

Ørsted in the UK



Ørsted

Let's create a world that runs entirely on green energy



A company with purpose and vision

At Ørsted, we believe in a world that runs entirely on green energy. Climate change is one of the biggest challenges for life on Earth. Today, the world mainly runs on fossil fuels. We need to transform the way we power the world: from black to green energy.

Headquartered in Denmark, and with over 900 employees in the UK, we create market leading green energy solutions that benefit the planet and our customers alike. We develop, construct and operate offshore wind farms, bioenergy plants and innovative waste-to-energy solutions and provide smart energy products to our customers.

Over the last decade we have undergone a truly green transformation. We have divested our oil and gas production business and, by 2023, we will have replaced coal with sustainable biomass in our power stations across Northern Europe, reducing our carbon emissions by 96%.

We are taking real action to make our vision a reality.

#takegreenaction

Ørsted in the UK

Offshore wind power: the UK leading the way

Ørsted is the global leader in offshore wind power and the UK is a vital market for us. Not only does the UK lead the world in offshore wind, with 36.3% of the world's installed capacity¹, but it is also our largest market. We currently have 11 operational wind farms and another two under construction. We have already invested £8 billion in the UK to date, with another £4 billion of investment to come by 2020. We are committed for the long-term, both to leading the change to green energy, and to investing in the communities where we work.

Today our 11 UK offshore wind farms produce around 3.7 GW, enough to power over

3.2 million homes.

By 2022 our pipeline of projects will see us provide enough power for over

5.5 million homes².

Investing in battery storage technology

At Ørsted, we believe that battery storage will play a crucial part in the future energy system as more of our energy starts to come from renewable sources. That is why we have invested in our first commercial-scale battery storage project, in addition to integrating a battery storage device into our Burbo Bank Offshore Wind Farm. These projects, both located in Merseyside, will help to keep the UK's electricity grid balanced.




Driving down the cost of offshore wind

In 2017, the UK Government awarded us a contract to build Hornsea Project Two, the world's largest offshore wind farm, at a price of £57.50 per MWh. This represents a 50% drop in price from the contracts awarded two years earlier. The optimum scale of the wind farm, added to Ørsted's many years of experience and the industry's maturing technology, made this landmark price possible. We are also able to maximise our efficiency by operating multiple wind farms from our East Coast Hub in Grimsby.

Building the world's largest offshore wind farms

In September 2018, Ørsted inaugurated the world's largest offshore wind farm off the Cumbrian coast. The 659 MW Walney Extension is capable of generating enough green energy to power almost 600,000 UK homes.

We are also constructing Hornsea Project One and Two in the North Sea. At 1.2 GW, Hornsea Project One will take the title of the world's largest offshore wind farm when it becomes operational in 2020, before being overtaken by the 1.4 GW Hornsea Project Two in 2022. Together, these two offshore wind farms will supply enough power for over 2.3 million UK homes.

 Wind power under construction

 Wind power in operation

 Battery technology integrated into Burbo Bank offshore wind farm

Apprenticeships

Working with the Grimsby Institute, we launched our UK apprenticeship scheme in 2017, welcoming four apprentices to our East Coast Hub. In 2018, we have a new intake of apprentices, including four based in Barrow, where we are working in partnership with Furness College.

Bringing benefits to the UK

As we build our offshore wind farms, we bring tangible benefits to the UK, in addition to green energy infrastructure. We are not only creating hundreds of jobs during the construction phase, but also offering long-term, skilled work in towns and cities such as Barrow, Grimsby and Liverpool, where we base our operations. Our East Coast Hub alone employs around 250 people and is becoming a world-class example of offshore wind operations.

Supporting the UK supply chain

We are helping to support a growing UK supply chain. In the past five years alone, we have placed major contracts with nearly 100 different UK suppliers.

Thanks to our pipeline of orders, major construction components such as turbine blades, transition pieces and towers can now be manufactured in the UK, helping to create and safeguard skilled jobs. We are also seeing our UK supply chain exporting to our projects across the world.

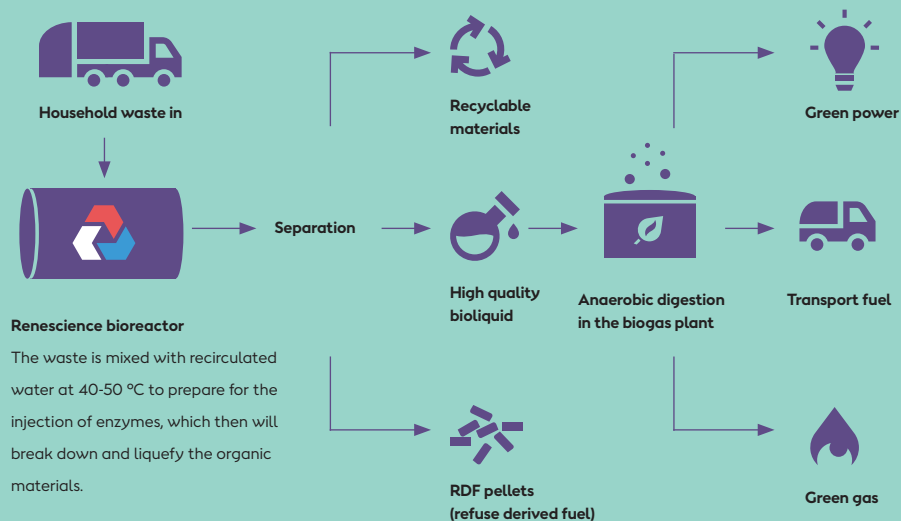
¹ UK's percentage of global offshore wind capacity (GWEC, 2017) Source: <http://gwec.net/global-figures/global-offshore/>

² We have based this on the BEIS 5-year average load factor of 38.6% and a household consumption of 3,828 kWh per year. Source: BEIS DUKES (2018), BEIS ECUK (2018)

Renescience: the circular economy in action

At Ørsted, we have developed Renescience, a patented biotechnology that not only uses enzymes to treat residual household waste but also produces green energy. With no incineration, the Renescience process achieves 100% diversion from landfill, helping to reduce greenhouse gas emissions. It produces high quality recyclables, which are separated, cleaned and sent back into the recycling system. Also, by putting the liquefied organic matter through a process of anaerobic digestion, it creates biogas for the production of green energy or for conversion into transport fuel.

How does the Renescience technology work?



Renescience Northwich

In 2017 we constructed our first Renescience plant in Northwich, Cheshire. With this project, we continue our investment in the North of England, creating up to 24 full-time jobs in the area.

Annually, the plant can produce 5 MW of renewable energy, which is enough power for 9,500 homes. It is capable of treating 120,000 tonnes of waste a year, the equivalent of the annual waste from 110,000 UK homes. The digestate, one of the products of the Renescience process, is used for soil restoration on former open-pit mine sites.



B2B energy supply: helping businesses to save time, money - and the planet

As a leading supplier of electricity and gas to UK businesses, we support the energy transformation in the UK. By making it easier for businesses to become smarter with their energy consumption and generation, we can help guide them to a more sustainable energy future.



Green energy

Buying 100% renewable electricity and gas helps our customers to reduce their carbon emissions. It also supports their Corporate Social Responsibility (CSR) strategies, offering an ethical choice for their energy supply.

At Ørsted, we absorb the additional Renewable Energy Guarantee of Origin (REGO) premium associated with buying renewable electricity, allowing our customers to choose renewable electricity at no additional cost. Our premium-free green offer makes choosing electricity from a renewable source a commercially sound decision for businesses of all types and sizes. It allows them to contribute towards a more sustainable future without impacting their budget.

In addition, we can now offer businesses green gas (biomethane), which comes from renewable sources and is more sustainable than natural gas. Green gas is supplied through the Green Gas Certification Scheme (GGCS), which tracks green gas that has been injected into the gas grid. We give our green gas customers a Renewable Gas Guarantee of Origin (RGGO) Certificate for each MWh of green gas consumed, which is validated by the GGCS.



Cost-effective

We give customers the tools to unlock the value of their assets without extra investment, commitment or risk. These include a range of innovative, smart tools to help them become more flexible with their energy consumption. We also offer Energy as a Service (EaaS), working with customers to create a tailored, integrated energy solution that's right for their business. This can be a combination of energy efficiency, sustainable sourcing, flexibility and optimisation, and embedded generation.



The Ørsted DNA

Our community investment

Across the UK, we are supporting the communities in which we work through grants, donations and sponsorships. We have committed to a three-year long partnership to help to fund the running costs of seven Royal National Lifeboat Institution stations around the country, and have created three independently run Community Funds which are supported by our wind farms along the North East and North West coasts of the UK. We ring fence part of these funds to support local training and skills development. We also help to encourage the study of Science, Technology, Engineering and Maths (STEM) in schools local to our wind farms through initiatives such as our three-year partnerships with the Natural History Museum and the educational charity Teach First.

Why Ørsted?

We are named after Hans Christian Ørsted, one of Denmark's best known scientists and innovators. Through his curiosity, dedication and interest in nature, he discovered electromagnetism in 1820, helping to lay the scientific foundation for how power is generated today. These qualities of Hans Christian Ørsted are just what we need to revolutionise the way we provide power to people.

Contact us

Ørsted
5 Howick Place
London
SW1P 1WG
Tel: +44 (0) 20 7811 5200

© Ørsted 2018. All rights reserved. No parts of this publication may be reproduced by any means without prior written permission from Ørsted.

All graphics in this document are for illustrative purposes. Dates are based on available information and are subject to change.



orsted.co.uk

Ørsted