TARCHON

NON-STATUTORY CONSULTATION INFORMATION BOOKLET

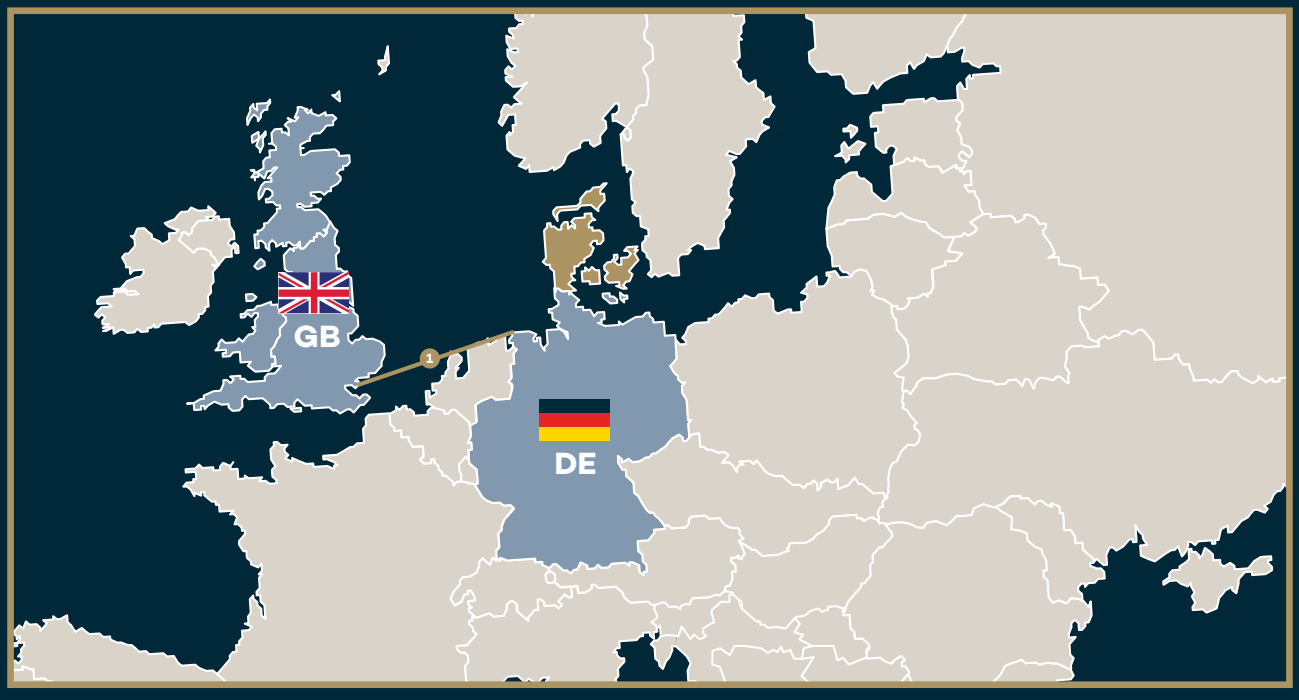
PURPOSE OF THE BOOKLET

This booklet provides a detailed overview of our non-statutory consultation information.

We are in the early stages of planning the Tarchon project. By engaging and speaking with local communities throughout the project evolution, we plan to develop our proposals with your knowledge and feedback in mind.

In this booklet you will find information about:

- What Tarchon is, and why it is needed
- The proposed project infrastructure (onshore and offshore)
- The process of our site selection, and our next steps
- How our project will deliver community benefits
- The timeline and consenting process for Tarchon
- How you can provide your feedback



We welcome your views on how best to engage with you and your community moving forward.

ABOUT TARCHON

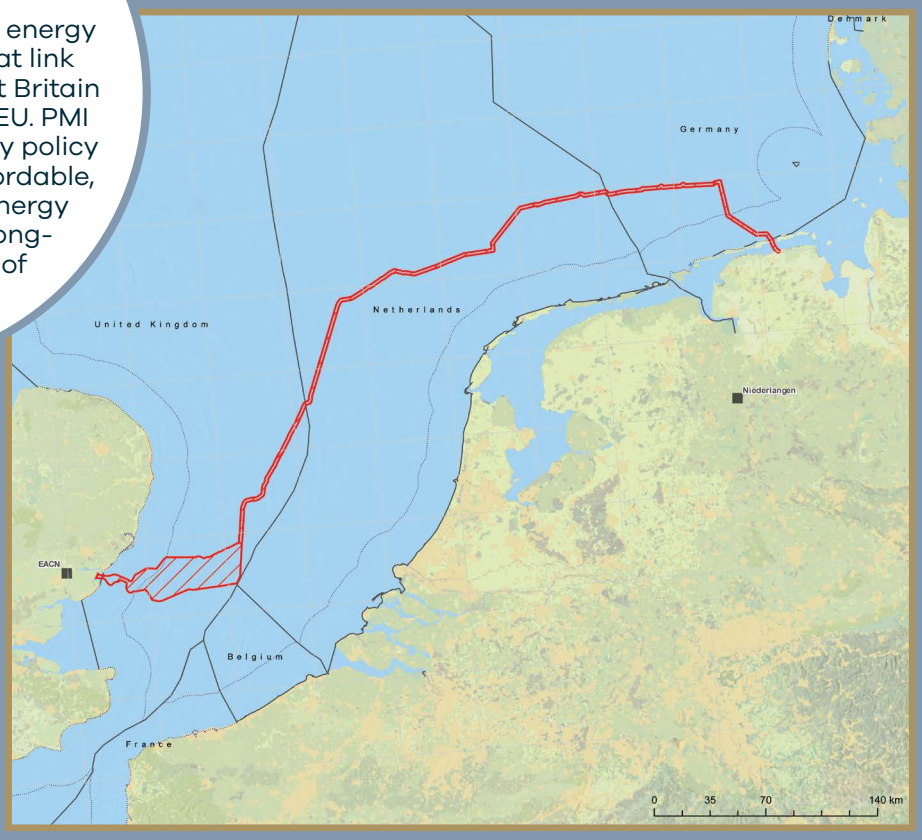
Tarchon will create a direct power link between Germany and Great Britain, connecting the two countries' energy markets and increasing the security and reliability of their electrical systems and energy demand. If one country has a surplus of energy and the other has a shortage, this energy can be transferred to help meet the needs during this time, and vice versa.

National Grid has proposed a new East Anglia Connection Node (EACN) 400 kV substation in Tendring, where Tarchon has been offered a grid connection.

In November 2024, Ofgem confirmed its support for the Tarchon project to proceed and participate in the regulatory process, noting that it is in the interest of Great Britain's consumers.

Tarchon is a project of mutual interest (PMI).

These are key cross-border energy infrastructure projects that link the energy systems of Great Britain and other countries in the EU. PMI projects help achieve energy policy and climate objectives: affordable, secure and sustainable energy for all citizens, and the long-term decarbonisation of the economy.



ABOUT TARCHON

Tarchon is being developed by Copenhagen Infrastructure Partners (CIP), a global leader in renewable energy investments.

CIP manages 12 funds and has to date raised approximately EUR 31 billion for investments in energy and associated infrastructure from more than 180 international institutional investors.

Volta Partners has a minority ownership stake in Tarchon Energy Limited. The team has experience developing transmission lines and interconnectors, including the 1.4GW NeuConnect interconnector between Great Britain and Germany.

Please visit **www.cip.com** for more information.

Entrepreneurship

We are industrial pioneers with an entrepreneurial mindset.

Relationship & solution-oriented

We build trust-based relationships with a solution-oriented approach.

Cross-functional teams

We work in teams where complementary skillsets enable fast and robust decision-making.

Investor alignment

We make long-term commitments in alignment with our investors.

Diligence

We work thoroughly and diligently to be well prepared.

Result-oriented

We are result-oriented and continue until things are done.

COPENHAGEN INFRASTRUCTURE PARTNERS

€31 bn[1]

accumulated raised capital from ~180 institutional investors since establishment of CIP in 2012

12 funds

including five CI Flagship Funds and specialised funds focused on advanced bioenergy, Power-to-X, and high-growth markets

1,900+

professionals[3] worldwide covering 400+ people employed in CIP and 1,500+ people employed across projects

Strong investment performance

with expected returns above target across funds, utilising CIP's industrial greenfield value creation approach towards de-risking investments with disciplined capital deployment

~16 GW
in operation or construction

~160 GW[4]
in development

with a market leading and pioneering investment pipeline of offshore wind, Power-to-X, solar PV, onshore wind, and other renewable technologies

Dedicated climate impact profile

~17m tons CO_2e avoided each year
(equivalent to more than ~60% of total Denmark's CO_2e)

INTERCONNECTORS

The UK has clear, legally binding targets for producing 95% of its energy from clean sources by 2030 and reducing its carbon emissions to net zero by 2050.

To meet its net zero ambitions, the UK needs to connect large volumes of renewable energy resources in the next decade, particularly offshore wind.

Electricity interconnectors are physical links that allow electricity to flow between two countries or regions. Interconnectors help to smooth out the peaks and troughs of demand on the electrical system.

Interconnectors are vital for integrating renewable energy into the grid. They help manage the variability of renewables by allowing power to be shared and reduce the risk of blackouts when local generation is insufficient.

Interconnectors enhance grid reliability, for example if a region experiences a fault or a sudden surge in demand, electricity can be imported through the interconnector to stabilise the grid.

Tarchon has a capacity of 1.4 GW – this will power up to 1.5 million homes.

Through interconnection, energy bills are decreased as interconnection helps to bring down wholesale energy prices.

At either end of an interconnector, there are converter stations that convert electricity between direct current (DC) and alternating current (AC), depending on the needs of the connected grids.

Most interconnectors use High Voltage Direct Current (HVDC) because it is more efficient for transmitting electricity over long distances. AC electricity from the local grid is converted to DC at the sending end, transmitted through the interconnector, and then converted back to AC at the receiving end.

PROJECT OVERVIEW: ONSHORE

Tarchon is proposed to connect to the UK national grid through the proposed East Anglia Connection Node (EACN) 400 kV substation.

Site selection and feasibility work has been completed identifying the preferred zone for the converter station to be located.

How did we choose the proposed zone?

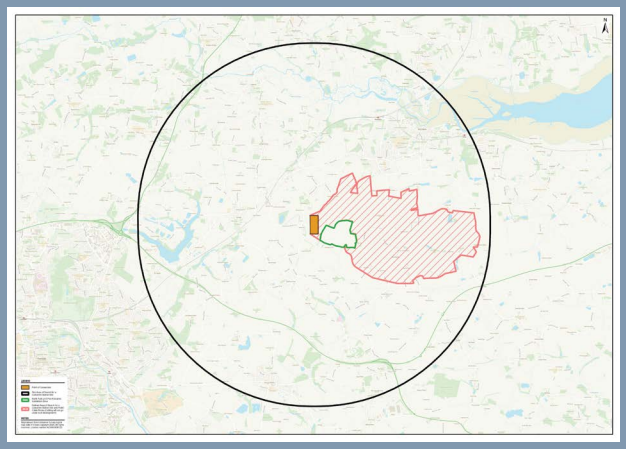
- 5km search area around the proposed National Grid East Anglia Connection Node (EACN) to avoid electrical losses
- Sites to the east of the point of connection to reduce excessive cabling between the converter and the EACN
- 10ha of available land to minimise our footprint
- Within proximity to main road networks to minimise disruption during construction
- Considerations of proximity to protected sites and other environmental constraints

Underground cabling (referred to as HVAC cabling) is proposed to connect the Tarchon converter station to the EACN.

Tarchon plans to engage the local community in this design process, and we welcome your views on ways we can get you involved.

CREDIT: BLYTH CONVERTER STATION

The proposed converter station will be a collection of buildings within which electricity can be converted from High Voltage Alternating Current (HVAC) to High Voltage Direct Current (HVDC) and vice versa. This would allow electricity imported from either country to be accepted into the local distribution grid networks.

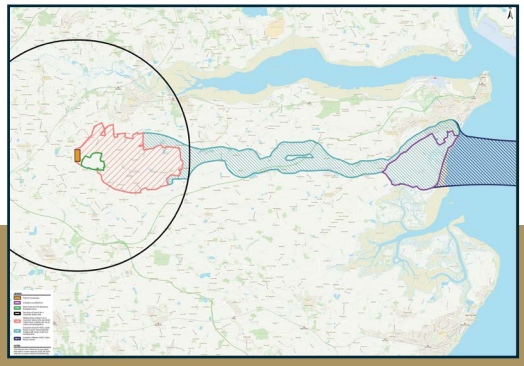


PROJECT OVERVIEW: ONSHORE

Underground cabling from the converter station will be required to transport the electricity to landfall.

The cables will make landfall at a proposed location south of Harwich – the final location is still to be determined within the landfall zone on completion of detailed surveys.

The selection of the underground cable corridor is underway. Tarchon has identified a 600 metre wide corridor. It represents the shortest route between the converter station zone and the landfall zone.



As all cabling will be underground, there will be no pylons or overhead lines.

The final cable route will be much narrower and no cabling will go under built development. Feedback is welcomed on key considerations within the current corridor.

THE LANDFALL ZONE

The landfall is proposed to be an area south of Harwich. This area was identified following a detailed and complex appraisal of environmental, social, physical and technical factors relating to both the onshore and offshore elements of the project, including but not limited to:

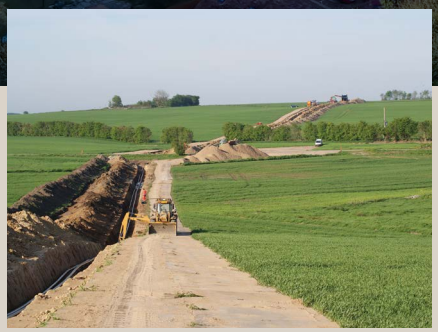
- **Existing and proposed infrastructure**
- **Fisheries**
- **Protected sites**
- **Navigational features**
- **Ground Conditions**

There will be no permanent building at landfall, although there would be temporary disruption during the project construction.

PROJECT OVERVIEW: ONSHORE

Bringing the interconnector cable onshore uses the latest engineering innovation to be precise and minimally disruptive to the area.

Tarchon will conduct a range of feasibility studies to identify the final cable route.



EXAMPLE CABLE ROUTE CONSTRUCTION.

EXAMPLE LANDFALL CONSTRUCTION SET UP CREDIT: GREENLINK

To construct the cable corridor, Tarchon will predominantly use mechanical excavators, with a technique known as Horizontal Directional Drilling (HDD) used to cross sensitive features. This specialised engineering enables the project to work with physical constraints and sensitive features such as rivers, railways and roads.

Installing the cables involves laying them within ducts or directly into the trenches. The excavated soil material will be used to cover up the trenches.

During construction, Tarchon will protect the site area. For example, installing protective fencing around sensitive areas such as ancient woodlands and wildlife habitats such as badger sets.

Construction areas will have a traffic management plan to minimise impacts on the local road networks.

A Construction Environmental Management Plan (CEMP) will be in place for the duration of the project. This provides measures such as erosion and sediment control and waste management.

Post construction, Tarchon will implement a plan to remove all construction assets including haul roads and return the land to its original use, for example, replacing all the topsoil. Monitoring of the environment such as crop establishment and habitat recovery will also be in the plan.

A drainage consultant will be brought on board in 2025 to work with local landowners.

A community liaison manager will be appointed to support open communication with people.

PROJECT OVERVIEW: ONSHORE SURVEYS

A range of surveys will be undertaken at the converter station site, along the proposed cable corridor, and at the proposed landfall location. These surveys will be undertaken during species-specific survey periods from March 2025 to summer 2026.

Ecology surveys for habitat classification; flora, wintering and breeding birds, bats, otter, water vole, badgers, dormouse, reptiles, amphibians (including great crested newt), fish and aquatic invertebrates. These will involve surveyors walking over land.

Traffic counts to identify existing levels of traffic on the local road network. Monitoring equipment will be placed at various locations on the local road network including routes proposed to be used by construction traffic.

Surveys to monitor current background noise levels and assess potential impacts of the project. Noise monitoring equipment will be placed at public locations close to residential and community areas.

Surveys to identify the location and condition of trees and determine whether any are ancient or veteran. This will enable the project to avoid unnecessary removal of trees.

Geophysical surveys to determine the potential archaeology beneath the land surface. The survey requires walking over land with sensor equipment.

Landscape walkover from publicly accessible locations to take photographs of the existing landscape and key views during summer and winter.

Walkover survey of watercourses and crossing locations to note the physical characteristics of these features.

Other walkover surveys as required to allow the Tarchon project to better understand the existing local environment.

The survey results will contribute to the final decision for the location of the infrastructure and design parameters of the project.

The survey results and assessments will be presented in the preliminary environmental information report and/or the environmental Statement depending upon the time of data collection. These reports will be available to view on the project website and made available via the planning inspectorate at that time.

PROJECT OVERVIEW: OFFSHORE

Identification of an offshore HVDC cable corridor is underway across all marine territories.

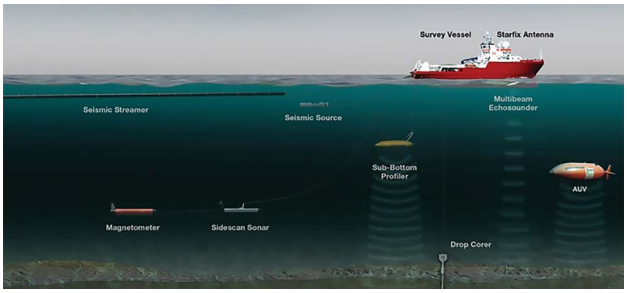
We are currently appraising options, following best practice guidance set out by The Crown Estate and National Grid. Additionally, we are holding discussions with key marine stakeholders such as the Harwich Haven Authority, fisheries organisations and the Maritime and Coastguard Agency (MCA) to confirm the optimal route.

The North Sea is complex with shipping operations in the area, fishing activities, and other projects such as existing and proposed offshore wind farms. Tarchon is working with the other developers to minimise cumulative impacts where possible.

Marine surveys are needed to ensure Tarchon understands the characteristics of the seabed and its environmental sensitivities.

Initial surveys will gather information about the physical characteristics of the seabed and its underlying geology. These surveys will also collect sediment samples that will be analysed in a specialist laboratory to characterise the benthic ecology that the seabed supports.

GEOPHYSICAL SURVEY VESSEL - LIVVI WIND FARM. CREDIT: GARDLINE



EXAMPLE TYPICAL SURVEY EQUIPMENT.

"Benthic" refers to the ecological region at the lowest level of a body of water, such as an ocean, lake, or river, including the sediment surface and some sub-surface layers. This zone is home to benthic organisms, or benthos, which live on, in, or near the seabed.

Tarchon expects to carry out these surveys in UK waters in summer 2025. This target timetable is still subject to ensuring all required permits are secured ... and of course the weather!

OFFSHORE CONSTRUCTION

56m maximum water depth

Interconnector cables often require crossing the sea and can be laid in very deep waters and stretch for hundreds of miles along the seabed, a remarkable engineering feat!

This year, Tarchon will conduct a series of surveys that will analyse the seabed and sub-seabed composition as well as the marine environment to inform the best option for laying and protection of the interconnector cable. After the surveys are completed, detailed design and micro siting of the cable route will take place.

UXO Surveys (Unexploded Ordnance)

There is a potential to encounter UXOs due to historical military activity in the region. Tarchon will undertake all necessary UXO studies and surveys prior to further construction activities to identify any potential UXO's for avoidance or clearance, as a last resort.

CONSTRUCTION WILL TAKE PLACE IN STAGES:

STAGE 1
UXO clearance and disposal

STAGE 2
Dredging and boulder clearance

STAGE 3
Cable installation

HOW DO WE LAY THE CABLES?

Cable burials can take place via trenching, ploughing, or jetting methodologies depending on the local seabed conditions.

Trenching consists of using machines to dig precisely in hard soil and clay and create trenches with consistent width and depths.

Ploughing consists of making a trench in the seabed for the cable and covering it with the original soil material.

Jetting involves the injection of pressurised water into the seabed which allows the cables to sink and be covered by settling seabed material.

Along the cable route, the Tarchon cable will cross other subsea cables and infrastructure. To protect the cables, layers of rocks can be used to separate them.

CONSENTING PROCESS

Although the Secretary of State determines the application; MMO, Tendring District Council and Essex County Council are statutory consultees, and we are already liaising with these authorities along with Parish Councils.

Tarchon has asked the Secretary of State for the Department of Energy Security and Net Zero for the interconnector to be considered a Nationally Significant Infrastructure Project (NSIP).

Under legislation (the Planning Act 2008), NSIPs are developments which require Development Consent Orders (DCO) to be granted by the Secretary of State for the Department of Energy Security and Net Zero.

THE SIX STEPS OF THE DCO PROCESS ARE:

1. Pre-application (where we are now)

Before an application is submitted, we will carry out a minimum of two consultations; an early (non-statutory) consultation (this event) followed by a statutory consultation. Following other application activities including EIA Scoping and the PEIR, we will submit our DCO application in late 2026.

2. Acceptance

After an application is submitted, the Planning Inspectorate has 28 days to decide whether it meets the standards required to be accepted for Examination.

3. Pre-examination

During this stage you can register as an Interested Party by making a Relevant Representation, which is a written summary of your views. Inspectors are selected, who then hold preliminary meetings and set out the timetable for Examination.

4. Examination

The Planning Inspectorate has a six-month period to carry out the Examination. This is mostly a written process, and those who have registered as Interested Parties will be invited to provide further information in writing. There will also be open floor hearings, which the public can register to speak at.

5. Decision

The Planning Inspectorate has three months to prepare a report, which includes a recommendation. The Secretary of State then has a further three months to issue a decision.

6. Post-decision

In the event of a positive decision by the Secretary of State, a DCO would be granted (or 'made' as it is a form of legislation). Tarchon would take a final investment decision and then discharge requirements and comply with the powers and provisions of the DCO.

The project will complete detailed Environmntal impact assessments, should any significant impacts be identified through this process mitigation measures will be proposed.

SHARING THE BENEFITS OF TARCHON IN THE COMMUNITY

We are committed to creating long term, tangible community benefits as part of the project development, such as improving skills and education locally.

We will complete social value and economic assessments to inform our plans and create meaningful opportunities for the community.

Tarchon will use the experience of other CIP projects to develop initiatives. For example:

Ossian Wind Farm has committed to collaborating with University of Highlands and Islands (UHI) and fellow ScotWind projects to support the expansion of STEM across the country to ensure we can build a skilled workforce for the future of offshore wind.

Pentland Floating Offshore Wind Farm is supporting an Education and Training Fund, which provides scholarships to select students from Thurso and Farr High Schools who are going on to higher education and training courses focused on Science, Technology, Engineering, Maths and Renewable Energy.

CREDIT: PENTLAND FLOATING OFFSHORE WIND FARM

Tarchon will endeavor to involve local suppliers throughout all procurement processes.

Most recently, local companies have been included in the offshore survey tender process.

NEXT STEPS

We want to work with the community to help us shape the project and we welcome your views too.

There are several ways you can share your feedback:

Complete a feedback form and pop it in the box at one of our non-statutory consultation events or post it to Freepost TARCHON ENERGY.

Visit the Tarchon website and complete a feedback form online.

Send us your views via email.

CONTACT US

For further information about the Tarchon project please contact:

Phone +44 (0)3 303 010079
Web: www.tarchonenergy.net
Email: info@tarchonenergy.net
Freepost TARCHON ENERGY

We will hold further consultations to seek your views on our more detailed proposals. Information will be published on our website and advertised locally.

TIMELINE

It will take two to three years to build.
The below sets out the outline project timeline.

Q1 2025:
non-stat public consultations and commencement of environmental surveys across all areas of the project

WE ARE HERE

Q2 2025:
*EIA Scoping

Q3/Q4 2025:
DCO **PEIR process

Q1 2026:
DCO statutory consultation

Q3 2026:
submission of DCO application for UK development.

2027:
Examination and determination of the DCO application. Submission of other permit applications in Netherlands and Germany.

2028:
work starts on constructing Tarchon

2032:
final stages of construction, project to be fully operational in line with Ofgem's backstop date.

* EIA (Environmental Impact Assessment)

** PEIR (Preliminary Environmental Information Report)