

Factsheet: Rosebank oil field

Summary

Rosebank is a planned new oil field 80 miles off the Shetland coast in the North Atlantic. An application has been submitted by its operator, the Norwegian oil giant Equinor, for UK government approval to develop the field.¹

At nearly 500m barrels,² Rosebank is the UK's biggest undeveloped oil and gas field – dwarfing the nearby Cambo oil field, which drew huge protests in 2021.

Ninety percent of Rosebank's reserves are oil, not gas. Like 80% of all North Sea oil,³ the majority of Rosebank's oil is expected to be put in tankers and exported for refining overseas, with only some sold back to the UK at market price. Rosebank's oil will not lower UK fuel bills.

The UK public, however, would carry almost all the costs of developing Rosebank. Thanks to the UK government's oil and gas subsidies, the UK public would hand over £3.75 billion in tax breaks to Equinor just to develop the field.²⁵

Burning Rosebank's oil and gas would produce over 200 million tonnes of CO_2 .⁵ To put this into context, the climate pollution from Rosebank's reserves would be more than the combined annual CO_2 emissions of all 28 low-income countries in the world, including Uganda, Ethiopia and Mozambique.⁶

In other words, emissions from this one UK field would be more than those created by the 700 million people in the world's poorest countries in a year. These are the same countries that have contributed the least to the climate crisis but are already experiencing among the worst impacts of a warming planet.

Rosebank's development could also harm our seas and the diverse marine life they support: from delicate coral gardens to rare, deep sea sponges; from clams that live to hundreds of years old, to whales and dolphins. The development would see a pipeline laid through a protected area of the North Sea.

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Rosebank in numbers

- 500m barrels of oil and gas, over 1km deep^{2,8}
- 90% of Rosebank is oil, likely to be exported^{2,3}
- £3.75 billion tax breaks to Equinor to develop Rosebank²⁵
- 200m+ tonnes of CO₂ from burning Rosebank's reserves, more than the annual CO₂ emissions of all 28 low-income countries, home to 700m people; equivalent to running 58 coalfired power stations for a year.^{6,24}

What is Rosebank?

Rosebank is the UK's biggest undeveloped oil and gas field with a total of nearly 500 million barrels of oil equivalent (mmboe).² The project would seek to extract almost three times the oil and gas of the nearby Cambo oil field.^{2,7} Rosebank's operator Equinor is applying for permission to carry out both phases.⁸

To develop the field, Equinor plans to re-use a Floating Production Storage and Offloading vessel (FPSO), owned by Altera Infrastructure.⁸ Rosebank's oil, which makes up 90% of its reserves,² would be offloaded onto a shuttle tanker, with the small amount of gas exported through a pipeline.

Rosebank is a complex, high-cost and risky field to exploit. Its reserves lie over a kilometre below the surface – making it the deepest field ever developed on the UK continental shelf – and specific procedures would need to be put in place to deal with harsh Atlantic conditions in the region.

First discovered in 2004 by Chevron, Rosebank's development has been delayed several times. Chevron cooled on the project a decade ago, declaring it uneconomic given the scale of the investment required.⁹ Likewise Equinor has delayed Rosebank's development, first shifting its financial investment decision from 2019 to 2022,¹⁰ and then February 2023,⁸ after the government introduced the huge new subsidy in the windfall tax, which Equinor describes as 'helpful'.⁴ The company is now awaiting government approvals to proceed.

Who benefits from Rosebank?

If approved, Rosebank will be developed by oil and gas giant Equinor, which is majority-owned by the Norwegian government. It now holds an 80% stake in the field, after signing a deal to acquire Suncor Energy's North Sea assets in March 2023.¹¹ The Israeli firm Ithaca Energy (Cambo's owner) holds a 20% stake.

The UK public, however, would carry almost all the costs (91%) of developing Rosebank, while these oil companies take the profits. Thanks to the UK government's oil and gas subsidies, the UK public would hand over £3.75 billion in tax breaks to Equinor just to develop the field.²⁵ Overall, the public purse could lose more than £100 million on its 'investment' if Rosebank goes ahead,¹² while Equinor, which made £62 billion in profits globally in 2022,¹³ and its partners take the profit.

If approved, Rosebank will therefore make the UK poorer but the Norwegian state richer. Norway already has a national wealth fund worth trillions built from its oil and gas assets.

Despite this huge taxpayer subsidy, the UK public will see little benefit from Rosebank. Much of the oil produced in the UK is not suitable for our energy needs, and as such, nearly 80% of the UK-produced oil is exported.³ It is likely, then, that Rosebank's oil will do little to provide UK consumers with fuel, and will definitely not bring costs down.

Equinor claims Rosebank will create 1600 jobs, but the real number is less than a third of this, with the rest temporary employment in the short period during the peak of construction.¹⁴

Rosebank's timeline¹

- Sept 2022 Equinor submitted an environmental statement to the regulator in August, which was open to public consultation until September 2022.
- Dec 2022 & Jan 2023 Regulator asks Equinor further questions about the environmental impacts of Rosebank.
- Early 2023 Final investment decision from Equinor to develop Rosebank could be made. Up to this point, Rosebank's development is in question.
- 2026-2028 'First oil' is expected, with most of the oil extracted in the next two years (around 70,000 barrels per day), after which it will plateau.
- 2033 Oil production from Rosebank will decline.
- 2051 Rosebank stops producing oil, a year after the UK has committed to be net zero, six years after Scotland's deadline, and far beyond the point at which fossil fuel production needs to be phased out to limit dangerous climate change.

Many more years of employment can be created through investment in renewables than fossil fuels.¹⁵

How will Rosebank impact the environment?

Burning Rosebank's oil and gas reserves would produce over 200 million tonnes of CO₂.⁵ To put this into context, the climate pollution from Rosebank's reserves would be more than the combined

annual CO2 emissions of all 28 low-income countries in the world, including Uganda, Ethiopia and Mozambique.⁶ In other words, emissions from this one UK field would be more than those created by the 700 million people in the world's poorest countries in a year.¹⁶

Experts around the world are warning that opening up new oil and gas fields risks taking us beyond safe climate limits. The International Energy Agency, for example, has said there are no new oil and gas developments on a pathway to limit global temperature rise to within 1.5 degrees¹⁷. The head of the UN said that continuing to invest in new drilling is "moral and economic madness" and has called on countries to end all new oil and gas exploration and production.^{18,19} Adding new reserves, like Rosebank, will push us closer to parts of our world becoming uninhabitable.

Equinor's pledges to reduce the climate harm from Rosebank are little more than hot air. The oil and gas giant is touting plans to reduce production emissions from Rosebank, promising to use electricity rather than gas to get the oil out of the ground.⁸ But this is technically challenging, as Equinor admits, it comes with additional costs, which is slowing industry progress, and may end up taking electricity from the grid that would otherwise be used to power homes. The one step Equinor has said it would undertake is making modifications to the FPSO vessel so that it could be powered by electricity in the future. This modification, however, would be entirely funded by UK taxpayers through an additional subsidy.²⁰ Equinor has also concluded that Rosebank is not suitable for carbon capture and storage.

Beyond its enormous climate impact, Rosebank's development could also have consequences for our seas and protected marine life. The pipeline needed to transport the tiny gas reserves in Rosebank would cut through a specially protected area of the North Sea, the Faroe-Shetland Sponge Belt. Such industrial activity on the seabed could potentially harm this fragile ecosystem and the extraordinary creatures that live on it, such as quahogs, a type of clam that can live for hundreds of years, as well as the ocean floor's delicate corals and rare, deep sea sponges, which have led to local fishermen dubbing the seabed "cheese-bottoms". Equinor's assessment of whether or not, for example, coral gardens would be damaged has been questioned by the regulator.

The project also poses a potential threat to protected species including a number of different species of whale dolphin and seabirds, as well as having a possible impact on commercial significant species of fish, such as haddock.^{8,21} An oil spill from Rosebank's operations could be devastating for marine ecosystems in the waters of the UK and neighbouring countries.

Rosebank can be stopped

Campaigners in the UK have proved that, with enough public pressure and scrutiny, major oil developments can be halted. In 2021, thousands came together and forced energy giant Shell to pull out of the Cambo oil field. Pressure is now mounting over Rosebank with, for example, 200 organisations, including RSPB, Women's Institute and Extinction Rebellion, writing to prime minister Rishi Sunak calling for Rosebank to be halted.²²

Equinor is also being resisted around the world: from campaigners in Argentina, where the company is trying to lead the industry in opening a new fossil fuel frontier to Canada and Equinor's plans for the huge new Bay du Nord project. At home in Norway, campaigners succeeded in getting Equinor's proposed Wisting field in Arctic waters postponed.

There is now widespread public understanding in the UK that the soaring cost of fossil fuels is the cause of the current cost-of-living crisis. A YouGov poll in February 2023 showed that 54% of people want the UK to get off oil and gas "as quickly as possible" by ramping up efforts to improve energy efficiency and developing lots more renewable energy, compared to just 10% who support

the UK continuing to meet its energy demand primarily with oil and gas for as long as is necessary.²³ Everyone from farmers to firefighters are now awake to what is being done to our planet by profiteering oil and gas companies, and are demanding a reliable, affordable energy supply that doesn't put the planet at risk.

Rosebank's oil must stay in the ground for the sake of people, the oceans and the climate.

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