Building a broad energy partnership with the UK
The UK needs energy that is affordable, reliable and low carbon. As the country’s leading energy provider, Equinor is committed to playing a key role in delivering these needs and building a broad energy partnership with the UK. We have been here for over 35 years, investing in multi-billion pound projects and creating hundreds of jobs.

Today, our supplies from Norway meet more than one quarter of the UK’s demand for natural gas and around one fifth of its demand for oil. And these supplies are produced with one of the lowest carbon footprints in the industry: for example, our new Johan Sverdrup field uses hydroelectricity to produce oil with emissions twenty times lower than the global average. And our reliable gas supplies have enabled the UK to phase out coal from its power mix and achieve greenhouse gas emission levels not seen since the 19th century.

We are growing in the UK, with over 650 employees working across the country, from the seas off the Shetland Islands down to our head office in London. We are one of the most active explorers in the North Sea. In 2019 we brought three new British fields onstream: Mariner, the largest undeveloped field in the UK, where we will leverage our unique engineering experience to increase the project’s value and reduce emissions.

I am proud that the emissions from Equinor’s oil and gas production are already at industry-leading levels. But to speed up the energy transition we need to see more substantial and rapid changes. In line with the United Nations Paris Agreement, our ambition is to reduce our own emissions and grow renewable energy capacity. By 2030 we’re aiming for carbon neutral operations globally on Equinor-operated projects. The UK was a pioneer in setting a 2050 net zero emissions target. And because we believe that one of the most effective ways to reduce our net carbon footprint is to increase the share of low carbon products, we will play an active role in the UK’s energy transition. Our two major offshore wind farms, Sheringham Shoal and Dudgeon, already comprise 155 wind turbines and we are now looking to double their capacity using newer turbines by the mid-2020s. In the seas east of Aberdeen, we run Hywind Scotland, the world’s first floating wind farm - the first of many projects we believe will be capable of harnessing the potential of more powerful and reliable wind in deeper waters.

Building on this experience, in 2019 we won contracts to build the largest offshore wind farm in the world. Dogger Bank will provide enough power for 4.5 million UK homes, and represents a £9 billion investment in the UK. As we look to the future, we want to scale up technologies to further reduce carbon emissions. For over 20 years, Equinor has been pumping carbon dioxide into reservoirs deep under the North Sea at our Sleipner and Snøhvit fields. We are now working with our partners in two projects in the north of England to assess the potential to create ‘net zero’ industrial clusters in Humberside and Teesside. If successful, these can also provide clean hydrogen to industrial users in the region, replacing natural gas.

But we know that to be a true energy partner for the UK, we need to invest in people as well as projects. That’s why we sponsor education programmes focused on Science, Technology, Engineering and Maths. It’s why we partner with world-leading organisations like the Science Museum in London and the Science Centre. It’s why we work with 700 local suppliers across the country. And it’s why we are committed to working with stakeholders across the country to help shape the future of energy in the UK.

Foreword

Equinor in the UK

Al Cook
Executive Vice President
and UK Country Manager

Aberdeen Science Centre. It’s why we work with 700 local suppliers across the country. And it’s why we are committed to working with stakeholders across the country to help shape the future of energy in the UK.
At a glance

- **35+** year presence in the UK
- **650+** UK employees
- **700** suppliers working for Equinor in the UK
- **£5bn** in energy sales to the UK each year
- **30%** of UK gas demand met by Equinor
- **20%** of UK oil demand met by Equinor
- **5 million homes** powered by our UK wind farms by 2030
- **30%** of UK gas demand met by Equinor
- **20%** of UK oil demand met by Equinor
- **5 million homes** powered by our UK wind farms by 2030

Equinor in the UK

- Gas storage
- Exploration licence
- Producing field
- Field development
- Wind farm
- Offices

All figures are correct as of March 2020
Our climate ambition

Equinor aims to:
- reduce the net carbon intensity, from initial production to final consumption, of energy produced by at least 50% by 2050;
- grow renewable energy capacity tenfold by 2026, developing as a global offshore wind major; and
- strengthen our industry-leading position in carbon-efficient production, aiming to reach carbon neutral global operations by 2030.

We expect to meet our ambition primarily through significant growth in renewables and changes in the scale and composition of our oil and gas portfolio. Operational efficiency, carbon capture utilisation and storage (CCUS) and hydrogen will also be important, and recognised offset mechanisms and natural sinks may be used as a supplement.

To enable our ambition, we use our voice to drive change. We advocate for greater cooperation between governments and businesses. We see COP26 as a crucial arena to further raise global ambitions and accelerate action.

At a global level, we are working to facilitate coordinated climate action, forming strong partnerships in support of our ground-breaking work. As a founding member of the Oil and Gas Climate Initiative, we look to collaborate with our peers and other industries to leverage more positive impacts than we can achieve on our own.

We believe that our new Climate Roadmap aims to ensure a competitive and resilient business model in the energy transition, fit for long-term value creation and in line with the Paris Agreement.

Our strategy is to provide more energy with less emissions. To succeed, our ambition is to reduce net carbon intensity by at least 50% by 2050.
Offshore oil and gas developments

Alongside Mariner, our offshore oil and gas portfolio in the UK has grown.

Cross-border developments connect fields and infrastructure across the UK and Norwegian continental shelves, unlocking otherwise stranded resources to add value on both sides of the border. These include the Utgard and Barnacle developments that started production in 2019. The developments are possible through innovative commercial solutions and close collaboration between partners, regulators and authorities in both the UK and Norway.

We are currently working with our partners to deliver Rosebank, one of the largest undeveloped discoveries in the UK. As operator with a 40% interest in Rosebank, we are applying learning from the Equinor portfolio to create value and apply carbon-efficient solutions. We expect to make a final investment decision in 2022.

Equinor is also a leading explorer on the UK Continental Shelf and continues to explore the further potential of this region. We will continue shooting seismic and drilling new wells in the 2020s, with the aim of discovering new resources for the country.
As the UK has moved away from coal to cleaner energy sources, natural gas has played an important role in helping to reduce emissions while keeping the lights on.

Natural gas is a key part of Norway’s energy partnership with the UK. Last year, Norway supplied 43% of the UK’s gas demand. It is also a key supplier of oil, providing around 45% of the UK’s needs.

The reliability of natural gas is backed up by SSE and Equinor’s Aldborough storage facility in Yorkshire. The facility, opened in 2011, provides around 7% of the UK’s total gas storage capacity.

Both our natural gas and our oil are produced with one of the lowest carbon footprints in the industry. In fact, natural gas from Norway is produced and supplied through pipelines to the UK with around one fifth of the emissions of liquefied natural gas. For those who want natural gas with lower emissions, Equinor’s gas is a natural choice.

Providing secure energy to the UK

As the UK has moved away from coal to cleaner energy sources, natural gas has played an important role in helping to reduce emissions while keeping the lights on.

Natural gas is a key part of Norway’s energy partnership with the UK. Last year, Norway supplied 43% of the UK’s gas demand. It is also a key supplier of oil, providing around 45% of the UK’s needs.

The reliability of natural gas is backed up by SSE and Equinor’s Aldborough storage facility in Yorkshire. The facility, opened in 2011, provides around 7% of the UK’s total gas storage capacity.

Both our natural gas and our oil are produced with one of the lowest carbon footprints in the industry. In fact, natural gas from Norway is produced and supplied through pipelines to the UK with around one fifth of the emissions of liquefied natural gas. For those who want natural gas with lower emissions, Equinor’s gas is a natural choice.

43% Norwegian market share
45% Norwegian market share
UK’s gas market
UK’s oil market

Equinor in the UK

A global offshore wind major, powering 5 million* UK homes

Sheringham Shoal, our first full scale offshore wind farm, started generating in 2011. Its 88 turbines are located approximately 20 miles off the Norfolk coast.

Adjacent is our second wind farm, Dudgeon, with its 67 turbines. We are working on extensions to both wind farms which will double their capacity and - along with our Dogger Bank project - mean that our UK wind farms will power 5 million UK homes by 2030.

<table>
<thead>
<tr>
<th>Wind Farm</th>
<th>Turbines</th>
<th>Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hywind Scotland</td>
<td>~300</td>
<td>3600</td>
</tr>
<tr>
<td>Dogger Bank</td>
<td>67</td>
<td>402</td>
</tr>
<tr>
<td>Dudgeon</td>
<td>88</td>
<td>317</td>
</tr>
</tbody>
</table>

Sheringham Shoal, our first full scale offshore wind farm, started generating in 2011. Its 88 turbines are located approximately 20 miles off the Norfolk coast.

Adjacent is our second wind farm, Dudgeon, with its 67 turbines. We are working on extensions to both wind farms which will double their capacity and - along with our Dogger Bank project - mean that our UK wind farms will power 5 million UK homes by 2030.

5 turbines 50 MW

Equinor in the UK
Hywind -
the global pioneer in floating wind farms

The UK is the home to our exciting Hywind Scotland project, the world’s first floating wind farm.

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.

Partnered with Batwind, the world’s first battery for offshore wind, Hywind Scotland demonstrates the global potential of floating wind in deeper waters – where wind speeds are stronger and more reliable, and where fixed offshore wind farms are not possible.

Hywind combines familiar technologies from the offshore and wind power industries into a new design. Hywind is a floating wind turbine design based on a single floating cylindrical spar buoy moored by cables or chains to the seabed. Its substructure is ballasted so that the entire construction floats upright.

We believe floating offshore wind is the next wave in renewable energy and, within the next decade, we aim to make it a competitive renewable energy source.
Dogger Bank, the world’s largest offshore wind farm

We are working to build the world’s largest offshore wind farm at Dogger Bank, off the coast of Yorkshire.

Comprising three phases, the wind farm will generate 3,600 MW, enough to power 4.5 million homes, or 5% of the UK’s estimated power demand. From first power in 2023, it will make a significant contribution to the UK’s climate goals, and at record-low power prices for UK businesses and consumers.

The Dogger Bank wind farm is also revolutionising the industry as a whole. A £9 billion project, it will use GE’s 12 MW Haliade-X turbine, the world’s most powerful with blades 107 metres long. It will also be the first in the UK to use high voltage direct current (HVDC) technology to transport the power generated at Dogger Bank back to shore 80 miles away.

The Dogger Bank area has capacity to grow further, with the potential to provide even more wind power to the UK.

Helping the UK to net zero

While renewable power continues to grow, most of the UK’s energy system still relies on the high energy content of oil and natural gas.

For the UK to reach its climate targets, these fuels must be replaced with lower or zero carbon alternatives.

This is why we are pushing ahead with projects that build on our 20+ years of experience in carbon capture utilisation and storage (CCUS), and developing new opportunities in hydrogen.

We are part of the Net Zero Teesside project to capture CO₂ emissions from local industry and from a gas-fired power station – and then store them safely deep under the North Sea.

We are also working on Zero Carbon Humber which will deploy hydrogen and CCUS technologies to cut CO₂ emissions in the Humber region, the UK’s largest industrial cluster.

With the H21 North of England project, we have also looked at how hydrogen production could be built up to replace natural gas across northern England.
Investing in future generations

Education in Science, Technology, Engineering and Maths (STEM) plays a vital role in equipping young people with the knowledge and skills needed to participate in and contribute to UK society and the future of the energy industry. Our sponsorships strengthen education in STEM, delivering on our commitment to host communities and to creating shared value in the UK.

We support Wonderlab: The Equinor Gallery at the Science Museum, which builds on children’s natural curiosity in STEM to ensure long-lasting engagement. Together with the Science Museum, Equinor has created Young Imagineers, a nationwide competition to find Britain’s most imaginative and creative young people.

In Aberdeen, we are the Digital Futures partner of the Aberdeen Science Centre, building visitors’ understanding of digitalisation. We also sponsor TechFest, and through our partnership, run an annual STEM workshop event reaching more than 400 pupils from across the North-east of Scotland.

With Aberdeenshire Council and Peterhead Academy, we have created the Hywind STEM Hub, which is building young people’s skills and understanding of renewable technologies.

Alongside sponsorships, we are committed to the local communities where we operate. Through community funds we provide grants for community groups, including schools and NGOs, seeking financial assistance for local projects and initiatives.
Our product may be energy. But our greatest resource is our people.

We are passionate individuals working towards one goal – to provide the world with the energy it needs, sustainably and responsibly.

We’re up for the challenge. Are you?
Photography
Ole Jørgen Bratland/Equinor ASA.
Roberg Gregory Yorke. Harald Pettersen.
Øyvind Gravås. Øivind Haug. Einar Aslaksen.
Jonas Bostrom.

Illustrations and design
Equinor ASA.

190394/May 2020