

Rampion Offshore Wind Farm

Newsletter



Robin Rigg Offshore Wind Farm, Solway Firth. For illustrative purposes only.

Welcome to our first newsletter introducing the Rampion Offshore Wind Farm.

Why Rampion?

In January 2010, The Crown Estate awarded us the exclusive right to seek consent to build a new large-scale offshore wind farm off the Sussex coast. Initially known as 'Zone 6', the site was one of nine zones that The Crown Estate identified in Round 3 of the UK Offshore Wind Programme, as suitable for large-scale wind farm development. These zones were chosen after extensive surveys of wind speeds, water depths, shipping lanes and environmental constraints.

The proposed site lies 13km off the Sussex coast at its nearest point and the 665 megawatt (MW) Rampion Offshore Wind Farm could generate enough electricity to power 430,000 homes* a year. That's almost two thirds of all the homes in East Sussex, West Sussex and Brighton & Hove.†

We ran a competition and asked local schools to help us name the wind farm. A shortlist was put to the public vote and more than 2,500 votes were cast. Rampion is the county flower of Sussex and is also known as the 'Pride of Sussex'.

Who is E.ON?

We're one of the world's leading power and gas companies. Here in the UK, we supply energy to more than 5 million customers, generate enough electricity for around 8 million homes and employ 12,000 people.

E.ON Climate & Renewables was set up in 2007 as a global business leading the way in developing new, cleaner ways of generating energy. We're helping to shape the energy industry of tomorrow and create secure, sustainable energy supplies for future generations.

In the UK, we own and operate 18 onshore and 3 offshore wind farms. Together, these have an installed capacity of more than 400MW.

Our offshore experience in the UK

We were early pioneers in the UK's offshore wind energy industry, owning and operating the UK's very first offshore wind farm at Blyth in Northumberland. We also built one of the country's first commercial scale projects, Scroby Sands in Great Yarmouth, which has 30 turbines with an installed capacity of 60MW. Our third operational offshore wind farm, the 180MW Robin Rigg project, was completed in 2010 and has 60 turbines. And in February 2011, we received consent for a 230MW offshore wind farm in the Humber Gateway, which will have up to 77 turbines.

In spring 2011, we started laying the first of 177 foundations on Phase One of the London Array Offshore Wind Farm, a project that we're undertaking with our partners DONG Energy and Masdar. When fully complete, this 1,000MW offshore wind farm will be the largest in the world and will generate enough electricity to power up to 750,000 homes* a year.

*Based on an average annual domestic household electricity consumption of 4,700KWh (DECC).

†Office of National Statistics census data

Introducing the Rampion Offshore Wind Farm site

Key statistics

- Rampion:** Named after the county flower of Sussex, also called the 'Pride of Sussex'.
- Location:** 13km to 23km off the Sussex coast
- Site area:** 167km²
- Water depth:** 19m to 50m
- Target capacity:** 665MW of electricity
- Grid connection:** Proposed 30km underground cable from the coast to the 400 kilovolts substation at Bolney in mid Sussex (owned by National Grid).
- Power output:** The Rampion Offshore Wind Farm could generate enough renewable electricity to power around 430,000 homes* a year. That's almost two thirds of all the households in East Sussex, West Sussex and Brighton & Hove[#].

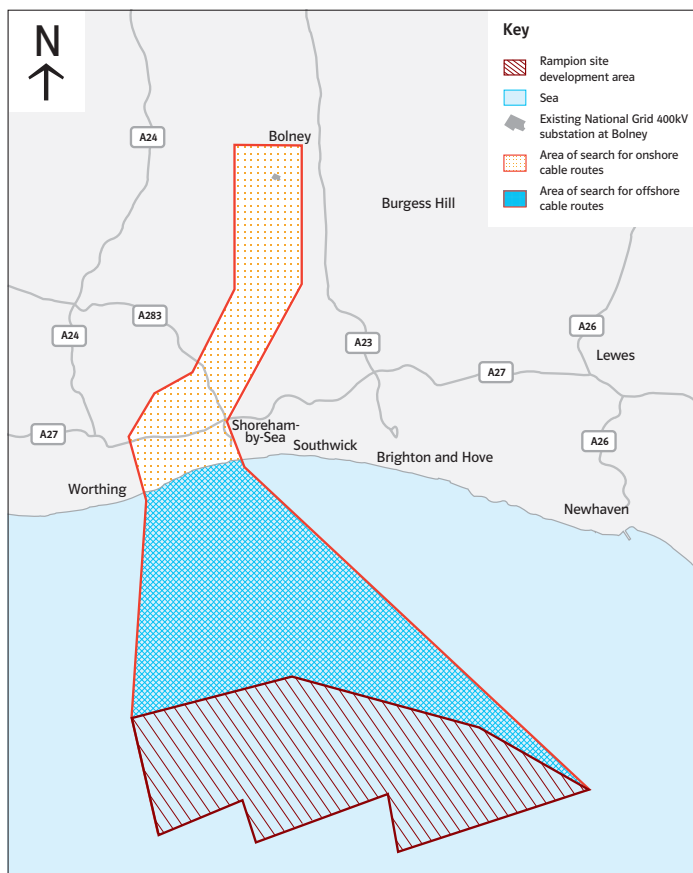
Why connect into Bolney?

As the wind farm will produce a large amount of electricity, the power will need to flow straight into the 400kV National Grid transmission system. We investigated a connection to the 132kV distribution system nearer to the coast, but this was not possible so we started looking further inland.

National Grid made us an offer to connect into its existing substation at Bolney, 30km north of the coast. When the electricity comes to shore, it will travel through cables to the substation where it will be fed into the grid. If our plans are approved, we'll bury the cable along the whole length of the route.

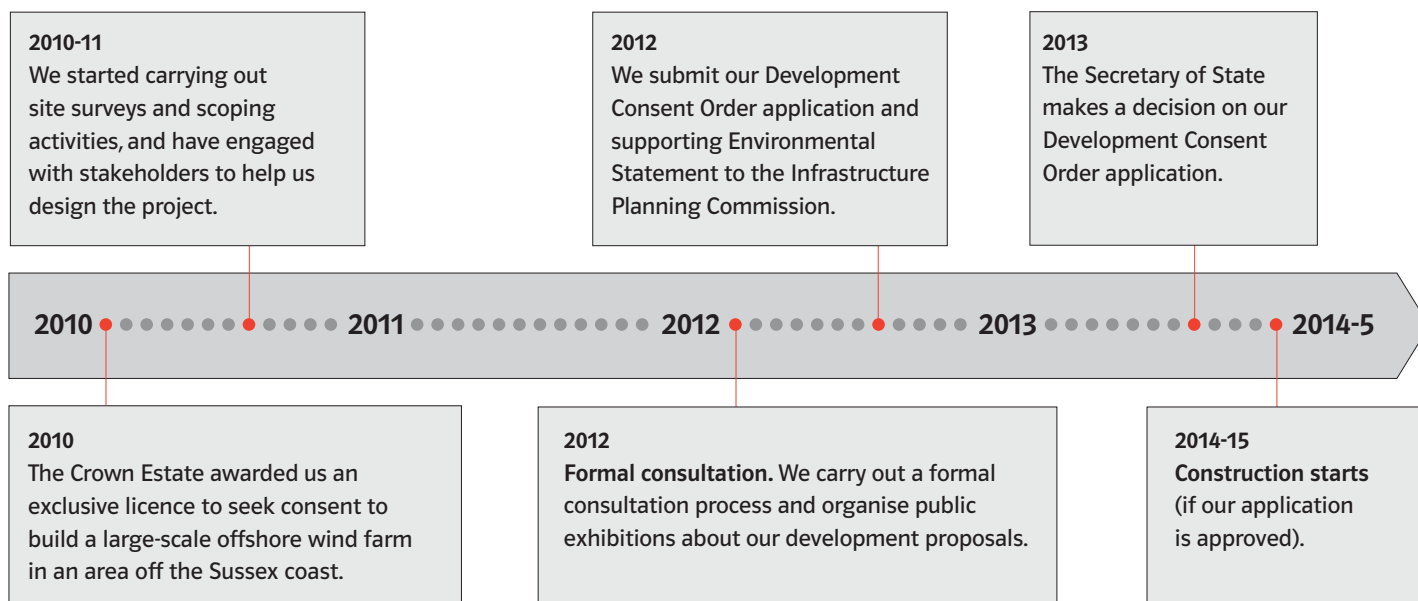
Site plan

The map below shows the Rampion site area and the indicative area of search for the onshore and offshore cable routes.



Map not to scale, for illustrative purposes only.

Project timetable



*Based on an average annual domestic household electricity consumption of 4,700KWh (DECC).

[#]Office of National Statistics census data.

What is a Development Consent Order?

You'll often hear the term 'Development Consent Order' when we're talking about the Rampion project. A Development Consent Order (DCO) is the main planning consent for wind farms of over 50MW electrical capacity. Under the new planning system, the application for consent will be made to the Infrastructure Planning Commission (IPC). The IPC is currently the independent body that examines applications for Nationally Significant Infrastructure Projects. The IPC will consider the application and make a recommendation to the Secretary of State who will make the final decision.

Environmental surveys

We've appointed a number of independent specialists to carry out detailed environmental studies to assess the wind farm's potential impact on the local environment. They're looking at a range of areas including ornithology, ecology, archaeology, traffic issues and socio-economic impact. We'll use their findings to create an Environmental Impact Assessment (EIA), and then an Environmental Statement (ES). This will form part of our Development Consent Order (planning) application.

What we've completed

Earlier in 2011, we carried out geophysical surveys and geotechnical site investigations to assess the seabed's geological conditions at the offshore site. The information we gathered will help us decide on the type and size of foundations that will support the wind turbines.

We recently submitted our meteorological mast application to the Marine Management Organisation (MMO). If this is accepted, the mast will be installed in spring 2012. It will collect information about the area's wind speed and resources, and allow us to forecast the wind farm's energy output more accurately. The mast will also help us optimise the final wind farm design.

Metocean data (information about conditions at sea), has also been collected to give us an idea of the impact the wind farm might have on the area's coastal processes.

We've also carried out navigation surveys so we can understand shipping movements in and around the Rampion site.

What's ongoing

As two years of offshore bird and sea mammal surveys are needed, we've been conducting surveys since spring 2010. These will be completed in spring 2012 and we're also carrying out onshore habitat surveys.

We've appointed a Fishing Liaison Officer and Fishing Liaison Representatives to liaise with commercial fishermen in the local area.

We're currently in discussions with local landowners about our options for the onshore cable route. The cable will be laid underground on a route 30km from the Worthing coast to the onshore substation at Bolney.

In each edition of the Rampion Offshore Wind Farm Newsletter, we'll update you on our development work and take a look at the next steps in the process.

E.ON in the Sussex community

We're very keen to play a positive role in your community. We've already been speaking at public meetings and events to introduce local groups to the Rampion project.

We were delighted to support the 2011 Brighton Festival Children's Parade on 7 May, as part of our interest in promoting educational initiatives and building relationships with schools. More than 5,000 children from around 100 local schools took part in the parade - many sporting fantastically creative costumes. With parents, teachers and spectators, the number of people along the route swelled to almost 20,000, creating a wonderful atmosphere across the city.

The Children's Parade is a great fit with our other educational initiatives and we hope to support the festival again in 2012.



Local employment potential

The Rampion project has the potential to create new jobs in the local area. We're already using companies based in the area and we'll try to make sure this continues by including a requirement in our contracts to recruit locally where possible.

It's still too early to say how many new jobs the wind farm could create. However, our latest operational offshore wind farm at Robin Rigg (180MW) in the Solway Firth created around 40 jobs at its local operations and maintenance base. Rampion should need many more people, as it will be a much larger wind farm and we're confident we'll be able to use a local port as an operations base.

When we've finalised our requirements, we'll be able to tell you how many jobs will be on offer and what they'll involve.

In the meantime, we're exploring ways to support local jobs, companies and training. Our first initiative, launched in September 2011, is a competition with the Universities of Brighton and Sussex to enable up to two postgraduate students to study a Masters (MSc) in Renewable Energy. We're delighted to be funding 80% of the student bursaries for the competition winner(s), along with our development partner, The Crown Estate.

We'll keep you updated on jobs and training issues in future editions of the newsletter.

How do I get involved?

In accordance with IPC guidance, we're responsible for arranging and recording a formal consultation process with the public. Before we make a planning submission, we'll formally consult with the local community and stakeholders.

We want to speak to as many people and organisations as possible during the consultation process so we can understand your local community's needs and concerns. Your responses will help us shape our proposals and finalise our designs for the wind farm, so we're very keen for you to be involved.

The formal consultation period will start in early 2012. Before it begins, we'll publish a Statement of Community Consultation (SOCC) in local newspapers. This will outline how and when we plan to run the consultation process and how you can respond. The SOCC will also be available online at eon-uk.com/rampion and at various public buildings in Sussex, such as libraries and town halls.

We'll also be holding several consultation events in the region, to tell you more about the Rampion project and give you the opportunity to meet our team. There'll be a number of ways you can give us your feedback at or after these events.

Wind energy: your questions answered

In each edition of the newsletter, we'll bring you the answer to a question we're frequently asked about wind energy.

Q: Do wind turbines generate more energy than the amount used to construct and install them, and how long does payback take?

A. A wind farm uses energy throughout its life cycle, from manufacturing the materials used to construct it through to operating the wind farm and eventually decommissioning it. This is the case for all forms of energy generation.

However, evidence suggests that the average wind farm should generate at least 20 to 25 times the amount of energy that was used to construct and install it. The average energy payback time for a wind farm is well within one year of operation – a fraction of its overall lifespan of 20 to 25 years.

Contact us

If you'd like any more information or would like to give us your feedback, please visit our website or contact us by phone, email or post:

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