1.5^{\circ}\text{C}$  will increase extreme weather events like drought, floods etc., and set the entire world economy at risk. The effects of climate change is expected to shave 11 to 14% off global economic output by 2050 compared with growth levels without climate change, according to [a report from Swiss Re](#), one of the world's largest providers of insurance to other insurance companies. That amounts to as much as **23 trillion** USD in reduced annual global economic output, worldwide. It is thus in the interest of the finance industry to commit to a  $1.5^{\circ}\text{C}$  world and ensure that their investment portfolios are aligned with this target.

If the global community meets its climate targets, oil and gas companies risk losing 1 trillion USD in stranded assets. According to the [financial think tank Carbon Tracker](#), more than a trillion dollars of business-as-usual investments is at risk - including \$480 billion in shale/tight oil projects and \$240 billion in deepwater projects.

Most of the market risk for oil and gas markets falls on private investors, overwhelmingly in OECD countries, including substantial exposure through pension funds and financial markets. Rich country stakeholders therefore have a major stake in how the transition in oil and gas production is managed, as ongoing supporters of the fossil fuel economy and potentially exposed owners of stranded assets.

Over 1500 institutions, with assets of over \$40.57 trillion, have committed to divest from fossil fuels. This figure is higher than the annual GDP of the US and China combined. As more investors withdraw from fossil fuel investments, the risk of remaining a passive portfolio increase. If for instance 20% of funds become fossil free and 40% are indexed portfolios, remaining active managers must have a massive overweight position in energy of 9% vs. 6% in the index.

## Investment gap for wind and solar energy



From International Institute for Sustainable Development (IISD): [Navigating Energy Transitions: Mapping the road to 1.5°C](#)

According to the IISD the investment gap in wind and solar, required to meet the  $1.5^{\circ}\text{C}$  target, will amount to 450 billion USD a year until 2030.

At the same time forecasts indicate that up to USD 570 billion will be spent every year in new oil and gas development and exploration during the same period. To avoid stranded assets and ensure a secure energy transition, investors should seek to place their investments in renewable projects instead of new fossil fueled development.

# Equinor's energy transition plan



In June 2021 [Equinor presented its updated climate targets](#), which among other things require the company to reduce its net carbon intensity by 20% within 2030, by 40% within 2035, and to be on its way to becoming a 'climate-neutral' company by 2050. In this context, "carbon intensity" refers to the total emissions resulting from the company's production, including from the end-use (combustion) of the fossil fuel products (Scope 3), divided by total number of energy units produced.

In March 2022 Equinor presented an [Energy Transition Plan](#), describing how the company intends to achieve its climate goals. However, there are substantial flaws, limitations, and omissions both in Equinor's climate goals and in its plans for achieving them. These constitute material risks for Equinor shareholders.

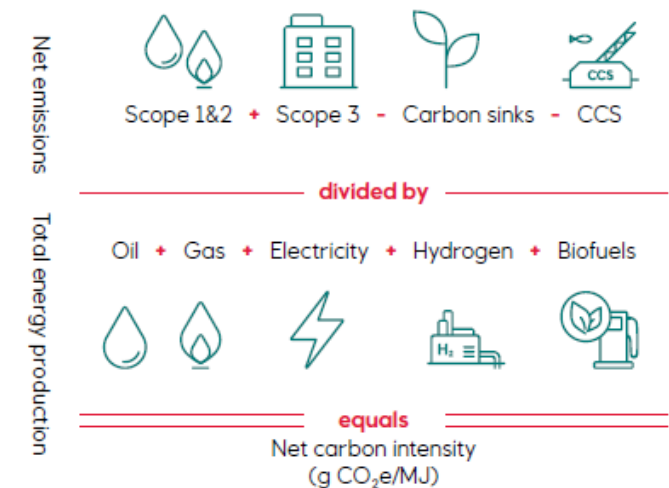
For example, the Energy Transition Plan does not describe how Equinor intends to reduce its net carbon intensity. Such a reduction can be achieved through various approaches, for example by increasing the production of renewable energy, such that the relative proportion of energy from oil and gas production is reduced (thus without needing to reduce absolute emissions from the oil and gas production), or by compensating for the emissions from the company's oil and gas portfolio either registering carbon capture through investment in natural carbon sinks (such as forests), or by purchasing or trading CO<sub>2</sub> quotas through the EU ETS system.

Equinor's Energy Transition Plan also comes with a [disclaimer saying](#): *Should society's demands and technological innovation not shift parallel with Equinor's pursuit of significant greenhouse gas emission reductions, Equinor's ability to meet its net zero and net carbon intensity ambitions will be impaired.* It is thus easy for the company to withdraw from its own ambitions if these prove too difficult to meet, something we already see in the argumentation from the Board of Equinor against our proposal at the AGM.

## Equinor's climate targets

- 50% reduction of operated emissions by 2030, with 90% of the cuts coming from absolute reductions.
- Reduction of net carbon intensity, which describes how the company plans to deliver energy that has lower emissions over time (including emissions from the use of sold products – scope 3), by 20% by 2030 and 40% by 2035, and eventually net-zero by 2050.
- Allocating more than 30% of annual gross capital expenditure to renewables and low carbon solutions by 2025 and more than 50% in 2030.

## Net carbon intensity equation



# The problems with Equinor’s energy transition plan



The Equinor energy transition plan lacks a lot of the information needed to assess how the company plans to meet its carbon intensity targets. [In the latest annual report](#), Equinor outlines plans to keep the same production levels in 2030 as in 2022, which means no reduction in scope 3 emissions. It seems thus that Equinor plans to meet its 20% reduction target by other means, like increasing renewable production or purchasing offsets in carbon sinks. This is not in line with the requirements from SBTi guidelines which calls for emissions to be cut from the company value chain before purchasing offsets. The access to natural carbon sinks is limited and is already accounted for in the IPCC climate scenarios as an existing part of climate offsets. It is thus a dangerous trend if oil and gas companies purchase these offsets as a mean to justify further oil and gas expansion.

In addition, Equinor's carbon intensity target excludes scope 3 emissions from energy used to produce plastics and non-energy products. Most plastics will at some point be either burned, thus emitting CO<sub>2</sub>, end up in landfills and cause methane and other GHG emissions or, even worse, end up in nature. To solve these problems, the global community must reduce its plastic consumption drastically. Oil and gas companies like Equinor should acknowledge the negative environmental effects of plastic production and pollution instead of viewing it as a solution to meet its own climate targets.

A final issue with Equinor’s carbon intensity target is that it doesn’t include emissions from sold oil and gas products, only the emissions from the company’s own operations. ACCR finds in their report [Global Climate Insights](#) that Equinor discloses only 45% of the emissions from the implied emissions from oil and gas products sold.

*“I am also calling on CEOs of all oil and gas companies to be part of the solution. They should present credible, comprehensive and detailed transition plans in line with the recommendations of my High-Level Expert Group on net-zero pledges. These plans must clearly detail actual emission cuts for 2025 and 2030, and efforts to change business models to phase out fossil fuels and scale up renewable energy.”*

[UN Secretary General António Guterres](#), March 2023

	2030	2035	2050
<b>Net carbon intensity</b>	20% reduction 54 gCO <sub>2</sub> e/MJ	40% reduction 41 gCO <sub>2</sub> /MJ	100% reduction 0 gCO <sub>2</sub> /MJ
<b>Scope 1 and 2</b>	50% reduction (90% from absolute emission cuts)	?	(assume)100% reduction
<b>Scope 3</b>	0% change from 2022	?	?
<b>Carbon sinks</b>	?	?	?
<b>CCS</b>	5-10 mtpa CO <sub>2</sub> transport and storage capacity by 2030	15-30 mtpa CO <sub>2</sub> transport and storage capacity by 2030	?
<b>Oil and gas production</b>	Same production level as in 2022	?	?
<b>Electricity production</b>	12-16 GW installed capacity, 35-60 TWh	?	?
<b>Hydrogen production</b>	?	10% of the European market share ?	?
<b>Biofuels</b>	?	?	?
<b>Overall energy production</b>	?	?	?

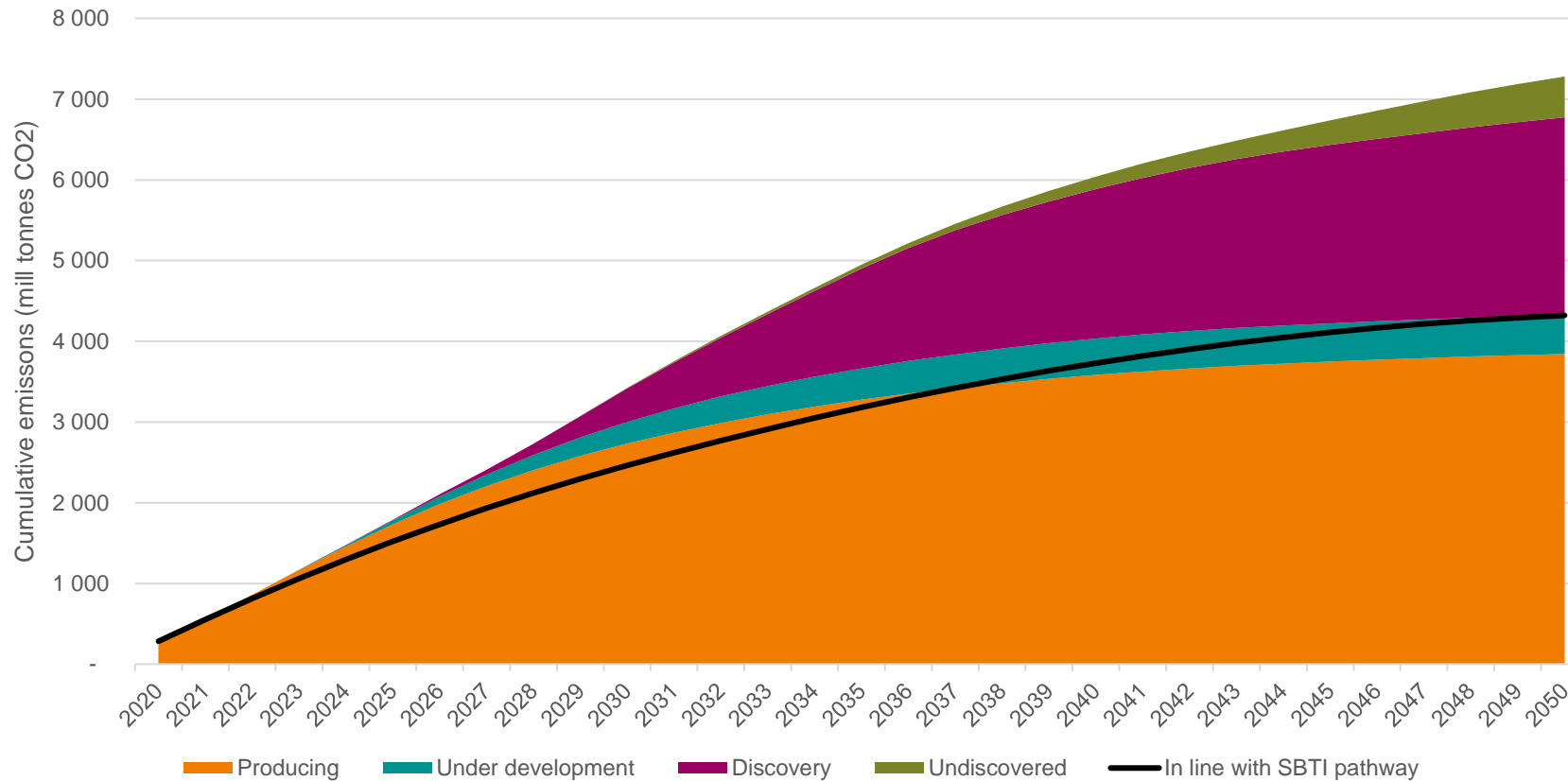
Table by WWF-Norway based on information from Equinor reports



# Equinor cannot invest in any new oil and gas projects to be aligned with SBTi



Scope 3 emissions from Equinor activities will surpass SBTi targets if new discoveries are developed

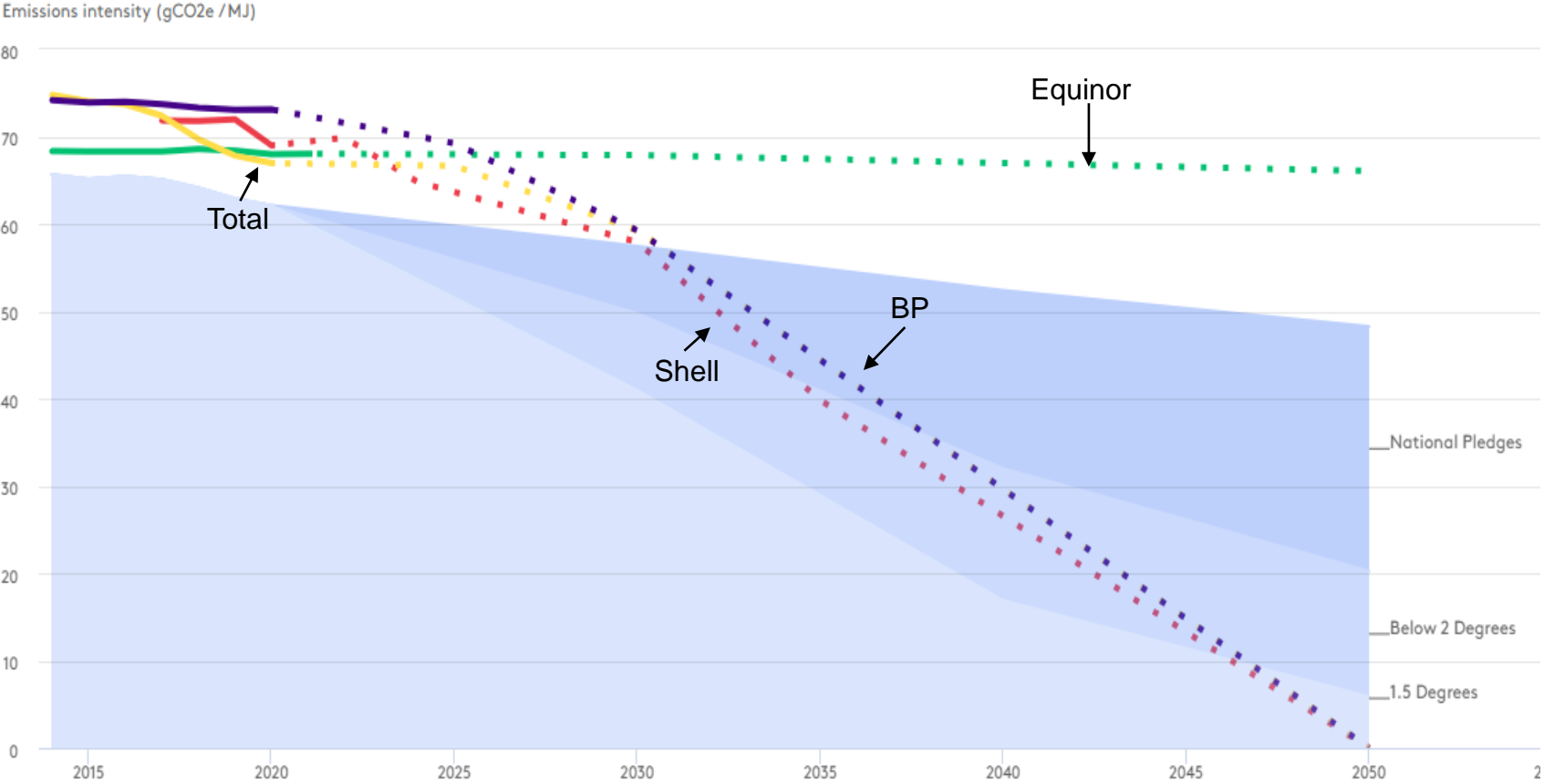


This graph shows the potential cumulative emissions impact of all assets in the Equinor portfolio, estimated by Rystad Energy. The black line shows an [SBTi 1,5 °C aligned pathway](#) which requires a 42% reduction in emissions, from 2020 levels, by 2030 and 90% cut in absolute emissions by 2050.

The graph shows that if Equinor were to be SBTi-aligned (as per the expectation of the Norwegian government to its state-owned companies) there is no room for new investments in oil and gas projects, since the allocated carbon emissions would be occupied by existing production and projects under development. This, however, disproves the argument from the Equinor Board against our AGM proposal which claims Equinor must shut down existing oil and gas production to meet an absolute climate target. If Equinor only *refrained* from investing in any new developments, their portfolio could be SBTi-aligned.

Equinor, however, has stated that it plans to keep the same production levels in 2030 as today. They would thus exceed the SBTi target for 2030 with 75%.

# Equinor announced targets and plans will fail to meet the 1,5 degree target



WWF-Norway is not the first to criticize Equinor’s energy transition plans and the lack of information given to its shareholders about its planned carbon performance. The Transition Pathway Initiative (TPI) has estimated the carbon intensity pathways of several oil and gas companies.

According to TPI, Equinor has not disclosed enough information about its future carbon performance, for instance sold products, which they then assume remain constant. Based on the information disclosed by Equinor, the analysis from TPI shows that Equinor’s announced targets and plans will result in a carbon intensity that remains largely flat up to 2050.

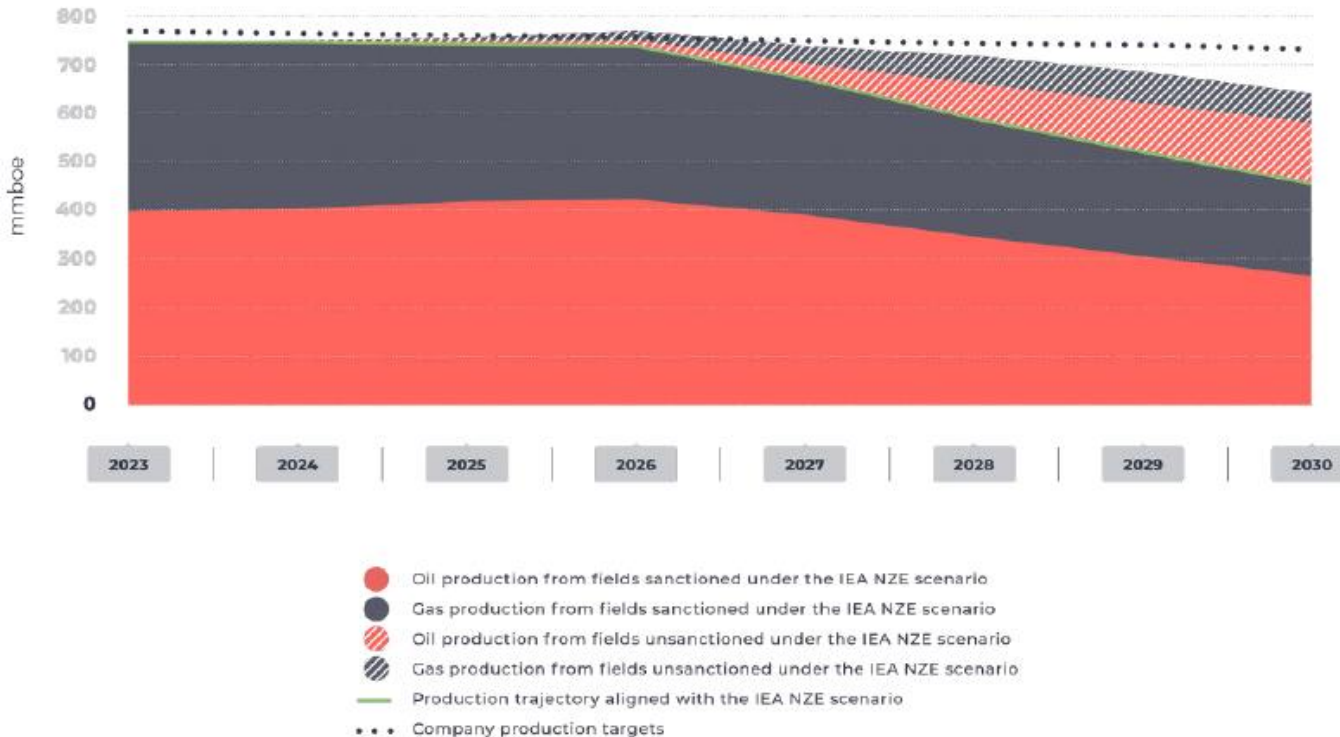
Carbon Performance		
Number of assessments: 4		
Short-term alignment in 2025	Medium-term alignment in 2035	Long-term alignment in 2050
● Not Aligned	● Not Aligned	● Not Aligned

Graph from: Transition Pathway Initiative <https://www.transitionpathwayinitiative.org/sectors/oil-gas>

# Equinor's carbon intensity will surpass both the IEA NZE and APS scenario

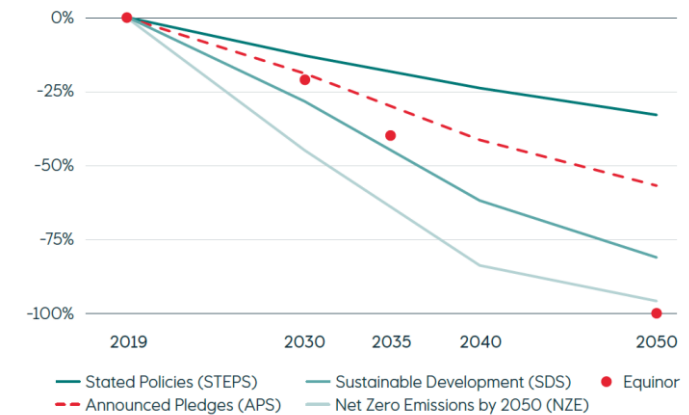


## Equinor's oil and gas trajectories (in million barrels of oil equivalent to 2030)



Graph from: Reclaim Finance (2023) Assessment of Equinor's climate strategy

Equinor NCI (incl. scope 3) ambitions compared to IEA scenarios  
% (g CO<sub>2</sub>e/MJ) - Partial substitution method applied



Graph from Equinor's energy transition plan (2022)

The NGO Reclaim Finance recently published [an assessment of Equinor's climate strategy](#). Using data from Rystad Energy they find that Equinor's targeted carbon intensity by 2030 is 21% higher than in the IEA Net Zero emissions scenario (NZE). If Equinor continues the same production levels in 2030 as in 2022, its production will be 67% higher than the level required to align with the NZE scenario.

Furthermore, Reclaim Finance finds that Equinor's carbon intensity targets surpasses the IEA scenario Announced Pledges (APS) by 9%. This contradicts Equinor's [Energy Transition Plan](#) (see graph above), where the company states that the carbon intensity targets will be *below* the APS scenario.

# Concerned investors has sent a letter to the Norwegian PM



In January 2023, 18 investors sent a letter to Norwegian Prime Minister Jonas Gahr Støre, expressing concern that Equinor's plans fall short of achieving a 1.5°C pathway. They express the need and opportunity for Equinor to move further and faster, reinforcing Norway's climate change leadership and the ambition to reduce emissions by at least 55% by 2030 and offering the world a model for how an oil and gas company can successfully navigate the clean energy transition.

*(...)we are concerned that the company's plans fall short of achieving the 1.5-degree Celsius pathway, which is the ambition of the Paris Agreement. Analysis undertaken by one of the consulting partners to Climate Action 100+, the Transition Pathway Initiative, shows that Equinor's announced targets and plans will result in carbon intensity that remains largely flat up to 2050. We are keen to see Equinor increase the ambition of its 2030 decarbonisation to align with a 1.5-degree Celsius pathway and to set out how it will achieve this new target, whether through acceleration of its investments in low-carbon energy solutions, phasing out expenditures in unabated carbon-intensive activities, or both. We believe that Equinor has an opportunity to demonstrate how an oil and gas company can lead in the energy transition.*

Extract from [letter](#) sent to Norwegian PM Jonas Gahr Støre 18 January 2023



Article from: <https://www.reuters.com/business/sustainable-business/investors-push-norwegian-government-over-equinor-climate-planning-2023-03-28/>

# Several of the most controversial Equinor projects are in frontier areas



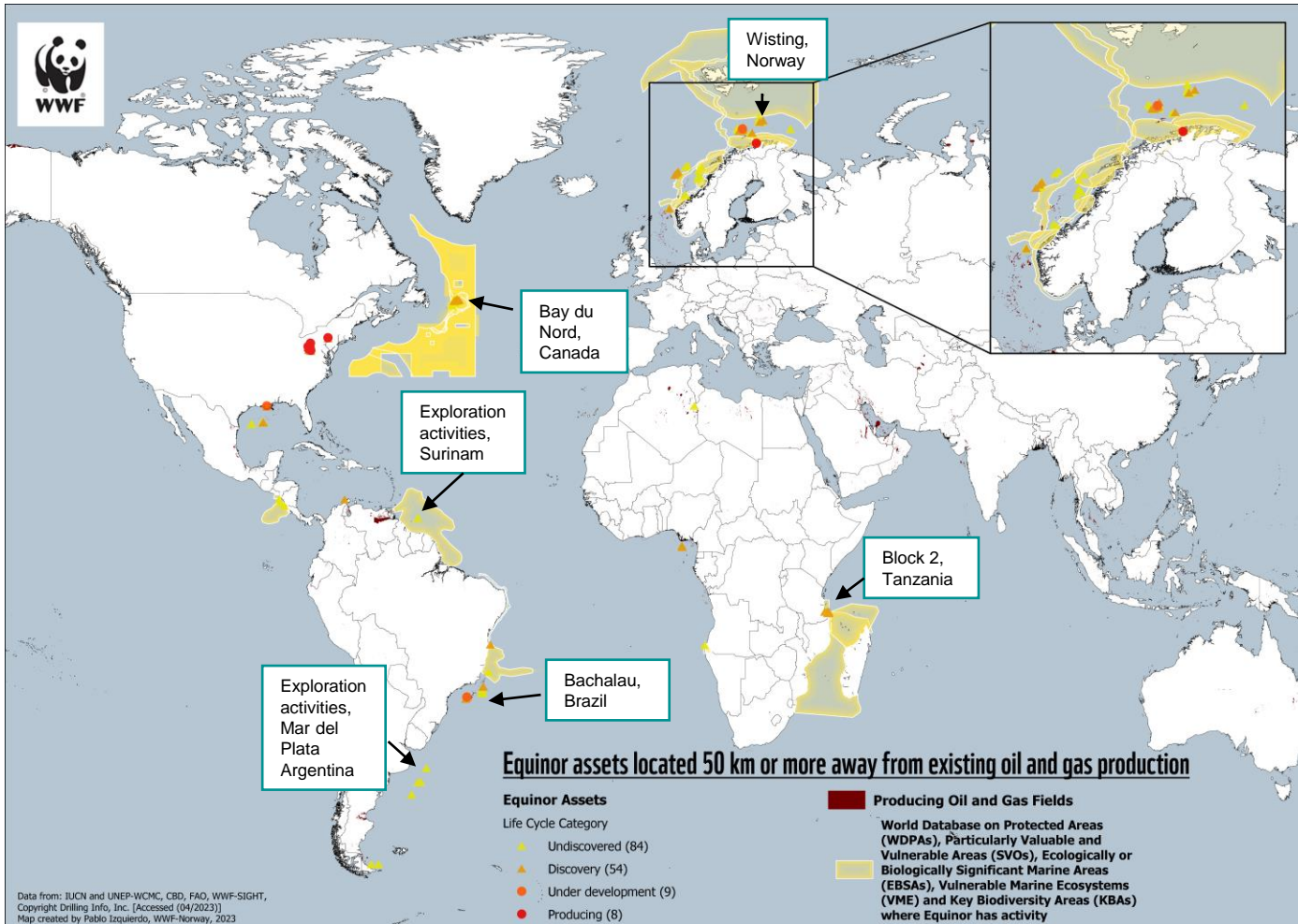
Equinor claims, in its annual report, that the company is prioritizing development in areas where they already have activity and existing infrastructure. The company also states that frontier exploration will be limited. This map shows assets in the Equinor portfolio that are located more than 50 km away from any existing oil and gas field, which means that it cannot be connected to existing oil and gas infrastructure but must be developed as a «greenfield». We find that over 50% of discoveries and exploration licences in the Equinor portfolio are located more than 50 km away from existing Equinor infrastructure.

Several of Equinor’s planned projects, that have caused outrage amongst local environmental groups, are located far away from existing infrastructure - in many cases in frontier areas and often in biologically significant or vulnerable marine areas.

	50 km away from <u>all</u> existing oil and gas production	50 km away from existing Equinor production	All assets in total
Under development	9	14	16
Discovery	54	110	201
Undiscovered (exploration licences)	84	322	583

Data from Rystad Energy and WWF SIGHT

Equinor is divesting lower performing or non-strategic assets. Improving efficiency will remain a priority, driven by implementation of technology at scale, digitalisation and automation. When we access new acreage and future exploration, we will focus on areas where we already have activity and existing infrastructure, ensuring shorter time span from discovery to production to capitalise on previous investments. Frontier exploration will be limited.

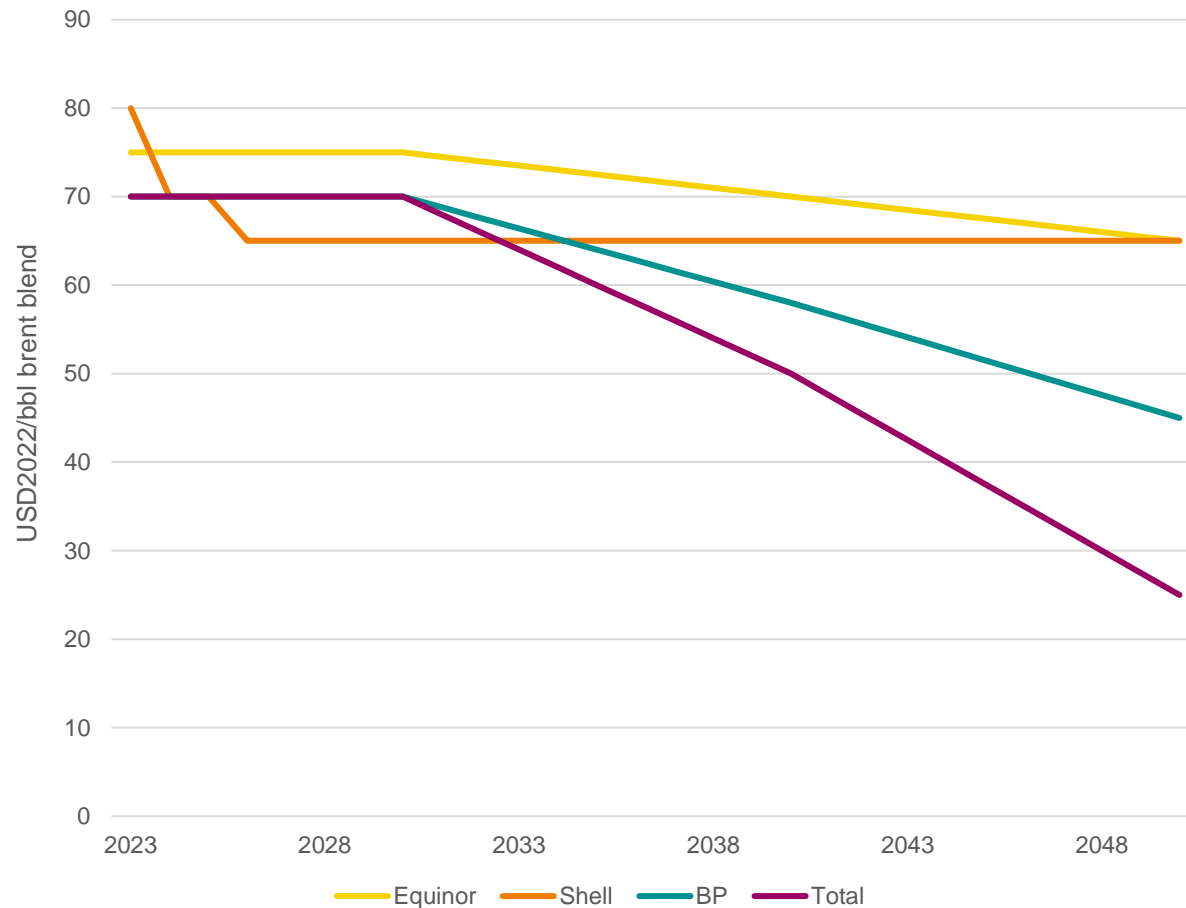


Data from: IUCN and UNEP-WCMC, CBD, FAO, WWF-SIGHT, Copyright Drilling Info, Inc. [Accessed 04/2023]. Map created by Pablo Izquierdo, WWF-Norway, 2023

# Equinor has the highest expectations to the future oil price



Future oil price expectations



WWF-Norway has studied the annual reports of some of the major gas companies to compare their expectations for the oil price development towards 2050. The graph shows the base case/best guess scenarios for all companies. Equinor is the company with the highest price expectations, with an expected oil price at 75 USD/bbl towards 2030, 70 USD/bbl in 2040 and 65 USD/bbl in 2050. Compared to the 2021 annual report, Equinor has actually increased their oil price expectation from 65 USD/bbl towards 2030 before declining to below 60 USD/bbl in 2050.

In comparison, Shell expects a flat oil price of 65 USD/bbl until 2050, while BP expects the oil price to drop to 45 USD/bbl in 2050. Total assumes that the oil price will converge towards the estimates in IEA's NZE scenario in 2050.

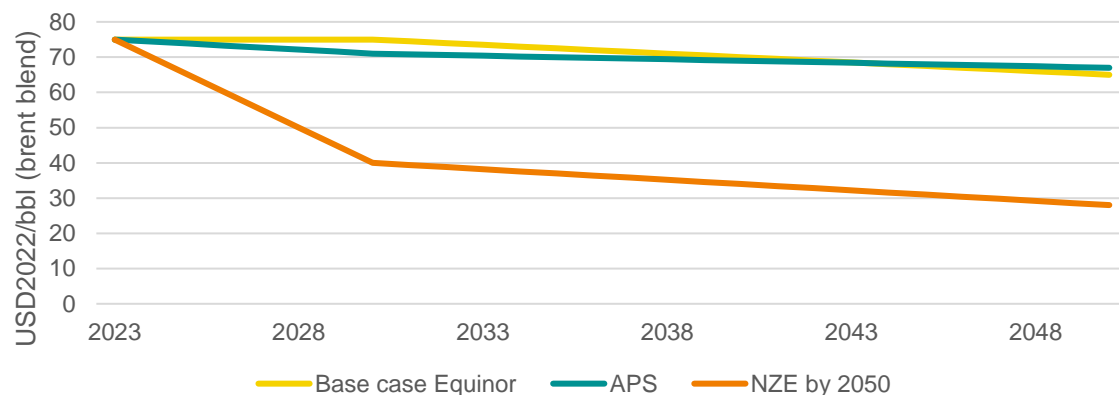
Equinor's optimistic perception of the future oil price should be a cause of concern to investors, since this might result in the company taking large risks based on the wrong pretences. Equinor has made the same mistake previously when it invested in shale oil and gas in the US, requiring a [break-even price above 100 USD/bbl](#) in 2011. The shale gas investments ended up costing Equinor and its investors almost [20 million USD](#).

Investors should also be aware that Equinor applies a base discount rate of 5% real after tax to its oil and gas investments. In comparison, the Norwegian government uses a real discount rate of 7% to calculate the net present value (NPV) on the Norwegian shelf, while Rystad Energy uses a real discount rate of 7.5% as the standard for all its calculations. The low discount rate used by Equinor can potentially result in the company taking riskier investment decisions, without assessing the potential climate risk sufficiently.

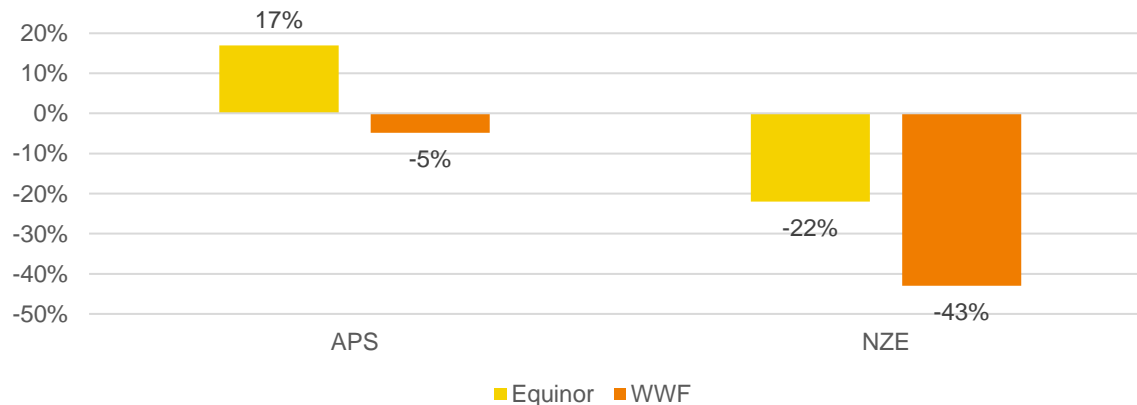
# When replicating Equinor's stress test the cost of the NZE scenario doubles



Equinor oil price scenarios



Replication portfolio stress test



WWF-Norway has tried to replicate the portfolio stress test reported by Equinor in its [annual report](#). This has been quite difficult given the limited information provided by Equinor.

According to Equinor, the profitability of its portfolio will increase with 17% (0.5 billion USD) using the announced pledges (APS) scenario by the IEA. This appears strange given that the price assumptions for the APS scenario falls below management price assumptions, 71 USD/bbl compared to 75USD/bbl in 2030.

Also according to Equinor, its portfolio stress test is calculated before tax. We are not sure why it has decided on this approach, given that many tax regimes will ensure a better earning for the government than the companies if the oil price drops. When we compare losses before and after tax, in the Net Zero Emissions scenario (NZE), we find that the portfolio losses are lower before tax than after tax.

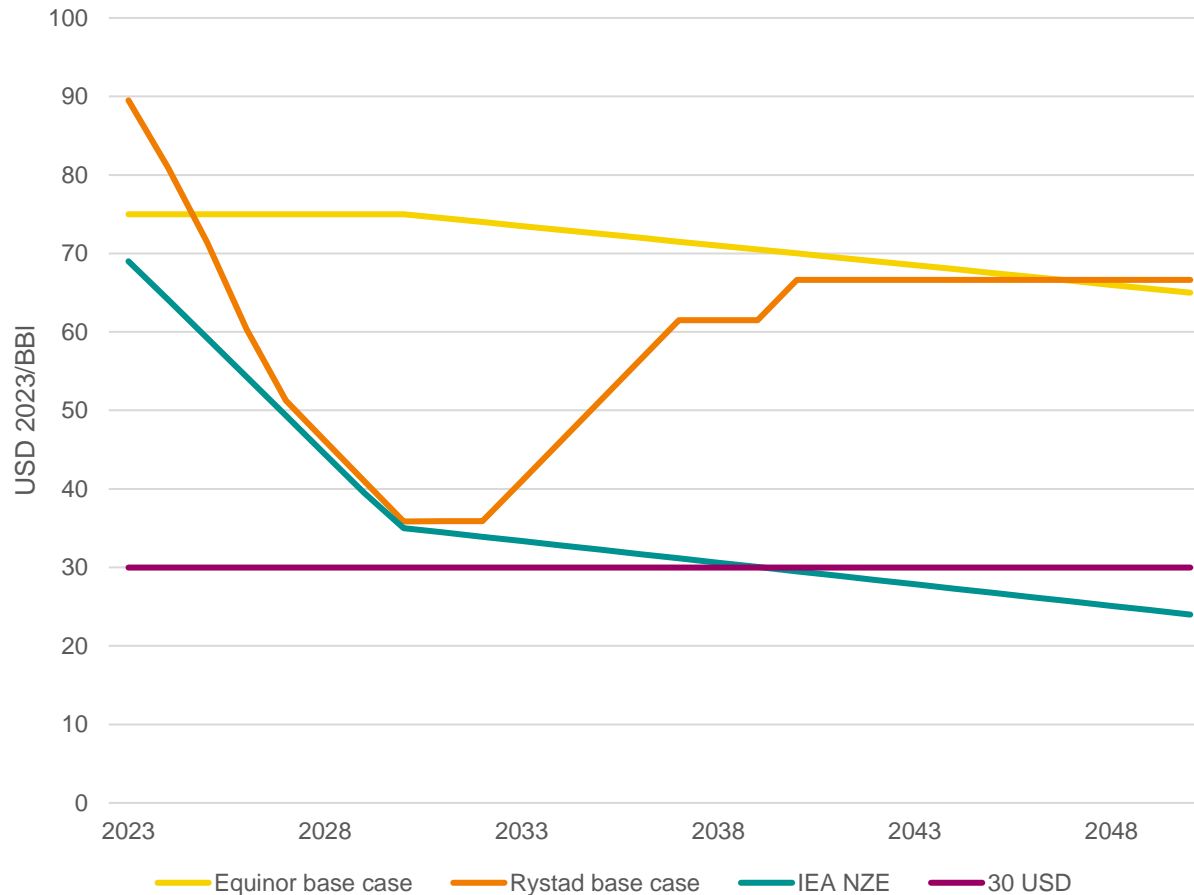
Since Equinor doesn't provide a concrete estimate for the applied discount rate before tax, we have had to calculate the value after tax instead. In our replication of the calculations, using the price scenarios provided by Equinor and data on all upstream assets from Rystad Energy, we find that the portfolio value would be reduced by 5% in the APS scenario. In the the NZE scenario we calculate an impairment of 43%, compared to Equinor's reported 22% loss to the equivalent of 4 billion USD.

There might be information Equinor has not disclosed about the portfolio stress test which results in the discrepancies between the estimates. However, other investors, for instance Sarasin and Partners have also addressed that [the 1.5°C degree stress test seems overly optimistic](#).

# Equinor price assumptions differs greatly from Rystad Energy expectations



Oil price scenarios (Brent blend)



WWF-Norway has also performed its own stress test of the Equinor portfolio, using data from Rystad Energy. This graph shows the oil price scenarios we have used in the remaining calculations. The yellow line shows the Equinor base case price scenario as shown in the previous slides.

The orange line shows the oil price assumptions in Rystad Energy's base case scenario. Unlike Equinor, who expects an oil price of 75 USD/bbl in 2030, Rystad Energy expects the oil price to drop towards 35 USD/bbl in 2030, before rising towards 2040. Rystad expects oil demand to steadily decline towards 2035, leading to a supply surplus and a lower oil price.

If Rystad's expectations become reality, as opposed to Equinor's optimistic expectations, there could be major implications for the profitability of the Equinor portfolio and new oil and gas projects in particular.

The green line represents the IEA NZE price scenario, as reported by the IEA and the purple line scenario using a 30 USD/bbl flat oil price. This is because many oil companies use a 30 USD/bbl break-even requirement for any new oil and gas investments. Equinor on the other hand uses a 35 USD/bbl break-even requirement, which combined with a 5% real discount rate could result in an overly optimistic investment approach.

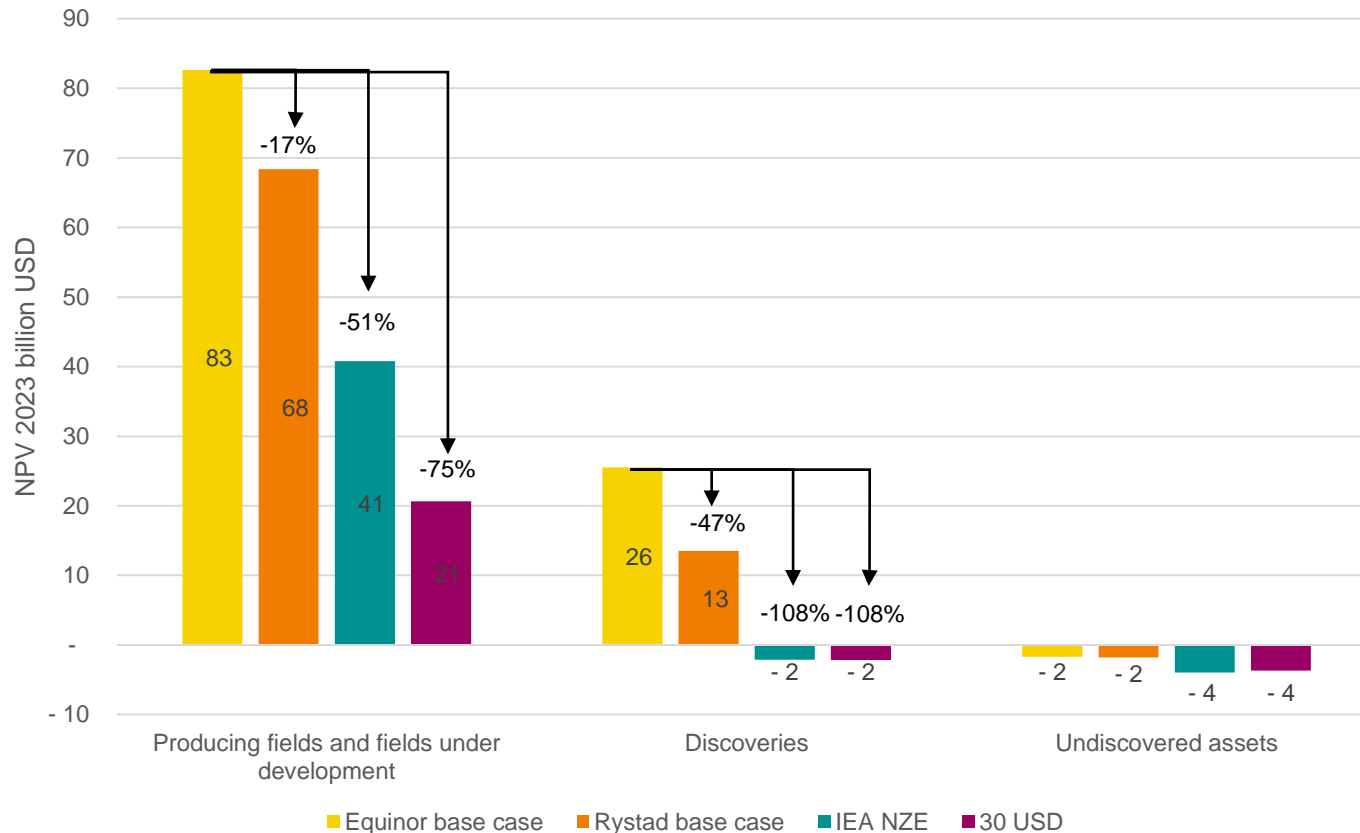
We use gas prices as reported in each scenario. In scenarios where the gas price is not reported, we use a scaling of the oil price to estimate the corresponding gas price.



# Equinor risks investing in potential stranded assets



Stress test Equinor portfolio divided by life cycle



This graph shows the result of the stress test of the Equinor portfolio in different price scenarios divided by life cycle. The calculations includes all discoveries and all estimated resources in Equinor’s exploration licenses. It is not, however, likely that Equinor will develop and explore its entire project portfolio. Since Equinor does not provide any information on which of the projects they will move forwards with, have we included them all to show the potential impact of a 1.5 °C aligned price scenario to the full portfolio.

Looking at the projects which are already developed and in production, the risk of stranded assets in a low-price oil scenario is low, even though the value of the portfolio would be halved in the NZE scenario, and reduced with 75% in a 30 USD-price scenario.

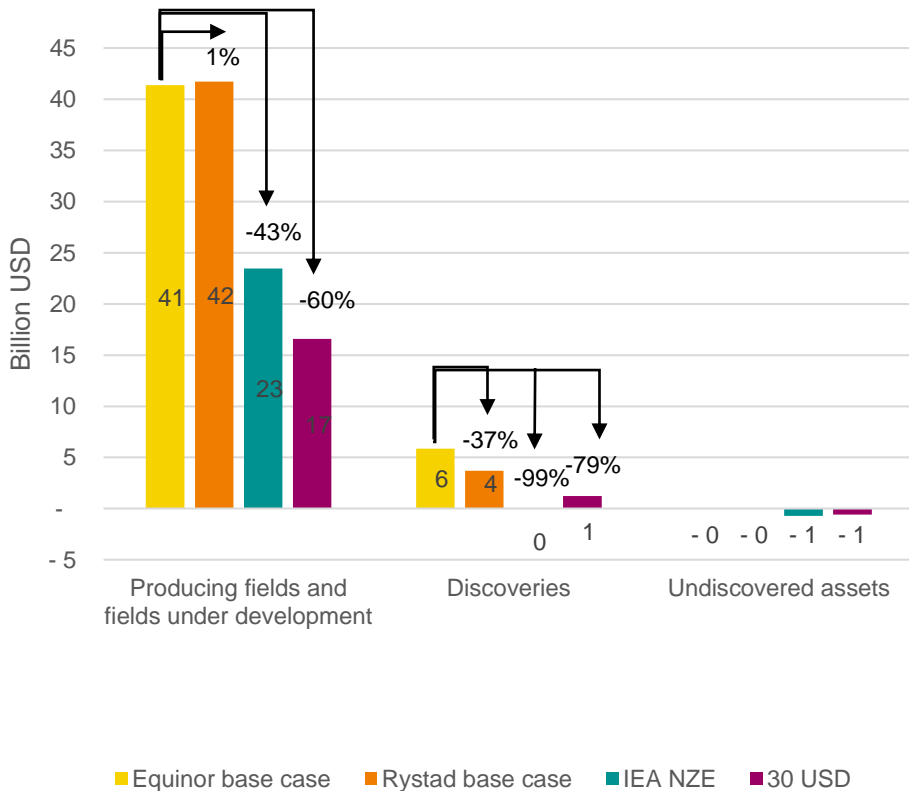
The major cause for concern for investors, however, should be whether Equinor continues to develop new oil and gas projects, since the potential earnings are low even in the Rystad base case scenario. In addition, the net present value (NPV) will turn out negative both in the NZE scenario and in the 30 USD-scenario.

Given the optimistic price expectations, Equinor nevertheless seems to be willing to take this risk on behalf of its investors. Investors should ask themselves whether the money could be invested better somewhere else, for instance in renewables or as an alternative, given back as dividends to its shareholders.

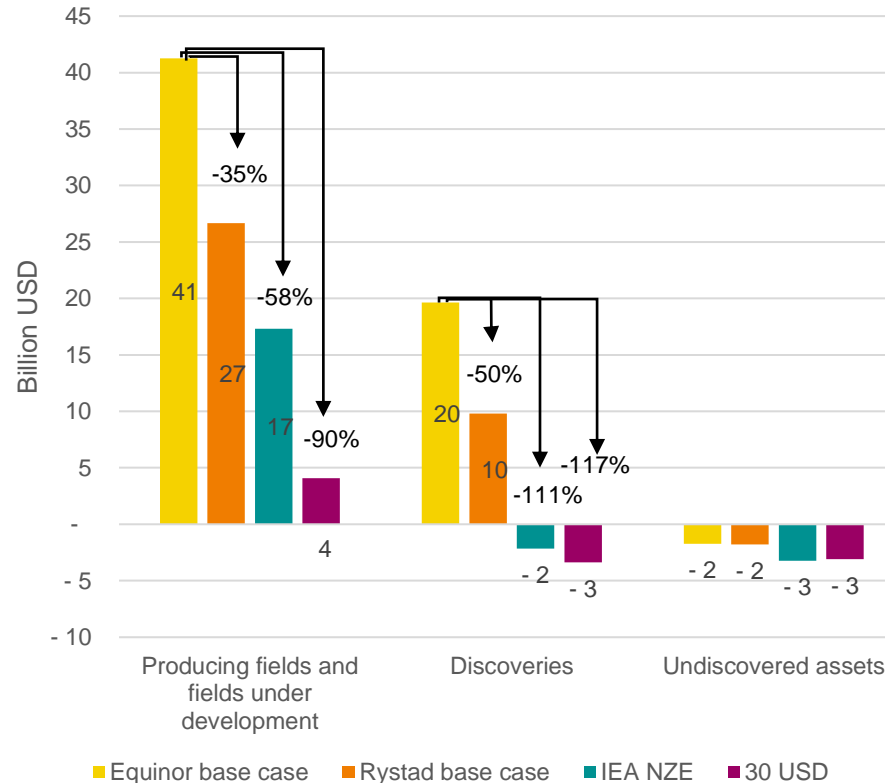
# The international portfolio has a higher risk of stranded assets than the Norwegian one



NPV Norway portfolio



NPV international portfolio



These graphs shows the same stress test as the previous slides, but now with a separation between the Norwegian portfolio and the international Equinor portfolio.

The results show that the climate risk of the international portfolio is much higher than the Norwegian one. For producing assets on the Norwegian shelf, the earnings remain the same in the Equinor price scenario and Rystad's price scenario due to the design of the Norwegian oil tax regime.

For the international portfolio, the potential loss with a lower oil price is much bigger, both for producing fields and discoveries. Concerned investors should thus take caution regarding new oil and gas investments outside of the Norwegian shelf, since the risk of stranded assets is higher.

# About the report



This report is written by senior advisor Guro Lystad at WWF-Norway. We have used data from the Rystad Energy database as well as publicly available reports to perform the analysis.

The map presented in the report has been made by Pablo Izquierdo using WWF's own mapping tool SIGHT.

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