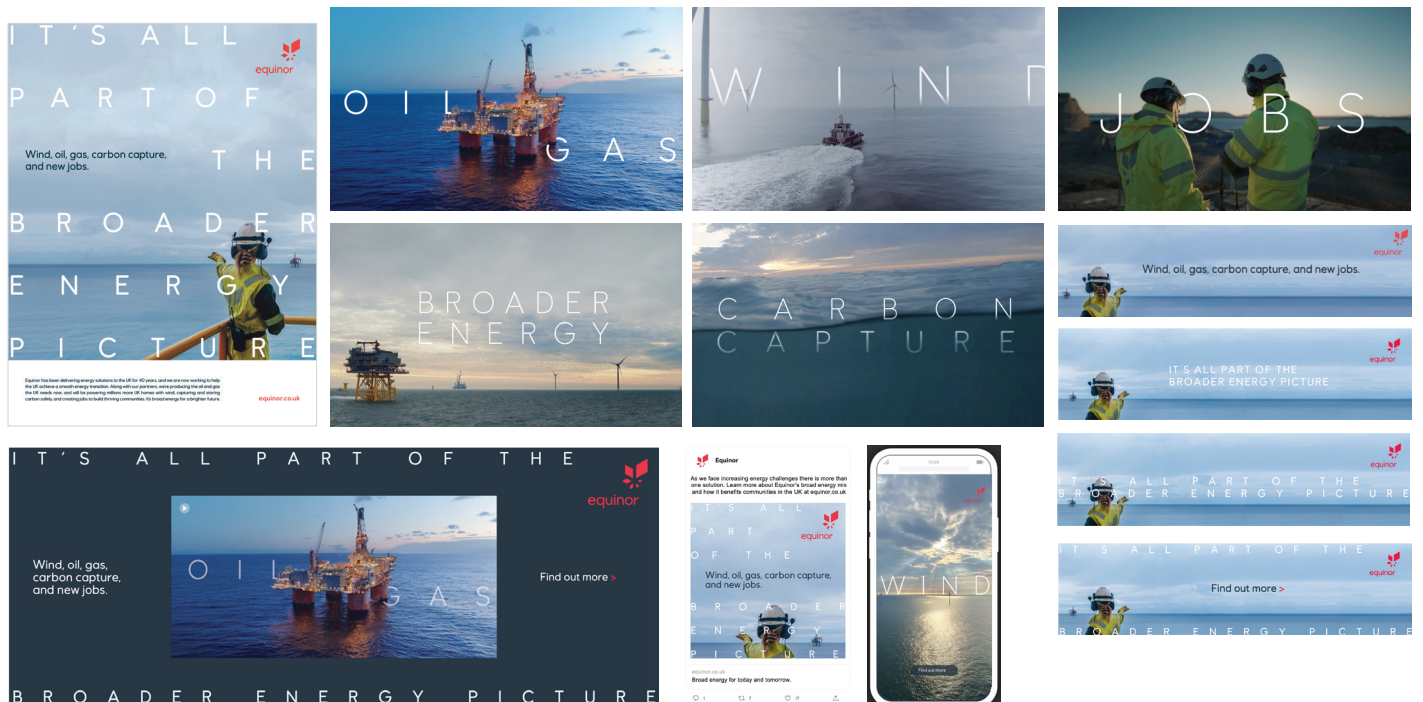


# The stories behind our advertising

Advertising doesn't offer the space and time to tell the whole Equinor story – it can really only catch your attention and encourage you to find out more. So, if our advertising has sparked your interest, this is where you'll be able to discover the details, facts and context behind our ads about supporting the UK energy transition to cleaner power.



Our ads show how our broad energy mix is creating a brighter energy future in the UK. Equinor has been delivering energy solutions to the UK for 40 years, and we are now working to help the UK achieve a smooth energy transition. Along with our partners, we're producing the oil and gas the UK needs now, and will be powering millions of UK homes with wind, capturing and storing carbon safely, and creating jobs to build thriving communities.



## What do we mean by broad energy?

The energy transition and our net zero ambition is greater than any single company, or any one industry. Our journey to develop a broad energy mix is founded on a strong commitment to sustainability, and our strategic pillars – always safe, high value and low carbon. We're creating wind power, energy from oil and gas with carbon capture and storage, and are investing in the hydrogen future to create the broad energy the UK needs today and tomorrow.



## Oil and gas

Equinor is taking a leading role in the energy transition by becoming net zero by 2050. By cutting emissions from oil and gas production and developing new technology that accelerates decarbonisation, we can contribute to net zero and be a relevant company in the future.

In the UK, we are leveraging digitalisation and technology to drive new ways of working with our offshore developments, like at the Rosebank Field. Technology provides new opportunities to keep people safe, create value and reduce carbon emissions. But energy from oil and gas is only one part of Equinor's broader energy picture.

### Mariner

The Mariner field, our first operated development in the UK North Sea, is one of our most innovative offshore developments. Equinor is at the forefront of applying new digital solutions and the latest technologies. We are testing new ground through our offshore digital workers, automated drilling and the use of Echo, a digital copy of the platform, to deliver safe and efficient solutions.

More on the Mariner field: <https://www.equinor.com/energy/mariner>

## Lowering our production emissions

Rosebank, an undeveloped oil and gas field on the UK Continental Shelf, has been designed to be electrification-ready from start-up - which could be a first in the UK. Electrification would lower the lifetime upstream CO<sub>2</sub> intensity from Rosebank from 12kg to about 3kg CO<sub>2</sub>/boe, which would be among the lowest of any oil and gas installations in the world.

More on the Rosebank Field: <https://www.equinor.com/energy/rosebank>

Equinor, as an operator with a 80% interest in Rosebank, is working with government and industry to pursue a regional solution for power from shore to Rosebank and nearby fields to minimise the carbon footprint from production.

# RENEWABLES



## Renewables

Equinor is using its expertise in offshore energy to drive forward innovation in the North Sea, and help the UK reach its net zero targets, and, when complete, the Dogger Bank wind farm could provide energy to 6 million homes. A project on this scale is creating major new employment opportunities in Tyneside, which is part of the broader energy mix required to create a thriving UK energy future.

The UK Government has the ambition to achieve 40GW of offshore wind by 2030, and has been advised by the Climate Change Committee that in order to reach net zero, up to 100GW of offshore wind will be needed by 2050.

Collaborating with others across industry, Equinor is taking a leading role in the Offshore Wind Sector Deal, a pathway to achieving the Government's ambition to quadruple offshore wind capacity by 2030.

Offshore wind is at the heart of the UK's energy transition, and Equinor is playing a pivotal role with more than 6m homes to be powered by Equinor wind farms.

### **Dogger Bank, the world's largest offshore wind farm**

5 million homes will be powered by Dogger Bank. This is based on 18TWh annual electricity production from Dogger Bank and average UK household energy consumption of 3,772kWh. The number of homes powered by our operational wind farms has been calculated using the average electricity production from each wind farm and average UK household energy production: 430,000 UK homes are powered by Dudgeon, 280,000 British homes are powered by Sheringham Shoal, and 35,000 homes are powered by Hywind.

Dogger Bank wind farm will be the world's largest offshore wind farm – the total area covered by the wind farm (1674km<sup>2</sup>) is bigger than Greater London (1568km<sup>2</sup>).

### **Hywind Scotland, the world's first floating wind farm**

Equinor is also the global leader in floating offshore wind – an exciting technology with huge global potential as it opens up access to deeper waters, with higher wind speed. Hywind Scotland, the world's first floating wind farm, has proved to be very efficient – in fact, for the third consecutive year, Hywind Scotland has reached the highest average capacity factor for any wind farm in the UK. With an average capacity factor of 57.1% in the twelve-month period to March 2020, the floating offshore wind farm set a new record in the UK. The capacity factor is the ratio of actual energy output over a given period of time, compared to the maximum possible output. The higher the capacity factor the better. Hywind Scotland's five turbines came online in 2017 and with 30 MW capacity they can generate enough electricity to power almost 35,000 Scottish homes.

This technology has been developed building on Equinor's oil and gas expertise and has paved the way for the UK Government's commitment to 1GW of floating offshore wind to be developed in the UK by 2030.

>> [Read more about our offshore wind projects in the UK](#)

>> [Equinor North Sea vision \(PDF\)](#)



# CARBON CAPTURE AND STORAGE

## Low-carbon solutions and CO<sub>2</sub> capture and storage

There are two principal ways to produce low carbon hydrogen: use renewable electricity and electrolysis to split the H from H<sub>2</sub>O (water) to produce what is known as green hydrogen; or produce it from natural gas and capture the CO<sub>2</sub> by-product. This is known as blue hydrogen.

The UK hopes to produce blue hydrogen at industrial clusters around the country. The biggest is in The Humber region. H2H Saltend will be the largest blue hydrogen plant in the world. The CO<sub>2</sub> by-product will be captured and safely stored under the North Sea with Carbon Capture and Storage (CCS) technology.

Equinor's H2H Saltend project will, from the mid-2020s, supply low-carbon hydrogen to local industry, and power, and we are planning to build further hydrogen production capacity in the Humber by the end of the decade. It's the starting point for creating a Zero Carbon Humber by 2040, with hydrogen and CO<sub>2</sub> pipelines connecting to power stations and industrial sites in the region.

With partners in Net Zero Teesside, Equinor is working to decarbonise the Teesside industrial cluster with carbon capture. CO<sub>2</sub> emissions from both the Humber and Teesside will be transported through pipelines to permanent storage, both developed by Northern Endurance Partnership, making use of the substantial storage potential deep under the UK North Sea.



# HYDROGEN

## Building the hydrogen economy of the future

We're bringing hydrogen power to The Humber, the UK's most carbon-intensive industrial cluster. When hydrogen is used as fuel, it's only emission is water.

### Hydrogen to The Humber

We're leading a project called Zero Carbon Humber (ZCH) to decarbonise the UK's biggest industrial cluster. Hydrogen to Humber (H2H) Saltend, led by Equinor, is ZCH's anchor project. It will establish a world leading hydrogen production plant with carbon capture at px Group's Saltend Chemicals Park.

The H2H Saltend project will be the starting point for a carbon dioxide (CO<sub>2</sub>) and hydrogen pipeline network connecting energy-intensive industrial sites throughout the region, offering businesses the options to capture their emissions or fuel-switch to hydrogen.

Our partners in the ZCH project include (amongst others) Drax, SSE Thermal, National Grid and British Steel. Between us, we expect to protect 55,000 existing jobs in the Humber and create 49,000 new ones, while supporting skills, apprenticeships, and educational opportunities in the region.

You can find out more about the vision for Zero Carbon Humber here:

<https://www.zerocarbonhumber.co.uk/the-vision/>

### **Projected economic benefit**

It's a huge project that we hope will make a massive difference – The Humber contributes £18bn a year to Gross Value Added (GVA) and is home to the UK's largest industrial cluster. It is also the UK's most carbon-intensive region. Transitioning away from high carbon emissions to a more sustainable economy would allow the Humber to make a significant contribution to the UK meeting its climate goals.

If you'd like to know more about the roadmap for Zero Carbon Humber you can read about it here:

<https://www.zerocarbonhumber.co.uk/wp-content/uploads/2019/11/Capture-for-Growth-Zero-Carbon-Humber-V4.9-Digital.pdf>



### **The broader energy picture; accelerating the transition to net zero**

Business as usual is no longer an option because society has to move faster towards a net-zero future. Climate change presents a fundamental challenge to society. It is a shared challenge, and our industry can play an important role. Equinor aims to become a leading company in the energy transition.

We believe it requires investment, innovation and a broad mix of energy sources. From lowering our production emissions of the oil and gas we need now, to wind and building the hydrogen economy of the future, we're helping to assure the reliable, affordable and sustainable energy of the future.