# equinor

Sheringham Shoal Extension Project and Dudgeon Extension Project

**Community Consultation Leaflet** 

April 2021

#### Introduction

This is your opportunity to comment on our onshore and offshore proposals for Sheringham Shoal Extension Project (SEP) and Dudgeon Extension Project (DEP). This community consultation leaflet contains details of our proposals and how you can take part in this consultation.

Our consultation starts on **Thursday 29 April 2021** and will run for six weeks, closing on **Thursday 10 June 2021.** 

We welcome all comments during this time. We are holding a variety of consultation activities during our phase two consultation, as detailed on pages 8 and 9 of this leaflet.



# Sheringham Shoal Extension Project and Dudgeon Extension Project

Equinor is the operator of the existing Sheringham Shoal and Dudgeon Offshore Wind Farms and is now proposing to extend these assets on behalf of their two operational partnerships. SEP and DEP will be located off the coast of North Norfolk, adjacent to the operational windfarms, and will help the UK to address climate change and reach its target of net zero carbon emissions by 2050.

We will apply for a joint Development Consent Order (DCO) which will be determined by the Secretary of State for Business, Energy and Industrial Strategy (BEIS). Submission of the joint DCO is indicatively planned for the fourth quarter (Q4) of 2021.



We are investigating offshore generating areas of up to 196 kilometres squared in total, where up to **56** turbines could be located.



We have been offered a grid connection at **Norwich Main Substation** by National Grid. A site for the onshore substation in the vicinity of the existing National Grid Norwich Main Substation is currently being identified.



We are seeking to minimise potential impacts on the **community and the environment** by adopting a shared onshore footprint for SEP and DEP.



SEP and DEP could generate enough electricity to power **820,000 UK homes**.



For the onshore elements of SEP and DEP, we will work with stakeholders to identify good projects with the aim of delivering a positive contribution to biodiversity, such as woodland planting, field boundary improvements and grassland habitat restoration.

#### Components of a typical offshore wind farm

The graphic below provides an overview of the typical components of an offshore wind farm.

- **1.** Offshore wind turbines and interarray cables
- 2. Interlink cables
- **3.** Offshore substation(s) (Alternating Current (AC))
- **4.** Offshore export cables

- Equinor onshore substation(s)
   Existing National Grid Substation
- Existing National Grid power lines
   UK homes
- 5. Cable landfall and onshore export cables

  Image: Control of the second secon



# **About Equinor**

Equinor is a broad energy company that has been operating in the UK for over 35 years and is the UK's largest energy supplier.

In the UK, we currently power around 750,000 homes through our three wind farms: Sheringham Shoal, Dudgeon, and the world's first floating wind farm, Hywind Scotland.

As a key contributor to the UK's efforts to meet its net zero carbon target, Equinor is leading the way in decarbonisation. Equinor supports the UK economy, investing billions of pounds in crucial energy infrastructure, employing over 650 people based in the UK, and working with over 700 suppliers across the country.

Equinor's plans for SEP and DEP will double its offshore wind capacity off the coast of Norfolk. Equinor will also operate Dogger Bank, the largest offshore wind farm in the world, off the North East coast of England. When complete it will be capable of generating around 5% of the UK's electricity demand.

#### Dudgeon Offshore Wind Farm and Sheringham Shoal Offshore Wind Farm



**Dudgeon Offshore Wind Farm** is owned by Equinor, Masdar and China Resources. **Sheringham Shoal Offshore Wind Farm** is owned by Equinor, Equitix and Green Investment Group.



Both wind farms have established community funds of **£100,000** per year which in total have awarded over £1 million to projects in Norfolk.



The funds were set up to provide grants to **Norfolk community groups**, including schools and non-governmental organisations (NGOs), seeking financial assistance for initiatives that focus on renewable energy, marine environment and safety, sustainability, or education.

# Supporting coordination in offshore wind

The UK Government has set a target of reaching net zero by 2050, with the goal of producing 40 gigawatts (GW) of offshore wind by 2030 to support this aim. However, they have also recognised the need to balance these goals with the desire for greater coordination in the sector.

Equinor is fully supportive of efforts for greater coordination and we are continuing to work with trade body RenewableUK, the teams at the Department for BEIS, Ofgem and National Grid, to feed into the Government's ongoing Offshore Transmission Network Review (OTNR).

Our preferred option is to develop SEP and DEP as an integrated project, with an integrated grid option, providing electrical infrastructure which services both wind farms. This strategic approach will particularly benefit the planning and construction of the electrical infrastructure system, and is likely to reduce the overall environmental impact, as well as responding to concerns regarding the lack of a holistic approach to offshore wind development in general.

However, because each project has different ownership, a separated grid option (i.e. infrastructure which allows each project to transmit electricity separately) will allow SEP and DEP to be constructed in a phased approach, if necessary. Therefore, the DCO application will seek consent for alternative development scenarios, including the development of either SEP or DEP in isolation, or both SEP and DEP developed together; either at the same time or one after the other.

To find out more about how Equinor is supporting offshore wind industry coordination, please visit our virtual exhibition.

## The consultation process

SEP and DEP each have an expected generating capacity greater than 100 MW and as such are classified as Nationally Significant Infrastructure Projects (NSIPs).

We must therefore apply for a DCO through the NSIP planning process. The DCO application will be dealt with by the Planning Inspectorate (PINS), the agency responsible for managing the examination process for NSIPs. If accepted, it will then be examined by an independent Examining Authority Panel, which will make a recommendation to the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS). Finally, the SoS will review and comment on this before making a decision on whether to grant a DCO.

#### To develop our proposals, we have considered:



 Feedback from statutory consultees such as your local council,
 local representatives, local interest groups and residents throughout our consultation area.



Feedback from community members interested in the onshore substation, landfall search area, onshore cable corridor, and offshore proposals.



Findings from environmental, technical and feasibility studies.

Since May 2018, we have undertaken a series of environmental studies and assessments as part of the Environmental Impact Assessment process. These have informed the Preliminary Environmental Information Report (PEIR), which is available as part of our phase two consultation.

During this consultation, **between Thursday 29 April and Thursday 10 June 2021**, we are inviting you to provide feedback on our refined proposals. This is your opportunity to influence the project prior to submitting our DCO application at the end of 2021.

# Viewing and commenting on our proposals

From **Thursday 29 April**, all consultation documents, the Preliminary Environmental Information Report (PEIR) and associated plans, maps and reports will be available electronically on the SEP and DEP website.

You can access our consultation material and provide your views in the following ways:



**Virtual exhibition:** visit our virtual exhibition to view information about SEP and DEP. Go to our consultation website or visit **event.sepanddep.co.uk**.

**Consultation website:** our consultation website is live for you to find out more information about SEP and DEP and to provide your feedback online at **sepanddep.commonplace.is**.

**By post:** you can also fill out the feedback form included with this leaflet and post it back to us free of charge using the envelope provided.

You can also **email us, call us or write to us** using the details on the back page of this leaflet.

#### Consultation accessibility and requesting consultation documents

If you wish to read our PEIR in full and do not have access to the internet, we will send you a USB preloaded with all our PEIR documentation. Additionally, we can send hard copies of phase two consultation documentation, such as the PEIR non-technical summary, PEIR boundary plans, virtual exhibition boards, and our consultation leaflet and feedback form.

Consultation documents are also available in large print, audio or braille. Hard copies of the totality of PEIR chapters are also available if required, for a set charge.

Please get in touch via the contact details on the back of this leaflet to enquire about PEIR USBs or other hard copy documentation.

## **Community Q&As**

We are holding a series of virtual Q&A sessions during our phase two consultation period to provide you with the opportunity to learn about our proposals from the project team and ask them your questions.

These events will be themed around different aspects of our proposals that have been highlighted by the community as important. However, if you are unable to attend your preferred event, your questions will be answered at any session.

The Q&As will be held through an accessible online platform, with the option for attendees to dial in via phone. The Q&As will be attended by the SEP and DEP project team, and presentations on the Q&A topics are available to watch via our consultation website prior to the Q&A.

A detailed step-by-step guide for how to access our community webinars, along with webinar links, telephone dial-in details and topic presentations, is available on our consultation website: **sepanddep.commonplace.is** 

#### Community Q&A topics and dates

Onshore substation and the grid connection **11 May, at 2pm-3pm** 

Landfall 18 May, at 6pm-7pm

Onshore cable corridor 25 May, at 10am-11am

Offshore proposals and seascape impacts 27 May, at 6pm-7pm

Onshore cable corridor 2 June, at 6pm-7pm



If you have any questions about our community Q&As, please get in touch via the contact details on the back of this leaflet.

# What we are consulting on

During our formal consultation, we are seeking your feedback on our proposals to help us refine them further, prior to the submission of our DCO application at the end of 2021. This includes our environmental survey and assessment work, proposed mitigation solutions and project infrastructure proposals.

Key areas we are requesting your feedback on include:

- Refinement of the 200 metres wide onshore cable corridor
- Our preferred options for onshore construction compound locations
- Refinement of the landfall working area
- Landfall cable corridor routing proposals
- Shortlisted onshore substation site options
- Onshore substation access options
- Offshore array area and seascape views





#### Onshore cable corridor

We have now identified an onshore cable corridor between landfall and the onshore substation that is typically 200 metres wide, as shown in figure 1. This has been refined after careful consideration of phase one consultation feedback, inputs from landowner discussions, environmental surveys, and engineering studies. For more information on how we have defined our onshore cable corridor, please view our previous updates in our documents library: via our consultation website **sepanddep.commonplace.is**.

The main principles that have informed the refinement of the onshore cable corridor include:

- avoiding populated areas
- avoiding key sensitive features where possible
- a preference for the shortest route

Following phase two consultation, the onshore cable corridor will be further refined to a width of 60 metres for the DCO application (except for trenchless crossing zones, such as main rivers and A roads where the width will be 100m). This will be informed by phase two consultation feedback, as well as further technical studies and ongoing environmental survey and assessment work.

For the onshore elements of SEP and DEP we are currently exploring opportunities for net gain and will work with stakeholders to identify good projects with the aim of delivering a positive contribution to biodiversity, such as woodland planting, field boundary improvements and grassland habitat restorations as possible measures to achieve this commitment. We are welcoming suggestions on relevant environmental initiatives to assist our aim of reaching biodiversity net gain during this consultation.

#### Your feedback:

We are asking for your feedback to help us refine this onshore cable corridor further, prior to our DCO application submission. Please provide your feedback on our onshore cable corridor PEIR boundary via our interactive map, where you can search specific locations and pin your comments to the map: **sepanddepmap.commonplace.is** 

#### **Choosing compound locations**

Temporary construction compounds are required to support the onshore cable installation. This will include several secondary compounds along the onshore cable corridor, and up to two main compounds for project offices, welfare facilities, staff parking, and material and equipment storage. In addition, the landfall and substation works would have their own dedicated construction compounds.

We are still in the process of identifying locations for the construction compounds. Key criteria for identifying potential main compound locations include areas with existing infrastructure to reduce the need for initial site establishment works, and suitable access to and from the compounds to reduce disruption to the local road network. The total size of the main compound(s) will be up to 60,000 metres squared, approximately 14.8 acres, however it may be preferable to use two smaller sites, which could potentially reduce traffic impacts from being concentrated in one area. A main compound site selection report, with more details on the criteria used and specific construction compound locations, can be viewed on our virtual exhibition at **event.sepanddep.co.uk**.

At this stage, a number of secondary compound locations have been identified, and we have also shortlisted four preferred locations for the main compound, from which we will choose up to two main compound locations, as shown in figure 1:

- A1067 Fakenham Road
- A1067 Norwich Road
- Woodforde Farm
- RAF Oulton

#### Your feedback:

We are asking for your feedback on our four shortlisted sites for the main compound. Additionally, we are welcoming suggestions of additional main compound locations which may be suitable for SEP and DEP. These should be areas larger than 20,000 metres squared, approximately 6.2 acres, with existing hard-standing, located in proximity to the onshore cable corridor.

You can give your feedback through our hardcopy feedback forms or via our consultation website here: **sepanddep.commonplace.is** 

#### **Onshore substation**

Equinor has been offered a grid connection at Norwich Main Substation by National Grid. Following an extensive site selection and refinement process, we have identified two preferred site options for the onshore substation, based on your phase one consultation feedback, and environmental and technical assessment, as shown in figure 2. To find out more on the full site selection process, please visit our virtual exhibition.

A number of factors have influenced the selection of the two preferred sites. Both sites are close to the existing Norwich Main Substation and benefit from existing screening that restricts views from surrounding areas. The sites also allow sufficient space for the Hornsea Project Three connection to Norwich Main Substation.

The onshore substation will require an operational area of up to 6.25 hectares, which will be large enough to accommodate the electrical infrastructure for both SEP and DEP. We will use feedback from our phase two consultation, along with technical, environmental and landscape considerations, to bring forward one site option as part of our DCO application.

As part of our Environmental Impact Assessments, we have carried out a Landscape and Visual Impact Assessment (LVIA). The LVIA has considered the potential visual effects of the onshore substation from a number of viewpoints, which have been agreed with the relevant local authorities and other stakeholders. Visualisations of the onshore substation site options have also been prepared for this consultation from a selection of viewpoints. View our onshore substation photomontages on our virtual exhibition.

#### Your feedback:

We want to understand your views on our onshore substation proposals, including: the locations of the two site options for the onshore substation; factors to consider in refining our site access proposals; and the onshore substation visualisations.

You can give your feedback through our hardcopy feedback forms or via our consultation website here: **sepanddep.commonplace.is** 

#### **Onshore substation access**

Onshore substation access during both construction and operation is an important consideration for determining the final onshore substation location.

Our preferred access option is entering via the existing National Grid Norwich Main Substation access, however this would need to be managed carefully to avoid impacting existing operations at the Norwich Main Substation. Work is ongoing with National Grid to establish the best solution for substation access. As part of this we are also considering the value of other access options, which could be temporary or permanent.

Read more about the onshore substation access proposals in our virtual exhibition. We will refine our proposals using phase two consultation feedback, alongside ongoing technical, environmental and landscape considerations. Our final access proposals may include one access route or a combination of the shortlisted routing options.

![](_page_7_Figure_12.jpeg)

## Landfall

Following our selection of Weybourne as the landfall location we have refined our proposals further. To find out more about how we refined our proposals to this point, please view our previous updates in our documents library on our consultation website: **sepanddep.commonplace.is** 

Since our phase one consultation, through technical assessments and working with local stakeholders, we have identified a preferred landfall location to the west of Weybourne beach car park at the Muckleburgh Military Collection.

This location benefits from favourable conditions for Horizontal Directional Drilling (HDD) to install cable ducts beneath Weybourne beach, minimising disruption to the shoreline. Additionally, the Muckleburgh landfall location minimises the need for site access works that would otherwise be required for landfall to the east of Weybourne.

We are in the process of refining the onshore cable corridor routing from Weybourne to Bodham. Our goal is to select the best route from a balance of technical, environmental and landscape considerations, whilst minimising disruption to local communities. Refinement will be based on a balance of technical and environmental considerations, your phase two feedback and further survey results, such as ground conditions surveys.

Currently, we are considering three routing options. For more information about our landfall routing options, please visit our virtual exhibition.

#### Your feedback:

We want to understand your views on our refined landfall location at the Muckleburgh Military Collection, and what you think is important for us to consider when refining our onshore cable routing options from Weybourne to Bodham.

You can give your feedback through our hardcopy feedback forms or via our consultation website here: **sepanddep.commonplace.is** 

Offshore array area and seascape views

SEP and DEP will be located approximately 14 kilometres (8.7 miles) and 25 kilometres (15.5 miles) offshore at the nearest point to shore, respectively. We are investigating offshore generating areas of up to 196 kilometres squared in total, where 30 to 56 turbines could be located. Each offshore turbine could be between 14 and 26 megawatts (MW) in capacity and be between 246 and 330 metres in height.

A Seascape Visual Impact Assessment (SVIA) has been included in our PEIR. This considers the potential visual effects of SEP and DEP from a number of coastal viewpoints, which have been agreed with the relevant local authorities and other stakeholders. Visualisations of the proposed offshore array areas can be viewed on our virtual exhibition.

#### Your feedback:

We want to hear your comments on the offshore array area proposals presented as part of our PEIR.

You can give your feedback through our hardcopy feedback forms or via our consultation website here: sepanddep.commonplace.is

![](_page_9_Figure_6.jpeg)

0

![](_page_9_Figure_7.jpeg)

# Environmental Impact Assessment (EIA) process

EIA is a process to allow stakeholders and the community to develop an informed view of the impacts that a proposed development may have, both on the environment and on people. Impacts can be positive or negative and it is our responsibility to seek to enhance positive impacts and reduce negative impacts. Reducing negative impacts can be achieved through project design decisions (also known as embedded mitigation) and also through proposing additional mitigation measures to avoid impacts or reduce them to acceptable levels.

The preliminary EIA findings for SEP and DEP are reported within the PEIR, which is being consulted on as part of our formal phase two consultation.

The PEIR has been informed by site specific surveys, desk based studies, and consultation with relevant stakeholders. All potential impacts of the construction, operation and decommissioning of SEP and DEP have been identified across a wide range of onshore and offshore topics, and an assessment made on the significance of each potential impact.

You can view further PEIR documentation via our virtual exhibition including a non-technical summary and the full suite of PEIR technical documents.

Additionally, as the full PEIR is a large and technical document, we have provided summaries of some of the key chapters in our virtual exhibition.

Visit our virtual exhibition and view the PEIR here: **event.sepanddep.co.uk** 

![](_page_10_Picture_7.jpeg)

![](_page_10_Picture_8.jpeg)

# Our consultation process

We have been inviting feedback from the community throughout the development of SEP and DEP.

We will have held two phases of community consultation to help inform the development of our plans for SEP and DEP before we submit our DCO application.

Following phase two consultation, we will continue to engage with the community. We will publish a Consultation Summary Report, outlining the feedback received at phase two consultation and how we have considered this. We will also continue to hold stakeholder forums with key parish councils to help us continue to refine our proposals.

To apply for planning permission for SEP and DEP, we are required to submit an application for a DCO to the Planning Inspectorate. As part of our DCO application we will submit a comprehensive Consultation Report which records and reports all of the feedback we have received, and how our final application has had regard to this.

![](_page_11_Figure_5.jpeg)

# **Stay informed**

#### Community Liaison Officer

![](_page_11_Picture_8.jpeg)

All our communication channels overleaf remain open for you to get in touch and ask any questions. You can also contact our Community Liaison Officer (CLO), Nigel Tompkins, who is based locally and available to answer any questions about SEP and DEP.

Should you wish to speak to Nigel or meet with him, please contact him using the details below:

Email: nigel@ni4b.co.uk

Telephone: 01263 822427 or 07860 206565

#### Landowner interests

If you are a landowner, have an interest in any of the land which interacts with our proposals, or if you have any questions relating to land interests in the area, please contact the SEP and DEP Land Team at Dalcour Maclaren by:

![](_page_11_Picture_15.jpeg)

Calling: 01869 352725

![](_page_11_Picture_17.jpeg)

Emailing: equinor.ukextensions@dalcourmaclaren.com

Alternatively, you can write to Simon Hinchliffe or Rhiannon Price at: Dalcour Maclaren, 1 Staplehurst Farm, Weston on the Green, Oxfordshire, OX25 3QU

# **Contact** us

You can get in touch with our community relations team at any time by any of the methods below:

![](_page_12_Picture_2.jpeg)

Send us an email: info@sepanddep.co.uk

![](_page_12_Picture_4.jpeg)

Call our Freephone information line: 08081 963 673

![](_page_12_Picture_6.jpeg)

Visit our website: sepanddep.commonplace.is

![](_page_12_Picture_8.jpeg)

Visit our virtual exhibition: event.sepanddep.co.uk

![](_page_12_Picture_10.jpeg)

Send us a letter: FREEPOST DUDGEON AND SHERINGHAM EXT

Should you require this document in large print, audio or braille then please contact us using the details provided.

This document was sent in compliance with GDPR regulations. Your personal data will be stored in compliance with GDPR by Equinor and will not be shared with third parties. Your details may however be passed on to the Planning Inspectorate to ensure that our pre-application consultation is sufficient and in line with the planning process. We are available to answer any questions regarding GDPR compliance through the contact details above.

![](_page_12_Picture_14.jpeg)

Follow us on Twitter: @Equinor\_UK #SEPandDEP

All image and graphics for illustrative purposes only. For all sources please visit our website or contact a member of our team. This has been printed on FSC certified paper.