




Greenlink Interconnector Limited Consultation Report (Ireland)

3 August 2020



Greenlink
INTERCONNECTOR

ARUP

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1 Introduction

1.1 About the Project

- 1.1.1 Greenlink is a proposed subsea and underground electricity interconnector cable between the existing electricity grids in Ireland and Great Britain (GB), with a nominal capacity of 500 megawatts (MW). Greenlink will provide a new grid connection between EirGrid’s Great Island substation in County Wexford (Ireland) and the National Grid’s Pembroke substation in Pembrokeshire (Wales). The power will be able to flow in either direction, depending on supply and demand in each country.
- 1.1.2 Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland and GB with onward connections to continental Europe. The construction and development of Greenlink will deliver increased energy security, regional investment and value for money to consumers; and will enable the further integration of low carbon renewable energy sources.
- 1.1.3 Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe’s most important energy infrastructure projects and granting it the “highest national significance” possible.
- 1.1.4 Greenlink will consist of two converter stations - one located close to the Great Island substation in County Wexford and the other close to the Pembroke substation in Pembrokeshire - connected by two High Voltage Direct Current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.
- 1.1.5 DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore, the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.
- 1.1.6 Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built.

1.2 About us

- 1.2.1 Greenlink is being developed by Greenlink Interconnector Limited (“GIL”), which is owned jointly by Element Power Holdings, part of Hudson Sustainable Investment, and Partners Group on behalf of its clients. Hudson Sustainable Investment is an independent investment management firm with a strong track record and expertise in investing in and developing sustainable energy infrastructure projects in Ireland, the UK and internationally.

- 1.2.2 Partners Group is a global private markets investment management firm with €73 billion in investment programs under management in private equity, private real estate, private infrastructure and private debt.

1.3 Consultation requirements and responsibilities

- 1.3.1 Greenlink has been designated as a European Union Project of Common Interest (PCI) under European Union Regulation 347/2013 on guidelines for Trans-European Network for Energy (the TEN-E Regulations). As such GIL was required to prepare a Concept of Public Participation (CoPP) outlining how meaningful public consultation would be delivered throughout the development of Greenlink. The CoPP prepared by GIL, in line with the requirements of the Manual of Permit Granting Process Procedures for Projects of Common Interest, was approved by An Bord Pleanála in December 2019. The approved CoPP can be found in Appendix 1.
- 1.3.2 This Consultation Report aims to demonstrate compliance with the CoPP and outlines the public consultation strategy we have undertaken during the development process in Ireland.

Consultation strategy

- 1.3.3 Developers must proactively engage the public in order to facilitate a meaningful and genuine consultation.
- 1.3.4 Public consultation is an important part of the development process. In the context of infrastructure development, its key goals are to increase transparency and a wider involvement in large-scale projects by creating a dialogue with key stakeholders with the aim of improving these projects with stakeholder input.
- 1.3.5 GIL recognises that as the developer it is responsible for ensuring public consultation forms a core part of the development process and that the public has access to relevant information and can influence the decision-making process as appropriate.
- 1.3.6 GIL has fully complied with, and has gone beyond, the requirements of the TEN-E Regulation in designing and carrying out its consultation strategy.

Our approach

- 1.3.7 The Greenlink project team has aimed to ensure that the local community is consulted and involved throughout the development process of Greenlink and that the public has visibility of the proposal and the opportunity to input as it has evolved. The consultation process has been tailored to the specific needs of the local community in Wexford and delivered in a relevant and accessible manner.
- 1.3.8 Statutory consultation processes have been carried out in addition to the public consultation outlined in this Report.
- 1.3.9 GIL recognises that any type of development can have varying degrees of impact and interest for local communities and it is committed to promoting an open and honest dialogue with the local community throughout the development process. GIL sought to commence a public dialogue during the early stages of development before detailed environmental work was carried out, enabling it to draw on input

and enabling the local community to watch the project evolve and understand the various complexities and detailed studies involved in developing and constructing an electricity interconnector of this scale.

- 1.3.10 By involving the local community throughout the development process and providing information as it has become available, GIL has worked to ensure that the local community is part of the development of Greenlink.
- 1.3.11 GIL has recognised and been steered by the principles of the consultation process set out in the Manual of Permit Granting Process for Projects of Common Interest.
- 1.3.12 These various regulations and elements of policy helped to shape and inform GIL's approach to consultation, which is designed to ensure early engagement prior to submission of the various planning applications for Greenlink.

Consultation Report

- 1.3.13 This document is the consultation report required pursuant to Article 9(4) of the TEN-E Regulation. This document sets out GIL's approach to consultation and the steps it took to ensure public participation. This document also sets out the results of activities related to consultation with the public prior to the submission of the application file, including those activities that took place before the start of the permit granting process.

2 Consultation Delivery

2.1 Resourcing

- 2.1.1 Members of the Greenlink development and corporate teams have the expertise to engage and communicate with a variety of stakeholders on a range of development issues. This includes the Chief Executive Officer, Planning & Permitting Manager, Communications Adviser, Community Liaison Officer, Legal Counsel and planning and PR consultants as the key representatives for the consultation programme.
- 2.1.2 Throughout the consultation process GIL has ensured that this expertise has been made available consistently, and consultation has also been supported by GIL's consultants - Arup and Intertek. Where appropriate, additional third-party consultants have been brought in to support the Greenlink team to ensure that GIL has been able to cope flexibly with the peaks and troughs in consultation and to respond adequately to topic specific issues.

2.2 Contact details and availability

- 2.2.1 GIL has sought to ensure that it is easy for local stakeholders to contact and engage with the development team, publicising who the key representatives are for the project and ensuring there are named local contacts (the Planning and Permitting Manager and the Community Liaison Officer) who are available to respond to detailed enquiries and meet with representatives and individuals as required.

2.2.2 Contact details are publicised on the project website and a general email account has been set up to deal with enquiries: info@greenlink.ie. This is monitored regularly, and enquiries are responded to in a timely and appropriate manner.

2.3 Consultation tools used and resources produced

2.3.1 GIL has employed a number of different consultation tools during the consultation programme, publishing information to stakeholders in a variety of formats and in an accessible way. The precise deployment of the tools has reflected the requirements of stakeholders and feedback as the consultation progressed. The tools and resources have included:

- Project information leaflet (or “brochure”) as required by the TEN-E Regulation.
- Project website as required by the TEN-E Regulation, including summary.
- Public exhibitions
- Meetings with local councillors
- One-to-one engagement with stakeholders
- Roundtable meetings
- House visits
- Local and social media
- Public notices and adverts for consultation published in the media
- FAQs document

Project information leaflet (brochure)

2.3.2 GIL has produced four editions of the brochure to date: in May 2018, November 2018, June 2019 and December 2019. These provide a summary (15 pages or fewer) of the project details, with updates as the design and development has evolved. GIL has sought to make the information accessible and engaging through the use of images, illustration and infographics to accompany the text.

2.3.3 Copies of the brochure were made available at public exhibitions held in both Ireland and Wales between May 2018 and the present day. They have also been distributed to individual stakeholders, at industry events and meetings and a digital copy of each is available to view and/or download from the project website. Copies of the brochures are included in Appendices 2, 3,4 and 5.

2.3.4 The brochure satisfies the requirements of Annex 6(5)(a) of the TEN-E Regulation.

Project website

2.3.5 The project website was published on 21st April 2016 and is available to view here: www.greenlink.ie. It includes comprehensive information on the proposal, presented in a deliberately accessible way. The content is regularly updated as the development progresses and has recently undergone a refresh to ensure it continues to meet the needs of the company, the project and stakeholders.

- 2.3.6 As well as an overview of the project proposal, news of milestones, and downloadable resources, the website includes a dedicated section on Planning and Consultation, where visitors can view and download planning documents, find a list of exhibitions and consultation events and read a comprehensive set of Frequently Asked Questions. The website has clear information on how to contact the Greenlink team and engagement is explicitly encouraged. A website screenshot can be found in Figure 1.
- 2.3.7 The website satisfies the requirements of Annex 6(5)(b) and Annex 6(6) of the TEN-E Regulation, including clear access to the latest information brochure and summary of the project.

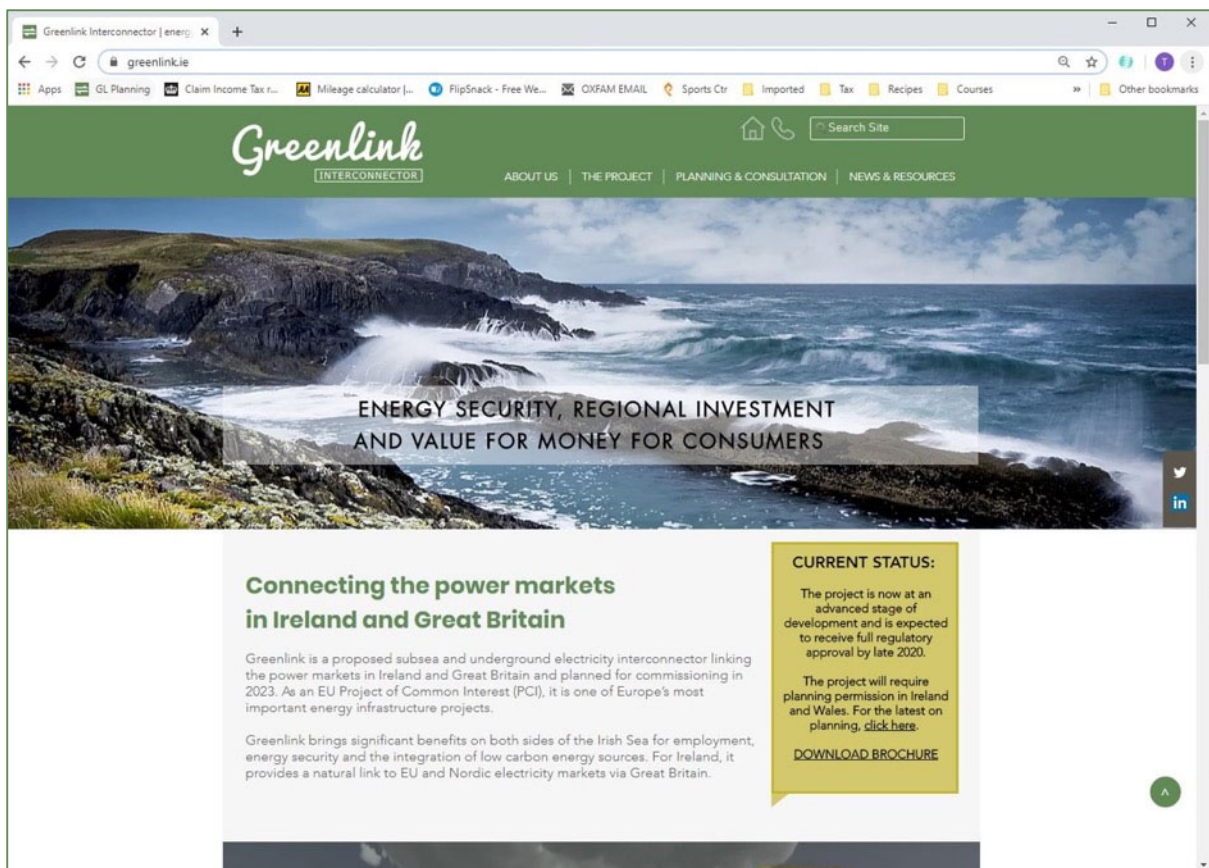


Figure 1: Project website screenshot

Public exhibitions

- 2.3.8 Four rounds of public exhibitions have so far been held in County Wexford. These have been designed to take place at key stages of the development programme to present the latest details of the project as the design has evolved. The exhibitions have enabled members of the local community to meet the project team in person, to ask questions and to feed back their views, many of which have influenced the design of the project. They have been held in public locations and at times of the day convenient for the local community.

- 2.3.9 A full list of public exhibitions held so far is presented in table 1 found in 3.1.
- 2.3.10 The materials at the exhibitions included display boards, brochures, maps and preliminary environmental and technical reports. The exhibitions were attended by the Planning and Permitting Manager and representatives from our consultants, along with other members of the Greenlink team, to ensure that the right level of expertise was available to the public.
- 2.3.11 Exhibitions have been publicised in advance through the local papers (see list in Local Media section below) with paid adverts and a press release for editorial coverage.
- 2.3.12 Stakeholder organisations and individuals, including elected representatives, have been invited to each round of exhibitions by letter and/or email.
- 2.3.13 The exhibition boards and advert for each round of public exhibition can be found in Appendices 6, 7, 8 and 9.

Meetings with New Ross District Councillors

- 2.3.14 Roundtable meetings took place with Wexford County Council's New Ross Councillors on 20th June 2018 and 11th September 2019. (See Appendices 14 and 15.)

One-to-one engagement with stakeholders

- 2.3.15 One-to-one engagement has been useful for discussing specific areas of concern with individuals - either local residents or leaders of local stakeholder groups. These have either been contacted by us proactively early on or have contacted us during the development process (for example through the website contact form, by email, or by leaving their details at public exhibitions with a request to be kept updated).
- 2.3.16 Stakeholders are invited to the public exhibitions and, if they cannot attend, offered alternative meetings or directed to the website, so that they can be kept updated on the project and have an opportunity to discuss any concerns.

House visits and direct engagement with nearby residents

- 2.3.17 Residents living near a proposed project often have a number of concerns pertaining to issues of residential amenity and construction impacts. Specific households may require additional consultation care due to perceived high impacts from a proposal.

GIL has therefore placed a high priority on early and comprehensive engagement with residents near the proposal, particularly those living along the onshore cable route and near the converter station site. Accordingly, during the early stages of the project, consultation centred on landowners and residents neighbouring the project site. Once an understanding had been developed of the environmental and technical constraints facing the project, wider public consultation began (with the first round of exhibitions in June 2018, as detailed below).

- 2.3.18 As the project moves into planning and then the construction phase GIL will continue to liaise with nearby residents to ensure that any impacts during construction are minimised and ensure that they have a direct point of contact within the project. The appointment of a local Community Liaison Consultant has enabled us to maintain direct contact with local residents and other stakeholders nearby, for example by in-person house visits.
- 2.3.19 This, together with the actions described throughout Sections 2.3, satisfies the requirements of Annex 6(3) and Annex 6(5)(c) of the TEN-E Regulation.

Media relations

- 2.3.20 Local media have been kept informed of the project throughout the development process, including news of project milestones, upcoming exhibitions and other consultation opportunities. GIL has used the media as an additional source of information to raise awareness within the community.
- 2.3.21 GIL has engaged regularly with the national and business media, and in particular with the following local media:
- New Ross Standard
 - Wexford People
- 2.3.22 Press coverage to date related to the project in Ireland can be found in Appendix 12. Copies of all press releases issued during development of the project can be found on the Greenlink website www.greenlink.ie
- 2.3.23 Social media is an important channel for engaging with stakeholders, allowing us to communicate news and updates on the project and also respond to questions and comments directly, given its interactive nature. We manage a Twitter account @Greenlink_IC and a LinkedIn account 'Greenlink Interconnector Limited' and both are monitored daily by the Communications Adviser. Screenshots are in Figures 2 and 3 below.

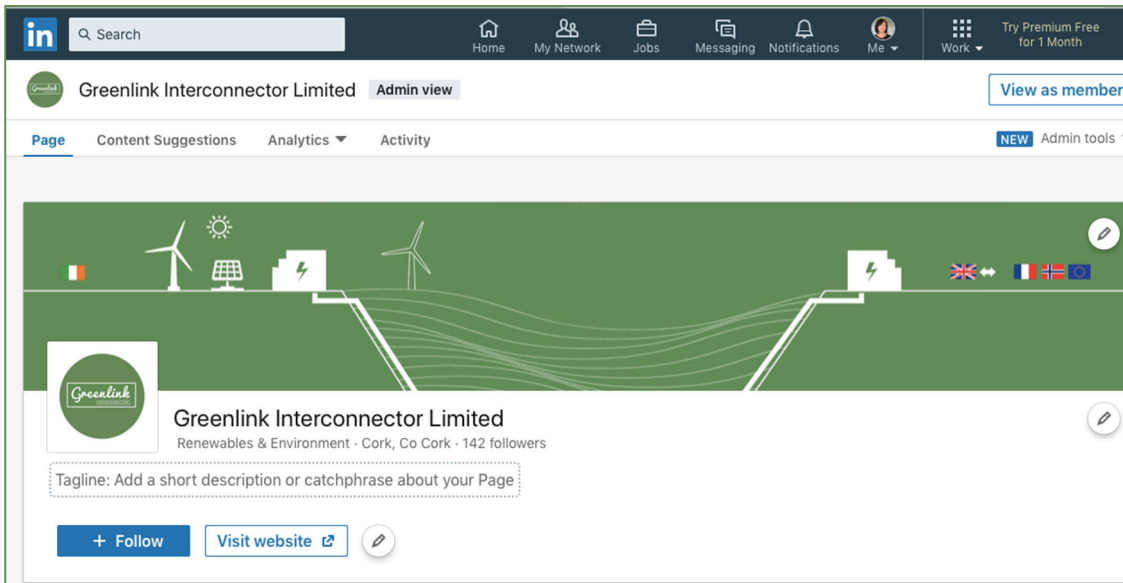


Figure 2: LinkedIn page screenshot



Figure 3: Twitter page screenshot

Adverts and public notices

- 2.3.24 Advertisements were placed in local newspapers prior to each round of public exhibitions. See Appendices 6, 7, 8 and 9 for copies including examples of published placements as they appeared in the newspapers.
- 2.3.25 Public notices have been published in local, national and industry media as required. For example, notices were issued at the time of: Application for a Foreshore Consent; Application for Foreshore Licence for marine surveys; Notice to Mariners at commencement of offshore and nearshore surveys. See Appendix 10 for copies.

Frequently Asked Questions

- 2.3.26 A comprehensive set of Frequently Asked Questions (FAQs) are published on the project website and have been made available at public exhibitions. These have been regularly updated in response to questions raised by the public during the development process.

2.4 Responding to feedback

- 2.4.1 During the public consultation process, we have established a number of channels for stakeholders to submit feedback on the project, including by email, in person (at exhibitions or meetings), via their elected representatives and on feedback forms that we provide at public exhibitions. An example of the feedback form can be found in Appendix 11.
- 2.4.2 Such feedback has been useful in identifying key areas of concern and has influenced the design of the project.

2.5 Stakeholders

- 2.5.1 As part of the consultation, GIL has engaged with a comprehensive range of stakeholders during the Greenlink development process. These were identified as key stakeholders when GIL were planning the consultation strategy and were set out in the CoPP. They have evolved as GIL has progressed through the development and consultation process and new stakeholders have been added.
- 2.5.2 In addition to the statutory consultees, the categories of key stakeholders for Greenlink have included:
- elected representatives
 - neighbouring residents
 - commercial and recreational users

Elected representatives

- 2.5.3 The local community is represented by elected officials at a local and national level. Elected representatives have been consulted to ensure that they can influence how the development progresses by representing the views of the electorate.

2.5.4 Details of how GIL has consulted both local and national elected representatives is set out in the following sections.

Local authority councillors

2.5.5 County Councillors have been contacted at each project milestone to ensure that they have accurate project information and contact details should they have any queries. The level of engagement with each councillor has varied depending on their interest in Greenlink and the proximity of their wards. Key examples of contact and correspondence are as follows:

- 13th June 2018: roundtable launch of the project - invitees included Wexford County Councillors (and TDs), hosted by the British Irish Chamber of Commerce in Dublin (see Appendix 13)
- 20th June 2018: presentation to Wexford County Council in Wexford (see Appendix 14)
- June 2018: email to councillors with update on project and inviting them to the first round of public exhibitions (Fethard on Sea (June) and Duncannon (August))
- January 2019: email to councillors with update on project and inviting them to the second round of public exhibitions (Fethard on Sea and Duncannon)
- March 2019: two emails to councillors: i) update on project, including the announcement of new private investment by Partners Group and ii) invitation to public exhibition in Ramsgrange
- May 2019: correspondence with Councillor Michael Whelan addressing concerns raised with him about the impact of cables on nearby residents. Expert opinion and data on Electromagnetic Fields supplied.
- September 2019: presentation to Wexford County Council New Ross District's Councillors (see Appendix 15)
- December 2019: email to councillors with update on project and inviting them to fourth round of public exhibitions (Ramsgrange, Duncannon and Fethard on Sea)

Engagement with Wexford Councillors has been extremely useful in identifying stakeholders at the start of the consultation, in identifying potential local issues and benefits and in acting as a channel for constituents' views.

For example, we have had frequent discussions with Councillor Michael Whelan, of New Ross District, who is local to the project. Councillor Whelan attended the public exhibition in March 2019 in Ramsgrange and we discussed ways in which the design of the project could improve local infrastructure. In May he passed on concerns raised by some local residents about the potential adverse effects of the cables. This prompted us to commission a report from an expert on Electromagnetic Fields in order to allay health and safety fears.

This information was provided to Councillor Whelan, added to our Frequently Asked Questions on our website and included in the next round of public exhibition information. We also arranged for the EMF expert to attend the exhibition to answer questions from local residents.

Nationally elected representatives

2.5.6

All local TDs identified in the CoPP were contacted at the early stages of the development process. Key constituency TDs have been contacted at each project milestone to ensure that they have accurate project information and contact details should they have any queries. Key examples of contact and correspondence are as follows:

- 13th June 2018: roundtable launch of the project: all Wexford TDs were invited to the discussion, hosted by the British Irish Chamber of Commerce in Dublin (see Appendix 13)
- June 2018: email to Wexford TDs with update on project and inviting them to the first round of public exhibitions (Fethard on Sea (June) and Duncannon (August))
- January 2019: email to Wexford TDs with update on project and inviting them to the second round of public exhibitions (Fethard on Sea and Duncannon)
- March 2019: two emails to Wexford TDs: i) update on project, including the announcement of new private investment by Partners Group and ii) invitation to public exhibition in Ramsgrange
- December 2019: email to Wexford TDs with update on project and inviting them to fourth round of public exhibitions (Ramsgrange, Duncannon and Fethard on Sea)

2.5.7

From the outset of the project, regular updates were provided to the following nationally elected politicians as identified initially in the CoPP:

- Paul Kehoe TD
- Michael W D’Arcy TD
- Brendan Howlin TD
- Malcolm Byrne TD
- James Browne TD
- Mick Wallace MEP

Following the announcement of the 2020 election, we contacted all candidates to update them on the project and are in the process of planning engagement with the newly-elected TDs for Wexford:

- Johnny Mythen TD
- Brendan Howlin TD
- Verona Murphy TD
- James Browne TD
- Paul Kehoe TD
- Mick Wallace MEP

Neighbouring residents

- 2.5.8 GIL contacted all landowners at the beginning of the development process to identify key constraints and opportunities to consider when designing the cable route. As the cable options became apparent a dialogue with residents along the cable route and near to potential converter station sites commenced.
- 2.5.9 Residents along the proposed cable route received letters in March 2019 to outline the project and invite them to present their views either by email or by attending the upcoming public exhibition. A further letter was sent in December 2019 with an update on the project, encouragement to share views on traffic impacts, safety and local infrastructure improvements and an invitation to the next round of exhibitions. Both letters can be found in Appendix 16. Residents have had a direct input into the design as the development has progressed and we will continue to liaise with them throughout the construction phase to minimise any disruption.
- 2.5.10 One key area where this influence is demonstrated is on the plans for cable routing and installation through the village of Ramsgrange. Concerns were raised by two residents about the impact of the work on local businesses and on access to properties. This emphasised the importance of designing and managing cable installation in a way that minimises disruption wherever possible.

- 2.5.11 For example, GIL’s contractors will install cables in pre-installed plastic ducts, a method selected to minimise the impact and to improve traffic flow management, and where possible the cable route was selected to provide suitable property access. Detailed plans to minimise disruption were communicated directly by email to those residents who raised concerns.

Commercial and recreational users

- 2.5.12 To fully assess potential constraints and impacts GIL has sought the views of local and commercial users of the area around the proposed Greenlink infrastructure. These consultations have directly shaped the delivery of the project and survey work. A non-exhaustive list of interested parties is provided below along with details of how they have influenced the delivery of Greenlink.

- Beach users
- Commercial and recreational users
- Farmers

Beach users

- 2.5.13 Concerns regarding the potential for the installation of the cable to disrupt beach access and the environment at Baginbun has been clearly highlighted by beach users and other stakeholders during consultation.
- 2.5.14 Recognising the importance of Baginbun, GIL has worked throughout the development process to ensure that installation could be completed via the use of Horizontal Directional Drilling, taking the cable under the cliff face and avoiding disruption to beach users. Consistent with GIL’s commitment to honest dialogue it retained the potential of trenching through the beach until it had confidence that an HDD was deliverable. Once the relevant survey work had been concluded GIL were able to make a firm commitment to using an HDD.

A commitment has also been made to avoid restricting access to the beach throughout construction and to complete installation work at Baginbun outside of the peak months of July and August.

Commercial fishing interests

- 2.5.15 It is recognised that subsea survey and installation work can impact ongoing commercial fishing interests. Prior to the commencement of subsea survey work in Ireland GIL worked to identify commercial fishing interests in the area and established a dialogue directly with the interests via the appointed fisheries liaison officer (MarineSpace). Liaison aimed to ensure survey work and the commercial fishing was coordinated and resulted in commercial fishing and survey work in Ireland being completed without impact on either activity.

- 2.5.16 It is proposed that this approach is repeated during the construction phase.

Other commercial interests

- 2.5.17 Concerns were raised during consultation (particularly at public exhibitions in January 2019) about the impact on tourism during the construction period, namely from cable laying work along the proposed route. A commitment was subsequently made by GIL to time the works outside of peak tourism season.

Farmers

- 2.5.18 The onshore cable route is predominantly being laid along the public road but does cross agricultural land at Baginbun Beach and at Great Island. During the route selection process, we consulted landowners and farmers to minimise impacts on field drainage and future land use plans. Where possible GIL has followed field boundaries. GIL has also routed the cable through existing field entrances whenever possible to minimise environmental and farming impacts.

2.6 Subject areas

- 2.6.1 During the development process GIL has consulted on a number of subject areas. Subject areas consulted on included:

- Environmental
- Local supply chain
- Logistics and construction programme
- Existing land use

Environmental

- 2.6.2 As part of the project development process Environmental Scoping Reports were prepared and issued to stakeholders for both the marine and onshore elements of the project in Ireland. The feedback received was then incorporated into the final assessment methodologies and planning documentation.

Onshore Scoping

- 2.6.3 Onshore Environmental Scoping Reports included the following topic areas:

- Approach to environmental assessment;
- Biodiversity;
- Population and human health;
- Historic environment;
- Landscape and visual impact;
- Water, hydrology, flooding and surface water quality;
- Soils, geology and hydrogeology;
- Noise and vibration;
- Land use;
- Air quality and climate change;
- Material assets, major incidents and disasters; and
- Cumulative and transboundary effects.

- 2.6.4 Organisations consulted included:

- Wexford County Council;
- Port of Waterford Company;
- Department of Culture, Heritage and the Gaeltacht;
- National Parks and Wildlife Service;
- National Monuments Service;
- Sea Fisheries Protection Authority;

- Inland Fisheries Ireland;
- Failte Ireland;
- Office of Public Works; and
- Heritage Council.

2.6.5 The community was also consulted with the Environmental Scoping Report and details being available to the public at the first round of public exhibitions in June 2018 and all future public exhibition events.

2.6.6 Following the completion of the scoping exercise dialogue continued with all key environmental stakeholders and information was made available to the community and answers provided to queries.

Marine Scoping

2.6.7 Marine Environmental Scoping Reports included the following topic areas:

- Physical conditions and marine processes;
- Intertidal and benthic ecology;
- Fish and shellfish;
- Birds;
- Marine mammals and reptiles;
- Protected sites;
- Commercial fisheries;
- Shipping and navigation;
- Offshore infrastructure and other marine users; and
- Marine archaeology.

2.6.8 Organisations consulted included:

- Department of Housing, Planning and Local Government (DHPLG) - Foreshore Unit;
- Department of Arts, Heritage and the Gaeltacht (DAHG) - Underwater Archaeology Unit;
- National Parks and Wildlife Service (NPWS);
- Marine Institute;
- Inland Fisheries Ireland;
- Department of Agriculture, Food and the Marine - Aquaculture and Fisheries Division;
- South East Regional Inshore Fisheries Forum
- Irish South and East Fish Producers Organisation
- Irish South and West Fish Producers Organisation
- Irish Sea Fisheries Board
- Irish Whale and Dolphin Society
- National Monuments Service;
- Port of Waterford; and
- Local fishing interests.

2.6.9 Copies of the Environmental Scoping Report and details were made available to the public at the first round of public exhibitions in June 2018 and all future public exhibition events.

2.6.10 Following the completion of the scoping exercise dialogue continued with all key environmental stakeholders and information was made available to the community and answers provided to queries.

Local supply chain

2.6.11 The development of significant infrastructure entails substantial capital outlay from developers and their investors, the majority of which is spent during the construction period. Most of this outlay is spent purchasing equipment and materials (e.g. converter stations and subsea cables) with the rest mainly spent on contractors for the construction of the infrastructure. The construction works will be coordinated by a main contractor who will sub-contract various components to specialist companies, e.g. cable laying, pouring foundations, etc.

2.6.12 Construction work on the Greenlink Interconnector is expected to lead to notable expenditure in Ireland. A significant amount of work will require skills and experience available from contractors found in the local area.

2.6.13 The types of services that could be locally sourced include:

- Transportation equipment and personnel;
- Materials: e.g. supplying and pouring concrete;
- Electrical connection;
- Civil engineering activities and earthworks e.g. tracks and hard-standing, foundations, trench digging for cables, etc.;
- Hospitality and catering;
- Office and cleaning supplies;
- Site services: e.g. portacabins and portaloos;
- Site security;
- Fencing; and
- Waste disposal.

2.6.14 GIL is committed to maximising the use of locally based contractors and personnel during the construction and operational phases of the project and this will also be a commitment by the main EPC contractor, once selected. As a part of this commitment GIL has engaged with local suppliers and liaised with local economic bodies to ensure that a dialogue is established with local businesses.

2.6.15 Throughout the development process GIL has ensured that interested businesses can register an interest in being part of the supply chain through the website and by contacting GIL directly.

2.6.16 GIL has committed to run a 'meet the buyer event' in the local area once a main contractor is selected so that they can have easy direct access to the local supply chain.

Logistics and construction programme

2.6.17 The construction phase of a major project includes numerous vehicle movements including workers travelling to and from site and equipment and material deliveries. A Transport Assessment has been completed as part of the suite of planning documentation alongside an Outline Construction Traffic Management

Plan. These have been produced incorporating consultation responses received during the consultation process.

2.6.18 Consultation responses have centred on concerns regarding speeding construction vehicles and transport routes through Wexford.

2.6.19 As noted above, installation of the underground cables also has the potential to cause disruption and GIL will continue to work with the local community throughout the installation process to minimise any impacts.

Existing land use

2.6.20 GIL is keen to avoid any negative impacts on existing users of the local land and marine locations where the project is proposed to be located. Through consultation with landowners, and users of the land, including the beach at Baginbun, GIL has developed a good understanding of the existing use of the land hosting Greenlink.

3 Public consultation undertaken

3.1.1 An overview of the consultation undertaken as the development process progressed is outlined and described in this section of the Consultation Report.

3.2 Consultation programme

3.2.1 GIL commenced informal consultation with landowners and key stakeholders prior to the commencement of the formal consultation detailed in the CoPP. The aim of this consultation was to gain an understanding of the key constraints facing the development of Greenlink in Wexford.

3.2.2 This consultation fulfilled the requirements of the TEN-E Regulation. To the extent that consultation pre-dated the formal approval of the CoPP, it was taken into account in the CoPP in accordance with Article 9(3) of the TEN-E Regulation.

3.2.3 As required by Article 9(4) of the TEN-E Regulation, GIL has carried out at least one public consultation prior to submission of the final and complete application file. The public consultations were designed to inform stakeholders about the project at an early stage in order to allow meaningful stakeholder engagement throughout the pre-application process. Undertaking public consultation at an early stage has ensured that potential concerns by the public could be taken into account in an open and transparent manner.

3.2.4 The first public consultation in Wales and Ireland took place within a period of one month of each other (during May 2018 and June 2018 respectively) and satisfied the requirement of Article 9(5) of the TEN-E Regulation.

3.2.5 A summary of key formal public consultation dates in both Ireland and Wales is detailed below in Table 1.

Table 1: Programme of consultation

Public Exhibitions		Ten-E Regulation Information Brochure	Additional Points of Note (Ireland)
Pembrokeshire (Wales)	County Wexford (Ireland)		
May 2018 - Pembroke Dock, Hundleton and Angle	June 2018 - Fethard on Sea, New Ross	Issue 1 - May 2018	Options for cable route, landfall and converter station. Project benefits including job estimates. Planning and consultation process.
-	August 2018 - Duncannon	-	Options for cable route, landfall and converter station. Project benefits including job estimates. Planning and consultation process.
December 2018 - Pembroke Dock, Hundleton and Angle	January 2019 - Duncannon and , Fethard on Sea	Issue 2 - November 2018	Cable infrastructure and converter station - preferred routes and location, initial designs and assessment outputs, including environmental.
April 2019 - Pembroke in Pembrokeshire	-	-	
June 2019 - Pembroke, Pembroke Dock, Hundleton and Angle	March 2019 - Ramsgrange	Issue 3 - June 2019	Cable infrastructure and converter station - preferred routes and location, initial designs and assessment outputs, including environmental
December 2019 - Pembroke, Pembroke Dock, Hundleton and Angle	December 2019 - Ramsgrange, Duncannon and Fethard on Sea	Issue 4 - December 2019	Cable infrastructure and route detailed design. Converter station - outline design.

3.3 June/ August 2018 public exhibitions and relevant consultation milestones

3.3.1 The boards and press notice relating to this round of public exhibitions can be found in Appendix 6. The exhibitions were advertised in the press, on local noticeboards, and via direct communication with landowners, local politicians, key stakeholders, and residents and members of the public who had requested to be kept informed of progress.

3.3.2 Details of the public exhibitions are shown below:

- 27th June 2018 - St. Marys Community Hall, Fethard on Sea - 14:00 to 20:00
- 15th August 2018 - Star of the Sea Parish Centre, Duncannon - 14:00 to 20:00

Public consultation completed prior to public exhibitions

3.3.3 Key stakeholders were contacted at an early stage to introduce Greenlink and discuss potential constraints regarding the proposed sites under consideration for cable landfall and the converter station, and the potential underground cable routes. These stakeholders included key local landowners, fisheries interests and the Port of Waterford Company.

3.3.4 Elected representatives (Wexford TDs and Wexford County Councillors) were also introduced to the project and invited to comment at a roundtable discussion in Dublin on 13th June and during a formal presentation to Wexford County Council on 20th June 2018.

3.3.5 One early outcome of consultation was that alternative landfall locations including Boyce's Bay were de-selected. The Port of Waterford Company requested that any route within the estuary must avoid the main navigation channel and follow or be as close to as possible the outcropping rock on the eastern coastline. This constraint, combined with the environmental sensitivities of the River Barrow estuary (ie reef habitat and important twaite shad spawning habitat), led to the recommendation that Baginbun Beach should be considered the preferred landfall for cable route survey.

3.3.6 Commercial fishing interests in the area had been contacted regarding the upcoming subsea surveys and consultation had commenced to coordinate surveys with planned commercial fishing.

Details of project development presented

3.3.7 Exhibition boards for consultation events in June and August 2018 can be found in Appendix 6. The boards included were:

- Project benefits
- The proposal
- Why Greenlink?
- Greenlink components
- Consultation
- Local supply chain
- Site assessment - overview
- Landscape and visual impact
- Agricultural land
- Electromagnetic fields
- Socio economics
- Air quality
- Marine surveys
- Marine environmental assessments
- Project timeline
- The planning process

- Water and soil
- Noise and vibration
- Biodiversity
- Historic environment
- Traffic and transport
- Offshore Ireland route options
- Offshore Wales route options
- Optioneering plan - regional
- Irish landfalls

3.3.8 Comments were welcomed on all subject areas.

3.3.9 Members of the public were informed of the proposed planning process for the converter station and cable routes.

3.3.10 Detailed maps showing the possible cable routes and converter stations were presented at the public exhibition and comments welcomed. The potential onshore cable routes and potential converter sites discussed can be found in Figure 4.

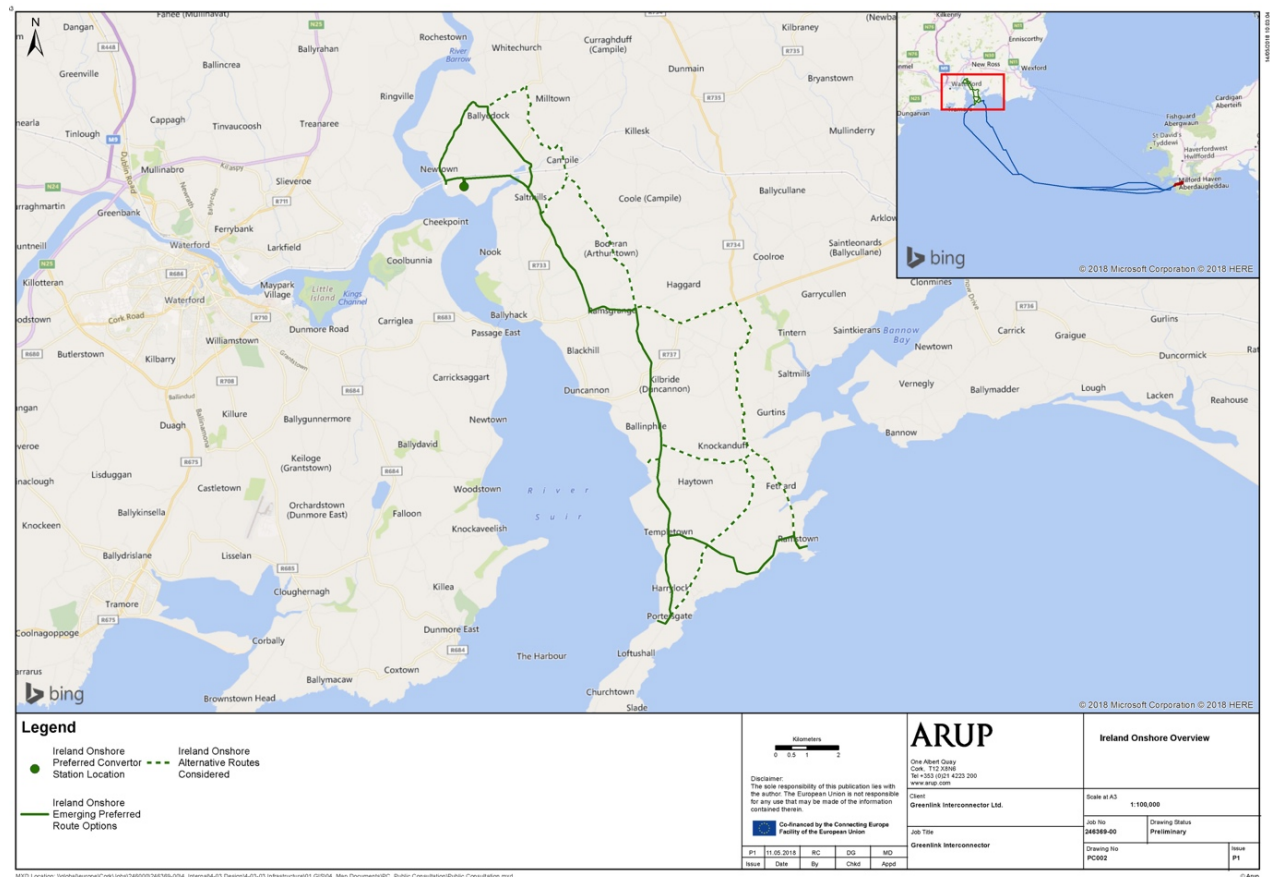


Figure 4: Onshore project plan presented at public exhibitions in June and August 2018

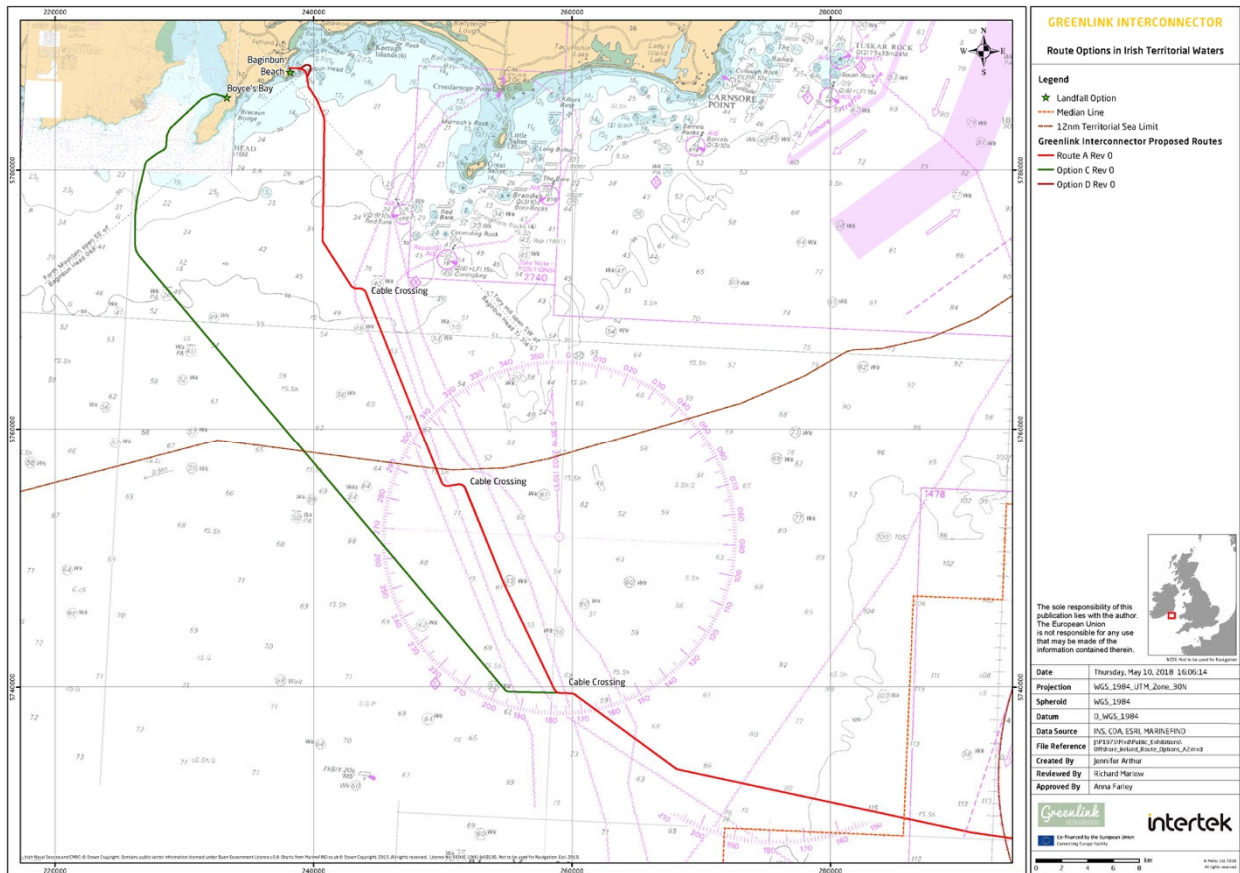


Figure 5: Offshore project plan presented at public exhibitions June and August 2018

- 3.3.11 The two potential offshore cable routes were also presented for discussion. These are shown in Figure 5.
- 3.3.12 The two preferred options for the cable landfall, along with other sites that had been considered, were presented. These are shown in Figure 6.

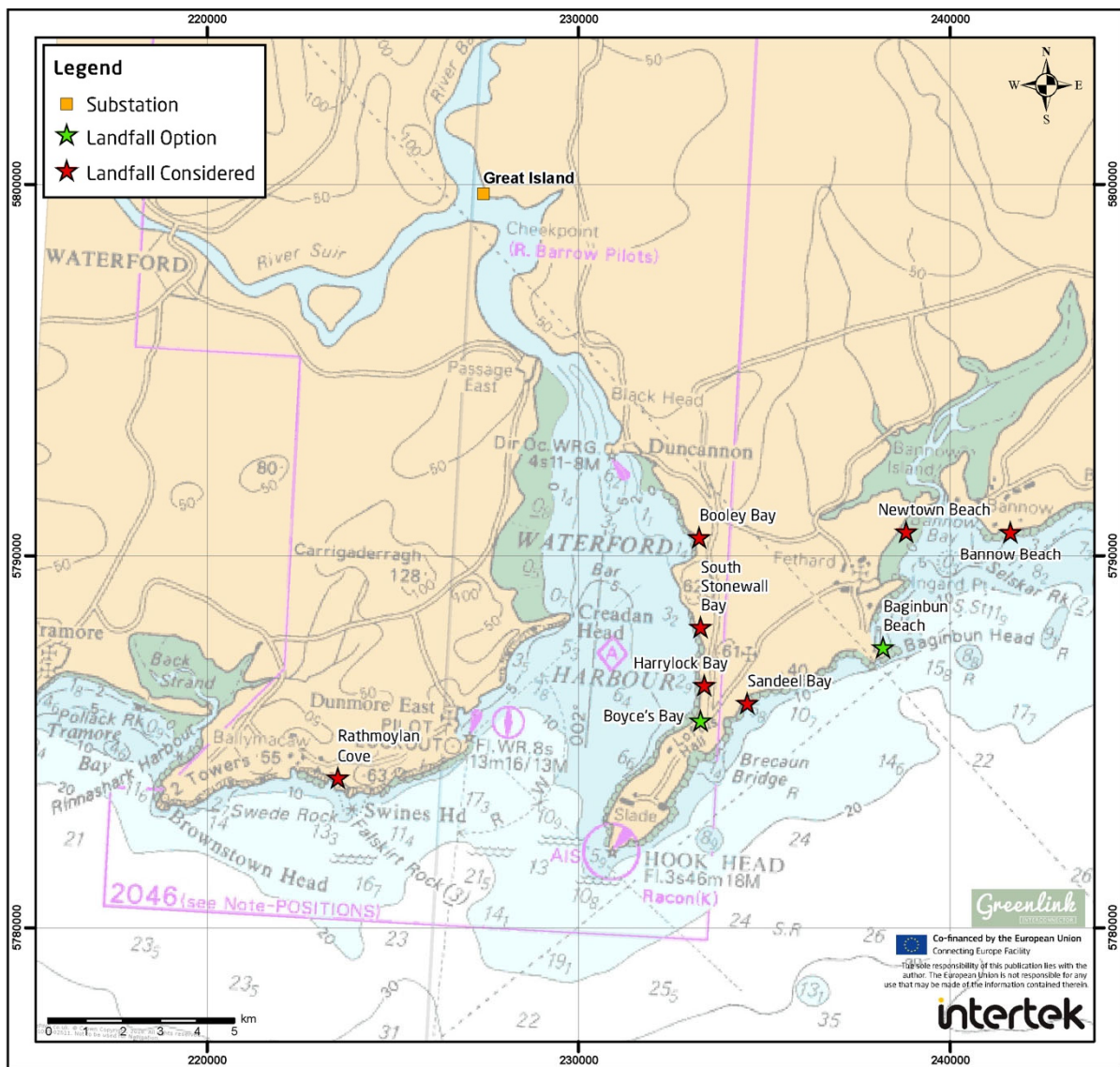


Figure 6: Landfall options presented at public exhibitions June and August 2018.

- 3.3.13 The May 2018 project brochure, found in Appendix 2, was distributed at the public exhibitions.
 Issues raised during consultation
- 3.3.14 Comments received were positive towards Greenlink. However, the majority of these were with the disclaimer that GIL had to ensure that the local road network remained open and Baginbun Beach not be damaged.
- 3.3.15 Comments were made regarding the importance of the cable route being designed to minimise any environmental impact.
- 3.3.16 Commitments were requested that overhead lines would not be used between the beach and the converter station. GIL gave this commitment.
- 3.3.17 No concerns were raised regarding converter station locations.

3.4 January 2019 public exhibitions and relevant consultation milestones

3.4.1 The boards and press notice relating to this round of public exhibitions can be found in Appendix 7. The exhibitions were advertised in the press, on local noticeboards and via direct communication with landowners, local politicians, key stakeholders and residents and members of the public who had requested to be kept informed of progress.

3.4.2 Details of the public exhibitions are shown below:

- 16th January 2019 - St Mary's Community Hall, Fethard on Sea - 14:00 to 18:30
- 17th January 2019 - Star of the Sea Parish Centre, Duncannon - 14:00 to 20:00

Public consultation completed prior to public exhibitions

3.4.3 Consultation continued with landowners and environmental stakeholders to refine cable routes and converter station locations. This resulted in a preferred cable route and converter station option being identified. Final selection would require the completion of technical and environmental feasibility work.

3.4.4 Liaison with commercial fishing interests continued throughout the subsea survey period from September 2018 to March 2019. Information was issued to all key stakeholders including members of the public who had requested to be kept updated on project progress and also to local councillors and TDs.

3.4.5 The provision of community benefit for local residents along the cable route had been raised by a member of the public and GIL began discussions on options.

Details of project development presented

3.4.6 Boards presented at the January 2019 exhibitions can be found in Appendix 7. The boards included were:

- Project benefits
- The proposal
- Why Greenlink?
- Converter station sites
- Greenlink in Ireland
- Greenlink components
- Indicative converter station
- Consultation
- Local supply chain
- Site assessment - overview
- Landscape and visual impact
- Viewpoint locations
- Biodiversity
- Historic environment
- Traffic and transport
- Transport routes
- Socio economics
- Marine surveys
- Marine environmental assessments
- Project timeline
- Offshore Ireland route options
- Offshore Wales route options
- Planning
- Irish landfalls

3.4.7 Comments were welcomed on all subject areas.

3.4.8 GIL were able to present more project specific information at this round of public exhibitions following the selection of preferred onshore and subsea cable routes and the converter station site.

These were identified following consultation with stakeholders and analysis of the results of ongoing environmental and technical work, including early subsea surveys. Information presented included the maximum potential converter station dimensions, potential transport routes and management plan and proposed viewpoint locations to be assessed in the landscape and visual impact assessment. A specific board was prepared explaining the selection of the preferred converter station site and an indicative diagram was presented. The selection of Baginbun Beach for landfall was explained and the preferred subsea cable route was presented.

3.4.9 Members of the public were also informed that GIL had made the decision to undertake a voluntary Environmental Impact Assessment (EIA) in support of Greenlink. While it was recognised that Greenlink did not require an EIA, GIL decided to undertake a voluntary EIA in recognition of the length of the permitting process and the evolving interpretation of the EIA regulations within Ireland. As a result of this decision the onshore cable routes would now seek planning permission rather than be developed using permitted development rights.

3.4.10 The preferred cable route and converter station site presented at the public exhibitions can be found in Figure 7.

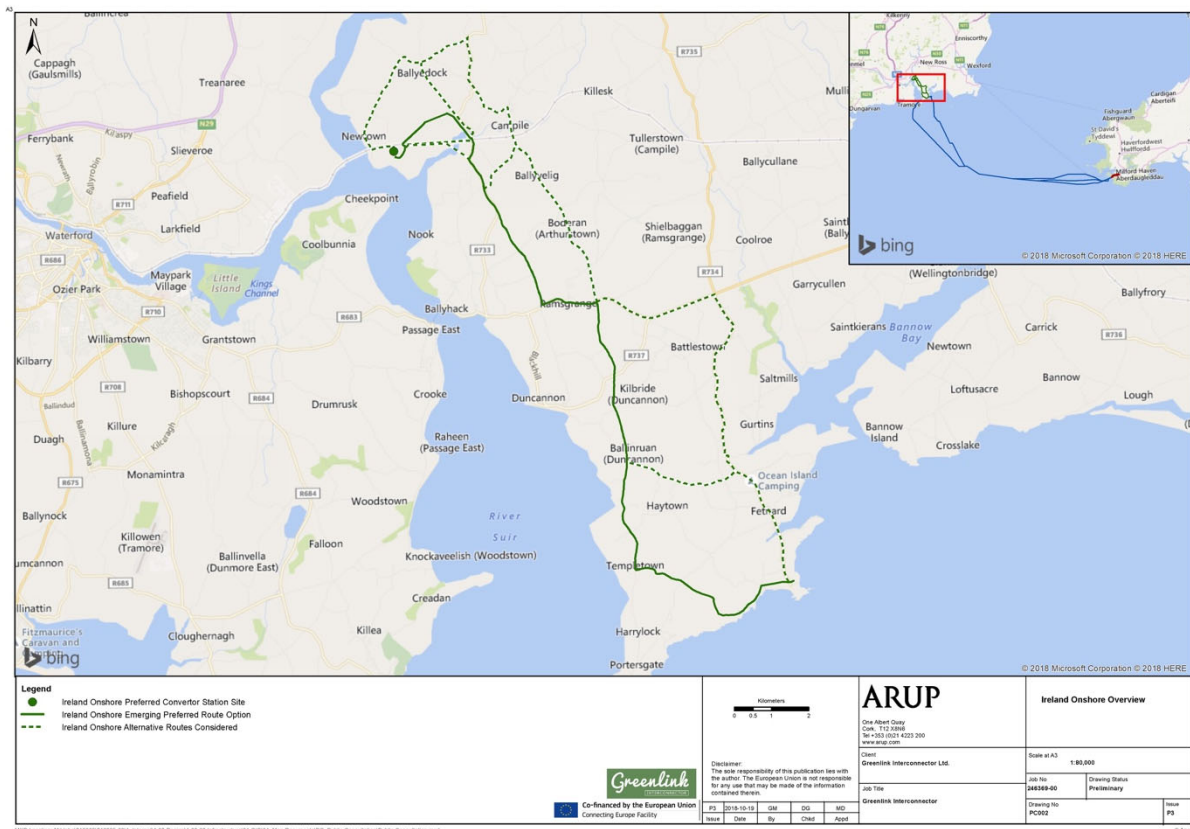


Figure 7: Onshore project plan presented at public exhibitions January 2019

3.4.11 The selected offshore cable route was also presented for discussion. This is shown in Figure 8.

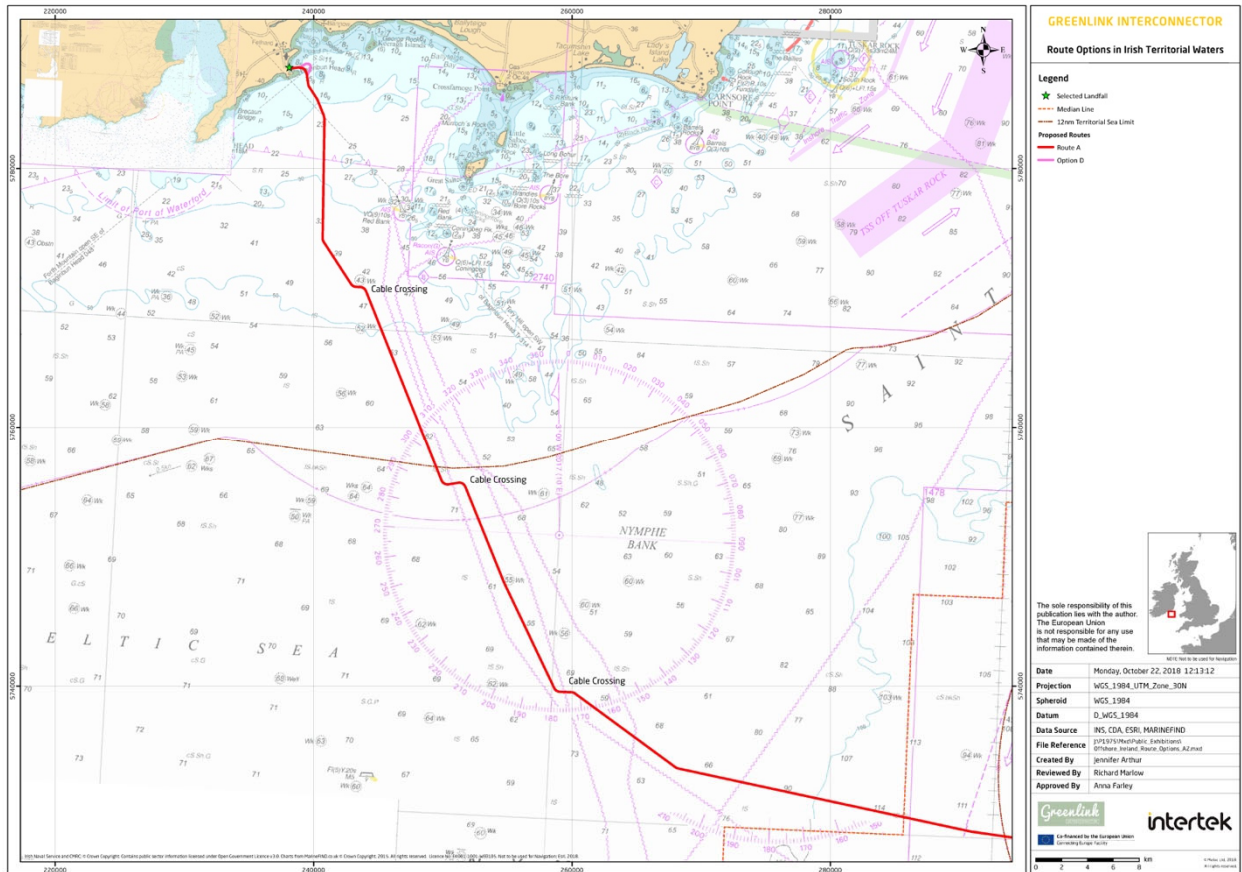


Figure 8: Offshore project plan presented at public exhibitions January 2019

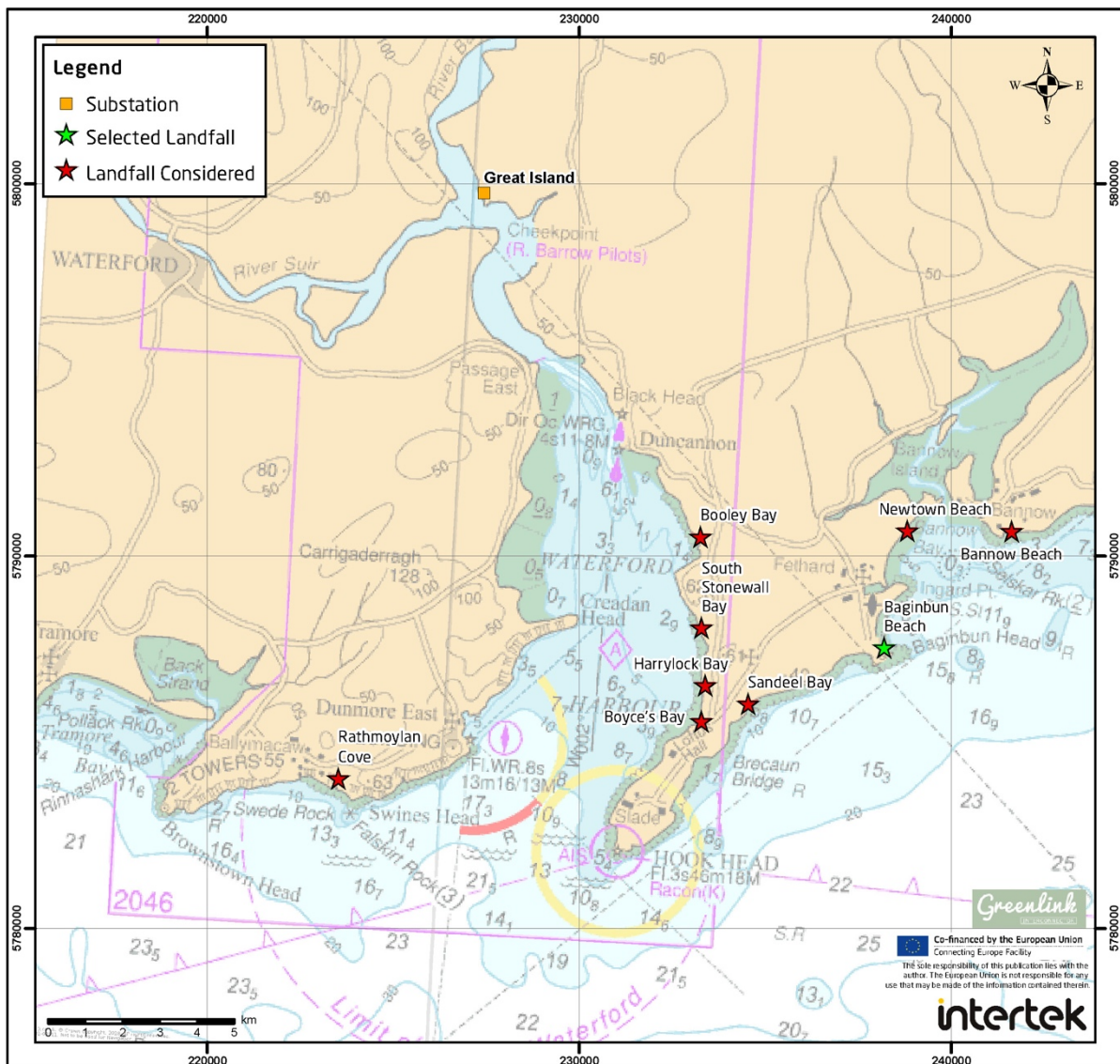


Figure 9: Preferred landfall location presented at public exhibitions January 2019.

- 3.4.12 It was also confirmed that Baginbun Beach had been identified as the preferred landfall location and this was presented on an exhibition board as shown in Figure 9.
- 3.4.13 The November 2018 project brochure, found in Appendix 3, was distributed at the public exhibitions.

Issues raised during consultation

- 3.4.14 The two days of public exhibitions were well attended. Many were coming to find out more about the project - where will it be located, why is it needed and what the impacts might be.
- 3.4.15 A number of residents living along the proposed cable route attended to voice concerns about potential adverse impacts: during construction and from the cable itself.

Issues raised including the health and safety impact of Electromagnetic Fields (EMF), devaluation of property and impacts on tourism, particularly potential negative impacts on Baginbun Beach.

- 3.4.16 The importance of GIL avoiding any impact on coastal processes was raised - requesting that GIL avoid introducing large artificial features close to the shore - i.e. avoid large rock placement at the HDD exit point in the sea. **Note:** the marine licence application made a commitment to avoid this.
- 3.4.17 The importance of coordinating construction traffic and cable installation with local residents was raised.
- 3.4.18 The only concern regarding the potential converter station location was regarding potential issues around noise.
- 3.4.19 It was requested that GIL consider what community gain might be provided as a result of the project. A suggestion was made to improve car parking provision at Baginbun Beach.

3.5 March 2019 public exhibition and relevant consultation milestones

- 3.5.1 The boards for this exhibition are as above and the press notice can be found in Appendix 8. The exhibition was advertised in the press, on local noticeboards and via direct communication with landowners, local politicians, key stakeholders and members of the public who had requested to be kept informed of progress. A letter was delivered to all residences on the proposed cable route (c 200 houses) inviting them to the exhibition (or to contact GIL with comments or questions if unable to attend). The letter is included in Appendix 15.
- 3.5.2 Details of the public exhibition are shown below:
- 28th March 2019 - Parochial Hall, Ramsgrange - 14:00 to 20:00

Public consultation completed prior to public exhibitions

- 3.5.3 Ramsgrange was chosen as the location for another public exhibition following selection of the landfall and onshore cable route, which would run through Ramsgrange village. Consultation had identified concerns from residents along the cable route.
- 3.5.4 Consultation had been undertaken with residents neighbouring the development to discuss noise issues, gain readings from properties and incorporate results into noise models to ensure properties would not be impacted by operational noise from the converter station site.

Details of project development presented

- 3.5.5 Boards and maps were as listed in 3.4 above.

Issues raised during consultation

- 3.5.6 Around 30 people attended during the course of the day. Many wanted to discuss Greenlink’s potential impact on those living along the cable route in Ramsgrange, in particular health and safety concerns from Electromagnetic Fields. As these concerns had been raised before, GIL had commissioned a study on EMF and invited an EMF expert to attend the exhibition. He was able to discuss and allay many of the concerns.

3.6 December 2019 public exhibition and relevant consultation milestones

- 3.6.1 The boards and the press notice can be found in Appendix 9. The exhibition was advertised in the press, on local noticeboards and via direct communication with landowners, local politicians, key stakeholders and residents and members of the public who had requested to be kept informed of progress.

- 3.6.2 Details of the public exhibition are shown below:

- 10th December 2019 - Parochial Hall, Ramsgrange - 16:00 to 20:00
- 11th December 2019 - Star-of-the-Sea Pastoral Centre, Duncannon - 16:00 to 20:00
- 12th December 2019 - St Mary’s Hall, Fethard on Sea - 13:30 to 18:30

Public consultation completed prior to public exhibitions

- 3.6.3 Consultation with all key stakeholders had continued since the last round of public exhibitions in March to prepare draft planning documentation to be submitted for pre-application planning consultation.

- 3.6.4 Public consultation had focussed on potential impacts from disruption during onshore cable laying, in particular traffic impact on tourism and other local businesses. GIL responded to email enquiries with detailed information on measures that would be taken to minimise disruption, including proposed cable-laying process, managing the timing of works, ensuring property access and road reinstatement. In September, GIL met with New Ross District County Councillors to provide an update on the proposal, preferred routes and designs and to seek further feedback.

Details of project development presented

- 3.6.5 Boards presented at the December 2019 exhibitions can be found in Appendix 9. The boards included were:

- Project benefits
- The proposal
- Why Greenlink?
- Consultation
- Biodiversity
- Greenlink components
- Greenlink in Ireland
- Historic Environment
- Indicative converter station
- Marine Surveys
- Noise and Vibration
- Offshore Ireland Route
- Planning
- Proposed Development Marine
- Project Timeline
- Site Assessment Overview
- Socio-economics
- Traffic and Transport

- Irish landfall
- Landscape and visual impact
- Viewpoint locations
- Local Supply Chain
- Horizontal Directional Drill Installation
- Installation at Baginbun Beach
- Foreshore Licence Application Consultation

3.6.6 Comments were welcomed on all subject areas.

3.6.7 GIL were able to present more detailed information on the design of the project likely to be submitted to pre-planning. Preliminary environmental assessment and reports were made available to view, along with detailed maps and diagrams.

3.6.8 Following concerns raised about the impact on Baginbun Beach, further information was provided on the installation of the cables at the landfall site, including the use of Horizontal Directional Drilling to minimise impacts on the beach. The diagrams presented at the exhibitions can be seen in Figures 10 and 11.

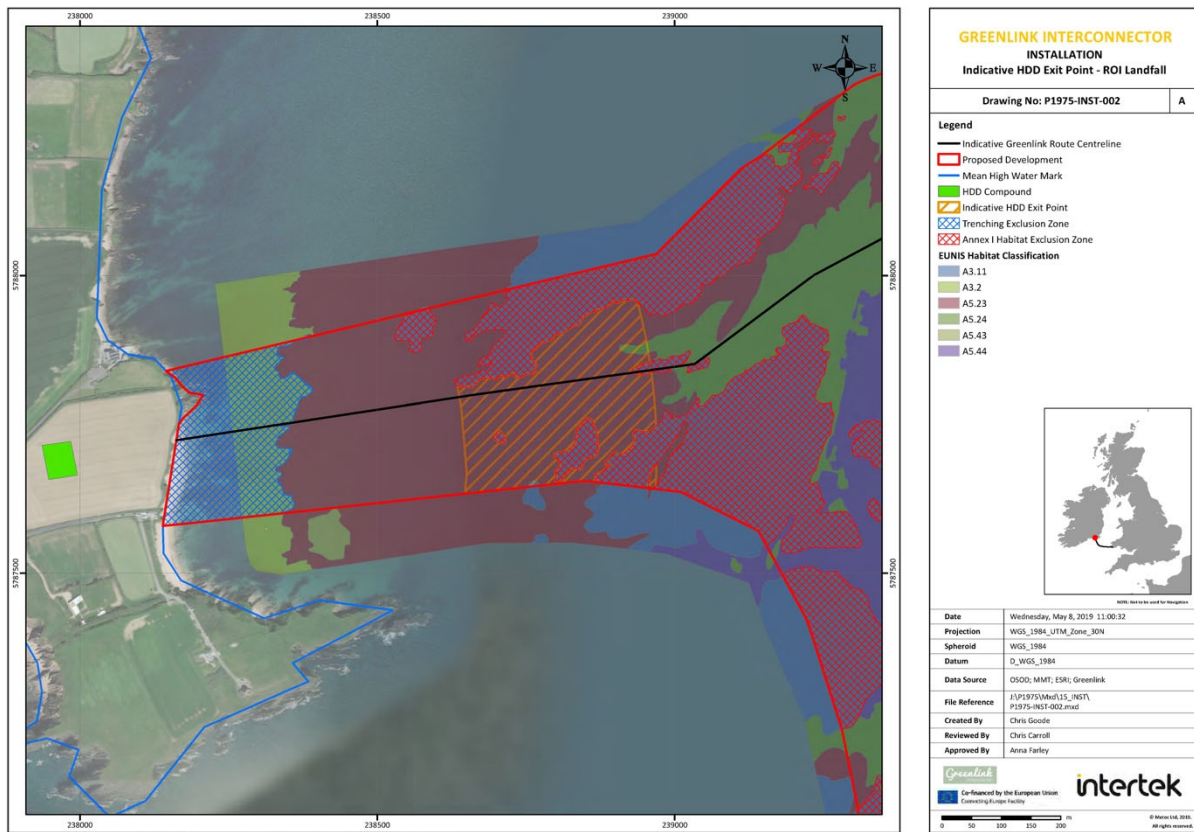


Figure 10: Nearshore plan showing likely HDD cable exit point below low water mark presented at public exhibitions in December 2019

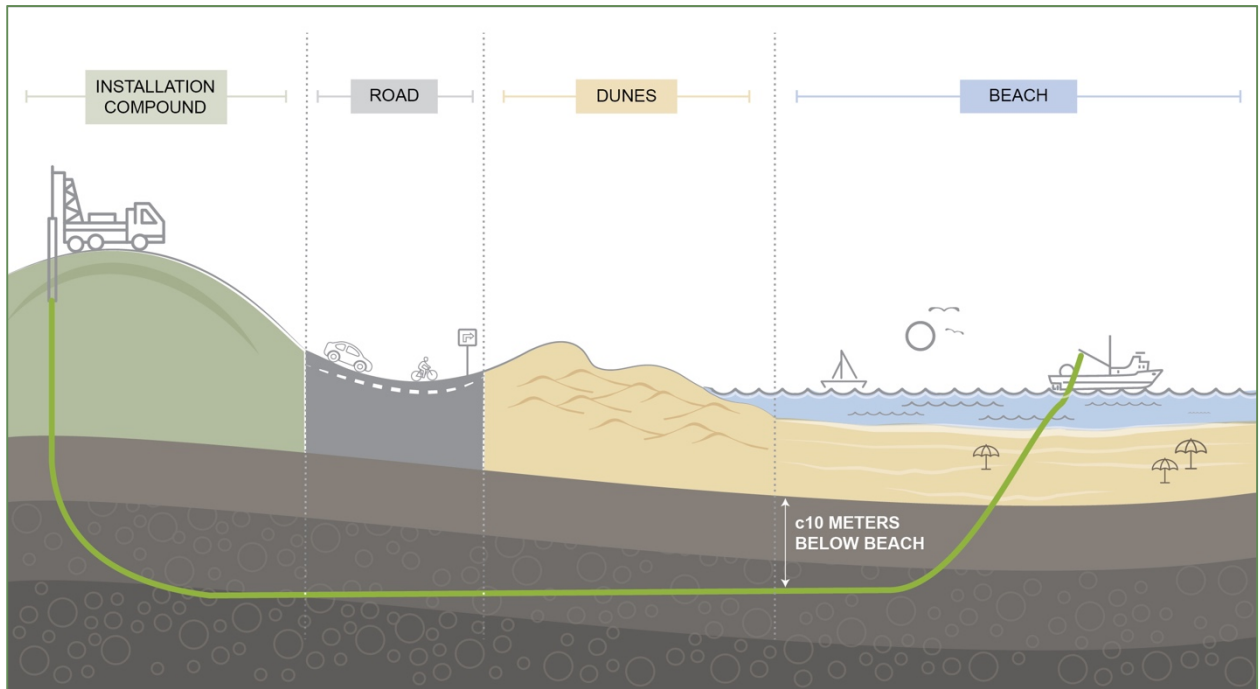


Figure 11: Plan illustrating an HDD cable installation presented at public exhibitions in December 2019

3.6.9 The preferred onshore cable route and converter site was presented. This is shown in figure 12.



Figure 12: Preferred onshore cable route presented at public exhibitions in December 2019

- 3.6.10 Following the completion of the subsea surveys the preferred offshore cable route was confirmed, as shown above in Figure 10.
- 3.6.11 The June 2019 project brochure, found in Appendix 4, was distributed at these public exhibitions.
- 3.6.12 Since the Marine Licence Applications had been submitted just prior to the exhibitions, the full suite of Marine Licence application documentation was available to view, and details were made available of the live consultation (running from 13th November 2019 to 8th January 2020) and how members of the public could submit comments. See Figure 13 below.

The poster is titled "FORESHORE LICENCE APPLICATION CONSULTATION" and features the Greenlink logo. It is divided into three main sections with icons: a computer monitor, a location pin with a person, and an envelope. The text provides details on the consultation process, including dates, website links, and submission methods. A note at the bottom right mentions an extension of the consultation period due to the Christmas period.

FORESHORE LICENCE APPLICATION CONSULTATION

Greenlink
INTERCONNECTOR

Computer Monitor Icon:
The formal consultation process for Greenlink's Foreshore Licence Application commenced on Wednesday 13th November and closes on 8th January 2020.
Copies of the environmental statement are available to view on the project website (www.greenlink.ie/foreshorelicenceapplicationireland) and on the Department's website (www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford).

Location Pin Icon:
Within 8 weeks from the publication of this notice, a copy of the application, the Environmental Impact Assessment Report and any other relevant report or information (including copies of any submissions, comments, or questions received by the appropriate Minister) may be inspected free of charge during the hours 10:00 to 13:00 and 14:00 to 17:00 Monday to Friday.
Foreshore Unit
Department for Housing
Planning Local Government
Newtown Road
Wexford
Co. Wexford

Envelope Icon:
Submissions, comments in relation to the proposal may be made in writing within 8 weeks from the publication of this notice to the Minister for Housing, Planning and Local Government at Foreshore Unit, Department for Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford
Or by e-mail to foreshore@housing.gov.ie (Quoting Ref: FS007050). The closing date for the receipt of written submissions, comments or questions is therefore 17:30 on 08/01/2020.
Representations should be dated and clearly state the name (in block capitals) and the full return email or postal address of the person making the representation.

Please note that while the standard formal consultation period is 42 days, due to interaction with the Christmas period we have agreed an extension to the consultation period of two weeks with NRW. This extends the consultation period to 56 days with the closing date of formal consultation set at 17:30hrs on Wednesday 8th January 2020.

For more information please visit: www.greenlink.ie

Figure 13: Details of Marine Licence Application Consultation presented at public exhibitions in December 2019

Issues raised during consultation

- 3.6.13 The exhibitions were well-attended and constructive discussions took place. There were positive comments on the need for interconnection and on the quality of the exhibition and materials provided.
- 3.6.14 Key issues raised by members of the public were similar to before, namely the impact on residents along the cable route during installation, particularly in the village of Ramsgrange, and on Hook Head during holiday season. The GIL team explained measures that have been agreed to minimise disruption during construction and agreed to continue to engage with the business community.

3.6.15 Community benefit for those most affected by the project was discussed and is being explored.

3.6.16 The GIL team was able to address concerns about EMF and to explain why the preferred cable route was selected.

3.7 Consultation since December 2019 public exhibitions

3.7.1 The formal consultation has concluded on the Marine Licence Application. The consultation period was extended for some key stakeholders to reflect the pressures of the winter break. No material public issues have been raised and GIL will continue to work with local commercial fishing interests throughout the delivery of Greenlink.

3.7.2 In light of government advice in Ireland on the Coronavirus pandemic, GIL adapted its public engagement and consultation activities in March 2020 and suspended face-to-face meetings and public events. However, dialogue with stakeholders has continued by email and GIL has provided updates on the project website, where it also encourages local residents and others to contact the team directly by email or telephone with any questions or comments. The project's Community Liaison Consultant remains available and has recently updated residents in the vicinity of the ground investigations site on the works being carried out.

3.7.3 GIL is currently planning its publicity and information activities with all the above stakeholders for when the final planning application documents are submitted.

4 Conclusion

4.1 Consultation programme

4.1.1 The public consultation undertaken to support the Greenlink development process in Ireland has followed the methodology set out in the Concept of Public Participation and played an important role in shaping the design and delivery of the project.

5 Appendices

- Appendix 1 - Concept of Public Participation (Ireland) Rev 2 (07/01/2020)
- Appendix 2 - TEN-E Regulation Information Brochure - May 2018
- Appendix 3 - TEN-E Regulation Information Brochure - November 2018
- Appendix 4 - TEN-E Regulation Information Brochure - June 2019
- Appendix 5 - TEN-E Regulation Information Brochure - December 2019
- Appendix 6 - Public Exhibition - June and August 2018
- Appendix 7 - Public Exhibition - January 2019
- Appendix 8 - Public Exhibition - March 2019
- Appendix 9 - Public Exhibition - December 2019
- Appendix 10 - Public Notices
- Appendix 11 - Feedback Form
- Appendix 12 - Press articles
- Appendix 13 - Presentation to BICC Roundtable June 2018
- Appendix 14 - Presentation to Wexford County Council June 2018
- Appendix 15 - Presentation to Wexford County Council September 2019
- Appendix 16 - Letters to cable route residents

Appendix 1

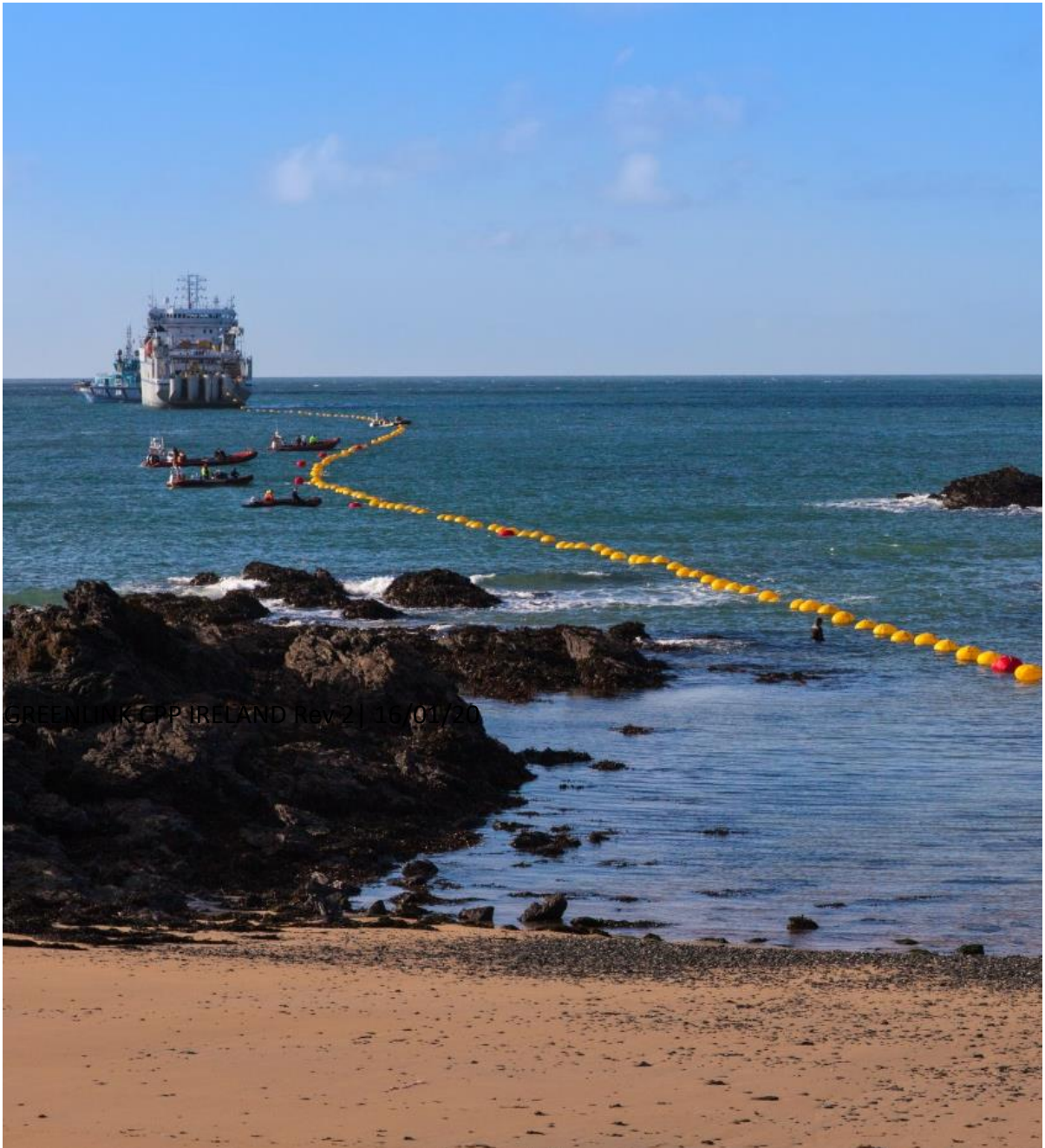
Concept of Public Participation (Ireland)

Rev 2 (16/01/2020)

GREENLINK

GREENLINK INTERCONNECTOR

CONCEPT OF PUBLIC PARTICIPATION (IRELAND)



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Appendices

Appendix 1 – European Guidelines

Appendix 2 – Irish Guidelines

Appendix 3 – UK Guidelines

0. DOCUMENT RELEASE FORM

Greenlink

Greenlink CPP IRELAND Rev 2

Greenlink Interconnector

CONCEPT OF PUBLIC PARTICIPATION (IRELAND)

Project Manager Nigel Beresford	Authoriser Nigel Beresford
------------------------------------	-------------------------------

Rev No	Date	Reason	Author	Checker	Authoriser
Rev0	12/03/18	Initial document	Tom Brinicombe		
Rev1	7/10/2019	Update on project	Rónán ÓhÓgartaigh	Tom Brinicombe	Angus Norman
Rev 2	16/1/2020	Update on project	Rónán ÓhÓgartaigh	Tom Brinicombe	Nigel Beresford

1. INTRODUCTION

The Greenlink Interconnector project has been designated as a Project of Common Interest (PCI) under European Regulation 347/2013 and as such the application has to be accompanied by a Concept of Public Participation to ensure that consultation with the public is of an appropriate standard, and is meaningful and central to the development of the PCI project.

The relevant European, Irish and UK guidelines can be found in Appendices 1, 2 and 3.

This document will provide an introduction to the Greenlink Interconnector project and outline the public consultation strategy to be undertaken during the development process in Ireland.

The public consultation strategy aims to ensure that the public has visibility of the Greenlink proposal as it develops and input into the project as it evolves.

CONTENTS

- Project Overview
- The Developer
- Project Need
- Consultation
 - Our Approach
 - Identification of Stakeholders
 - Subject Areas
 - Consultation Tools
 - Resourcing
 - Consultation Programme
- Appendices

1.1 PROJECT OVERVIEW

Greenlink is a proposed electricity interconnector with a nominal capacity of 500MW linking the existing electricity grids in Ireland and Great Britain (Fig 1-1). It will consist of two converter stations, one close to the existing substation at Great Island in County Wexford (Ireland) and one close to the existing Pembroke substation in Pembrokeshire (Wales), connected by electricity cables running underground (onshore) and under the sea (offshore).

The onshore project elements in Ireland will consist of a landfall site at Baginbun Beach in County Wexford, a converter station close to the existing power station at Great Island in County Wexford and high voltage direct current (HVDC) electricity cables with a fibre optic cable for control and communication purposes running underground from the landfall site to this converter station.

The onshore project elements in Wales will consist of a landfall site at Freshwater West, a converter station close to the existing Pembroke power station in Pembrokeshire (and an associated permanent access road) and HVDC electricity cables running underground from the landfall site to this converter station.

The offshore project element will consist of HVDC electricity cables and a fibre optic cable running under the sea between the landfall sites in Ireland and Wales.

The Greenlink interconnector will link the Irish and Welsh/GB electricity networks and the markets that they serve. The project is independent from the power generation sources that will generate the power to be transmitted through the interconnector; the interconnector will utilise whatever sources

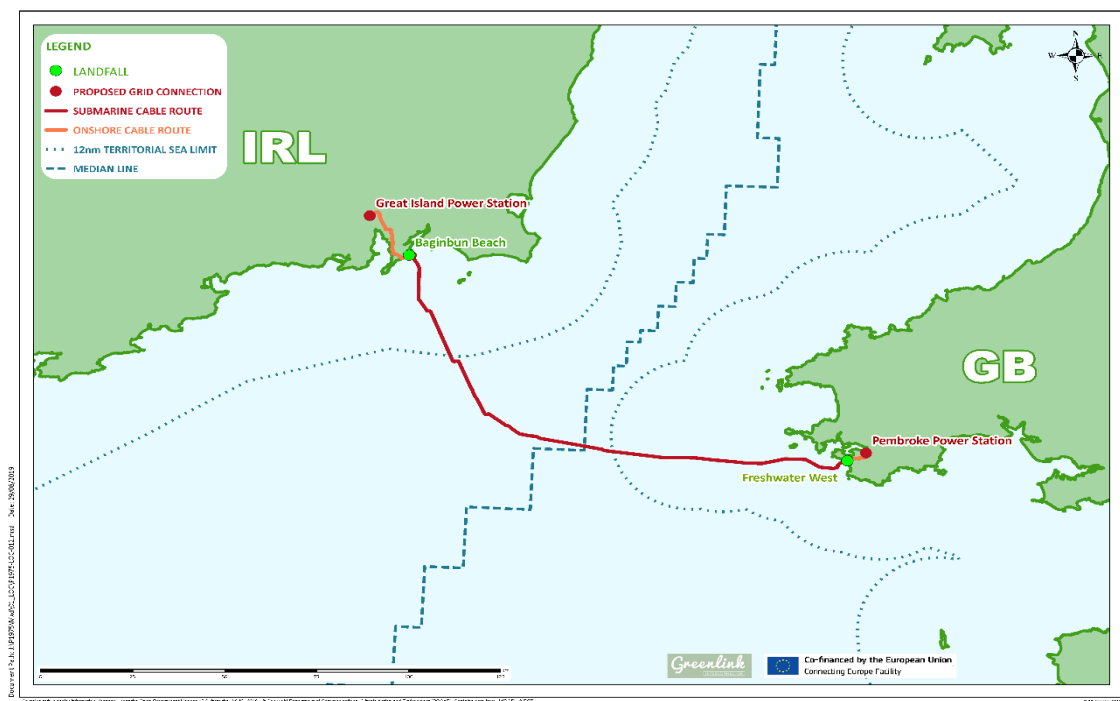
of power are supplied to those networks from time to time. The interconnector will facilitate power transfer in both directions.

The design of the project has evolved to date through constraints assessments, options appraisal, environmental and technical surveys and consultation with relevant stakeholders.

Greenlink will be of key strategic importance providing significant additional interconnection between Ireland, Great Britain and onwards to mainland Europe. It will provide additional transmission network capacity, reinforcing the existing electricity grids in south-east Ireland and southern Wales and contributing to each country’s strategic interconnection objectives. The development and construction of Greenlink will deliver increased security of supply, facilitate fuel diversity and greater competition and will ultimately provide significant benefits to consumers in Ireland, Wales, Great Britain as a whole and mainland Europe. It is recognised that there are significant benefits to be accrued both in Ireland and Great Britain from the provision of additional interconnection of the two national electricity grids.

In Wales, a connection agreement has been signed with National Grid for a grid connection at the Pembroke substation, and in Ireland with EirGrid for a connection at the Great Island substation in Wexford.

Figure 1-1 Greenlink Overview



1.2 THE DEVELOPER

The Greenlink project is being developed by Greenlink Interconnector Limited, which is owned jointly by Element Power Holdings, part of Hudson Sustainable Investment, and Partners Group on behalf of its clients. Hudson Sustainable Investment is an independent investment management firm with a strong track record and expertise in investing in and developing sustainable energy projects. The Greenlink project is being developed by Greenlink Interconnector Limited, energy infrastructure projects in Ireland, the UK and internationally. Partners Group is a global private markets investment management firm with €73 billion in investment programs under management in private equity, private real estate, private infrastructure and private debt.

1.3 PROJECT NEED

Ireland is currently connected to the UK by two ‘two-way’ electricity interconnectors, which provide a means of transferring electricity between the two countries – the East West Interconnector (EWIC), which connects County Dublin to North Wales, and an interconnector between Moyle, County Antrim, Northern Ireland and Ayrshire, Scotland. However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Ireland and the UK and within Europe as a whole. There is strong support within Europe for additional interconnection.

The ‘Energy Union’ is a strategy launched by the European Commission on 25th February 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy. This strategy is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and towards different approaches in the design and implementation of energy policy.

A key aim of the strategy is to increase the physical interconnectedness of the energy grids (both gas and electricity) of European and neighbouring countries. This includes building more energy interconnectors between European countries, with the target of meeting 10% interconnectedness by 2020 and to reach 15% by 2030.

An interconnected European energy grid is vital for Europe's energy security, for more competition in the internal market resulting in more competitive prices as well as for better achieving the decarbonisation and climate policy targets which the European Union has committed to. An interconnected grid will help deliver the ultimate goal of the Energy Union, i.e. to ensure affordable, secure and sustainable energy, and also growth and jobs across the EU.

Greenlink has been given the status of a European Union ‘Project of Common Interest’ (PCI), making it one of Europe’s priority energy infrastructure projects.

Greenlink will have key strategic importance providing significant additional interconnection between the electricity grids of Ireland, the UK and mainland Europe. As well as at the European level, Greenlink is also expected to provide benefits at the national level. For both Ireland and the UK, it will provide additional transmission network capacities, reinforcing the existing electricity grids in south-east Ireland and south Wales by creating an increasingly meshed network, and thus improving security of supply, as well as contributing to each country’s strategic interconnection objectives.

The construction of Greenlink will also deliver increased security of supply by diversifying energy sources in both Ireland and the UK, and greater competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, the UK and mainland Europe.

Greenlink’s location in respect of the existing EWIC and Moyle interconnectors will also enable EirGrid and National Grid to increase the use of these connections to manage power flows on their networks, reduce network constraints and hence reduce costs of operating their transmission systems, benefiting consumers both in Ireland and the UK.

Greenlink is privately financed and will provide significant capital for a large infrastructure project that will generate jobs and wider economic benefits along the local and regional supply chains. In Co. Wexford there will be around 250 jobs during construction and around 20 permanent jobs once the project is operational. Knock-on benefits to the region will be through contracts for a range of services and products and we will be looking to maximise the benefits to the local supply chain (see section 2.3.2 below).

The Greenlink interconnector will support the achievement of the Government’s goals on

decarbonisation and green growth, which offer significant economic and environmental benefits to Ireland. While the interconnector is technology agnostic, greater interconnection will be valuable in facilitating the build-out of renewable energy generation on both sides, particularly the growth of offshore wind, as it will allow surplus renewable power to be exported between Ireland and Great Britain. Infrastructure like Greenlink is therefore essential to facilitate the growth of the low carbon economy and attract green investment.

Greenlink will therefore support the Irish government’s Climate Action Plan and its target to achieve 70% of electricity from renewable sources by 2030.

In summary, the main benefits from the Greenlink Interconnector are expected to be:

- Strategically placed to reinforce the transmission grid in the south of Ireland by its connection to Wales, creating synergy with existing EWIC and Moyle interconnectors, and by connecting the centre and north of Ireland to the UK;
- Providing reinforcement to transmission boundaries in south Wales;
- Providing additional import and export capacity for the island of Ireland and the UK;
- Greater market integration;
- Greater sharing of reserve, generation capacity and ancillary services between the UK and the island of Ireland;
- Jobs and regional economic benefits from private investment in a large infrastructure project; and
- Reduction of carbon emissions and integration of high levels of renewable energy generation.

2. CONSULTATION

Consultation is the process by which the input of various stakeholders is sought on matters affecting them. It is an important part of the development process. In the context of infrastructure development, its key goals are to increase transparency and a wider involvement in large-scale projects, by creating a dialogue with key stakeholders with the aim of improving these projects with stakeholder input.

Developers are responsible for ensuring public consultation forms a core part of their development projects and that the public has access to relevant information and can influence the decision-making process as appropriate. They must proactively engage the public in order to facilitate a meaningful and genuine consultation.

The Greenlink project team intends to ensure that the local community is consulted and involved throughout the development process of the Greenlink project. The consultation process will be tailored to the specific needs of the local community and delivered in a relevant and accessible manner.

2.1 OUR APPROACH

Greenlink recognises that any type of development can have varying degrees of impact and interest for local communities and is committed to promoting an open and honest dialogue with the local community throughout the development process.

Greenlink has sought to commence a public dialogue during the early stages of development, before detailed environmental work has been carried out. This will enable the local community to watch the project evolve and understand the various complexities and detailed studies involved in developing and constructing a subsea interconnector.

By involving the local community throughout the development process and providing information as it becomes available, Greenlink will work to ensure that the local community is part of the development process.

2.2 IDENTIFICATION OF STAKEHOLDERS

A key part of planning any consultation is to identify the relevant key stakeholders. Key stakeholders can include community groups, local residents, local interest groups, constituency politicians, councillors and local media.

It is expected that the list of stakeholders will grow throughout the consultation process, as more groups and stakeholders become aware of the project. We will ensure that project information is provided to these groups in a timely and transparent manner.

Due to the Concept of Public Participation (CPP) concentrating on public consultation, the considerable consultation activities to be undertaken with statutory consultees will not be included in this document, although for reference the statutory consultees are included in the list of stakeholders in Section 2.3.3 below. Input from statutory consultees will be captured within the documentation forming the final planning application.

Greenlink recognises that different stakeholders will have varying levels of interest in the project. To assist in developing a meaningful consultation strategy, stakeholders will be assigned a different 'consultation level', based on expected/perceived impacts and levels of interest in the project. Consultation levels are explained below:

- **Consultation Level 1** – must be informed and proactively engaged throughout, high level of interest expected
- **Consultation Level 2** – must be kept informed and engaged as per responses, medium level of interest expected
- **Consultation Level 3** – must be kept informed and engaged as per responses, low level of interest expected

2.2.1 ELECTED REPRESENTATIVES

A number of elected representatives have been and will continue to be consulted as part of the Greenlink consultation programme in Ireland.

Relevant county councils and county councillors from the local planning authority are key local stakeholders, directly representing local communities at the local political level, including:

- Local authority – county councillors (listed below); and
- Nationally elected representatives – TDs and MEP (listed below).

2.2.1.1 LOCAL AUTHORITY - COUNTY COUNCILLORS

The local authority for the region is Wexford County Council. Greenlink believes that it is important that county councillors from relevant districts have access to accurate project information and a clear

point of contact within the project team to raise queries and make suggestions regarding the development of the project.

Figure 2-1 New Ross Municipal District



Source: Wexford County Council website

The councillors within the New Ross Municipal District will be proactively and directly consulted.

Table 2-1 Priority district councillors within Wexford County Council for consultation

District	Consultation Level	Notes
New Ross Municipal District	1	Relevant district for landfall, cable route and converter station
Gorey Municipal District	3	Not expected to be affected but will have an interest in a major project taking place in the area
Enniscorthy Municipal District	3	Not expected to be affected but will have an interest in a major project taking place in the area
Borough District of Wexford	3	Not expected to be affected but will have an interest in a major project taking place in the area

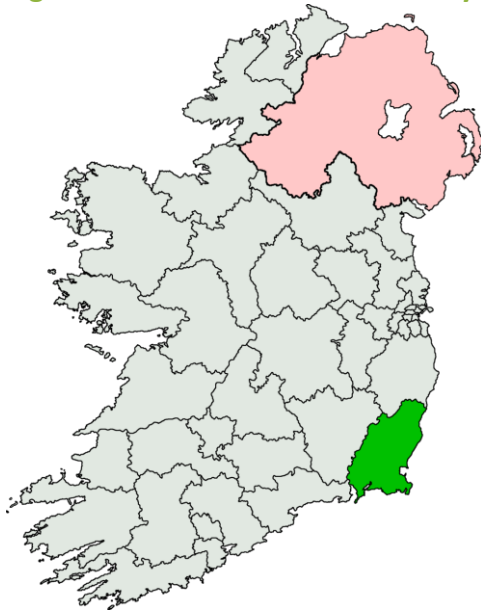
Table 2-2 Wexford County Councillors - New Ross Municipal District (as at December 2019)

Councillor	Consultation Level	Notes
Michael Sheehan	1	Fianna Fáil
John Fleming	1	Fianna Fáil
Anthony Connick	1	Non-Party
Pat Barden	1	Non-Party
Bridin Murphy	1	Fine Gael
Michael Whelan	1	Fianna Fáil

2.2.1.2 NATIONALLY ELECTED REPRESENTATIVES

Greenlink is a major project offering national as well as regional and local benefits and constituents will regularly look to their nationally elected representatives for guidance, support and advice. With this in mind, elected representatives at the national level will also be consulted, with representatives from the Wexford constituency being included in the Greenlink consultation programme.

Figure 2-2 Wexford constituency



Source: Wikipedia

Table 2-3 National elected representatives for consultation

TD	Consultation Level	Notes
Paul Kehoe	2	Fine Gael
Michael W. D’Arcy	2	Fine Gael



TD	Consultation Level	Notes
Brendan Howlin	2	Labour
Malcolm Byrne	2	Fianna Fáil
James Browne	2	Fianna Fáil
MEP		
Mick Wallace	2	Independents 4 Change

2.2.2 NEIGHBOURING RESIDENTS

The input of neighbouring residents is considered by Greenlink to be vitally important. Residents living in the vicinity of the proposed converter station location, the landfall site and those living along the underground cable route (between the landfall site and the converter station site) will be consulted.

Consultation will be carried out in the local area with information being made available to all residents along the potential cable and transport routes, and landfall and converter station sites. This amounts to c. 195 properties and includes local businesses as well as households.

Consultation activities include:

- Direct visits to / meetings with individual residents and local businesses
- Letter drops to households with local representative contact details
- Advertising of exhibitions in the vicinity (eg posters, local media)
- Invitations to the residents to attend exhibition
- Availability of industry experts to explain and communicate items of interest at key project milestones or all other times, as appropriate

2.2.3 COMMERCIAL AND RECREATIONAL USERS

Greenlink recognises that there are numerous members of the local community who are commercial and/or recreational users of the area in which Greenlink is looking to install the cables and converter station. Greenlink is keen to understand any concerns and opportunities arising from the project in respect of these users. In order to fully assess potential impacts, Greenlink will seek views from local commercial and recreational users to understand the current baseline and identify the assessment and development work required to ensure that the project is designed to incorporate the interests of existing users.

Commercial/recreational users include:

- tourism and other recreational business interest;
- landowners;
- fishermen;
- anglers;
- walkers;
- transport users;
- environmental and heritage interest.

We have identified the following organisations (statutory and non-statutory) to consult directly:

- Port of Waterford Company;
- Department of Culture, Heritage and the Gaeltacht (DCHG);
- Department of Housing, Planning and Local Government (DHPLG);
- Department of Communications, Climate Action and Environment (DCCA);
- Department of Agriculture, Food and the Marine (DAFM);
- Southern Regional Assembly;
- National Parks and Wildlife Service (NPWS);
- National Monuments Service (NMS);
- Irish Rail;
- Transport Infrastructure Ireland (TII);
- National Transport Authority (NTA);
- Commission for Railway Regulation;
- Gas Networks Ireland (GNI);
- Office of Public Works (OPW);
- Health and Safety Authority;
- Geological Survey of Ireland (GSI);
- Sea Fisheries Protection Authority;
- Inland Fisheries Ireland (IFI);
- Irish South East Fish Producers Organisation (ISEFPO);
- Irish South and West Fish Producers Organisation (ISWFPO);
- South East Regional Inshore Fisheries Forum;
- Local fishermen as identified through surveys and public exhibitions;
- Bord Iascaigh Mhara (BIM);
- Marine Institute (MI);
- Heritage Council;
- Wexford Local Enterprise Office;
- Fáilte Ireland;
- An Chomhairle Ealaíon (The Arts Council);
- Environmental NGOs including: An Taisce; Birdwatch Ireland; Irish Whale and Dolphin Group; Irish Peatland Conservation Council; Irish Wildlife Trust; and Bat Conservation Ireland.
- An Garda Síochána

This list is not exhaustive and further users are likely to be identified and consulted as the consultation progresses. Some of the above stakeholder organisers will also be relevant to the interests of neighbouring residents (as described in section 2.2.2).

2.3 SUBJECT AREAS

Greenlink will seek input into several key subject areas to incorporate into the development process moving forward and ensure that the Greenlink proposal is being developed to the highest standard. Subject areas to be consulted on will include:

- environmental;
- local supply chain;
- logistics and construction programme; and
- existing land use.

Further subject areas will be included as they arise during the consultation process.

2.3.1 ENVIRONMENTAL

As part of the project development process, Environmental Scoping Reports have been sent out to relevant stakeholders for the Marine and Onshore components of the project. These reports outline the proposed scope and methodology of assessment and survey work to be carried out during the development of the project. The feedback from stakeholders is then incorporated into the survey and assessment programme.

Local stakeholders are included within the circulation of the report and Greenlink will seek an ongoing dialogue with all stakeholders throughout the development process. Greenlink will also seek to identify additional local environmental interest groups and is open to additional specific environmental issues throughout the public consultation (see list of stakeholders in section 2.2.3). Greenlink will seek to continually engage with these groups to ensure that the environmental work carried alongside the application is as robust as possible and considers all environmental issues and concerns raised.

As the design evolves, Greenlink will be seeking feedback from the public on relevant changes, including the visual appearance of the converter station and the proposed landscaping and screening planting.

2.3.2 LOCAL SUPPLY CHAIN

The development of significant infrastructure projects entails substantial capital outlay from developers and their investors, the majority of which is spent during the construction period. Most of this outlay is spent on purchasing equipment and materials (e.g. converter stations and subsea cables) with the rest mainly spent on contractors for the construction of the infrastructure. The construction works will be coordinated by one main contractor who will sub-contract various components to specialist companies, e.g. cable laying, pouring foundations etc.

Construction work on the Greenlink Interconnector is expected to lead to notable expenditure in Ireland. A significant amount of work due to take place at the landfall, cable and converter station sites will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- transportation – equipment and personnel;
- materials, e.g. supplying and pouring concrete;
- electrical connection;
- civil engineering activities and earthworks, e.g. tracks and hard-standing, foundations, trench digging for cables etc;
- accommodation and catering;
- office and cleaning supplies;
- site services, e.g. portacabins and portaloo;
- site security;
- fencing; and
- waste disposal.

Greenlink is committed to maximising the use of locally based contractors and personnel during the construction and operational phases of the project. In order to deliver this, Greenlink will develop a Local Business Support Scheme, which will be aimed at maximising the potential for local business involvement during the construction and operation of the project. As a part of this we will work to engage with local suppliers during the consultation programme and liaise with local economic bodies to ensure that a dialogue is established with local businesses.

2.3.3 LOGISTICS AND CONSTRUCTION PROGRAMME



The construction phase of a major project includes numerous vehicle movements including workers travelling to site and equipment and material deliveries. A transport impact assessment will be completed as part of the planning application and Greenlink will seek input on potential issues of road safety and traffic disruption with the aim of minimising local impacts.

Installation of the underground cables also has the potential to cause disruption and Greenlink will work with the local community to develop a programme to minimise any impacts.

As part of the planning application process, an outline **Traffic Management Plan (TMP)** will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink. We will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

2.3.4 EXISTING LAND USE

Greenlink will seek to build a thorough understanding of the current commercial and recreational users of the sites and develop and maintain a dialogue with them to ensure that their interests are incorporated into the design and construction programme as the development progresses.

2.4 CONSULTATION TOOLS

Greenlink will use a variety of consultation tools throughout the consultation programme. The precise deployment of the tools will reflect the requirements of stakeholders, the most appropriate and effective ways of consulting at any given time and feedback as the consultation progresses.

Our consultation tools will include:

- project information brochure/leaflet/non-technical summary;
- project website;
- email;
- public exhibitions;
- one-to-one engagement;
- roundtable meetings and presentations;
- house visits;
- newsletters;
- field trips;
- local and social media; and
- national media.

2.4.1 PROJECT INFORMATION BROCHURE/LEAFLET AND NON-TECHNICAL SUMMARY

In accordance with PCI guidance Greenlink will produce a series of information brochures of no more than 15 pages to provide a short non-technical summary of the project purpose, timetable, studies, route options, opportunities, project evolution, possible project impacts and mitigation measures as well as other relevant background information as appropriate.

These will be made available to all stakeholders in hard copy format and also published on the project website in a downloadable format. They will be updated at regular intervals to coincide with key phases of the development. The project website also provides a non-technical summary of the project with further detail on the project and this is updated regularly.

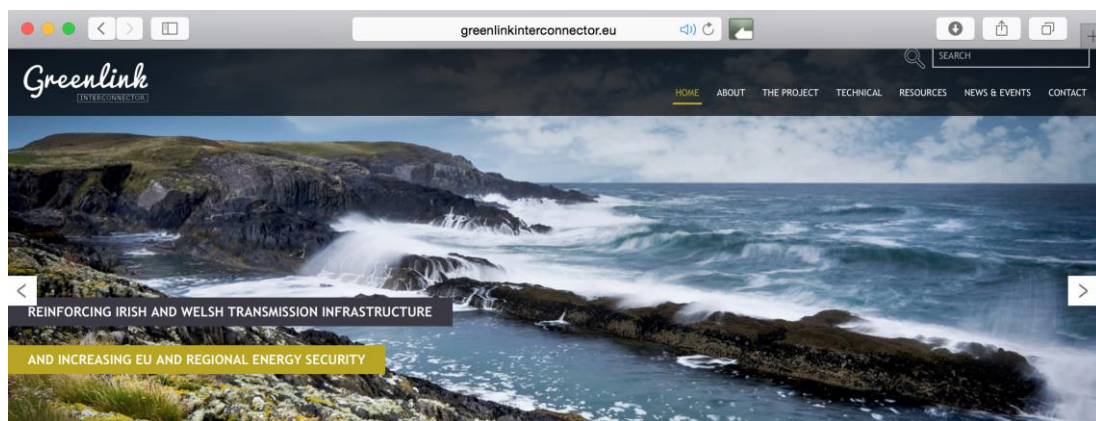


2.4.2 PROJECT WEBSITE

A dedicated project website has been published www.greenlink.ie. The website offers stakeholders key project information and the latest development news, including details of consultation events and opportunities to comment through a dedicated ‘Consultation’ page.

All planning application documents are available to view and download from the ‘Planning’ page and the website also includes full contact details, including an online contact form, for stakeholders to convey comments and objections during consultations. In addition, the website contains all press announcements and a comprehensive set of Frequently Asked Questions (FAQs). The project information brochure is displayed prominently on the Home Page and available to download as a pdf; and a non-technical summary of the project is available on the ‘Project: Summary’ page. Both are regularly updated.

The website will play a central role in the consultation plan, as it provides all key project information in one accessible location and creates a basis for discussion between different stakeholders. Regular communication via the project website will help boost awareness and transparency among stakeholders.



GREENLINK INTERCONNECTOR

Greenlink is a proposed interconnector linking the power markets in Great Britain and Ireland.

TECHNOLOGY: Greenlink will employ high voltage direct current voltage source converter (HVDC VSC) technology to link the two power systems. HVDC has been selected over an alternating current (AC) connection, because AC is technically difficult over this distance. HVDC has lower unit costs, can be much more easily controlled according to trading and market requirements, and has much lower losses. In addition the Irish and GB grid systems are not synchronised and therefore can only be connected via HVDC. The VSC technology (as compared to older current source converters) requires less reinforcement to the AC grid at the connection points, as well as allowing very rapid change of flow direction and reactive power.

This flexibility is highly valued by system operators when managing grid stability and in providing ancillary/system services. The connection between the new converter stations will all be underground and subsea cables with no new overhead lines.

PRE PLANNING: The development team is currently carrying out initial feasibility work for the Greenlink interconnector between Pembroke, Pembrokeshire, in Wales, and Great Island, County Wexford in Ireland. Throughout the pre planning phase of the project we will be consulting all key stakeholders to ensure that they can input into the development process. The project will require planning permission.



2.4.3 COMMUNITY EMAIL AND PHONE LINE

It is important for members of the community to have a direct communication route to channel their queries, comments and concerns. To facilitate this, Greenlink will ensure that contact details are clearly shown on all consultation literature and the website, and that a dedicated email address is set up: info@greenlink.ie. In addition, we will ensure that an email and phone number is provided to local residents and other stakeholders for the relevant local liaison person for Greenlink.

All email and phone calls will be responded to in a prompt and professional manner.

2.4.4 PUBLIC EXHIBITIONS

Public exhibitions will take place at key stages of the development programme to present the latest details of the project and enable members of the local community to meet the project team in person. Project information will be provided via a range of media at these consultation events – exhibition boards, leaflets and third-party materials.

Events will be held in public locations convenient for the local community and publicised locally with posters, letters to targeted stakeholders, press releases, adverts in the local media and through social media. Dates, once confirmed, will also be added to a running calendar on the project website. A list of past exhibitions and the materials available at each will be available to download on the Consultation page of the website.

The locations for the exhibitions in Wexford are listed below, along with preferred venues we have identified through discussion with local stakeholders:

- Ramsgrange: Parochial Hall
- Fethard on Sea: St Mary’s Hall
- Duncannon: Star-of-the-Sea Pastoral Centre

Where these are not available on given dates, alternative nearby venues will be used, such as local hotels.

For indicative dates of rounds of exhibitions, please see the project Consultation Programme and Timeline in section 2.7.

2.4.5 ONE-TO-ONE ENGAGEMENT

One-to-one engagement will be used to discuss specific areas of interest or concern with participating parties. These meetings will be particularly useful for focused discussions with leaders of local stakeholder groups in the planning and permitting stages of development. It will also be used to address individual residents’ and property-owners’ concerns when requested.

2.4.6 ROUNDTABLE MEETINGS AND PRESENTATIONS

Roundtable meetings will allow formal discourse among a number of representatives from various stakeholder groups to discuss specific areas of the project and gain varied inputs. We will present information on the project and its development (using visual tools such as slides and plans) where appropriate and deemed useful.

2.4.7 HOUSE VISITS

Residents living near a proposed project often have a number of concerns pertaining to issues of residential amenity and other areas such as perceived impacts on health and house prices. Specific households may require additional consultation care due to perceived high impacts from a proposal.

Directly engaging with stakeholders via house visits is an ideal opportunity for both informational and participatory communication.



We have engaged a local representative to support the Development Manager for Ireland in visiting and engaging with local residents and businesses at their properties, when requested.

2.4.8 SITE VISITS

Site (or 'field') visits are explorative in nature and can help familiarise local stakeholders with the technical details of the project and to envisage the proposals in situ. We will routinely offer these to stakeholders such as local political representatives.

2.4.9 LOCAL AND SOCIAL MEDIA

We use the local media as a platform to inform local residents, organisations and other stakeholders of news on the project, including opportunities to comment on the development. We issue press releases at key milestones of the project and on upcoming consultation events such as public exhibitions.

Our key local media publications for Greenlink in Ireland are in the Wexford People Group, specifically the **New Ross Standard** and the **Wexford People**.

We use our Twitter account **@Greenlink_IC** to provide regular updates on the project, including news of milestones, policy developments and details of upcoming public consultation events. We use our **LinkedIn page** to provide news of the project for a more commercial and industry stakeholder audience, such as potential contractors.

2.4.10 NATIONAL AND TRADE MEDIA

We use the Irish national media and industry/trade media (such as Fishing News) in a similar way, as a platform for communicating news and information about the project, including alerting stakeholders of opportunities to provide input. We maintain a database of media publications and issue press releases and briefings at key milestones.

We have engaged an external PR specialist based in Ireland to provide support and to ensure our media relations is of the highest quality; and we monitor media coverage on a daily basis.

2.5 CONSULTATION TO DATE

Greenlink is currently in the development phase. Consultation to date has been extensive and has covered:

- Statutory consultees and key users. The aim of this work has been to understand the existing constraints and develop a broad design to form the basis of a high-value public consultation.
- Local and nationally elected representatives. We have provided regular written updates on the project and offered one-to-one and group meetings to brief them on progress. We have invited them to the local public exhibitions.

Roundtable meetings and presentations have taken place to date with Wexford County Council's New Ross District Councillors on the following dates:

- 20th June 2018
- 11th September 2019

- Neighbouring residents and commercial and recreational users. We have held three rounds of public exhibitions in County Wexford to date, timed to coincide with key development milestones in the proposal:
 - June and August 2018: Fethard on Sea and Duncannon
 - January 2019: Fethard on Sea and Duncannon
 - March 2019: Ramsgrange
 - December 2019: Ramsgrange, Duncannon and Fethard on Sea

The full list, including dates, location and materials provided at the event, can be found on our website [here](#). These were advertised in the local media, on social media and in local locations.

We have contacted all residents along the onshore cable route, including letters inviting them to their local exhibition and offering one-to-one meetings to address any questions. We have responded to a number of enquiries from the public received through our website or directly to our local representative.

- Consultation materials produced so far include the following, available through our dedicated [Resources](#), [Planning](#) or [News](#) pages on our website:
 - four issues of the project brochure;
 - information boards for the public exhibitions;
 - printed maps and diagrams;
 - event adverts and public notices;
 - articles and updates in the media (including social media);
 - website content; and
 - a detailed set of FAQs.

2.5.1 WEBSITE

The www.greenlink.ie website (then named www.greenlinkinterconnector.eu) was published on 21st April 2016. The website is outlined in 2.4.2 above. The website has resulted in a number of enquiries.

2.5.2 COMMERCIAL/RECREATIONAL USERS

A dialogue has been established with the Port of Waterford to ensure that the project takes shipping and ongoing activity in the Port into consideration as the project evolves.

Dialogue is also ongoing with the list of stakeholders identified in section 2.2.3 above, which includes recreational users and fisheries interests.

2.6 RESOURCING

Members of the Greenlink development team have the expertise to engage and communicate with a variety of stakeholders on a range of development issues.

We have designated local and regional representatives in the two jurisdictions: a Development Manager for Ireland and a Planning and Permitting Manager for Wales. These manage the consultation process in their respective areas, and it allows local, regional and national stakeholders to have a clear point of contact with the requisite local knowledge.

The Development Manager for Ireland is also supported by the following:

- A local liaison officer based in Wexford – to manage dialogue with local landowners and residents.
- A Communications Manager for Greenlink – to oversee communications and ensure best practice in stakeholder and community relations and PR.
- An external communications and PR advisor based in Dublin – to provide additional communications and stakeholder engagement advice, including support on the ground in Wexford.
- Technical and environmental consultants – to provide expertise and advice on specific issues raised by stakeholders.



2.7 CONSULTATION PROGRAMME AND TIMELINE

Table 2-4 Details of full project life consultation activity

Stage	Development Details	Consultation Details	Indicative Timeline
Site development	A variety of technical and environmental assessments; commencement of the planning process: screening, scoping and assessment.	With the commencement of the official planning process, community consultation kicks off, consultation ongoing over the development period, to include at least 3 rounds of public exhibitions and all other engagement activities detailed above.	2018-2019 Website launch and press work Exhibitions: Summer 2018, Spring 2019, Autumn/Winter 2019 Three editions of information brochure/leaflet Meetings with stakeholders ongoing throughout
Planning applications - marine	Applications submitted for the marine components of the Greenlink project. In Ireland, applications are submitted to Department of Housing, Planning and Local Government (DHPLG) Foreshore Unit.	Stakeholders are fully aware of the content of the planning applications due to thorough consultation taking place prior to submission. Details are provided (through activities detailed above) of how stakeholders can comment during the formal period of consultation.	November 2019 Exhibitions: December 2019 Fourth edition of information brochure/leaflet Website updates and press work Ongoing meetings and written contact
Planning applications - onshore	Applications submitted for the onshore components of the Greenlink project. In Ireland, applications are submitted to An Bord Pleanála for the converter station and cable route.	Stakeholders are fully aware of the content of the planning applications due to thorough consultation taking place prior to submission. Details are provided (through activities detailed above) of how stakeholders can comment during the formal period of consultation.	First quarter 2020 (estimated) Exhibitions Fifth edition of information brochure/leaflet Website updates and press work Ongoing meetings and written contact Targeted newsletters in community
Determination	Planning applications are determined. In Ireland the application will be determined by An Bord Pleanála.	Stakeholders are informed of the planning decisions.	Second half of 2020 (estimated) Direct contact (written and in-person) plus press work, website updates, press work and community newsletter
Post-planning	Pre-commencement planning conditions are discharged. Construction preparation takes place.	Community is engaged on key practical issues, such as traffic management plans and timing of works.	Second half of 2020 – 2021 Roundtables and meetings with community representatives Website updates and community newsletters
Construction	Construction and installation works take place as per the agreed construction programme.	Community is kept informed of progress; project team responds to construction-related queries and issues.	Second half of 2020 – 2023 Community newsletters and direct contact with key stakeholders; website updates and press work.
Operational	The Greenlink project becomes operational.	Stakeholders are informed of the successful completion of the project and its operational status.	2023

3. APPENDICES

3.1 APPENDIX 1 – EUROPEAN GUIDELINES

Source

REGULATION (EU) No 347/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:115:0039:0075:en:PDF>

Article 9

Transparency and public participation

1. By 16 May 2014, the Member State or competent authority shall, where applicable in collaboration with other authorities concerned, publish a manual of procedures for the permit granting process applicable to projects of common interest. The manual shall be updated as necessary and made available to the public. The manual shall at least include the information specified in Annex VI.1. The manual shall not be legally binding, but it may refer to or quote relevant legal provisions.
1. Without prejudice to any requirements under the Aarhus and Espoo Conventions and relevant Union law, all parties involved in the permit granting process shall follow the principles for public participation set out in of Annex VI.3.
1. The project promoter shall, within an indicative period of three months of the start of the permit granting process pursuant to Article 10(1)(a), draw up and submit a concept for public participation to the competent authority, following the process outlined in the manual referred to in paragraph 1 and in line with the guidelines set out in Annex VI. The competent authority shall request modifications or approve the concept for public participation within three months; in so doing, the competent authority shall take into consideration any form of public participation and consultation that took place before the start of the permit granting process, to the extent that such public participation and consultation has fulfilled the requirements of this Article. Where the project promoter intends to make significant changes to an approved concept, it shall inform the competent authority thereof. In that case the competent authority may request modifications.
1. At least one public consultation shall be carried out by the project promoter, or, where required by national law, by the competent authority, before submission of the final and complete application file to the competent authority pursuant to Article 10(1)(a). This shall be without prejudice to any public consultation to be carried out after submission of the request for development consent according to Article 6(2) of Directive 2011/92/EU. The public consultation shall inform stakeholders referred to in Annex VI.3(a) about the project at an early stage and shall help to identify the most suitable location or trajectory and the relevant issues to be addressed in the application file. The minimum requirements applicable to this public consultation are specified in Annex VI.5. The project promoter shall prepare a report summarising the results of activities related to the participation of the public prior to the submission of the application file, including those activities that took place before the start of the permit granting process. The project promoter shall submit that report together with the application file to the competent authority. Due account shall be taken of these results in the comprehensive decision.
1. For projects crossing the border of two or more Member States, the public consultations pursuant to paragraph 4 in each of the Member States concerned shall take place within a period of no

more than two months from the date on which the first public consultation started.

- For projects likely to have significant adverse cross-border impacts in one or more neighbouring Member States, where Article 7 of Directive 2011/92/EU and the Espoo Convention are applicable, the relevant information shall be made available to the competent authority of the neighbouring Member States. The competent authority of the neighbouring Member States shall indicate, in the notification process where appropriate, whether it, or any other authority concerned, wishes to participate in the relevant public consultation procedures.
- The project promoter, or, where national law so provides, the competent authority, shall establish and regularly update a website with relevant information about the project of common interest, which shall be linked to the Commission website and which shall meet the requirements specified in Annex VI.6. Commercially sensitive information shall be kept confidential. Project promoters shall also publish relevant information by other appropriate information means to which the public has open access.

ANNEX VI

GUIDELINES FOR TRANSPARENCY AND PUBLIC PARTICIPATION

The manual of procedures referred to in Article 9(1) shall at least specify:

- the relevant law upon which decisions and opinions are based for the different types of relevant projects of common interest, including environmental law;
- the relevant decisions and opinions to be obtained;
- the names and contact details of the Competent Authority, other authorities and major stakeholders concerned;
- the work flow, outlining each stage in the process, including an indicative time frame and a concise overview of the decision-making process;
- information about the scope, structure and level of detail of documents to be submitted with the application for decisions, including a checklist;
- the stages and means for the general public to participate in the process.

The detailed schedule referred to in Article 10(4)(b) shall specify as a minimum the following:

the decisions and opinions to be obtained;
the authorities, stakeholders, and the public likely to be concerned;
the individual stages of the procedure and their duration;
major milestones to be accomplished and their deadlines in view of the comprehensive decision to be taken;
the resources planned by the authorities and possible additional resource needs.

- To increase public participation in the permit granting process and ensure in advance information and dialogue with the public, the following principles shall be applied:

The stakeholders affected by a project of common interest, including relevant national, regional and local authorities, landowners and citizens living in the vicinity of the project, the general public and their associations, organisations or groups, shall be extensively informed and consulted at an early stage, when potential concerns by the public can still be taken into account and in an open and transparent manner. Where relevant, the competent authority shall actively support the activities undertaken by the project promoter.

Competent authorities shall ensure that public consultation procedures for projects of common interest are grouped together where possible. Each public consultation shall cover all subject matters relevant to the particular stage of the procedure, and one subject matter



relevant to the particular stage of the procedure shall not be addressed in more than one public consultation; however, one public consultation may take place in more than one geographical location. The subject matters addressed by a public consultation shall be clearly indicated in the notification of the public consultation.

Comments and objections shall be admissible from the beginning of the public consultation until the expiry of the deadline only.

- The concept for public participation shall at least include information about:

the stakeholders concerned and addressed;
the measures envisaged, including proposed general locations and dates of dedicated meetings;
the timeline;
the human resources allocated to the respective tasks.

- In the context of the public consultation to be carried out before submission of the application file, the relevant parties shall at least:

publish an information leaflet of no more than 15 pages, giving, in a clear and concise manner, an overview of the purpose and preliminary timetable of the project, the national grid development plan, alternative routes considered, expected impacts, including of cross-border nature, and possible mitigation measures, which shall be published prior to the start of the consultation; The information leaflet shall furthermore list the web addresses of the transparency platform referred to in Article 18 and of the manual of procedures referred to in point (1);

inform all stakeholders affected about the project through the website referred to in Article 9(7) and other appropriate information means;

invite in written form relevant affected stakeholders to dedicated meetings, during which concerns shall be discussed.

- The project website shall make available as a minimum the following:

the information leaflet referred to in point (5);

a non-technical and regularly updated summary of no more than 50 pages reflecting the current status of the project and clearly indicating, in case of updates, changes to previous versions;

the project and public consultation planning, clearly indicating dates and locations for public consultations and hearings and the envisaged subject matters relevant for those hearings;

contact details in view of obtaining the full set of application documents;

contact details in view of conveying comments and objections during public consultations.

3.2 APPENDIX 2 – IRISH GUIDELINES

AN BORD PLEANÁLA GUIDELINES

5. Public Participation: The Regulation

5.1 Article 9 of Regulation 347/2013

Article 9 provides that, without prejudice to any requirements under the Aarhus and Espoo Conventions and relevant EU law, all parties involved in the permit granting process shall follow the principles for public participation set out in Annex V1.3.

Those principles are listed below:

The stakeholders affected by a project of common interest, including relevant national, regional and local authorities, landowners and citizens living in the vicinity of the project, the general public and their associations, organisations or groups, shall be extensively informed and consulted at an early stage, when potential concerns by the public can still be taken into account and in an open and transparent manner. Where relevant, the Competent Authority shall actively support the activities undertaken by the project promoter.

Competent authorities shall ensure that public consultation procedures for Projects of Common Interest are grouped together where possible. Each public consultation shall cover all subject matters relevant to the particular stage of the procedure, and one subject matter relevant to the particular stage of the procedure shall not be addressed in more than one public consultation; however, one public consultation may take place in more than one geographical location. The subject matters addressed by a public consultation shall be clearly indicated in the notification of the public consultation.

Comments and objections shall be admissible from the beginning of the public consultation until the expiry of the deadline only.

An Bord Pleanála as Competent Authority for Projects of Common Interest shall operate by those principles.

5.2 The Pre-Application Procedure and Public Participation

The project promoter has an indicative period of 3 months from the start of the permit granting process to submit a public participation concept to An Bord Pleanála (Competent Authority). An Bord Pleanála (Competent Authority) must either modify or approve the concept within 3 months.

The modification or approval will be done following consultation with the other relevant authorities, as considered appropriate.

To give effect to the public participation principle that the general public, stakeholders and landowners should be extensively informed, An Bord Pleanála (Competent Authority) will be requesting project promoters to inform and consult with the general public at the earliest possible time which may include the time prior to the project promoter formally notifying An Bord Pleanála (Competent Authority) about the project under Article 10(1)(a) of the Regulation. An Bord Pleanála (Competent Authority) draws the attention of project promoters to the provisions of Article 9(3) of the Regulation which provides that An Bord Pleanála (Competent Authority) shall take into consideration any form of public participation and consultation that took place before the start of the permit granting process in arriving at any decision in relation to the public participation concept.

5.3 Public Participation Before Submission of the Application File

Annex VI (5) of the Regulation sets out what, at least, the relevant parties shall provide. These details are:

publish an information leaflet of no more than 15 pages, giving, in a clear and concise manner, an overview of the purpose and preliminary timetable of the project, the national grid development plan, alternative routes considered, expected impacts, including of cross-border nature, and possible mitigation measures, which shall be published prior to the start of the consultation; the information leaflet shall furthermore list the web addresses of the transparency platform referred to in Article 18 and of the manual of procedures;

inform all stakeholders affected about the project through the website referred to in Article 9(7) of the Regulation and other appropriate information means;

invite in written form relevant affected stakeholders to dedicated meetings, during which concerns shall be discussed.

An Bord Pleanála (Competent Authority), during the pre-application procedure stage will expect the project promoter to provide details of having complied with the foregoing.

5.4 The Public Participation Concept

Article 9.3 of Regulation 347/2013 provides that a project promoter shall, within an indicative period of three months of the start of the permit granting process under Article 10(1)(a) draw up and submit a concept for public participation to An Bord Pleanála (Competent Authority). Within three months of receipt of the concept An Bord Pleanála (Competent Authority) shall request modifications or approve the concept. An Bord Pleanála (Competent Authority) will seek the opinion of other relevant authorities concerned on the concept.

Annex VI (4) of the Regulation provides details of what the concept shall at least include. These details are:

- the stakeholders concerned and addressed;
- the measures envisaged, including proposed general locations and dates of dedicated meetings;
- the timeline;
- the human resources allocated to the respective tasks.

An Bord Pleanála (Competent Authority) draws the attention of the project promoters to the requirements of the Data Protection Acts 1988 and 2003 and citizens' fundamental right to privacy in relation to any material concerning identifiable stakeholders published in a public participation concept.

Generally, An Bord Pleanála (Competent Authority) intends, where it has approved a public participation concept for a specific project, to require the project promoter to publish the approved public participation concept on the project website as a further means of enhancing transparency and public participation.

In addition, An Bord Pleanála (Competent Authority) considers that all submissions received as part of the public consultation process should be published on the project website unless the submitter has provided reasonable reasons for the consideration of An Bord Pleanála, as Competent Authority, for wishing that their submission be received in confidence. Project promoters should be aware of their responsibilities under the Data Protection Acts 1988 and 2003 in relation to personal information such as addresses and contact details.

5.5 The Project Website and Public Participation

Annex VI (6) of the Regulation sets out the information that projects websites shall make available as a minimum. The information is:

- the information leaflet referred to in 8.4(a) above;
- a non-technical and regularly updated summary of no more than 50 pages reflecting the current status of the project and clearly indicating, in case of updates, changes to previous versions;
- promoters of PCIs are free to make additional information available on their websites. However the information leaflet and the current status summary documents must be stand-alone documents which provide a complete and not misleading view of the project and its current status;
- the project and public consultation planning, clearly indicating dates and locations for public consultations and hearings and the envisaged subject matters relevant for those hearings;
- contact details in view of obtaining the full set of application documents;
- contact details in view of convening comments and objections during public consultations.

An Bord Pleanála (Competent Authority) will expect that the website is maintained by the project promoter concerned and that all changes to the website content are documented so that An Bord



Pleanála (Competent Authority) can trace what information was made available to the general public at specific times.

5.6 The Statutory Permit Granting Procedure and Public Participation

As the Competent Authority under the Collaborative Scheme, the role of An Bord Pleanála is mainly to co-ordinate the issuing of the comprehensive decision and to ensure that it is made within the period set out in the Regulation. The comprehensive decision being the decision or set of decisions not including courts or tribunals that determines whether or not a project promoter is to be granted authorisation to build the energy infrastructure to realise a project.

Public participation within the individual consent granting processes operated by other authorities in the Republic of Ireland, therefore, remains within the competence of these authorities at this statutory permit granting stage. Insofar as a project comes before An Bord Pleanála as a planning application, An Bord Pleanála will follow its own public participation procedures.

5.6.1 Public Participation and An Bord Pleanála

A Guide to Public Participation in Strategic Infrastructure Development is available [here](#).

5.6.2 Public Participation and the EPA

Information relating to EPA statutory public participation in the licensing and permitting process may be found [here](#).

5.6.3 Public Participation and Foreshore Applications

The Department of Environment, Community and Local Government (DECLG) places a high priority on public participation during the assessment of foreshore applications.

Information relating to DECLG public participation in relation to foreshore applications may be found [here](#).

Source

Projects of Common Interest: Manual of Permit Granting Process Procedures
<http://www.pleanala.ie/publications/2014/pocimanual.pdf>

3.3 APPENDIX 3 – UK GUIDELINES

4.23. Within 3 months of the written notification to the NCA, the developer is required to submit a “concept for public participation” according to the principles in Annex VI (4). This is to ensure that the developer carries out proper public consultation on the project. In approving a concept for public participation, the NCA may take into consideration any form of public participation and consultation that took place before the start of the consenting process, to the extent that it fulfils the requirements of Article 9 of the TEN-E Regulation. Although it enumerates principles for consultations in Annex VI(3) the TEN-E Regulation does not prescribe rigid rules.

4.24. The “concept for public consultation” must include, as a minimum, the following information:

- the stakeholders concerned and addressed;
- the measures envisaged, including proposed general locations and dates of dedicated meetings;
- the timeline;
- the human resources allocated to the respective tasks.

4.25. It may be that the overall concept would be for consultation on a specific route for a linear PCI or specific location for the site of a sub- station, but because the specific site will be subject to more detailed assessments, it is not possible to specify exact dates or locations for any dedicated meetings. In such circumstances, it may be acceptable for the concept to set out in general terms what is proposed and use an indicative timescale in which consultations would be undertaken. It should be noted however, that for PCIs that are in more than one MS, consultations on the PCI in each MS must be held within two months of the first consultation.

4.26. The TEN-E Regulation sets out the minimum requirements for “public participation” that would meet the consultation requirements in Article 9(3) and Annex VI (3). Annex VI(5) also specifies that for the required public consultation, the relevant parties shall at least:

- publish an information leaflet of no more than 15 pages, giving, in a clear and concise manner, an overview of the purpose and preliminary timetable of the project, the national grid development plan, alternative routes considered, expected impacts, including of cross-border nature, and possible mitigation measures, which shall be published prior to the start of the consultation. The information leaflet shall furthermore list the web addresses of the transparency platform referred to in Article 18 and of the manual of procedures referred to in point (1);
- inform all stakeholders affected about the project through the website referred to in Article 9(7) and other appropriate information means;
- invite in written form relevant affected stakeholders to dedicated meetings, during which concerns shall be discussed.”

4.27. The concept for public participation should be proportionate to the nature of the infrastructure proposed, but must include at least one public consultation. Developers should consider how best to engage with the public, considering the likely stakeholders and issues that might be of concern. A “concept for public participation” could follow the pattern of a stakeholder engagement plan that developers often prepare as part of project planning for a proposal that requires an EIA4. It should include some indication of where in the project timetable any proposed information events might occur. It is not expected, however, that all concepts for public participation would be able to state the precise day, hour or location of any putative information event.

4.28. In indicating the “human resources” to be allocated to specific consultation tasks, it may not be possible to state explicitly the number of persons allocated to each part of a consultation process, nor the precise timing of potential consultation events. Further, some developers may use professional public relations consultants to manage public information and consultation on a project. However developers will be expected to indicate the type of resources expected to be committed to consultation tasks (for example a project engineer and environmental specialist to explain the project and any potential significant effects) and an indication of the timing of consultations to demonstrate that the TEN- E obligations and any UK obligations will have been met before an application is submitted.

4.29. Some UK consenting regimes set out specific requirements for consultation. For example, the Planning Act 2008 and its implementing regulations have statutory obligations to consult statutory bodies, including environmental bodies such as Natural England and local authorities before submitting an application. Prospective applicants for a DCO must prepare a “Statement of Community Consultation” (SOCC), having first consulted relevant local authorities on a draft of this and carry out consultations as set out in the SOCC. The developer is required to submit a report on all the statutory



consultation and publicity they have undertaken with an application for an order granting development consent and show how the outcome of the consultation has been taken account.

4.30. There is a process for consultation on applications for a Marine Licence that takes place during the examination period and the concept for public participation would take into this into account. There are also consultation requirements in regulations implementing the environmental impact assessment (EIA) directive in the UK.

4.31. Under the Town and Country Planning Act 1990, local planning authorities are required to carry out consultations as prescribed in Article 13 of The Town and Country Planning (Development Management Procedure) (England) Order 2010. In considering a proportionate concept for public participation for PCIs that may only require TCPA planning permission, developers should ensure that the concept takes account of the statutory obligations on local authorities. It should be noted that such consultations will take place after the formal application file has been accepted, i.e. in the 18 month examination and determination period. It is recommended that developers have discussions with the NCA and relevant local authorities on the timing of such consultations, which may also be reflected in the schedule of permit-granting process. Guidance on consultations under the TCPA is available on the Planning Portal at:

<http://planningguidance.planningportal.gov.uk/blog/guidance/consultation-and-pre-decision-matters/>

4.32. In drafting a concept for public participation, developers should include any statutory requirements for consultation and how they will comply with these requirements. Note, however, that any statutory consultations required by UK consenting regimes during the examination of an application do not over-ride or substitute for the requirement in the TEN-E Regulation to hold at least one public consultation before submission of the “draft application file” – which should be accompanied by a report on the consultation. It is recommended that developers discuss any proposed “concept for public participation” with the NCA at an early stage. This would avoid rejection of an inadequate plan later.

Submission of a “draft application file”

4.33. Article 10(4)(c) of the TEN-E Regulation requires the NCA to review the developer’s “draft application file” and request any missing information. In the UK, there is no requirement to submit draft applications for approval by consenting authorities before a formal application is made for consent of an infrastructure project. Moreover, in respect of an application for a DCO under the Planning Act 2008, there is no provision during the acceptance period under section 55 of the Act to require or allow submission of additional information once an application has been made. The application must be accepted or rejected within 28 days.

4.34. However, it is normal for developers to have informal discussions with consenting or examining authorities prior to submitting an application. In the context of the TEN-E Regulation, the developer may ask the NCA to co-ordinate these discussions and the “draft application file” could be the compendium of information compiled from such discussions on formal consent applications identified in the schedule of consents drawn up in the pre-application procedure. For DCOs, such discussions should take place with PINS within two months of the intended formal application, as set out in the developer’s implementation plan.

4.35. The NCA must consider whether any information is missing according to the details identified in the pre-application stage and, if so, request it from the applicant. Under the TEN-E Regulation, the NCA has 3 months in which to confirm whether the application is accepted for examination. To avoid unnecessary duplication of material, if consenting authorities require missing information, they should consult the NCA so that the NCA can make a co-ordinated request to the developer.

Source

THE TEN- E REGULATION EU347/2013 Manual of Procedures: The permitting process for Projects of Common Interest in the UK

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf





Appendix 2

TEN-E Regulation
Information Brochure
– May 2018

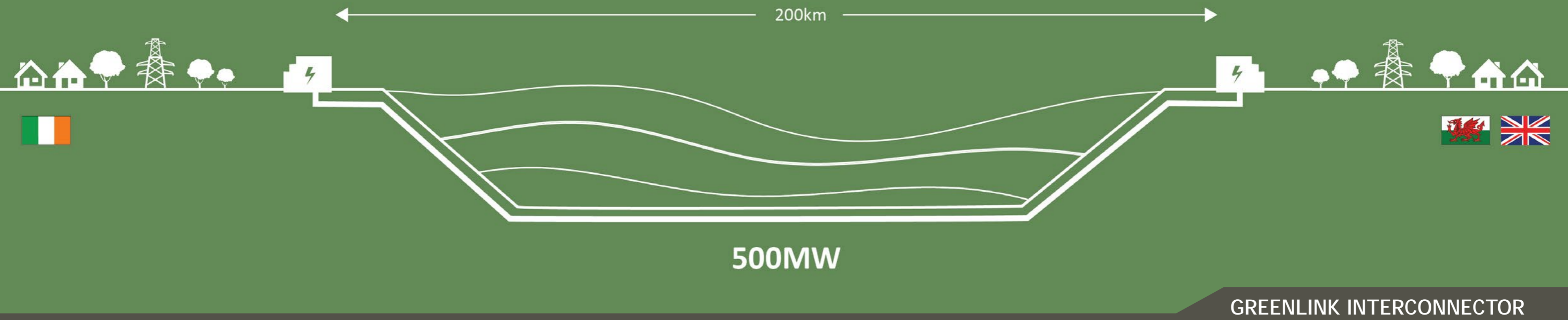


CONNECTING THE POWER MARKETS IN IRELAND AND GREAT BRITAIN

FOR ENERGY SECURITY, INWARD INVESTMENT
AND VALUE FOR MONEY FOR CONSUMERS

TEN-E Regulation Information Brochure

Greenlink
INTERCONNECTOR



Consents required to construct the projects are expected to include:

	Wales	Ireland
Converter station	Planning permission - major development - Pembrokeshire County Council	Planning permission - Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Lawful Development Certificate	Planning permission - Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

STATUS OF THE PROJECT: The project is in the pre-planning phase. Throughout this phase of the project we will be consulting all key stakeholders, including the public, to ensure that they can input into the development process.

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain (GB), allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid’s Great Island substation in County Wexford (Ireland) and the National Grid’s Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver: increased energy security; inward investment and value for money to consumers; and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe’s most important energy infrastructure projects and granting it the “highest national significance” possible.

Greenlink will consist of two converter stations, each located close to the Great Island substation in County Wexford and Pembroke substation in Pembrokeshire. The converter stations will be connected by two high voltage direct current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.

DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. The Greenlink interconnector is planned for commissioning in 2023.

The project will require planning permission in Ireland and in Wales.



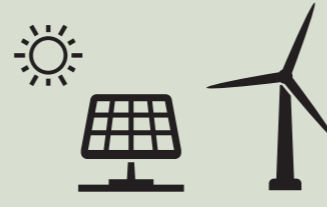
380,000

Potential to power
380,000 homes*



€400m

of private capital
investment for
Ireland and Wales



Energy

Supports the growth
and integration of
low carbon energy



Security

Enhances the
security of supply for
electricity consumers



Value for Money

Downward pressure
on electricity bills



Jobs

Jobs and knock-on
economic benefits
during construction

Inward investment and jobs

Greenlink represents €400m (£350m) of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

The construction of Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Great Britain

National Grid is the Electricity System Operator for the whole of GB and operates the electricity transmission network in Wales and England including the 400kV network and substation at Pembroke. In its role as System Operator for GB, National Grid publishes plans and assessments for the economic and efficient development of the GB electricity transmission networks:

- » In Future Energy Scenarios (FES), National Grid considers different potential future impacts on the electricity system. In the 2017 FES the amount of interconnection capacity could reach 19GW by 2030 compared to 4GW today.
- » In the Network Options Assessment (NOA), National Grid carries out economic analyses to determine which transmission investments are efficient. The 2017/18 NOA recommends additional interconnection from GB to Ireland, beyond the 1.5GW capacity provided by Greenlink and the existing interconnectors (East West Interconnector (EWIC) and Moyle).
- » The Electricity Ten Year Statement (ETYS) includes data on the existing and planned transmission networks in GB and the ETYS 2017 references Greenlink as one of the planned interconnectors that has a connection agreement with National Grid.

Ireland

EirGrid is the Electricity System Operator for Ireland and with its subsidiary, SONI, operates the island of Ireland's electricity system. In its role as System Operator for Ireland, EirGrid publishes a ten year transmission development plan.

- » Greenlink is part of Transmission Development Plan 2016-2026, is referenced as part of the European Ten Year Network Plan 2016 (ENTSO-E TYNDP 2016) and as a PCI. The document notes that interconnection assists in increasing Security of Supply and Competition and has been addressed in the plan.

Offshore studies and assessments

The subsea cable route is expected to be up to 170km long. The final length of the cable will depend on the findings of subsea surveys as well as ongoing consultation with key stakeholders. Initial cable route selection has centred on desk-based work and the assessment of known data and constraints. Environmental and technical constraints will be assessed and the route that offers the best solution to challenges identified while maintaining the shortest route solution will be chosen as the preferred route.

Subsea surveys are intended to take place in 2018 in order to identify constraints facing the subsea cable routes and enable a preferred option to be selected.

The results of the subsea surveys will not only aid the selection of the preferred cable route but also the appropriate installation and protection methods to be adopted.

Technical and environmental assessment

As part of the project development, a series of technical and environmental assessment studies are being carried out to establish the viability of all the proposed converter sites and cable routes and to consider any potential impacts and opportunities arising from the project development. Greenlink is a cross-border project and no adverse cross-border impacts are expected.

Onshore studies and assessments

Biodiversity

Surveys will be carried out and the data assessed to ensure that the final onshore elements of Greenlink are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Surveys will cover the landfall sites, the various cable routes under consideration and the possible converter station locations.



As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles, reptiles, great crested newts and dormice. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

Our surveys and assessments will be verified and consulted on by Natural Resources Wales and the National Parks and Wildlife Service in Ireland. Consideration is also being made of local vegetation, including hedgerows, trees and important habitats.

Historic environment

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets.

To mitigate any potential impacts, Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

Landscape & visual impact

This assessment relates to changes in the physical landscape, brought about by the proposed development, which may alter its character and how this is experienced.

Greenlink will produce visualisations of the converter stations from viewpoints that will be selected to represent the character of the area and particularly important landscape and heritage sites. Suitable mitigation, such as landscaping, building finishes and design layout, will be proposed.

Flooding and hydrology

This assessment considers the existing surface and ground water resources in the proximity to Greenlink. It will assess potential impacts to water bodies, surface water drainage and flood risk due to the proposed scheme during the construction and operational phases. The results of this assessment will be incorporated into the final design.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.



ILLUSTRATION: WSP

The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact.



ILLUSTRATION: WSP

Noise & vibration

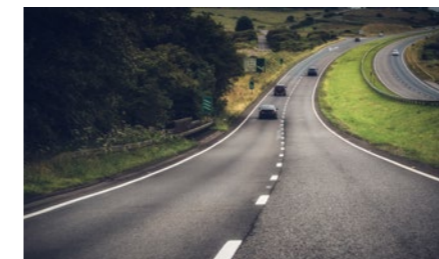
This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station. The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.

Noise sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship, etc) and open public spaces (including public footpaths).

The results of this assessment will be incorporated into the final design.

Traffic & transport

The traffic impact assessment will address the traffic impacts on the local road network from the construction and operation of the Greenlink project.



The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A Transport Assessment or Transport Statement will be produced in accordance with best practice.

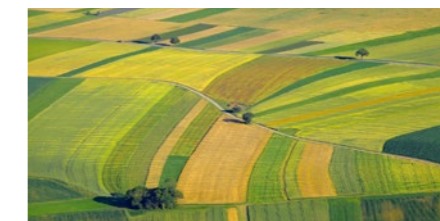
As part of the planning application process a Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink. Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Electromagnetic fields (EMFs)

The Greenlink electrical infrastructure (converter station and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

Use of agricultural land

Construction of the converter station will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.



Socio-economics & human health

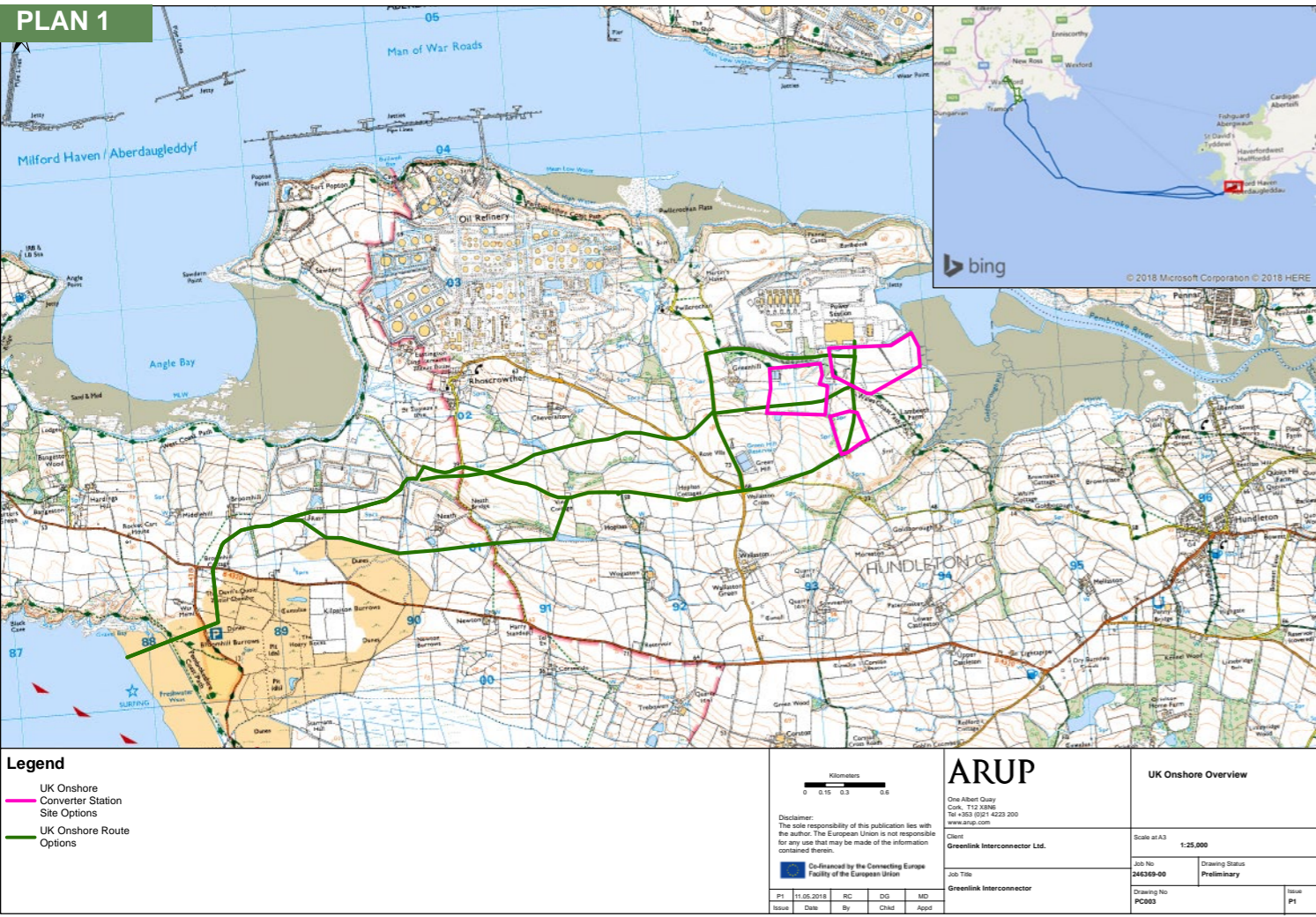
This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects on the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact and maximise benefits.

Air quality & climate change

This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be addressed.



Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

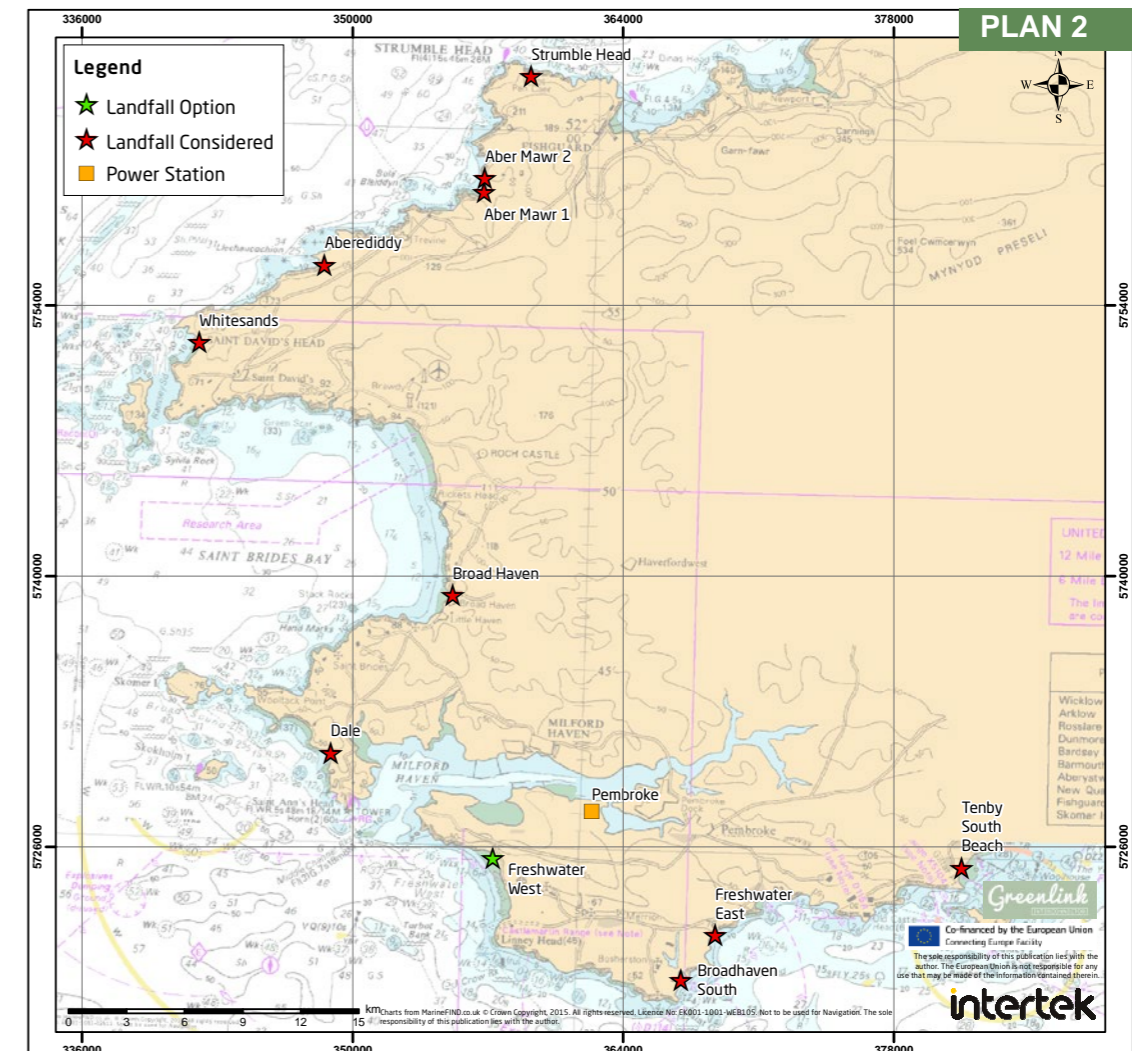
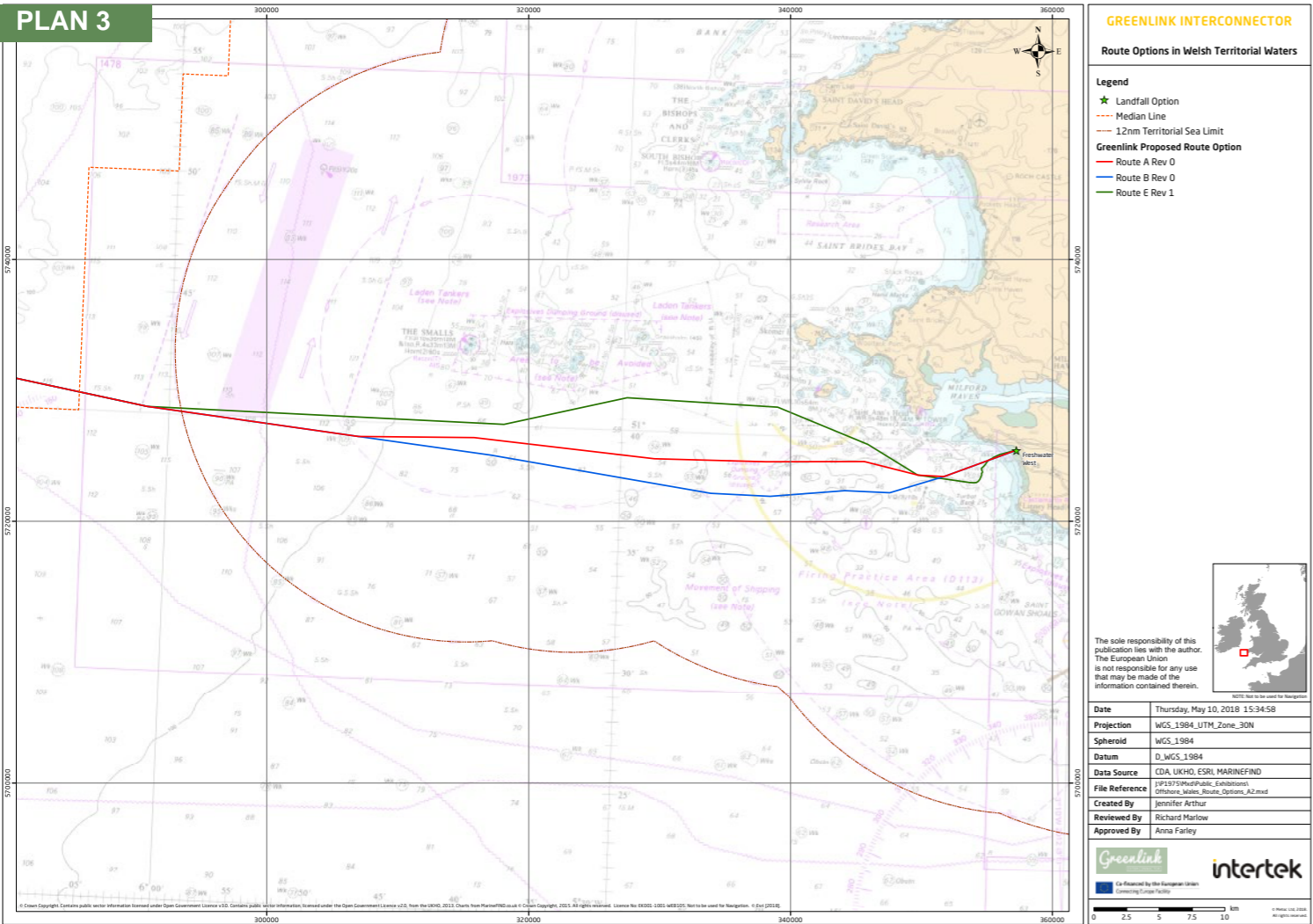


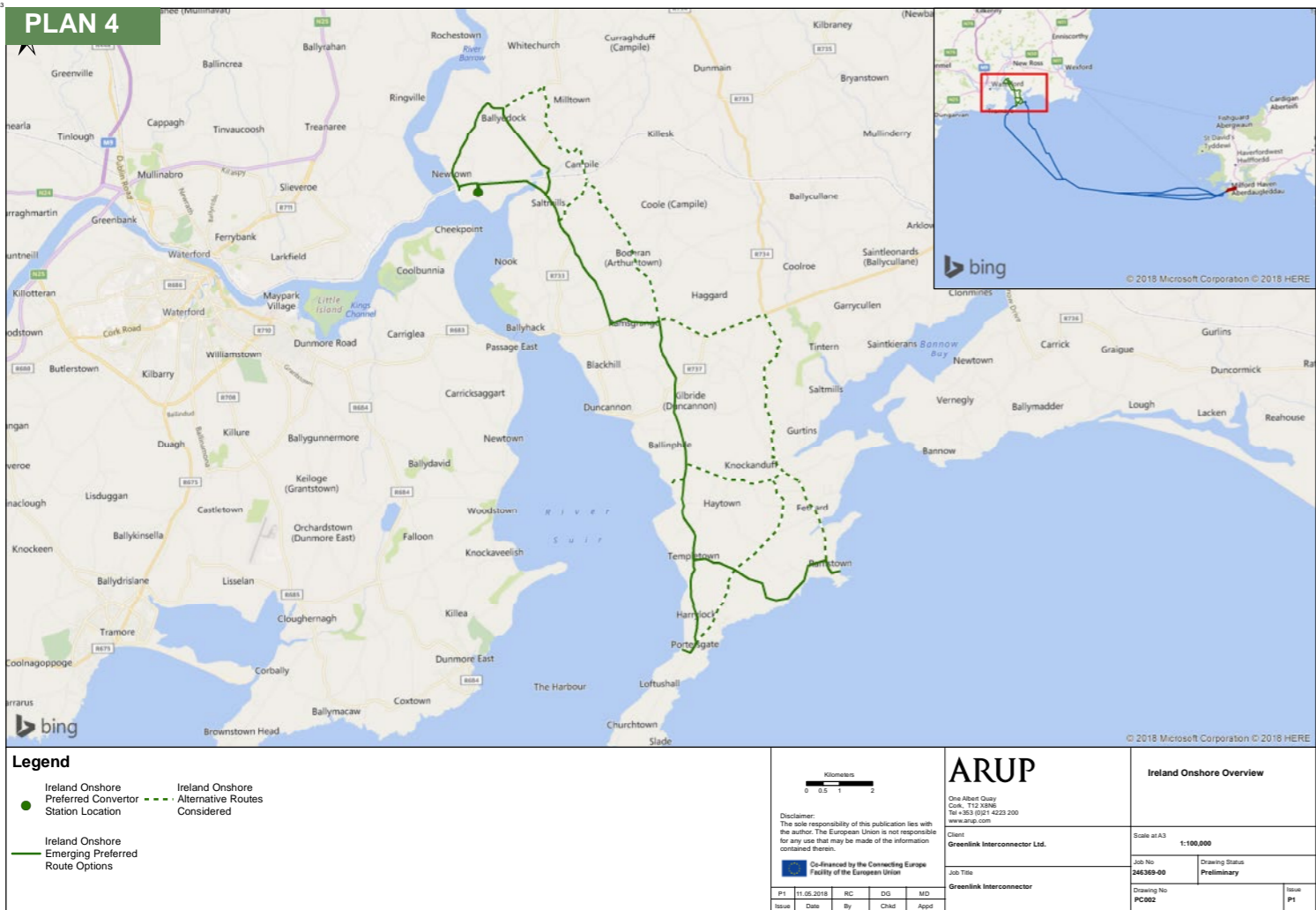
In Wales, Greenlink will connect to the Pembroke 400kV substation in Pembrokeshire. The substation at Pembroke was identified as the connection point for Greenlink following the completion of assessments and consultation with National Grid. AC cables will connect the HVDC converter station to the substation. Three sites, in close proximity to the substation, are currently being assessed as potential locations to locate the HVDC converter station. The sites under investigation are shown in Plan 1 along with potential onshore underground cable routes linking the proposed landfall site at Freshwater West with the converter station sites.

The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 7km. The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 2.

It is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the dunes and beach at Freshwater West. HDD is a trenchless method of installing underground cables. Further technical assessment work will be undertaken before the installation methodology is finalised.

There are currently three subsea routes being assessed off the Welsh coast. The routes under assessment are shown in Plan 3. The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.





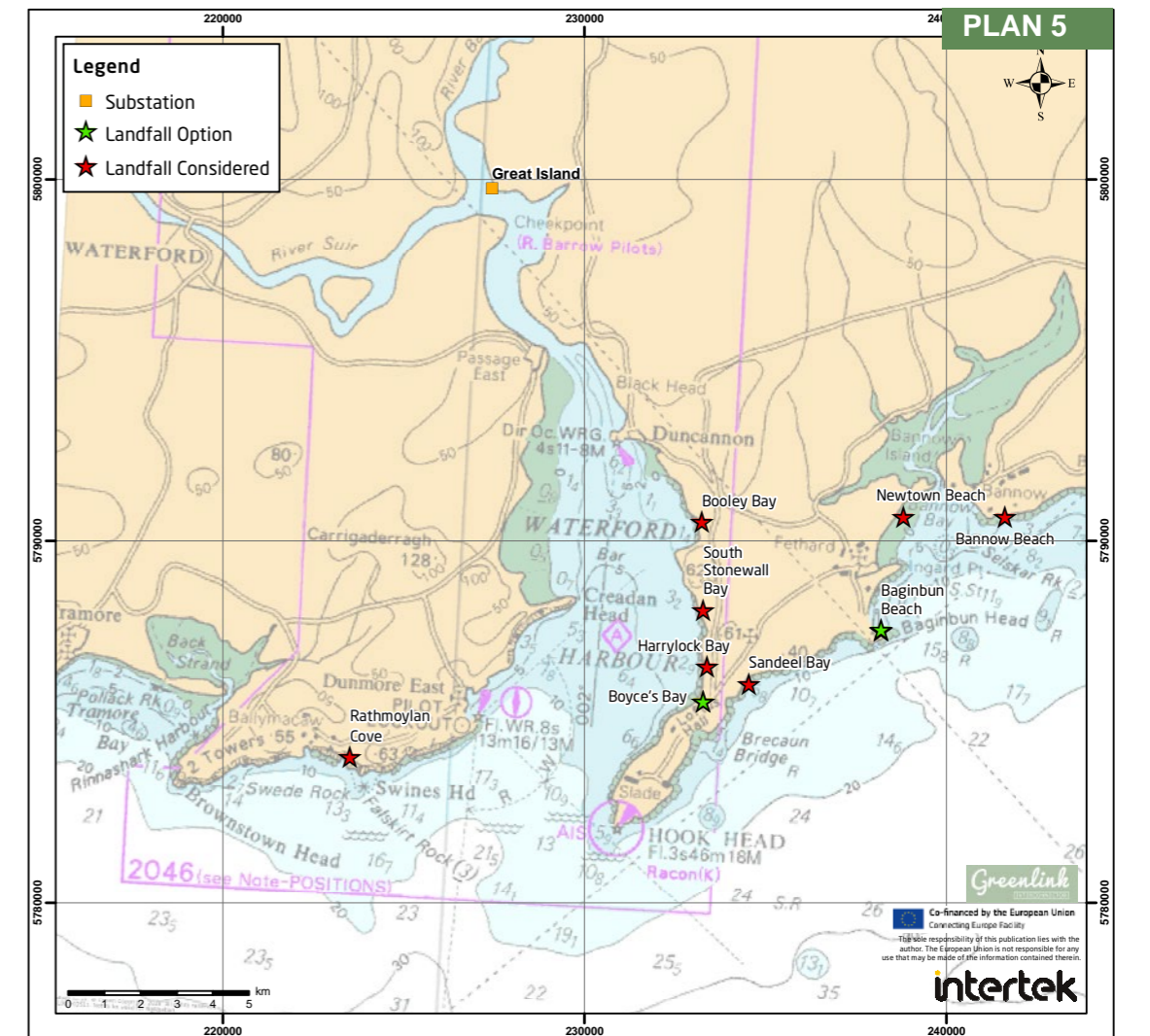
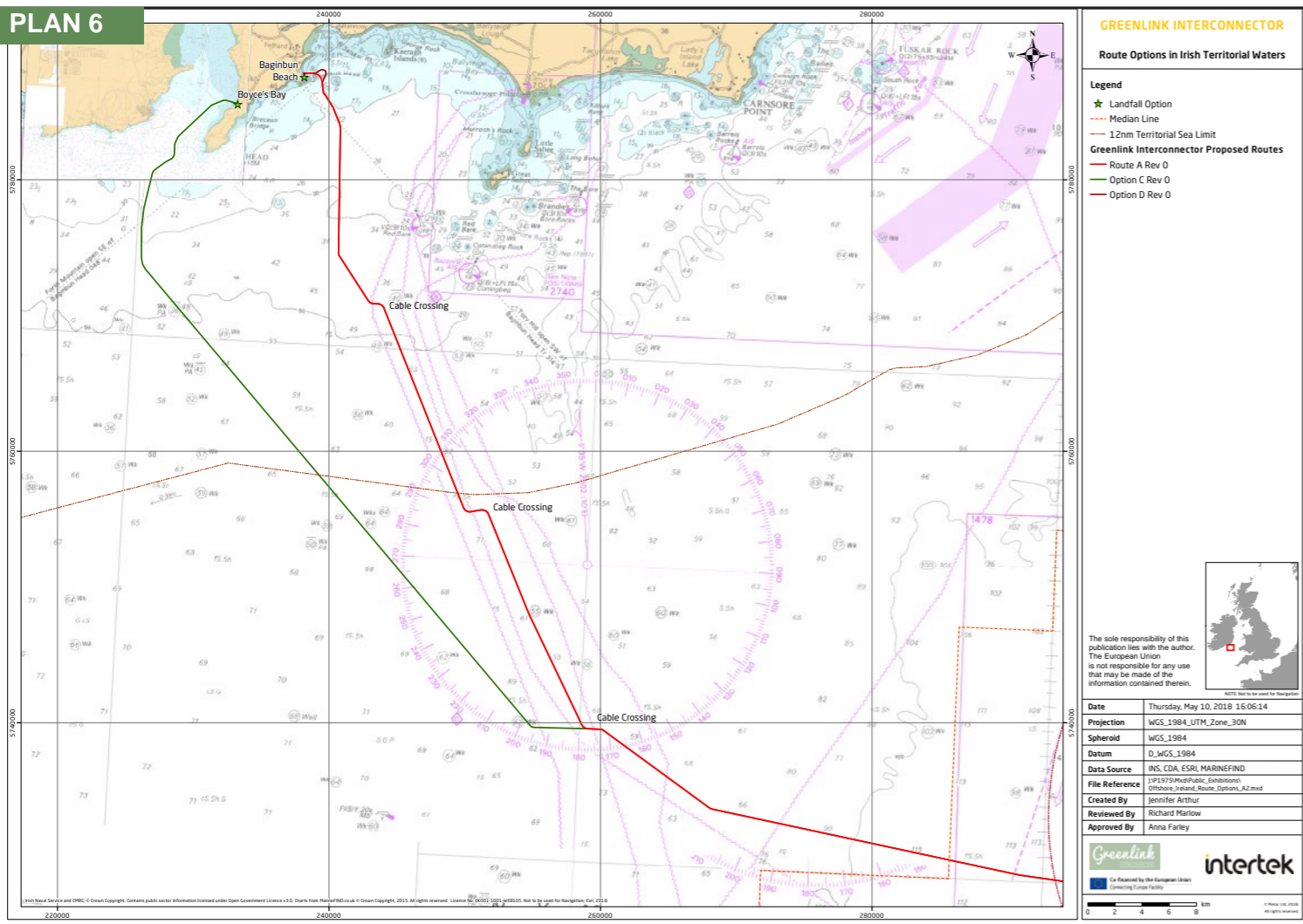
In Ireland, Greenlink will connect into the Great Island 220kV substation in County Wexford. The substation at Great Island was identified as the connection point for Greenlink following the completion of assessments and consultation with EirGrid. A high voltage AC conductor will connect the HVDC converter station to the substation. A site adjacent to the substation is currently being assessed as a potential location to locate the HVDC converter station. The site under investigation is shown in Plan 4 along with potential onshore underground cable routes linking the two potential landfall sites, at Boyce's Bay and Baginbun Beach.

The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 28km.

The landfalls at Boyce's Bay and Baginbun Beach were selected for further investigation following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 5.

It is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the cliff edge and beach at both potential landfalls. Further technical assessment work will be undertaken before landfall site and installation methodology are finalised.

There are currently two subsea routes being assessed off the Irish coast. The routes under assessment are shown in Plan 6. The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.





Technical viability

Marine surveys are taking place in the summer of 2018 and will include geophysical and geotechnical surveys.

Geophysical

The geophysical survey will look to map the seabed and sub-surface geology along the proposed routes to identify marine habitats, optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route. It will also look to provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical

The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This will be done using a number of techniques, including drilling boreholes and digging trial pits.

Environmental impacts

The initial marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey will then be used to inform the environmental assessment.

Marine environmental assessments

Greenlink will cross a number of European Marine Protected Sites; Special Areas of Conservation designated for the protection of habitats and species, and Special Protection Areas designated for the protection of wild birds. To determine if the project is likely to have a significant effect on the conservation objectives of the sites, Habitat Regulations Assessment will be carried out. The process identifies any potential impacts the project may have on the site and assesses whether it is likely that the feature of the site will be affected. Where the project is likely to undermine the conservation objectives of the site e.g. it is possible that condition, characteristics, or distribution of the feature

cannot be maintained, then mitigation measures are proposed to manage or reduce the potential negative impacts identified.

In accordance with best practice, Environmental Reports will be completed for the marine components of the project in both the Ireland and Wales. The Habitats Regulation Assessment will form part of this larger environmental appraisal.

Topics covered by the environmental assessment will include:

- » Coastal processes
- » Protected sites
- » Benthic ecology
- » Fish and shellfish
- » Marine birds
- » Marine mammals and reptiles
- » Marine archaeology and unexploded ordnance
- » Fisheries
- » Shipping and navigation
- » Recreation and other sea users
- » Cumulative effects

The potential impacts to be assessed include:

- » Penetration and/or disturbance of the substrate below the surface of the seabed and effects on benthic communities and fish spawning
- » Disturbance e.g. to birds, fish and marine mammals
- » Transient underwater noise changes because of cable installation equipment and project vessels
- » Temporary siltation rate changes from trenching activity
- » Permanent, local, hydrological changes resulting from cable protection rock berms
- » Physical loss (permanent change) of localised areas of marine habitat
- » Localised electromagnetic changes and potential effects on fish, marine mammals and shipping
- » Temporary, localised displacement of fishing activity and disruption to shipping routes.
- » Possible in-combination effects

Most of the environmental impacts from cable installation are temporary and transient. For example, temporary disturbance of sea birds through the presence of project vessels, temporary increases in suspended sediment levels associated with trenching.

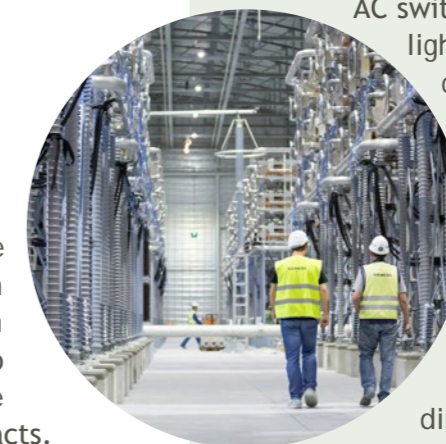
Steps are taken during the design of the project to ensure that environmental impacts are minimised where possible e.g. HDD under sensitive coastal features, routing around sensitive offshore habitats, avoiding known marine archaeology features such as wrecks. Best practice will also be followed to further reduce the significance of any potential impacts.

The proposed cable route crosses two Special Areas of Conservation which protect stony and bedrock reef. High resolution bathymetry data has been obtained by Greenlink in nearshore areas to assist routeing through features.

The proposed marine survey will also provide essential information to assist in confirming the presence/absence of features offshore, allow routeing around and if possible through features e.g. using sand channels between patches of reef, and in identifying suitable installation techniques that minimise effect on the habitat.

Mitigation

Where a potential impact is established, the environmental appraisal will recommend mitigation measures to be taken to reduce or remove the significance of the effect. Suitable mitigation will be established through consultation with stakeholders.



Greenlink will use high voltage direct current voltage source converter (HVDC VSC) technology to link the two power systems. HVDC has been selected over an AC connection, because AC is technically difficult over this distance. VSC technology has the main benefit that it reduces the size of the converters (when compared to similar technologies).

The Greenlink Interconnector converter station

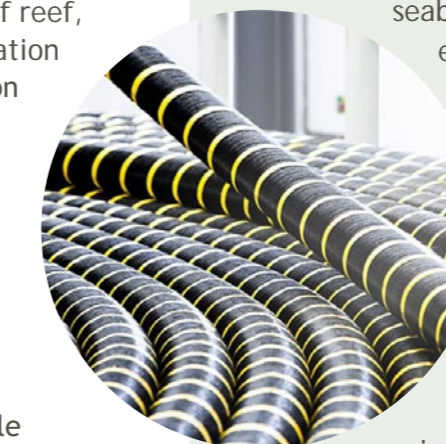
The indicative converter station site footprint would be circa. 1.85 hectares (185m x 100m).

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant such as cooling bank and diesel generators, and a control building. Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

OFFSHORE CABLES

Approximately 170km of the Greenlink cable route will be laid offshore. The final routes will be selected following a detailed assessment of the marine environment and technical challenges.

The cables will predominantly be buried in the seabed however where the geology or marine environment does not lend itself to this a cable may be laid on the seabed with protection added. Protection could be in the form of concrete mattress or rock dumping on top of the cable.



ONSHORE CABLES

One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore. It is anticipated that the Greenlink onshore cables will be buried within the road network or in private or agricultural land as appropriate.

Onshore cable technology and installation techniques

The two onshore HVDC cables will be buried underground in a single trench with a typical depth of cover of 850mm. These will be installed in plastic duct to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape will also be buried along with marker posts at regular intervals at ground level.

This arrangement is shown in Figure 1.

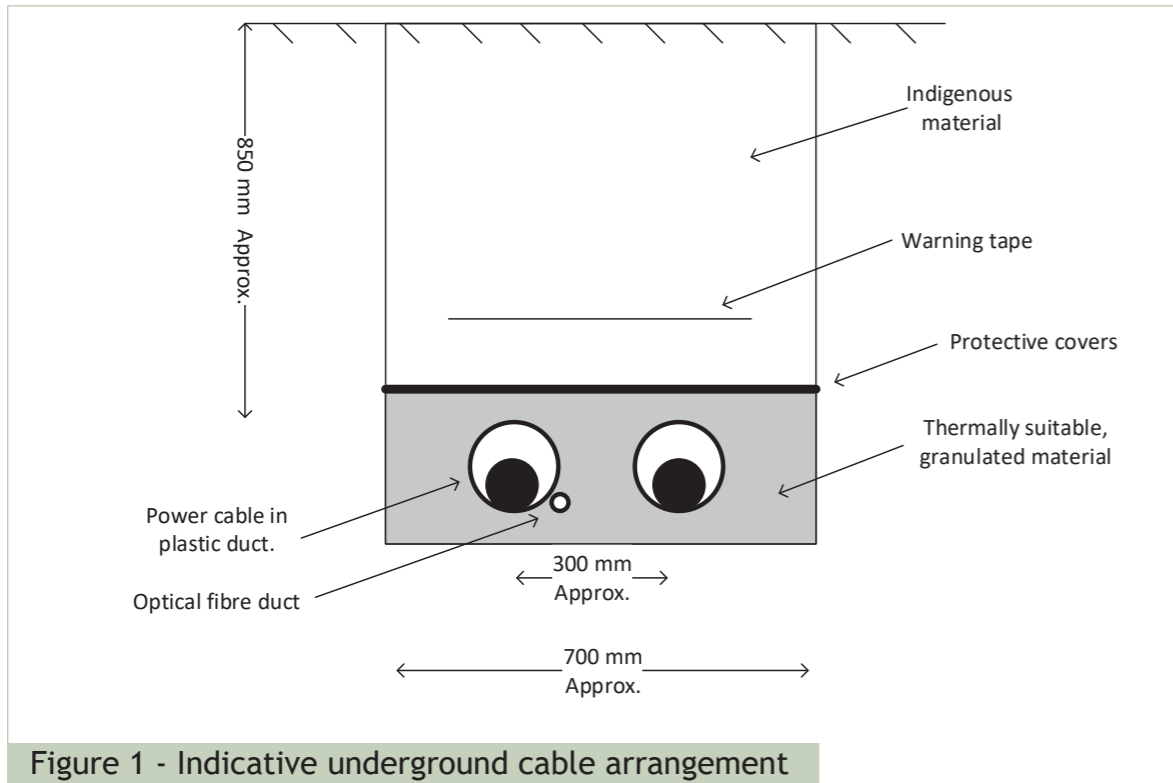


Figure 1 - Indicative underground cable arrangement

It is usual to increase the depth of cover in agricultural land to around 1050mm (increase from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become). A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.



PHOTO: Deep Ocean



Onshore Cable Installation



PHOTOS: WSP

Project Timeline



A large infrastructure project such as Greenlink takes several years from concept to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees. Once a detailed proposal and design are completed, permits and licences will need to be obtained from: Pembrokeshire County Council, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will be constructed, which is expected to be approximately 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023.

An important energy infrastructure project

The “Energy Union” launched by the European Commission on 25th February 2015 is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and to address different approaches to the design and implementation of energy policy.

Facilitating the Union requires a range of actions, chief amongst them being an increase in the physical interconnectedness of the EU and surrounding country energy grids (both gas and electricity) to meet a 10% interconnection target by 2020 and to reach 15% by 2030.

An interconnected European energy grid is vital for Europe’s energy security, for more competition in the internal market resulting in more competitive prices as well as for better achieving the decarbonisation and climate policy targets that the European Union has committed to. An interconnected grid will help deliver the ultimate goal of the Energy Union, i.e. to ensure affordable, secure and sustainable energy, and also growth and jobs across the EU.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe’s most important energy infrastructure projects.

- » For information regarding the infrastructure transparency platform referred to in Article 18 of the TEN-E Regulation, please visit: http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html
- » For information regarding the manual of procedures for each of UK and Ireland https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf and www.pleanala.ie/publications/2014/pocimanual.pdf

Greenlink

INTERCONNECTOR

GREENLINK INTERCONNECTOR LIMITED

The Greenlink Interconnector is being developed by Greenlink Interconnector Limited.

Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

Element Power has significant experience in developing energy infrastructure projects, with established teams of experienced engineers, environmental and financial professionals covering both the UK and Ireland.

For more information on Greenlink, please visit our website: www.greenlinkinterconnector.eu

For more information on Element Power, please visit our website: www.elementpower.com



elementpower

Version 1 | May 2018

Appendix 3

TEN-E Regulation
Information Brochure
– November 2018

Greenlink

INTERCONNECTOR

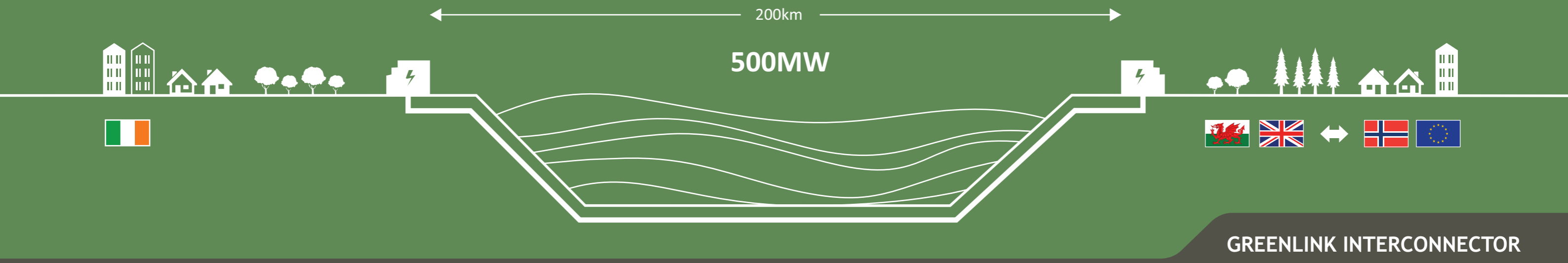


CONNECTING THE POWER MARKETS IN IRELAND AND GREAT BRITAIN

for energy security, regional investment and value for money for consumers

TEN-E REGULATION INFORMATION BROCHURE

Issue 2 - November 2018



GREENLINK INTERCONNECTOR

This Greenlink brochure provides an update of the project information contained within the first brochure published in May 2018 and forms part of the ongoing stakeholder consultation process.

Consents required to construct Greenlink are expected to include:

	Wales	Ireland
Converter station	Major Development - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Major Development - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

IMPORTANT PLANNING UPDATE: ENVIRONMENTAL IMPACT ASSESSMENT

Since the previous round of public consultations Greenlink Interconnector Limited has decided to undertake a voluntary Environmental Impact Assessment (EIA) in support of the Greenlink project. This will result in the application documents facing an increased level of scrutiny from stakeholders. While it is recognised that Greenlink does not require an EIA, we have decided to undertake a voluntary EIA in recognition of the length of the permitting process and the evolving interpretation of the EIA regulations within Ireland. As a result of this decision the onshore cable route in Wales will now seek planning permission rather than being developed as permitted development.

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain (GB), allowing for electricity to flow both ways between the two countries. Greenlink will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland and GB with onward connections to continental Europe. The construction and development of Greenlink will deliver: increased energy security; regional investment and value for money to consumers; and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will consist of two converter stations - one located close to the Great Island substation in County Wexford and the other close to the Pembroke substation in Pembrokeshire - connected by two High Voltage Direct Current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.

DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore, the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built.

Greenlink is planned for commissioning in 2023.

The project will require planning permission in Ireland and in Wales.

STATUS OF THE PROJECT: The project is in the pre-planning phase. Throughout this phase of the project we will be consulting all key stakeholders, including the public, to ensure that they can input into the development process.



380,000

Potential to power 380,000 homes*



Investment

€400m/£350m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



Security

Enhances the security of supply for electricity consumers



Value FOR Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents around €400m/£350m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

The construction of Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

*Figure for number of homes is based on typical annual Irish household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Great Britain

National Grid is the Electricity System Operator for the whole of GB and operates the electricity transmission network in Wales and England including the 400kV network and substation at Pembroke. In its role as System Operator for GB, National Grid publishes plans and assessments for the economic and efficient development of the GB electricity transmission networks:

- » In Future Energy Scenarios (FES), National Grid considers different potential future impacts on the electricity system. In the 2017 FES the amount of interconnection capacity could reach 19GW by 2030 compared to 4GW today.
- » In the Network Options Assessment (NOA), National Grid carries out economic analyses to determine which transmission investments are efficient. The 2017/18 NOA recommends additional interconnection from GB to Ireland, beyond the 1.5GW capacity provided by Greenlink and the existing interconnectors (East West Interconnector (EWIC) and Moyle).
- » The Electricity Ten Year Statement (ETYS) includes data on the existing and planned transmission networks in GB and the ETYS 2017 references Greenlink as one of the planned interconnectors that has a connection agreement with National Grid.

Ireland

EirGrid is the Electricity System Operator for Ireland and with its subsidiary, SONI, operates the island of Ireland's electricity system. In its role as System Operator for Ireland, EirGrid publishes a ten year transmission development plan.

- » Greenlink is part of Transmission Development Plan 2016-2026, is referenced as part of the European Ten Year Network Development Plan 2018 (ENTSO-E TYNDP 2018) and as a PCI. The documents note that interconnection assists in increasing security of supply and competition.
- » The Irish regulator determined, in October 2018, that Greenlink passed the test to be part of the Irish transmission system paving the way for Greenlink to move to the permitting phase.

Offshore studies

The subsea cable route is expected to be up to 170km long. The final length of the cable will depend on the completion of subsea surveys as well as ongoing consultation with key stakeholders. Initial cable route selection centred on desk-based work and the assessment of known data and constraints. This work identified several route corridor options that are currently being surveyed.

Subsea surveys commenced in September 2018 in order to identify and confirm the presence of any constraints facing the subsea cable routes. The environmental and technical constraints will be assessed in conjunction with the Irish and Welsh foreshore authorities. **The route that offers the best solution to challenges identified while maintaining the shortest route solution will be chosen as the preferred route.**

The results of the subsea surveys not only support the selection of the preferred cable route but also the appropriate installation and protection methods to be adopted.

Technical and environmental assessment

As part of the project development, a series of technical and environmental assessment studies are being carried out to establish the viability of the proposed converter sites and cable routes and to consider any potential impacts and opportunities arising from the project development. Greenlink is a cross-border project and no adverse cross-border impacts are expected.

Onshore studies and assessments

Biodiversity

Surveys are currently being carried out and the data assessed to ensure that the final onshore elements of Greenlink are designed sympathetically to the local environment and wildlife. Where possible enhancement measures will be employed.

Surveys cover the landfall sites, the cable routes under consideration and the possible converter station locations.



As well as birds, wildlife to be considered include badgers, bats, otters, water voles, reptiles, great crested newts and dormice. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

Our surveys and assessments will be verified and consulted on by Natural Resources Wales and the National Parks and Wildlife Service in Ireland.

Historic environment

The potential effects of Greenlink on local archaeology and cultural heritage are being assessed by identifying, predicting and evaluating the significance of potential effects on designated and non-designated heritage assets.

To mitigate any potential impacts we will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects. Wherever possible, mitigation will be designed to deliver benefits, such as maintaining the visual setting of historic assets. We will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

Landscape & visual impact

This assessment relates to changes in the physical landscape, brought about by the proposed development, which may alter its character and how this is experienced.

We will produce visualisations of the converter stations from viewpoints that will be selected to represent the character of the area and particularly important landscape and heritage sites. Suitable mitigation, such as landscaping, building finishes and design layout, will be proposed.

Flooding and hydrology

This assessment considers the existing surface and ground water resources in proximity to Greenlink. It will assess potential impacts to water bodies, surface water drainage and flood risk due to the proposed scheme during the construction and operational phases. The results of this assessment will be incorporated into the final design.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.



ILLUSTRATION: WSP

The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact.



ILLUSTRATION: WSP

Noise & vibration

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.

Noise sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship, etc) and open public spaces (including public footpaths).

The results of this assessment will be incorporated into the final design.

Traffic & transport

The traffic impact assessment will address the traffic impacts on the local road network from the construction and operation of Greenlink.



The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A transport assessment will be carried out in accordance with best practice.

An outline Traffic Management Plan (TMP) will be put together that will detail measures for managing and mitigating the construction traffic caused by Greenlink. We will consult the local community on the outline TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Electromagnetic fields (EMFs)

The Greenlink electrical infrastructure (converter station and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

Use of agricultural land

Construction of the converter station will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.



Socio-economics & human health

This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects on the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact and maximise benefits.

Air quality

This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be considered.



Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

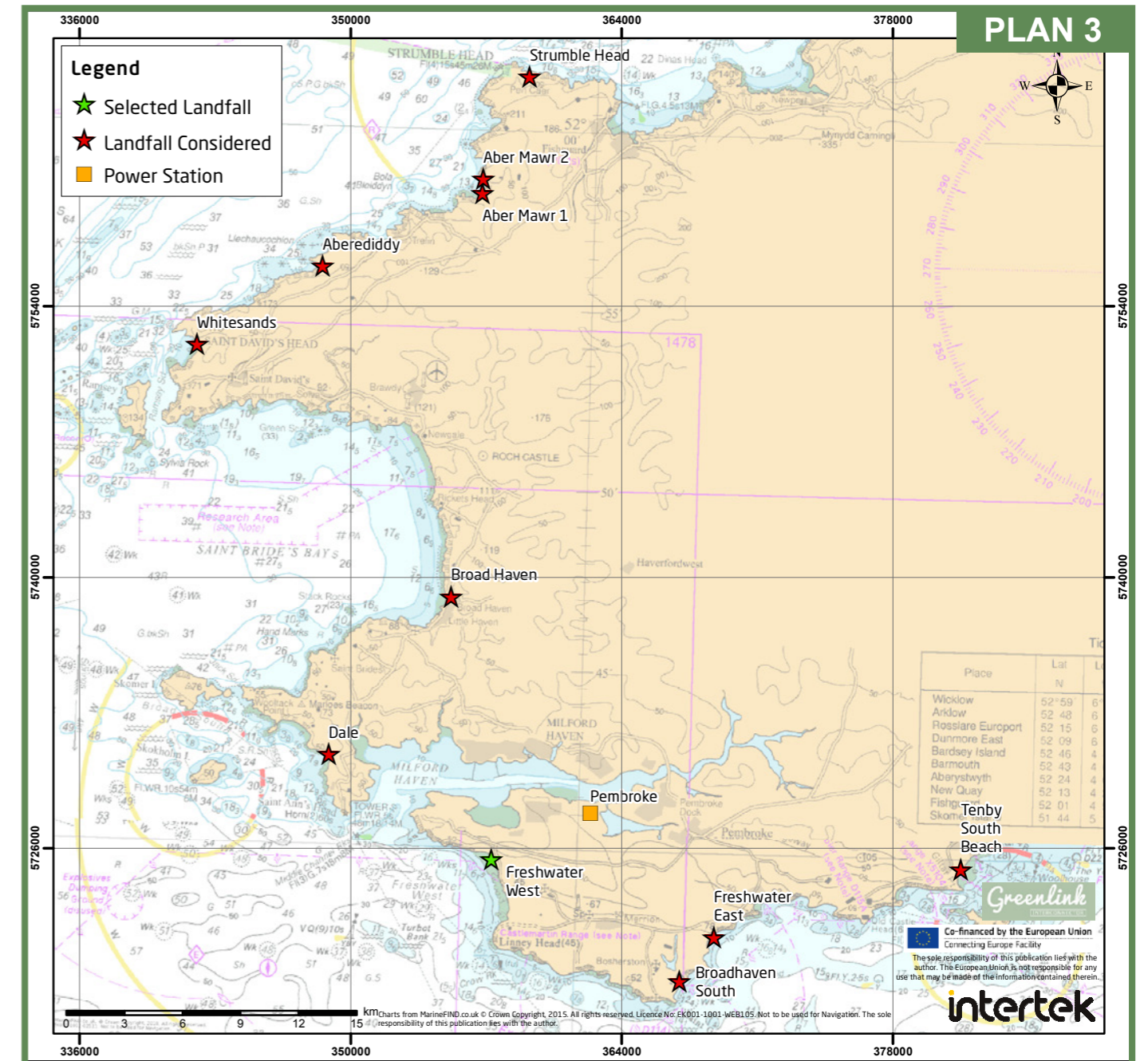
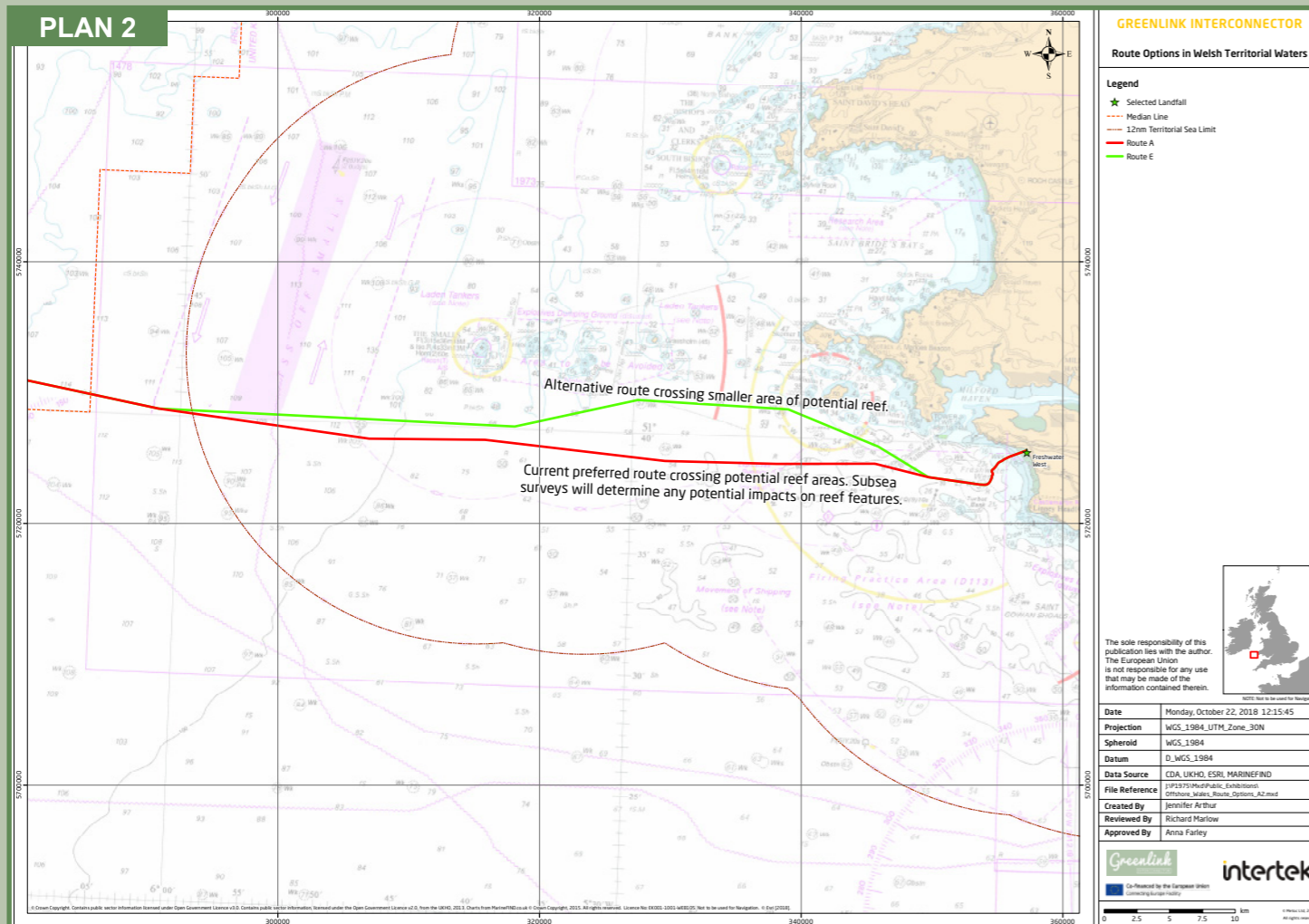
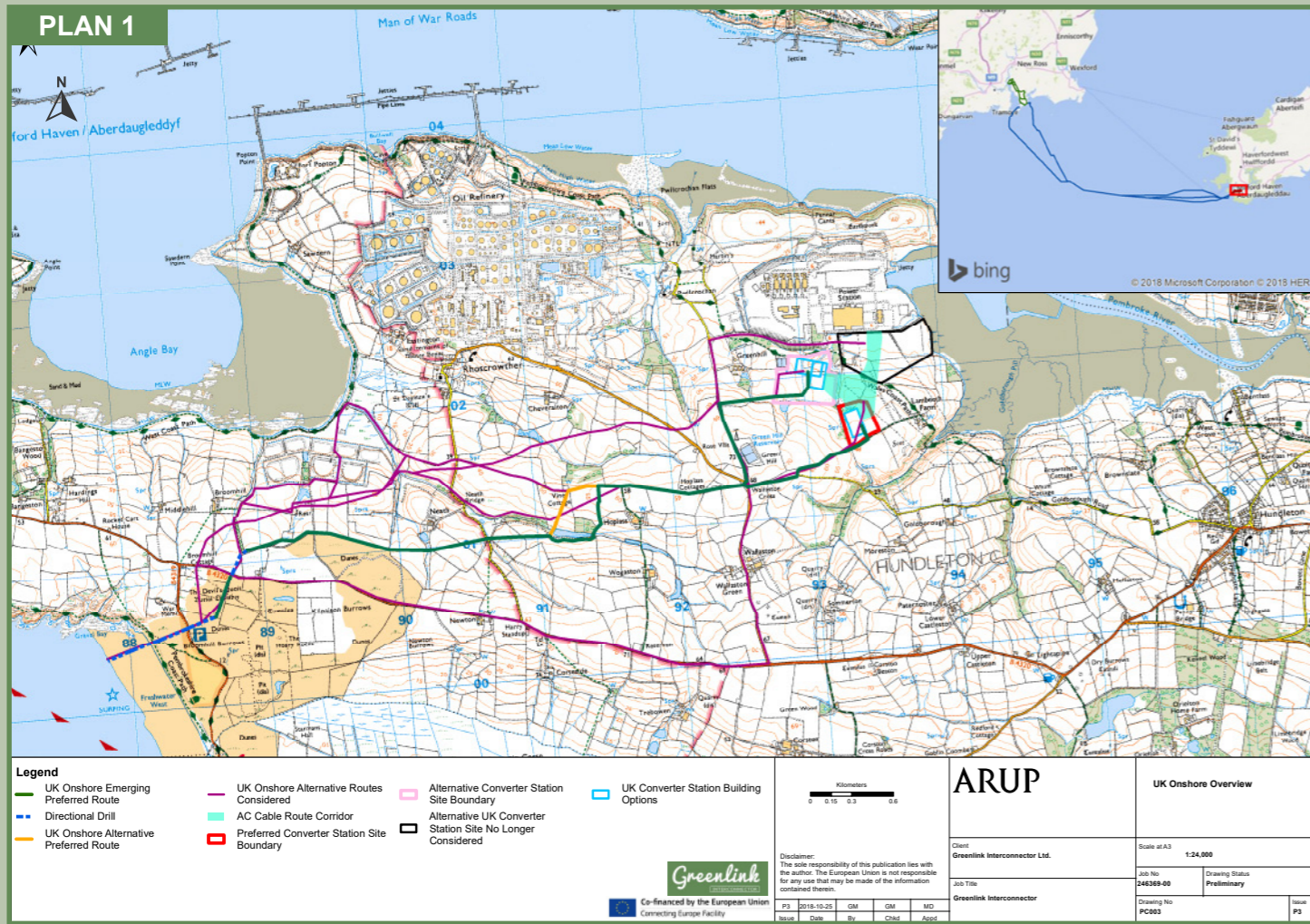
Greenlink in Wales

In Wales, Greenlink will connect to the Pembroke 400kV substation in Pembrokeshire. The Pembroke substation was identified as the connection point for Greenlink following the completion of assessments and consultation with National Grid. AC cables will connect the HVDC converter station to the substation. Three sites, in close proximity to the substation, have been assessed as potential locations to locate the HVDC converter station. The site immediately to the south of the substation is no longer being considered as an option. This is following consultation with RWE Npower and analysis of the constraints placed on a future development by existing infrastructure crossing the site.

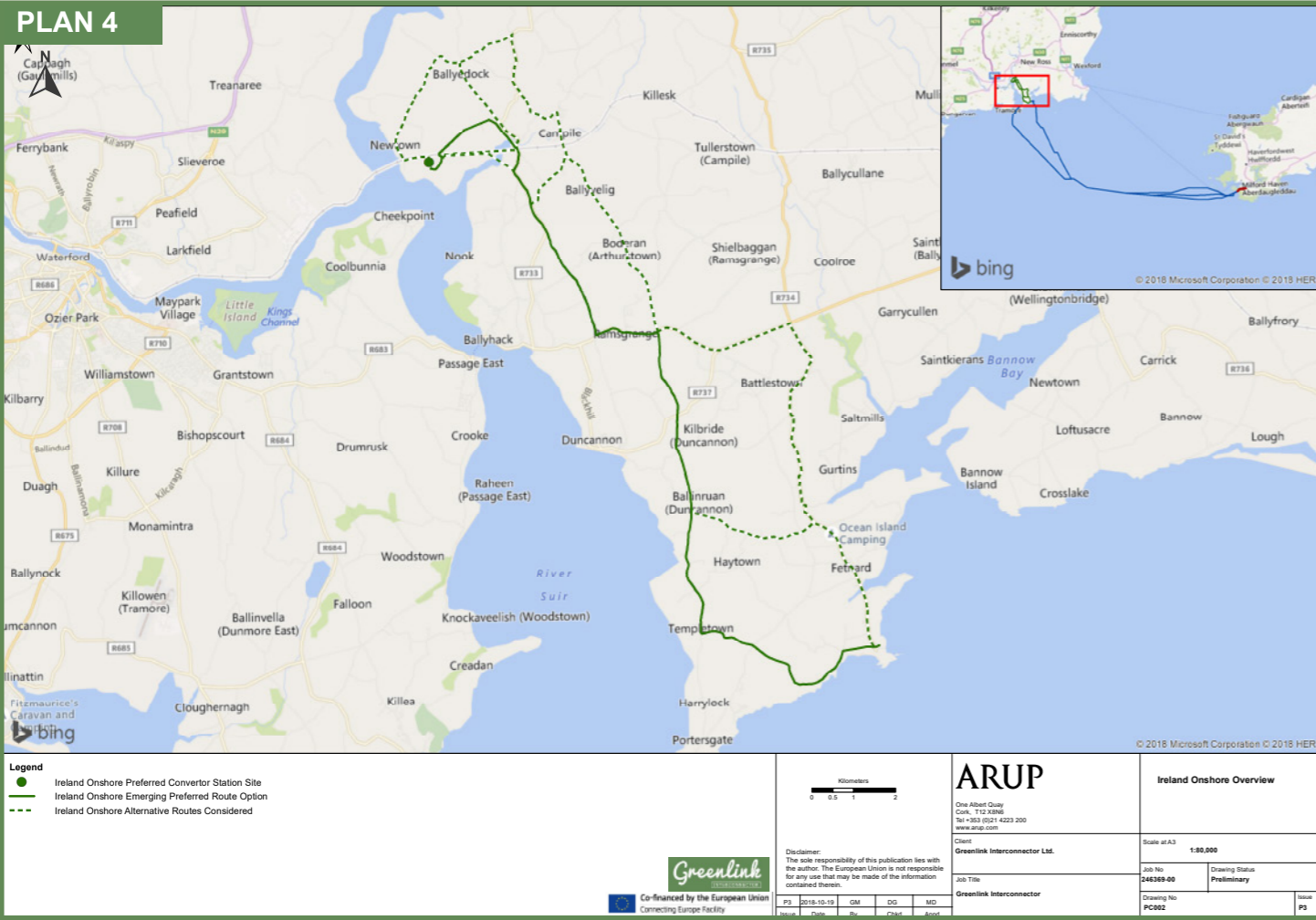
To minimise environmental impact, it is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the dunes and beach at Freshwater West. HDD is a trenchless method of installing underground cables. Further technical assessment work will be undertaken before the installation methodology is finalised.

A preferred cable route and converter station site have been identified following consultation with stakeholders and analysis of the results of ongoing environmental and technical work. The preferred cable route and converter station site are shown in Plan 1 along with alternatives still under consideration.

There are currently two subsea routes being assessed off the Welsh coast. The red and green routes under assessment are shown in Plan 2. Initial survey data suggests that both routes have environmental constraints and consultation and additional survey work is being undertaken to see if there is an alternative route between the two options. The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders. The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 3.



PLAN 4



Greenlink in Ireland

In Ireland, Greenlink will connect into the Great Island 220kV substation in County Wexford. The substation at Great Island was identified as the connection point for Greenlink following the completion of assessments and consultation with EirGrid.

A high voltage AC conductor will connect the HVDC converter station to the substation. A site adjacent to the substation has been identified as the most suitable location to construct the HVDC converter station.

The proposed converter station site is shown in Plan 4 along with potential onshore underground cable routes linking the landfall at Baginbun Beach.

The preferred converter station site and cable route options were identified following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa 22km.

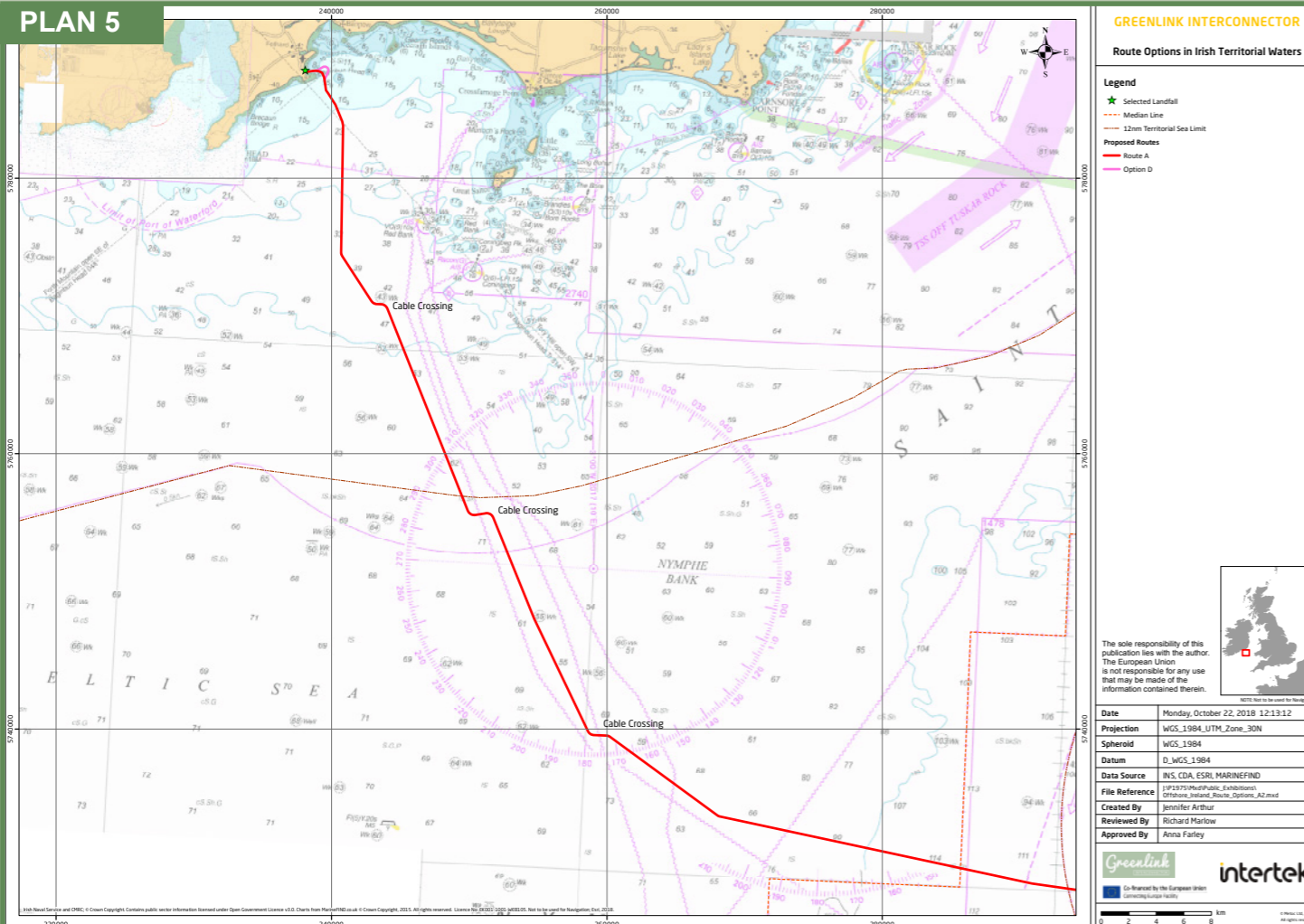
To minimise environmental impact, it is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the cliff edge and sand at Baginbun Beach.

A preferred subsea route has been identified following desk-based assessments supported by the results of early subsea surveys. The preferred route is shown in Plan 5.

The landfall at Baginbun Beach was selected as the landfall site following a review of potential landfalls in the region. The landfalls assessed are shown in Plan 6.

The detailed design of final onshore and subsea cable routes will be carried out following the conclusion of the subsea and onshore survey programmes and consultation with stakeholders.

PLAN 5



PLAN 6

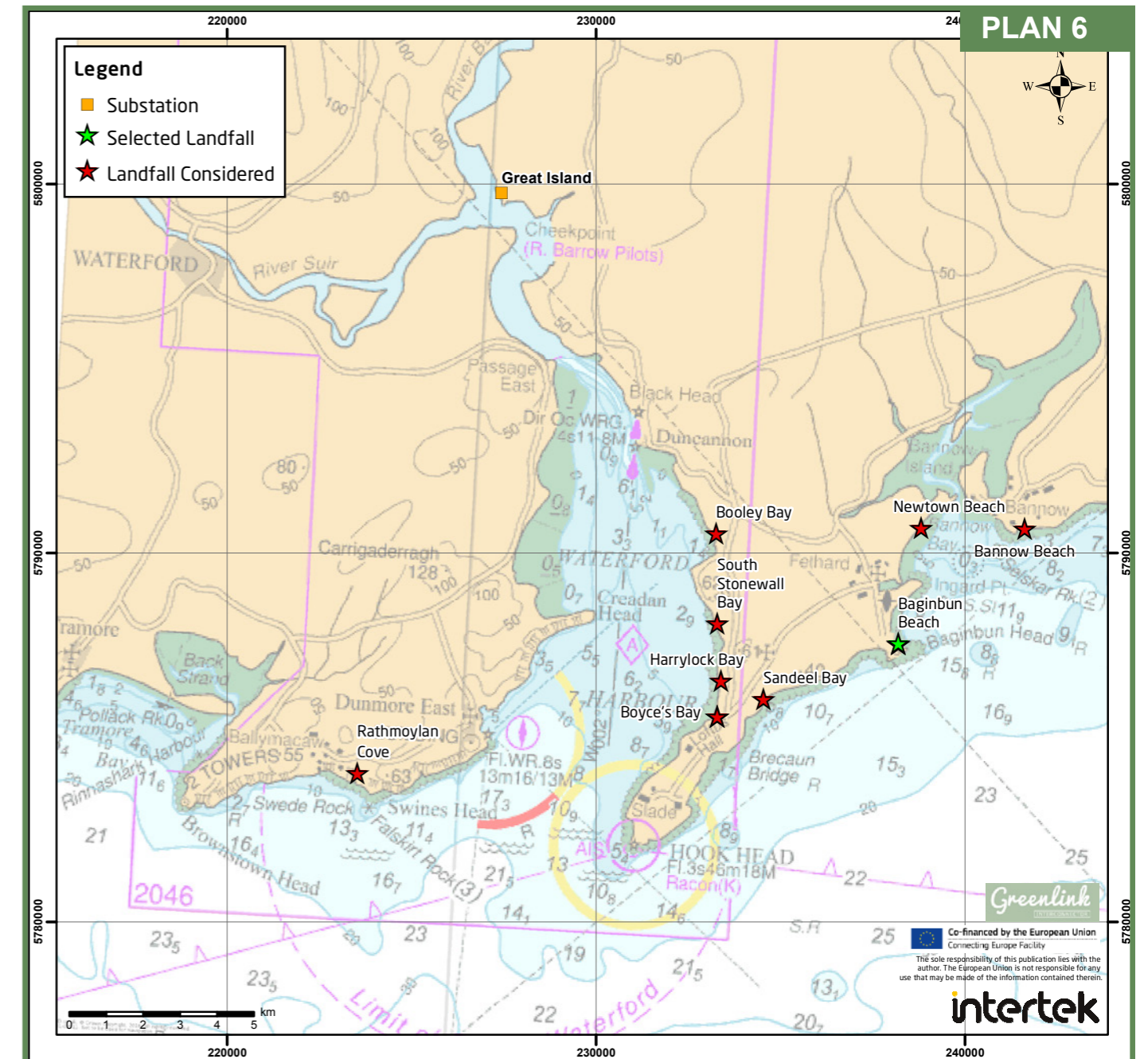




PHOTO COURTESY OF MMT

Technical viability

Marine surveys commenced in September 2018 and include geophysical and geotechnical surveys.

Geophysical

The geophysical survey maps the seabed and sub-surface geology along the survey route corridors to identify marine habitats, optimise cable routing within the survey corridor and enable the assessment of cable target burial depth. It also provides the geophysical data from which a marine archaeological assessment will be undertaken as part of the consenting process.

Geotechnical

The geotechnical surveys evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This is done using a number of techniques, including drilling boreholes and taking shallow core samples.

Marine environmental assessments

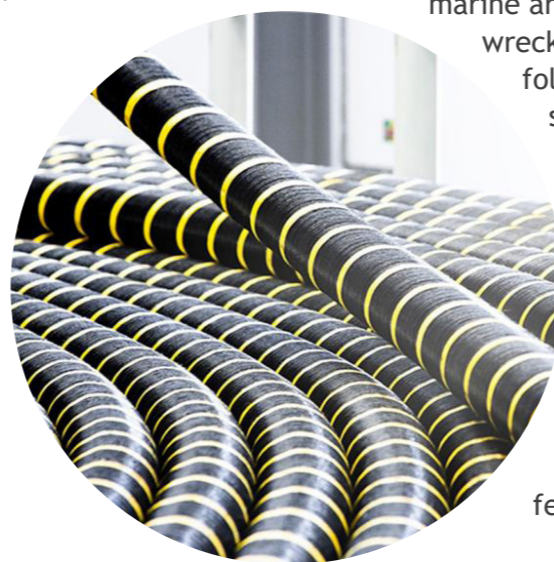
Greenlink will cross a number of European Marine Protected Sites: Special Areas of Conservation designated for the protection of habitats and species, and Special Protection Areas designated for the protection of wild birds. To determine if the project is likely to have a significant effect on the conservation objectives of the sites, Habitat Regulations Assessment will be carried out. The process identifies any potential impacts Greenlink may have on the site and assesses whether it is likely that the feature of the site will be affected.

Where Greenlink is likely to undermine the conservation objectives of the site e.g. it is possible that condition, characteristics, or distribution of the feature cannot be maintained, then mitigation measures are proposed to manage or reduce the potential negative impacts identified.

We are voluntarily undertaking an Environmental Impact Assessment for Greenlink. An Environmental Statement will be completed for the marine components of the project in Wales and an Environmental Impact Assessment Report will be completed for marine components in Ireland. The Habitats Regulation Assessment will form part of this larger environmental appraisal.

Topics covered by the environmental assessment will include:

- » Coastal processes
- » Protected sites
- » Benthic ecology
- » Fish and shellfish
- » Marine birds
- » Marine mammals and reptiles
- » Marine archaeology and unexploded ordnance
- » Fisheries
- » Shipping and navigation
- » Recreation and other sea users
- » Cumulative effects



The potential impacts to be assessed include:

- » Penetration and/or disturbance of the substrate below the surface of the seabed and effects on benthic communities and fish spawning
- » Disturbance to birds, fish and marine mammals
- » Transient underwater noise changes because of cable installation equipment and project vessels
- » Temporary siltation rate changes from trenching activity
- » Permanent, local, hydrological changes resulting from cable protection rock berms
- » Physical loss (permanent change) of localised areas of marine habitat
- » Localised electromagnetic changes and potential effects on fish, marine mammals and shipping
- » Temporary, localised displacement of fishing activity and disruption to shipping routes.
- » Possible in-combination effects. Most of the environmental impacts from cable installation are temporary and transient. For example, temporary disturbance of sea birds through the presence of project vessels, temporary increases in suspended sediment levels associated with trenching.

Mitigation

Steps are taken during the design of the project to ensure that environmental impacts are minimised where possible e.g. HDD under sensitive coastal features, routing around sensitive offshore habitats, avoiding known marine archaeology features such as wrecks. Best practice will also be followed to further reduce the significance of any potential impacts.

The proposed cable route crosses two Special Areas of Conservation that protect stony and bedrock reef. High resolution bathymetry data has been obtained for nearshore areas to assist routing through and around features.

Onshore cable technology and installation techniques

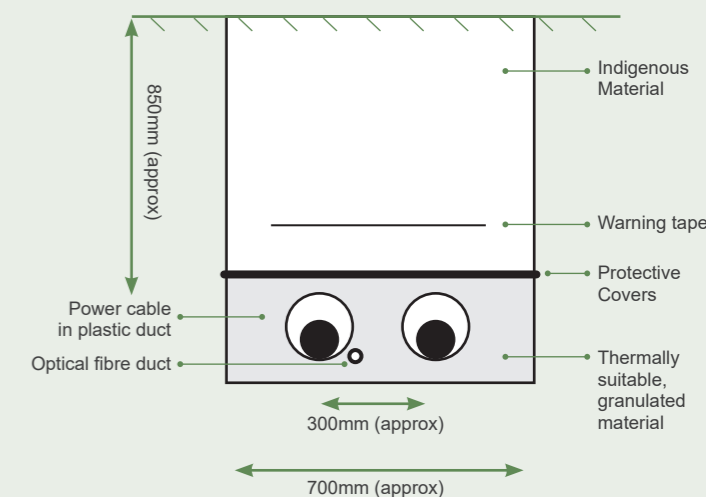
The two onshore HVDC cables will be buried underground in a single trench with a typical depth of cover of 850mm. These will be installed in plastic ducts to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape will also be buried along with marker posts at regular intervals at ground level. This arrangement is shown in Figure 1.



It is usual to increase the depth of cover in agricultural land to around 1050mm (from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become). A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

[Picture (top right): 250kV HVDC cable - courtesy of Prysmian]

Figure 1 : Indicative underground cable arrangement

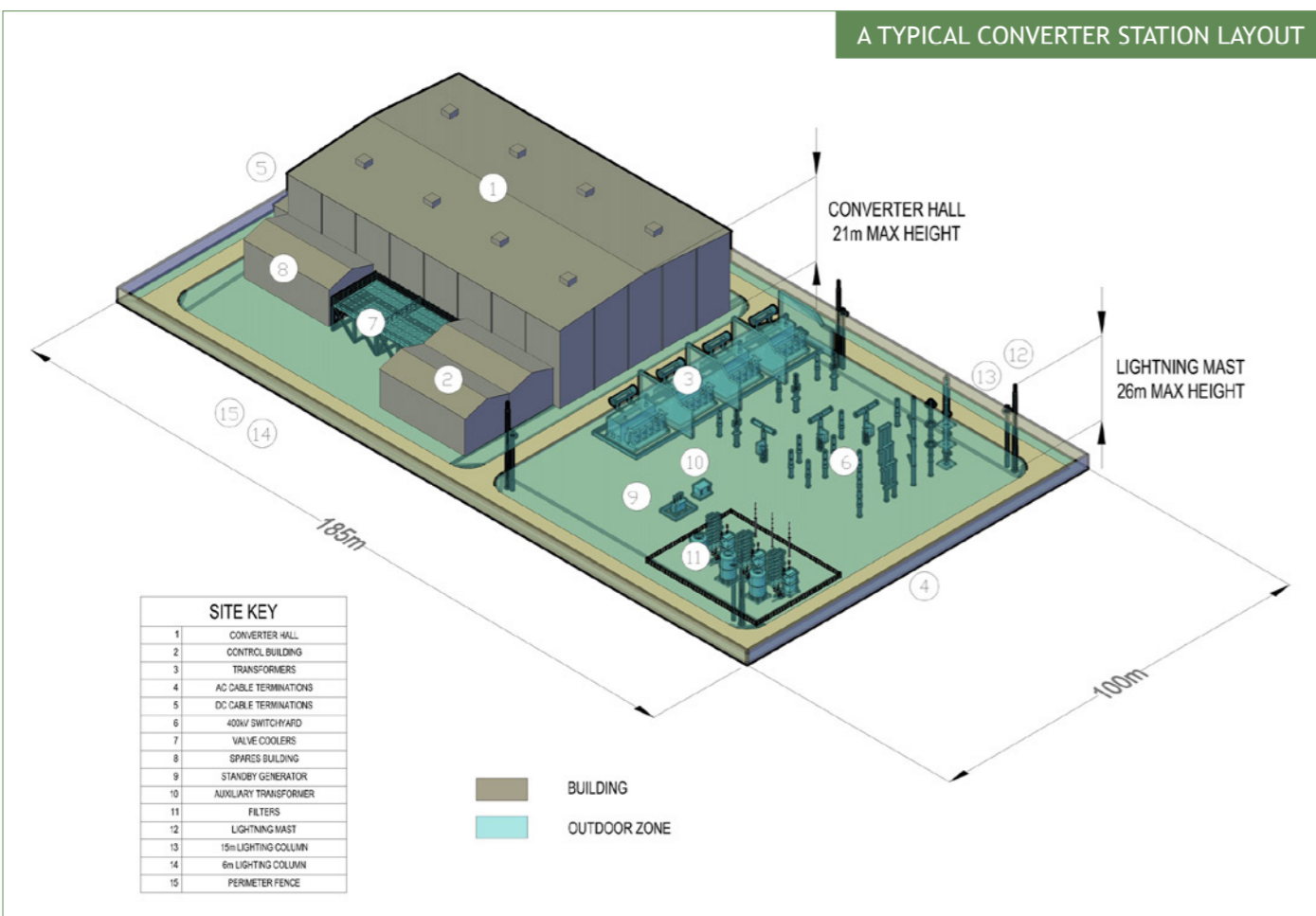


Greenlink will use High Voltage Direct Current Voltage Source Converter (HVDC VSC) technology to link the two power systems. In Ireland and GB, HVDC has been selected over an AC connection because AC is technically difficult over this distance. VSC technology has the benefit that it reduces the size of the converter stations (when compared to similar technologies).

The Greenlink Interconnector Converter Station

The indicative converter station site footprint would be circa 1.85 hectares (185m x 100m).

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonic filters (if required), lightning towers, ancillary plant such as cooling bank and stand-by back-up emergency generators, and a control building. Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.



Tail Station

A tail station is a substation built adjacent to infrastructure such as a converter station and remote generation plant. Following consultation, EirGrid may require a tail station to be developed alongside the converter station in Ireland. While the need for a tail station has not been confirmed we will now incorporate one within the design to be assessed within the final planning application in Ireland.

We are using a 60m x 70m footprint for the potential tail station.

Project Timeline



A large infrastructure project such as Greenlink takes several years from concept to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design are completed, permits and licences will need to be obtained from: Pembrokeshire County Council, Pembrokeshire Coast National Park Authority, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will be constructed, which is expected to take approximately three years from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023

An important energy infrastructure project

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

The "Energy Union" launched by the European Commission on 25th February 2015 is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and to address different approaches to the design and implementation of energy policy.

Facilitating the Union requires a range of actions, chief amongst them being an increase in the physical interconnection of the EU and surrounding country energy grids (both gas and electricity) to meet a 10% interconnection target by 2020 and to reach 15% by 2030.

The EU, Irish and UK governments all agree that even after Brexit, an interconnected grid will help to ensure affordable, secure and sustainable energy, and also growth and jobs across Europe.

- » For information regarding the infrastructure transparency platform referred to in Article 18 of the TEN-E Regulation, please visit: http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html
- » For information regarding the manual of procedures for each of UK and Ireland https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf and www.pleanala.ie/publications/2014/pocmanual.pdf

Greenlink

INTERCONNECTOR

Greenlink is being developed by
Greenlink Interconnector Limited.

Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewables, storage, flexible generation and interconnection projects and is experienced in the development of energy infrastructure projects in the UK, Ireland and internationally.

Greenlink Interconnector Limited is bringing private capital to the project and will assume the majority of the project risks.

For more information on Greenlink, please visit our website: www.greenlinkinterconnector.eu

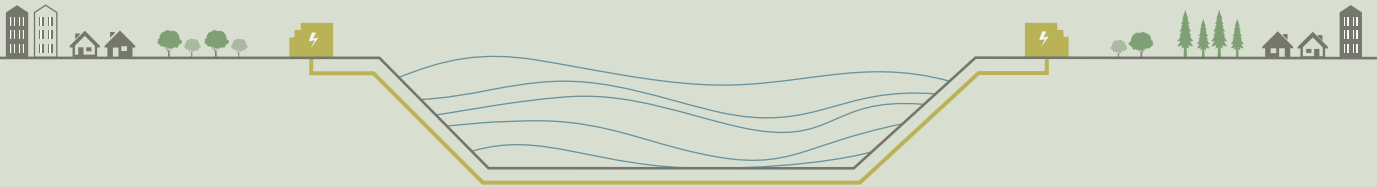


Appendix 4

TEN-E Regulation
Information Brochure
– June 2019

Greenlink

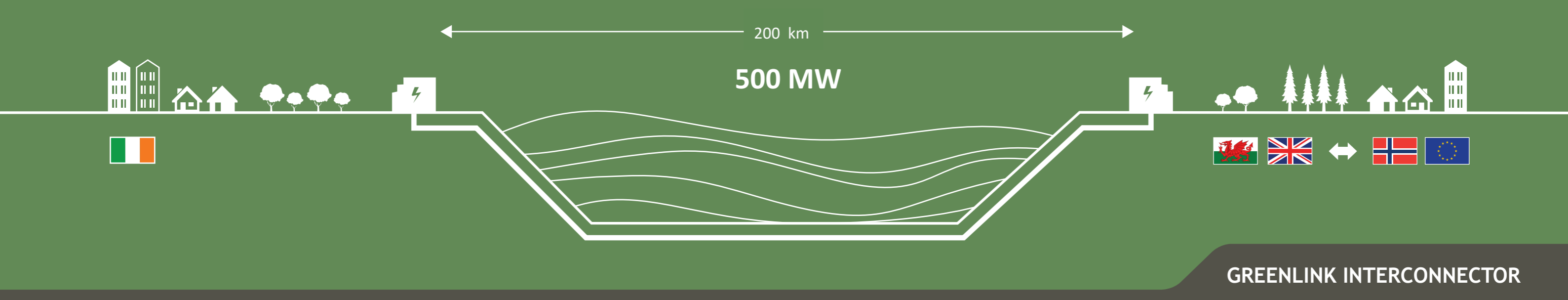
INTERCONNECTOR



TEN-E REGULATION INFORMATION BROCHURE

Issue 3 - June 2019

Connecting the power markets
in Ireland and Great Britain
for energy security, regional
investment and value for money
for consumers



GREENLINK INTERCONNECTOR

This Greenlink brochure provides an update of the project information contained within the brochures published in May 2018 and November 2018 and forms part of the ongoing stakeholder consultation process.

Consents required to construct Greenlink are expected to include:

	Wales	Ireland
Converter station	Major Development - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Major Development - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

IMPORTANT PLANNING UPDATE: MARINE APPLICATIONS

The Marine Licence application and the Foreshore Licence application are scheduled to be submitted to Natural Resources Wales (Wales) and the Foreshore Unit (Ireland) respectively in June/July 2019.

Greenlink is a proposed subsea and underground electricity interconnector cable between the existing electricity grids in Ireland and Great Britain (GB), with a nominal capacity of 500 megawatts (MW). Greenlink will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales). The power will be able to flow in either direction, depending on supply and demand in each country.

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland and GB with onward connections to continental Europe. The construction and development of Greenlink will deliver: increased energy security; regional investment and value for money to consumers; and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will consist of two converter stations - one located close to the Great Island substation in County Wexford and the other close to the Pembroke substation in Pembrokeshire - connected by two High Voltage Direct Current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.

DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore, the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built.

Greenlink is planned for commissioning in 2023.

The project will require planning permission in Ireland and in Wales.

STATUS OF THE PROJECT: The project is in the pre-planning phase, with planning submissions anticipated during Q4 2019. The applications for the marine components are scheduled to be submitted in June 2019.



380,000

Potential to power 380,000 homes*



Investment

€400m/£350m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



Security

Enhances the security of supply for electricity consumers



Value FOR Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents around €400m/£350m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

The construction of Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

*Figure for number of homes is based on typical annual Irish household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Great Britain

National Grid is the Electricity System Operator for the whole of GB and operates the electricity transmission network in Wales and England including the 400kV network and substation at Pembroke. In its role as System Operator for GB, National Grid publishes plans and assessments for the economic and efficient development of the GB electricity transmission networks:

- » In Future Energy Scenarios (FES), National Grid considers different potential future impacts on the electricity system. In the 2017 FES the amount of interconnection capacity could reach 19GW by 2030 compared to 4GW today.
- » In the Network Options Assessment (NOA), National Grid carries out economic analyses to determine which transmission investments are efficient. The 2018/19 NOA recommends additional interconnection from GB to Ireland, beyond the 1.5GW capacity provided by Greenlink and the existing interconnectors (East West Interconnector (EWIC) and Moyle).
- » The Electricity Ten Year Statement (ETYS) includes data on the existing and planned transmission networks in GB and the ETYS 2017 references Greenlink as one of the planned interconnectors that has a connection agreement with National Grid.

Ireland

EirGrid is the Electricity System Operator for Ireland and with its subsidiary, SONI, operates the island of Ireland's electricity system. In its role as System Operator for Ireland, EirGrid publishes a ten year transmission development plan:

- » Greenlink is part of Transmission Development Plan 2016-2026, is referenced as part of the European Ten Year Network Development Plan 2018 (ENTSO-E TYNDP 2018) and as a PCI. The documents note that interconnection assists in increasing security of supply and competition.
- » The Irish regulator determined, in October 2018, that Greenlink passed the test to be part of the Irish transmission system paving the way for Greenlink to move to the permitting phase.

Offshore studies

The subsea cable route was expected to be up to 170km long. Following the completion of subsea surveys and consultation with key stakeholders the proposed cable route is circa 160km long.

Initial cable route selection centred on desk-based work and the assessment of known data and constraints. This work identified several route corridor options which required further assessment.

Subsea surveys commenced in September 2018 in order to identify and confirm the presence of any constraints facing the subsea cable routes. The environmental and technical constraints were assessed in conjunction with the Irish and Welsh foreshore authorities. **The route that offered the best solution to challenges identified while maintaining the shortest route solution was chosen as the preferred route.**

The results of the subsea surveys not only supported the selection of the preferred cable route but also the appropriate installation and protection methods to be adopted.

Technical and environmental assessment

As part of the project development, a series of technical and environmental assessment studies are being carried out to establish the viability of the proposed converter station sites and cable routes and to consider any potential impacts and opportunities arising from the project development. Greenlink is a cross-border project and no adverse cross-border impacts are expected.

Onshore studies and assessments

Biodiversity

Surveys are currently being carried out and the data assessed to ensure that the final onshore elements of Greenlink are designed sympathetically to the local environment and wildlife. Where possible, enhancement measures will be employed.

Surveys cover the landfall sites, the cable routes under consideration and the possible converter station locations.



As well as birds, wildlife being considered includes badgers, bats, otters, water voles, reptiles, great crested newts and dormice. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

Our surveys and assessments will be verified and consulted on by Natural Resources Wales and the National Parks and Wildlife Service in Ireland.

Historic environment

The potential effects of Greenlink on local archaeology and cultural heritage are being assessed by identifying, predicting and evaluating the significance of potential effects on designated and non-designated heritage assets.

To mitigate any potential impacts we will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects. Wherever possible, mitigation will be designed to deliver benefits, such as maintaining the visual setting of historic assets. We will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

Landscape & visual impact

This assessment relates to changes in the physical landscape, brought about by the proposed development, which may alter its character and how this is experienced.

We will produce visualisations of the converter stations from viewpoints that will be selected to represent the character of the area and particularly important landscape and heritage sites. Suitable mitigation, such as landscaping, building finishes and design layout, will be proposed.

Flooding and hydrology

This assessment considers the existing surface and ground water resources in proximity to Greenlink. It will assess potential impacts to water bodies, surface water drainage and flood risk due to the proposed scheme during the construction and operational phases. The results of this assessment will be incorporated into the final design.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.



The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact.



ILLUSTRATION: WSP

Noise & vibration

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.

Noise sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship, etc) and open public spaces (including public footpaths).

The results of this assessment will be incorporated into the final design.

Traffic & transport

The traffic impact assessment will address the traffic impacts on the local road network from the construction and operation of Greenlink.



The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A transport assessment will be carried out in accordance with best practice.

An outline Traffic Management Plan (TMP) will be put together that will detail measures for managing and mitigating the construction traffic caused by Greenlink. We will consult the local community on the outline TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Electromagnetic fields (EMFs)

The Greenlink electrical infrastructure (converter stations and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

Use of agricultural land

Construction of the converter stations will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.



Socio-economics & human health

This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects on the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact and maximise benefits.

Air quality

This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be considered.



Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

Greenlink in Wales

In Wales, Greenlink will connect to the Pembroke 400kV substation in Pembrokeshire. The Pembroke substation was identified as the connection point for Greenlink following the completion of assessments and consultation with National Grid. AC cables will connect the HVDC converter station to the substation. Three sites, in close proximity to the substation, were assessed as potential locations to locate the HVDC converter station.

A preferred cable route and converter station site have been selected following consultation with stakeholders and analysis of the results of environmental and technical work.

The preferred cable route and converter station site are shown in Plan 1 along with alternatives that were considered.

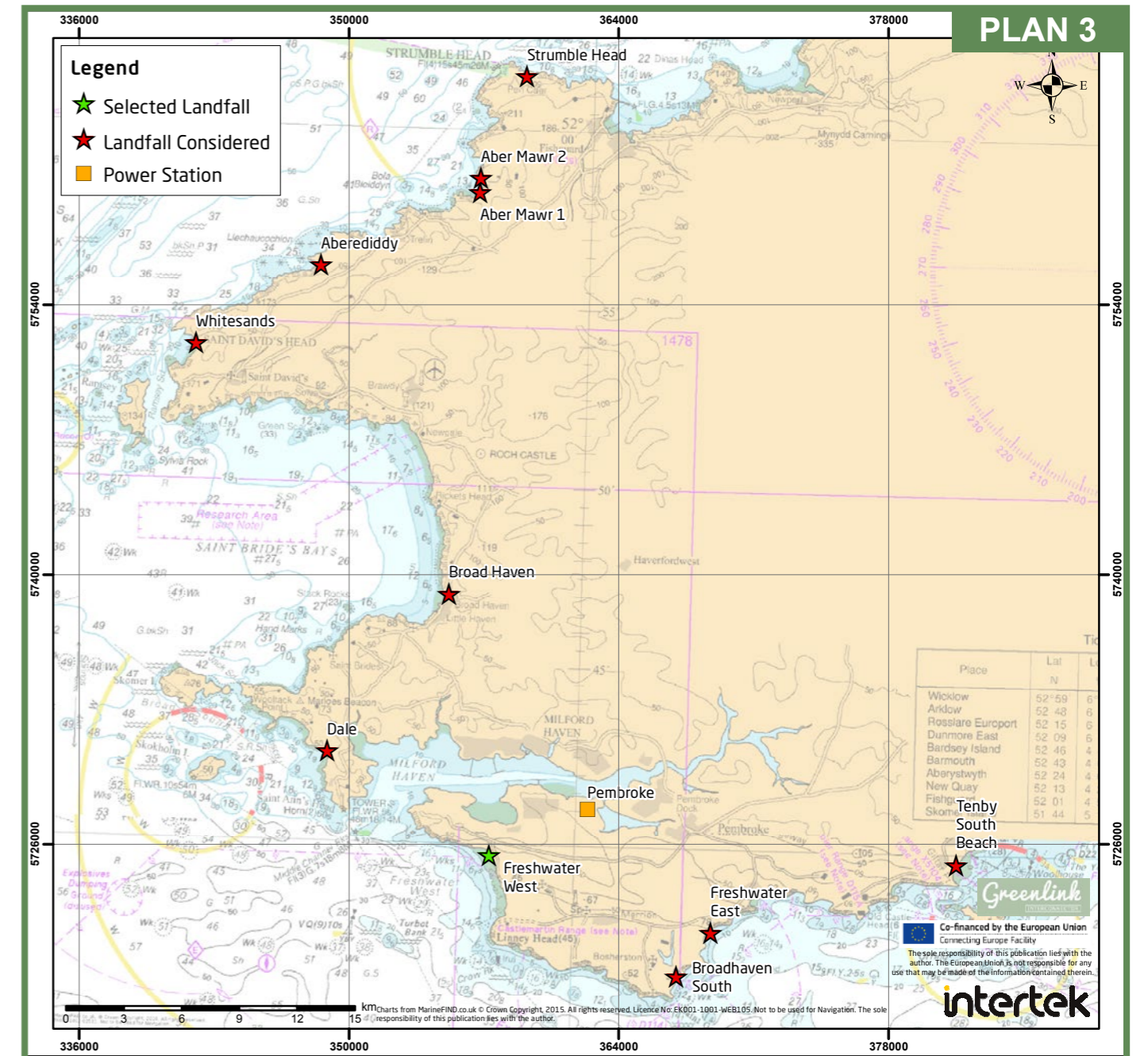
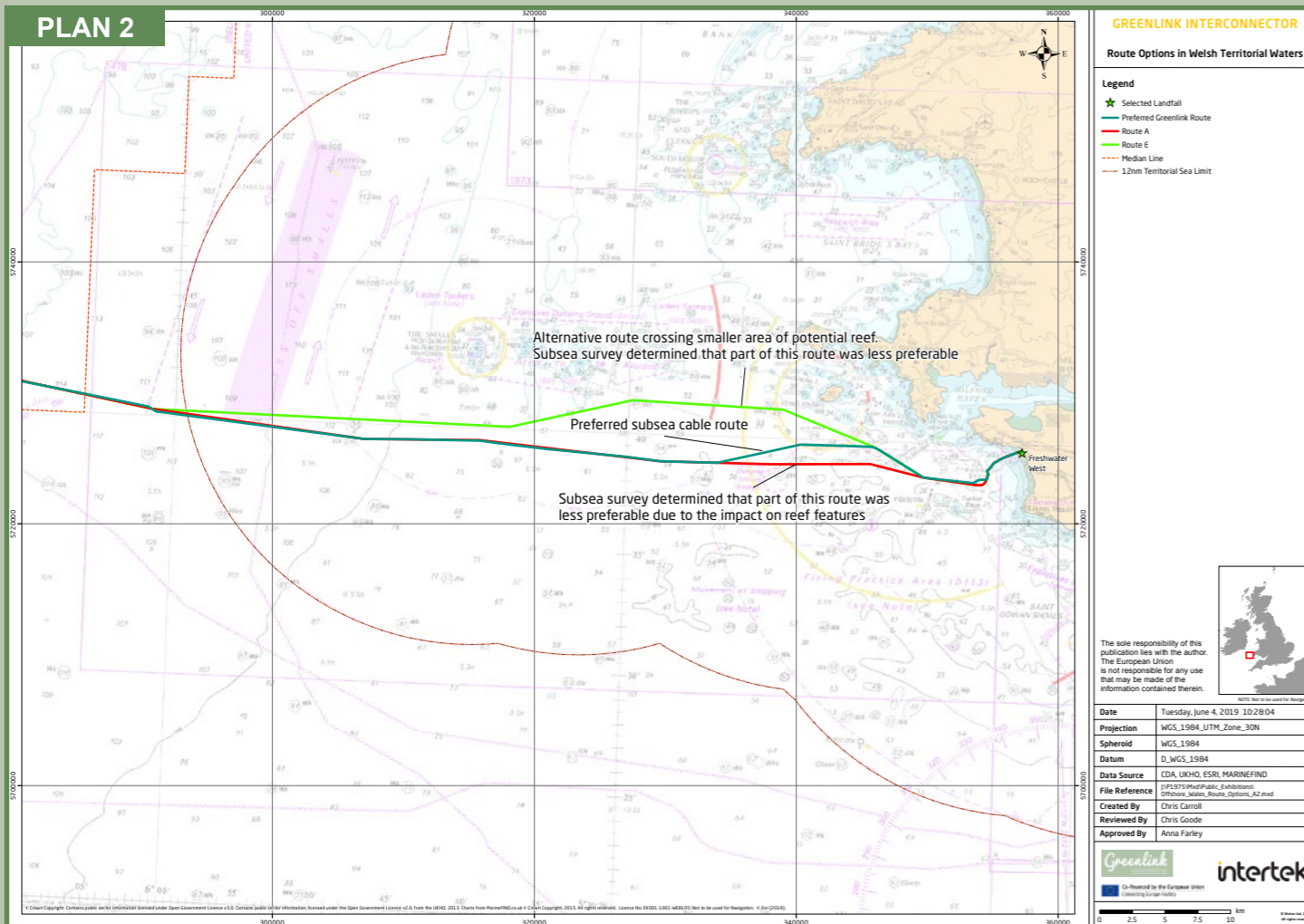
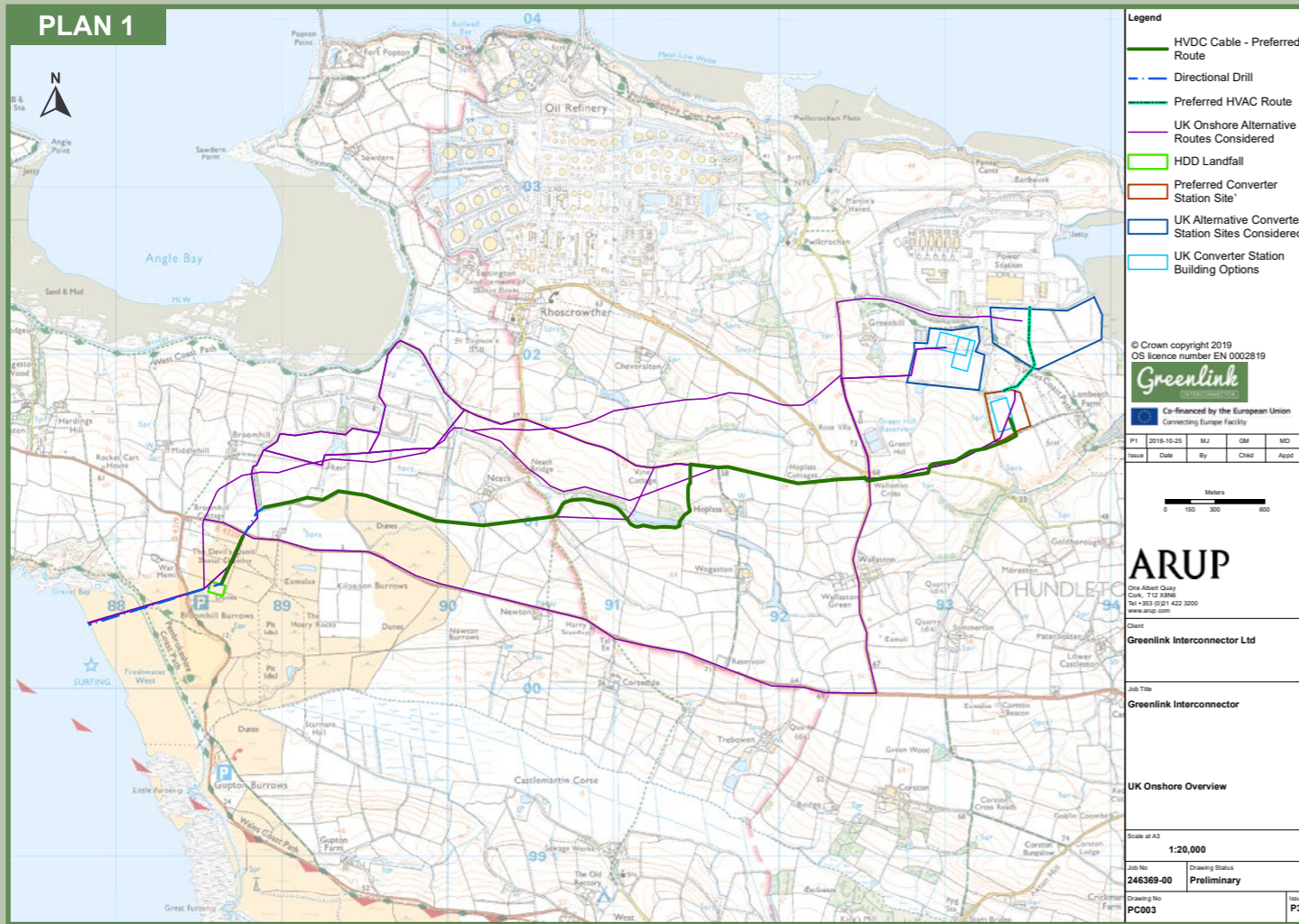
To minimise environmental impact, it is proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the dunes and beach at Freshwater West.

HDD is a trenchless method of installing underground cables, as detailed on page 13.

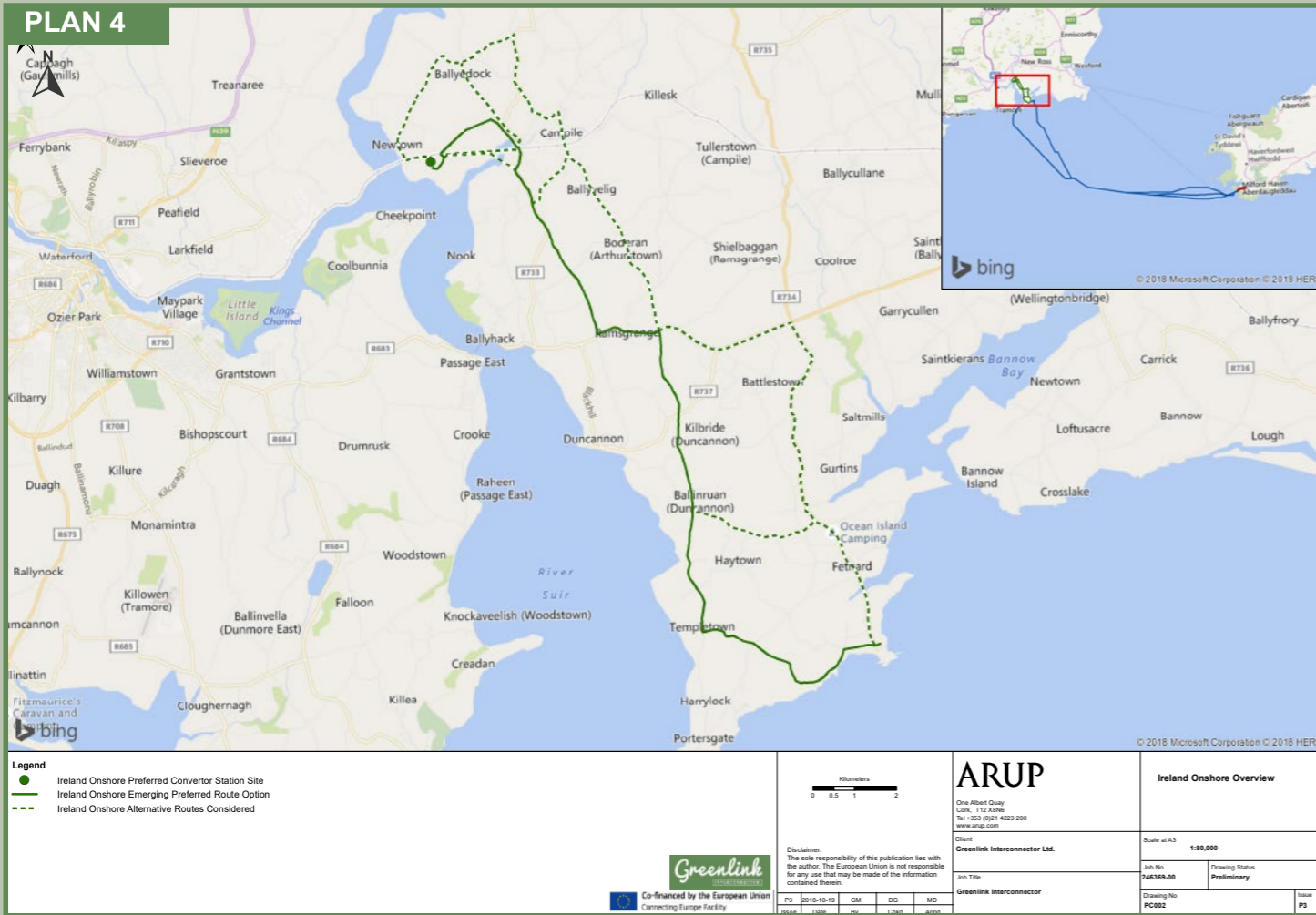
The final subsea route was selected following the conclusion of subsea surveys and consultation with stakeholders.

Two initial routes were subject to subsea surveys. Following the results of surveys confirming the presence of reef habitats a third route was identified and assessed in partnership with Natural Resources Wales. The third route assessed has been confirmed as the preferred subsea cable route. The final subsea route and the two other routes assessed are shown in Plan 2.

The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 3.



PLAN 4



Greenlink in Ireland

In Ireland, Greenlink will connect into the Great Island 220kV substation in County Wexford. The substation at Great Island was identified as the connection point for Greenlink following the completion of assessments and consultation with EirGrid.

AC cables will connect the HVDC converter station to the substation. A site adjacent to the substation has been identified as the most suitable location to construct the HVDC converter station.

The proposed converter station site is shown in Plan 4 along with potential onshore underground cable routes linking the landfall at Baginbun Beach.

The preferred converter station site and cable route options were identified following environmental and technical assessments and consultation with key stakeholders.

The length of the underground onshore cable route could be circa 22km.

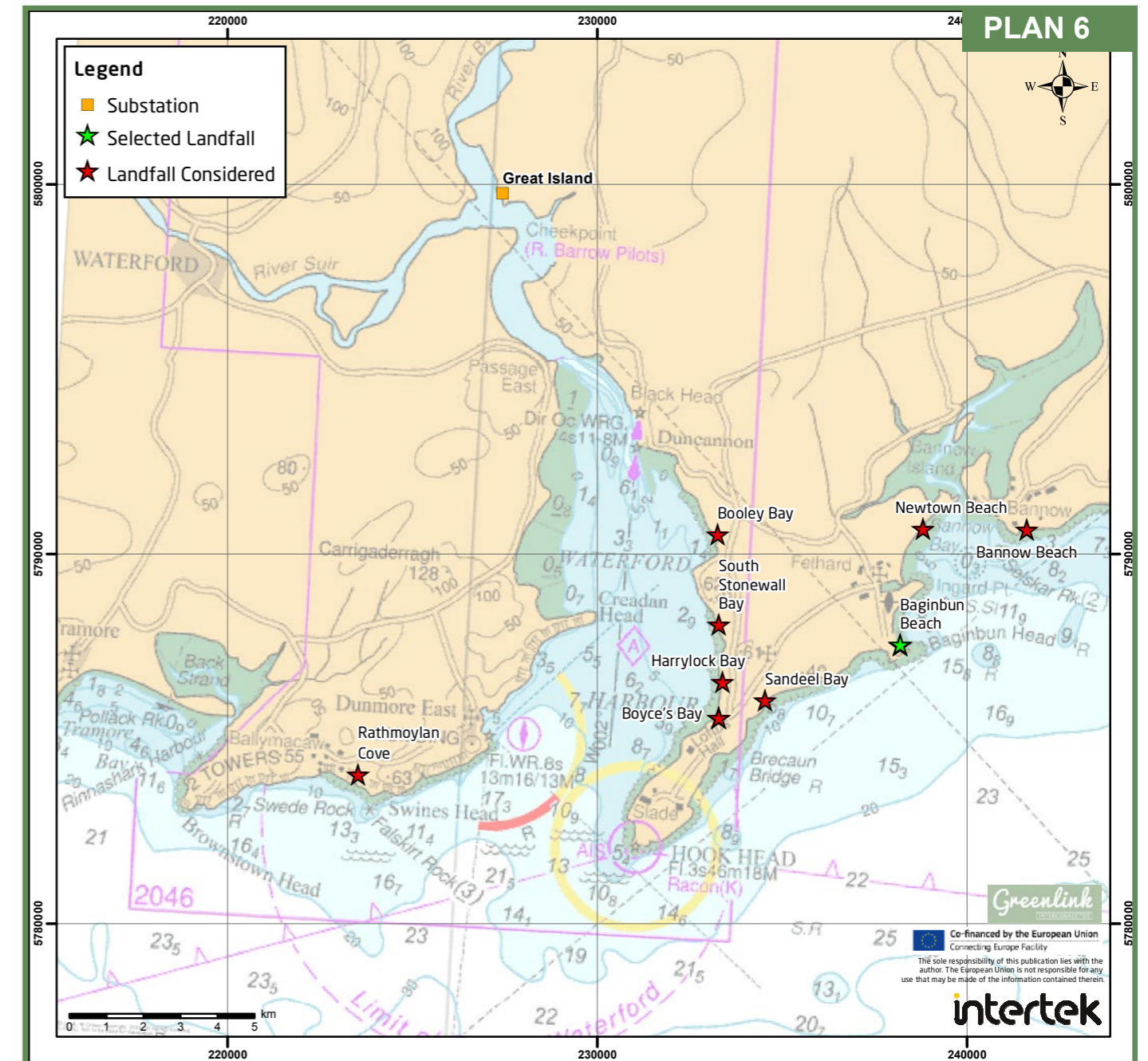
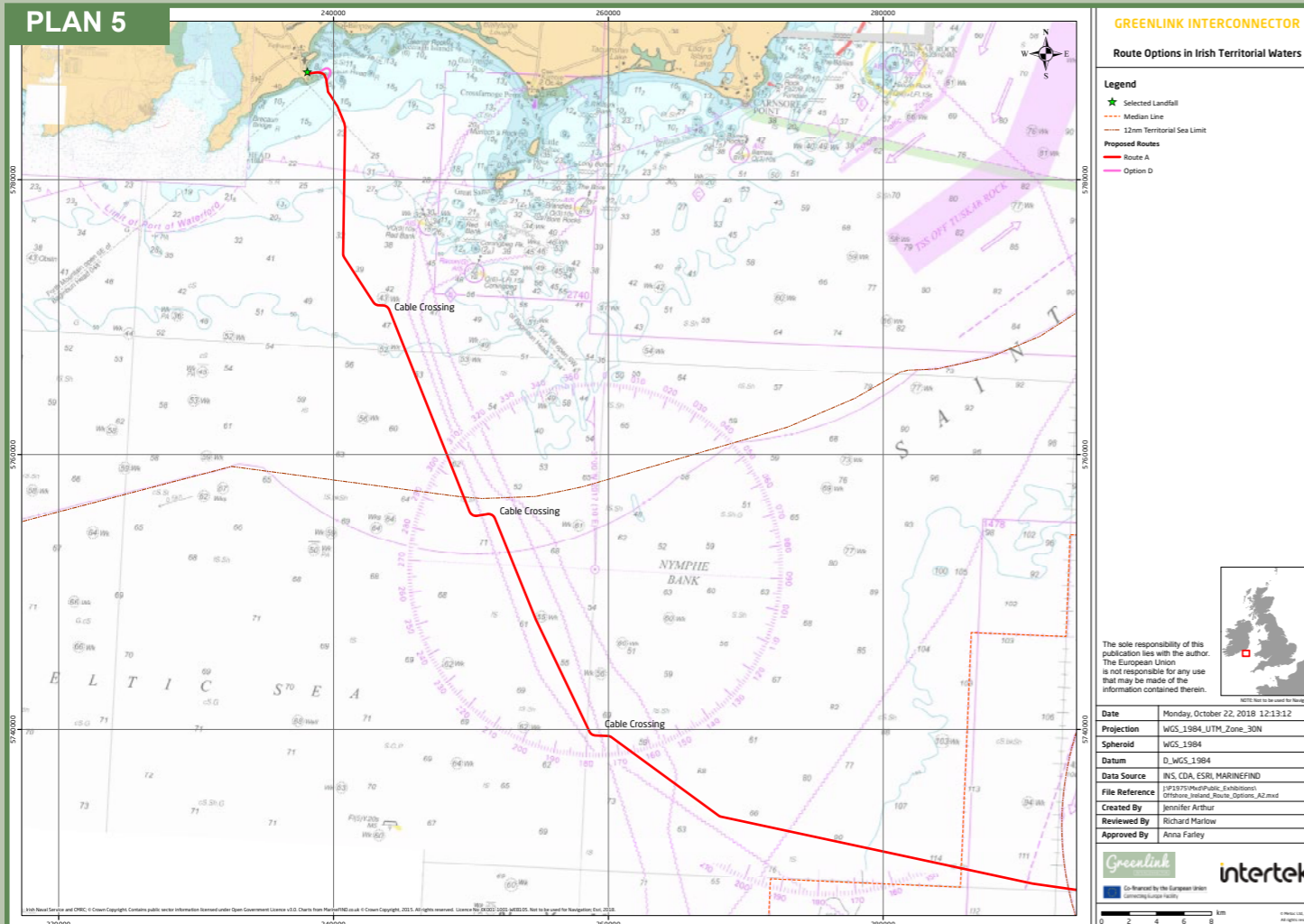
To minimise environmental impact, it is proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the cliff edge and sand at Baginbun Beach.

HDD is a trenchless method of installing underground cables, as detailed on page 13.

A preferred subsea route has been identified following desk-based assessments supported by the results of subsea surveys. The preferred route is shown in Plan 5.

The landfall at Baginbun Beach was selected as the landfall site following a review of potential landfalls in the region. The landfalls assessed are shown in Plan 6.

PLAN 5





Technical viability

Marine surveys which commenced in September 2018 and included geophysical and geotechnical surveys, have now all been completed.

Geophysical

The geophysical survey mapped the seabed and sub-surface geology along the survey route corridors to identify marine habitats, optimise cable routing within the survey corridor and enable the assessment of cable target burial depth. It also provided the geophysical data from which a marine archaeological assessment was undertaken as part of the consenting process.

Geotechnical

The geotechnical surveys evaluated the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This was done using a number of techniques, including drilling boreholes and taking shallow core samples.

Marine environmental assessments

Greenlink will cross a number of European Marine Protected Sites: Special Areas of Conservation designated for the protection of habitats and species, and Special Protection Areas designated for the protection of wild birds. To determine if the project is likely to have a significant effect on the conservation objectives of the sites, a Habitats Regulations Assessment is being carried out in Wales and a Natura Impact Statement is being carried out in Ireland. These processes identify any potential impacts Greenlink may have on designated sites and assesses whether it is likely that the feature of the site will be affected.

Where Greenlink is likely to undermine the conservation objectives of the site e.g. it is possible that condition, characteristics, or distribution of the feature cannot be maintained, then mitigation measures are proposed to manage or reduce the potential negative impacts identified.

We are undertaking an Environmental Impact Assessment for Greenlink. An Environmental Statement will be completed for the marine components of the project in Wales and an Environmental Impact Assessment Report will be completed for marine components in Ireland. The Habitats Regulations Assessment (Wales) and Natura Impact Statement (Ireland) will form part of this larger environmental appraisal.

Topics covered by the environmental assessment will include:

- » Coastal processes
- » Protected sites
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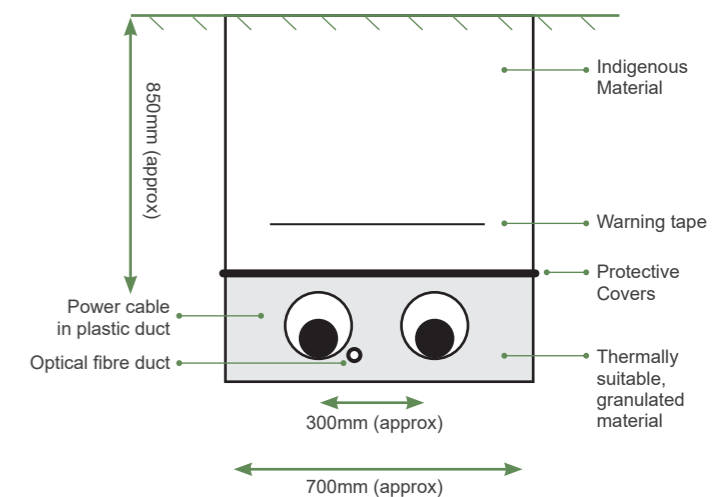
Onshore cable technology and installation techniques

The onshore HVDC cables will be buried underground in a single trench with a typical depth of cover of 850mm. These will be installed in plastic ducts to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape will also be buried along with marker posts at regular intervals at ground level. This arrangement is shown in Figure 1.

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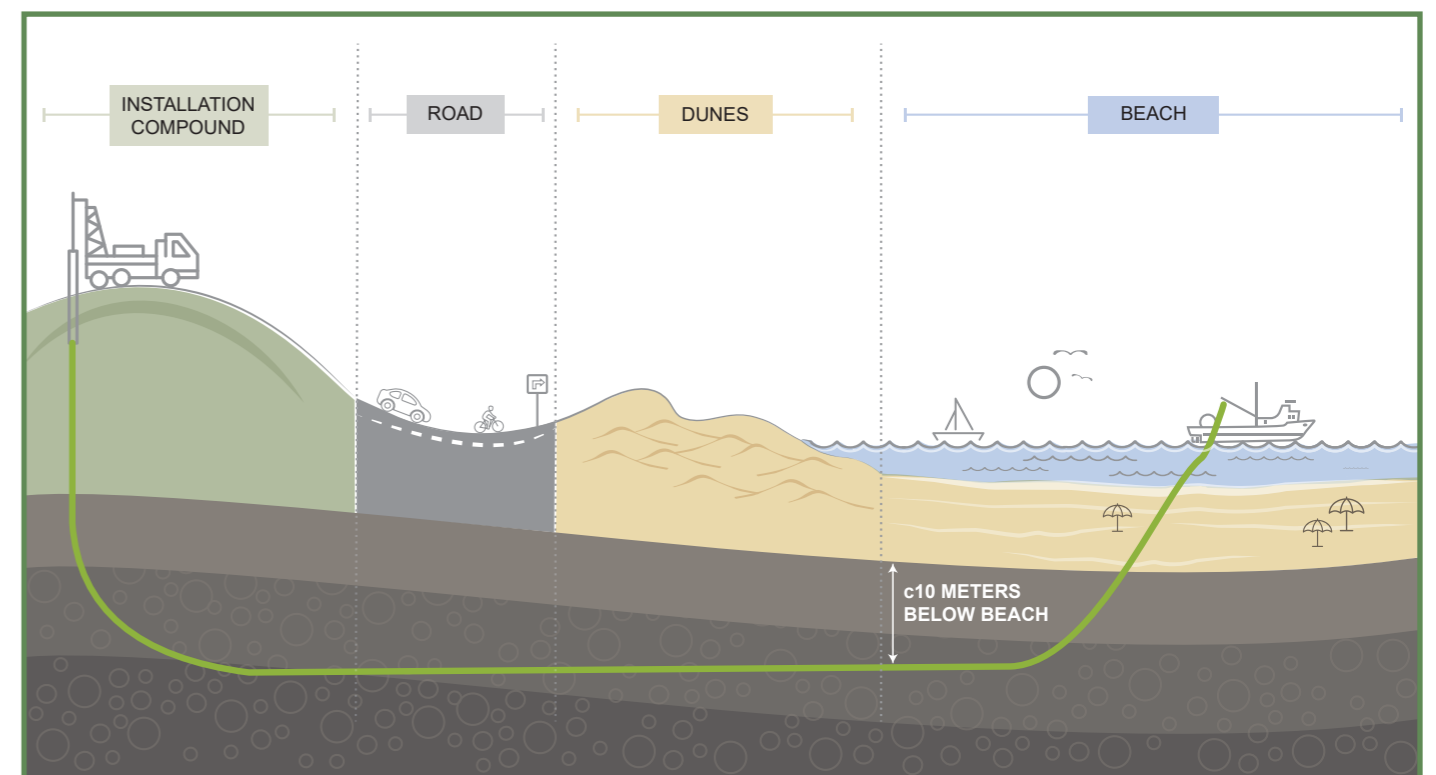
A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

Figure 1 : Indicative underground cable arrangement



Installation of Cables at Landfalls

We are proposing to use a Horizontal Directional Drill to install the cables at both Baginbun Beach (Ireland) and Freshwater West (Wales). Using this method of installation will ensure that cables can be installed without any impact on the beaches at both locations and will avoid any impact on the dune system at Freshwater West. The cable will emerge below the low water mark so no work will take place on either beach. While the construction programme for the full project is anticipated to take around three -years construction work around each landfall would last for approximately 3 months and be scheduled to avoid the most popular periods of use. Below is an illustration of how an HDD might work.

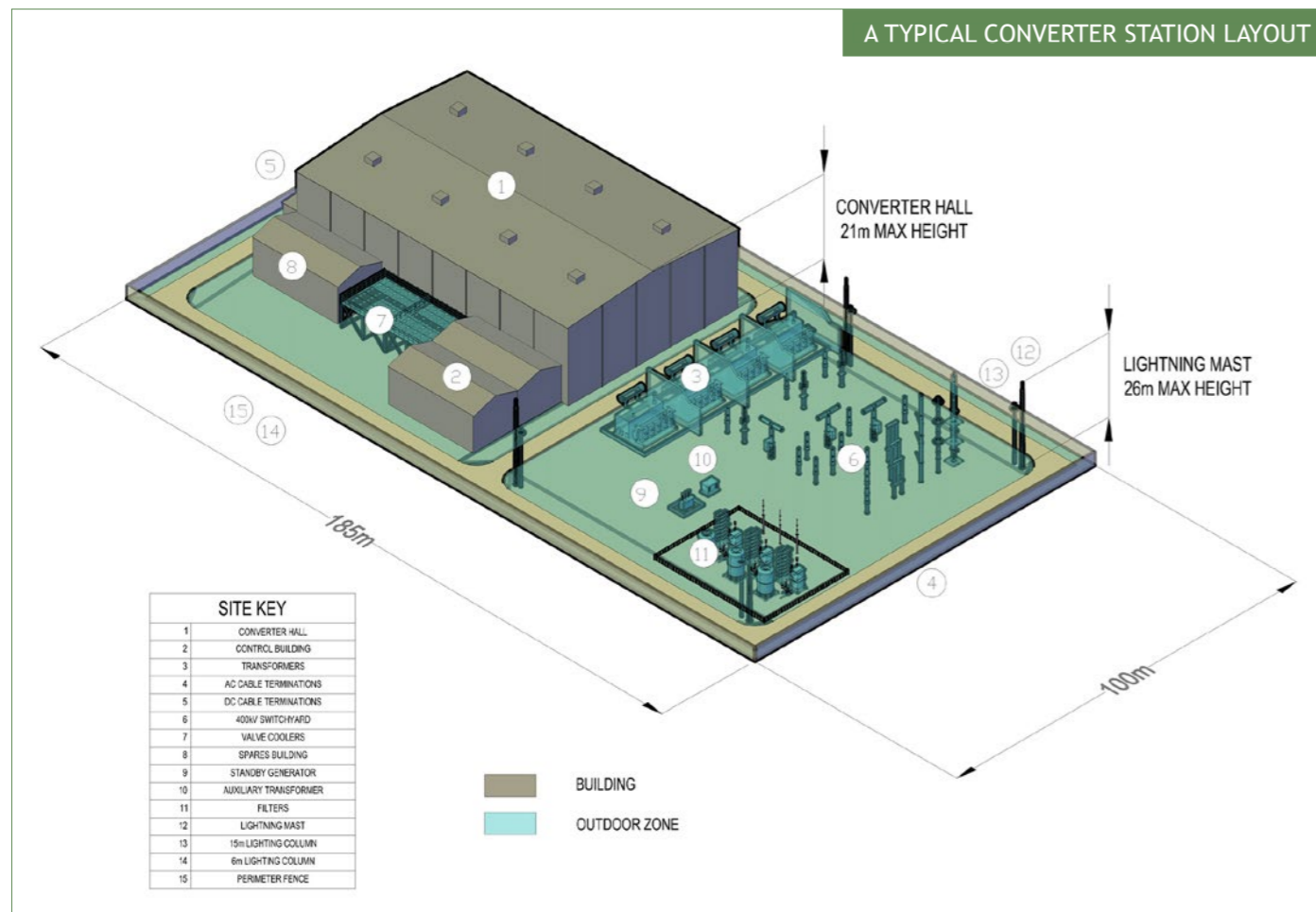


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A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonic filters (if required), lightning towers, ancillary plant such as cooling bank and stand-by back-up emergency generators, and a control building. Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.



Tail Station

A tail station is a substation built adjacent to infrastructure such as a converter station and remote generation plant. Following consultation, EirGrid has confirmed that a tail station will need to be developed alongside the converter station in Ireland. We will now incorporate a tail station within the design to be assessed within the final planning application in Ireland.

We are using a 60m x 70m footprint for the potential tail station, however consultations are taking place with EirGrid to reduce the footprint of the tail station to minimise environmental and landscape impacts.

Project Timeline



A large infrastructure project such as Greenlink takes several years from concept to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This followed the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design are completed, permits and licences will need to be obtained from: Pembrokeshire County Council, Pembrokeshire Coast National Park Authority, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will be constructed, which is expected to take approximately three years from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023.

An important energy infrastructure project

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

The "Energy Union" launched by the European Commission on 25th February 2015 is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and to address different approaches to the design and implementation of energy policy.

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Greenlink

INTERCONNECTOR

Greenlink is being developed by Greenlink Interconnector Limited.

Greenlink Interconnector Limited is owned jointly by Element Power Holdings, part of Hudson Sustainable Investment, and Partners Group on behalf of its clients. Hudson Sustainable Investment is an independent investment management firm with a strong track record and expertise in investing in and developing sustainable energy infrastructure projects in Ireland, the UK and internationally. Partners Group is a global private markets investment management firm with €73 billion in investment programs under management in private equity, private real estate, private infrastructure and private debt.

Greenlink Interconnector Limited is bringing private capital to the project and will assume the majority of the project risks.

For more information on Greenlink, please visit our website: www.greenlink.ie



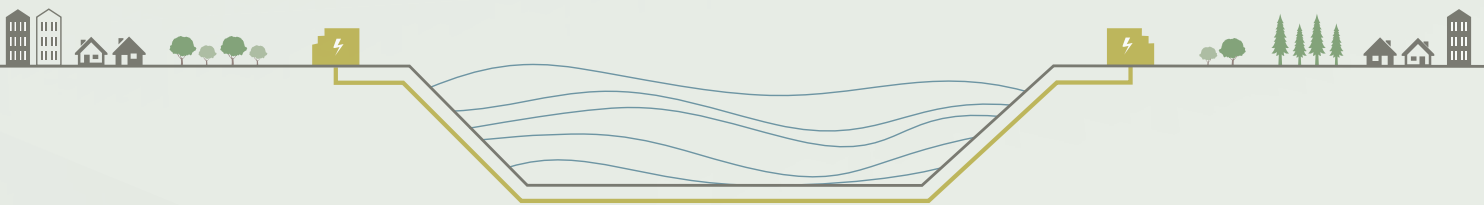
Appendix 5

TEN-E Regulation
Information Brochure
– December 2019

Greenlink

INTERCONNECTOR

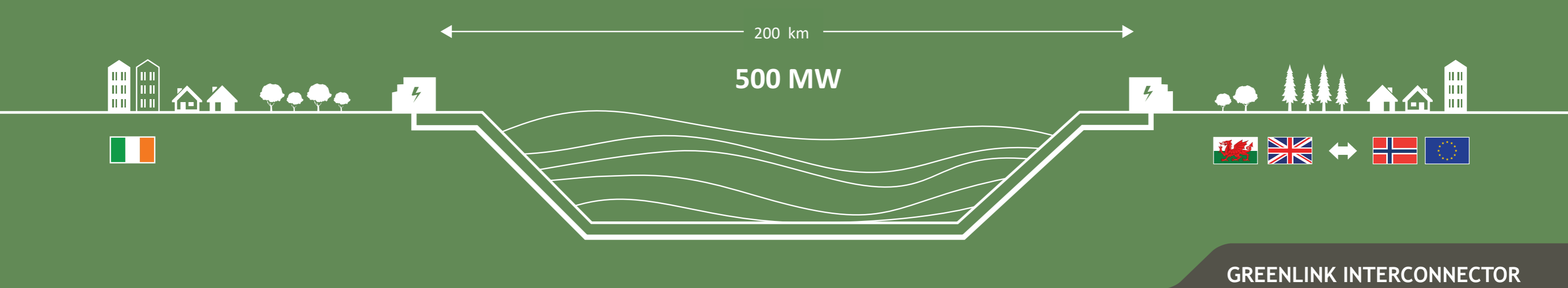
TEN-E REGULATION
INFORMATION BROCHURE



Connecting the power markets in Ireland and Great Britain for energy security, regional investment and value for money for consumers

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This Greenlink brochure provides an update of the project information contained within the brochures published in May 2018, November 2018 and June 2019 and forms part of the ongoing stakeholder consultation process.

Consents required to construct Greenlink are expected to include:

	Wales	Ireland
CONVERTER STATION	Major Development (Outline) - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
ONSHORE CABLE ROUTE	Major Development (Full) - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
MARINE CABLE	Marine Licence - Natural Resources Wales - Submitted Marine Works Licence - Milford Haven Port Authority - Submitted	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit) - Submitted

IMPORTANT PLANNING UPDATE: MARINE APPLICATIONS SUBMITTED

Formal consultation has commenced on Greenlink’s Marine Licence application (Wales) and Foreshore Licence application (Ireland). The consultation ends on 8th January 2020. The applications and details of how to respond can be found on the Greenlink website: www.greenlink.ie/marinelicenceapplicationwales and www.greenlink.ie/foreshorelicenceapplicationireland.

Greenlink is a proposed subsea and underground electricity interconnector cable between the existing electricity grids in Ireland and Great Britain (GB), with a nominal capacity of 500 megawatts (MW). Greenlink will provide a new grid connection between EirGrid’s Great Island substation in County Wexford (Ireland) and the National Grid’s Pembroke substation in Pembrokeshire (Wales). The power will be able to flow in either direction, depending on supply and demand in each country.

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland and GB with onward connections to continental Europe. The construction and development of Greenlink will deliver: increased energy security; regional investment and value for money to consumers; and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe’s most important energy infrastructure projects and granting it the “highest national significance” possible.

Greenlink will consist of two converter stations - one located close to the Great Island substation in County Wexford and the other close to the Pembroke substation in Pembrokeshire - connected by two High Voltage Direct Current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.

DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore, the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built.

Greenlink is planned for commissioning in 2023.

The project will require planning permission in Ireland and in Wales.

STATUS OF THE PROJECT:

The onshore components of the project are in the pre-planning phase, with planning submissions anticipated during Q1 2020. The applications for the marine components have now been submitted.



380,000

Potential to power 380,000 homes*



Investment

€400m/£350m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



Security

Enhances the security of supply for electricity consumers



Value FOR Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents around €400m/£350m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

The construction of Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

* Approximate figure, based on value and conversion rate: €1=£0.88, November 2018

** Figure for number of homes is based on typical annual Irish household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Great Britain

National Grid is the Electricity System Operator for the whole of GB and operates the electricity transmission network in Wales and England including the 400kV network and substation at Pembroke. In its role as System Operator for GB, National Grid publishes plans and assessments for the economic and efficient development of the GB electricity transmission networks:

- » In Future Energy Scenarios (FES), National Grid considers different potential future impacts on the electricity system. In the 2017 FES the amount of interconnection capacity could reach 19GW by 2030 compared to 4GW today.
- » In the Network Options Assessment (NOA), National Grid carries out economic analyses to determine which transmission investments are efficient. The 2018/19 NOA recommends additional interconnection from GB to Ireland, beyond the 1.5GW capacity provided by Greenlink and the existing interconnectors (East West Interconnector (EWIC) and Moyle).
- » The Electricity Ten Year Statement (ETYS) includes data on the existing and planned transmission networks in GB and the ETYS 2017 references Greenlink as one of the planned interconnectors that has a connection agreement with National Grid.

Ireland

EirGrid is the Electricity System Operator for Ireland and with its subsidiary, SONI, operates the island of Ireland's electricity system. In its role as System Operator for Ireland, EirGrid publishes a ten year transmission development plan:

- » Greenlink is part of Transmission Development Plan 2016-2026, is referenced as part of the European Ten Year Network Development Plan 2018 (ENTSO-E TYNDP 2018) and as a PCI. The documents note that interconnection assists in increasing security of supply and competition.
- » The Irish regulator determined, in October 2018, that Greenlink passed the test to be part of the Irish transmission system paving the way for Greenlink to move to the permitting phase.

Offshore studies

The subsea cable route was expected to be up to 170km long. Following the completion of subsea surveys and consultation with key stakeholders the proposed cable route is circa 160km long.

Initial cable route selection centred on desk-based work and the assessment of known data and constraints. This work identified several route corridor options which required further assessment.

Subsea surveys commenced in September 2018 in order to identify and confirm the presence of any constraints facing the subsea cable routes. The environmental and technical constraints were assessed in conjunction with the Irish and Welsh foreshore authorities. **The route that offered the best solution to challenges identified while maintaining the shortest route solution was chosen as the preferred route.**

The results of the subsea surveys not only supported the selection of the preferred cable route but also the appropriate installation and protection methods to be adopted.

Technical and environment assessment

As part of the project development, a series of technical and environmental assessment studies have been completed to establish the viability of the proposed converter station sites and cable routes and to consider any potential impacts and opportunities arising from the project development. Greenlink is a cross-border project and no adverse cross-border impacts are expected.

Onshore studies and assessments

The following areas have been or are being assessed for potential impacts and mitigation measures, and the results will be set out in the onshore planning applications expected to be submitted during 2020



Biodiversity

Surveys have been completed to ensure that the final onshore elements of Greenlink are designed sympathetically to the local environment and wildlife. Where possible, enhancement measures will be employed.

Surveys cover the landfall sites, the cable routes under consideration and the possible converter station locations.

As well as birds, wildlife being considered includes badgers, bats, otters, water voles, reptiles, great crested newts and dormice. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

Our surveys and assessments will be verified and consulted on by Natural Resources Wales and the National Parks and Wildlife Service in Ireland.

Historic environment

The potential effects of Greenlink on local archaeology and cultural heritage have been assessed by identifying, predicting and evaluating the significance of potential effects on designated and non-designated heritage assets.

To mitigate any potential impacts we will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects. Wherever possible, mitigation will be designed to deliver benefits, such as maintaining the visual setting of historic assets. We will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

Landscape and visual impact

This assessment relates to changes in the physical landscape, brought about by the proposed development, which may alter its character and how this is experienced.

We are producing visualisations of the converter stations from viewpoints that will be selected to represent the character of the area and particularly important landscape and heritage sites. Suitable mitigation, such as landscaping, building finishes and design layout, will be proposed.

Flooding and hydrology

This assessment considers the existing surface and ground water resources in proximity to Greenlink. It assesses potential impacts to water bodies, surface water drainage and flood risk due to the proposed scheme during the construction and operational phases. The results of this assessment are being incorporated into the final design.

Geology and hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.

The assessment includes consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area is also considered. The results of this assessment are being incorporated into the final design and delivery of the proposal to mitigate any potential impact.



ILLUSTRATION: WSP

Noise and vibration

This assessment addresses potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors have been determined via noise surveys.

Noise sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship, etc) and open public spaces (including public footpaths).

The results of this assessment are being incorporated into the final design.



Traffic and transport

This assessment will address the traffic impacts on the local road network from the construction and operation of Greenlink.

The assessment includes the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce are also addressed.

Mitigation measures will be proposed to minimise any impacts on the local road network and users.

Electromagnetic fields (EMFs)

The Greenlink electrical infrastructure (converter stations and underground cables) are being designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.



Use of agricultural land

Construction of the converter stations will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.

Socio-economics and human health

This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects on the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy. The results of this assessment are being incorporated into the final design and delivery of the proposal to mitigate any potential impact and maximise benefits.

Air quality

This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase has also been considered.

Following the assessment of air quality effects during the construction phase, mitigation measures are being recommended to minimise the impact from dust. These measures, including dust suppressant measures, have been considered for both human and ecological receptors.

Greenlink in Wales

In Wales, Greenlink will connect to the Pembroke 400kV substation in Pembrokeshire. The Pembroke substation was identified as the connection point for Greenlink following the completion of assessments and consultation with National Grid. AC cables will connect the HVDC converter station to the substation. Three sites, in close proximity to the substation, were assessed as potential locations to locate the HVDC converter station.

A preferred cable route and converter station site have been selected following consultation with stakeholders and analysis of the results of environmental and technical work.

The preferred cable route and converter station site are shown in Plan 1 along with alternatives that were considered.

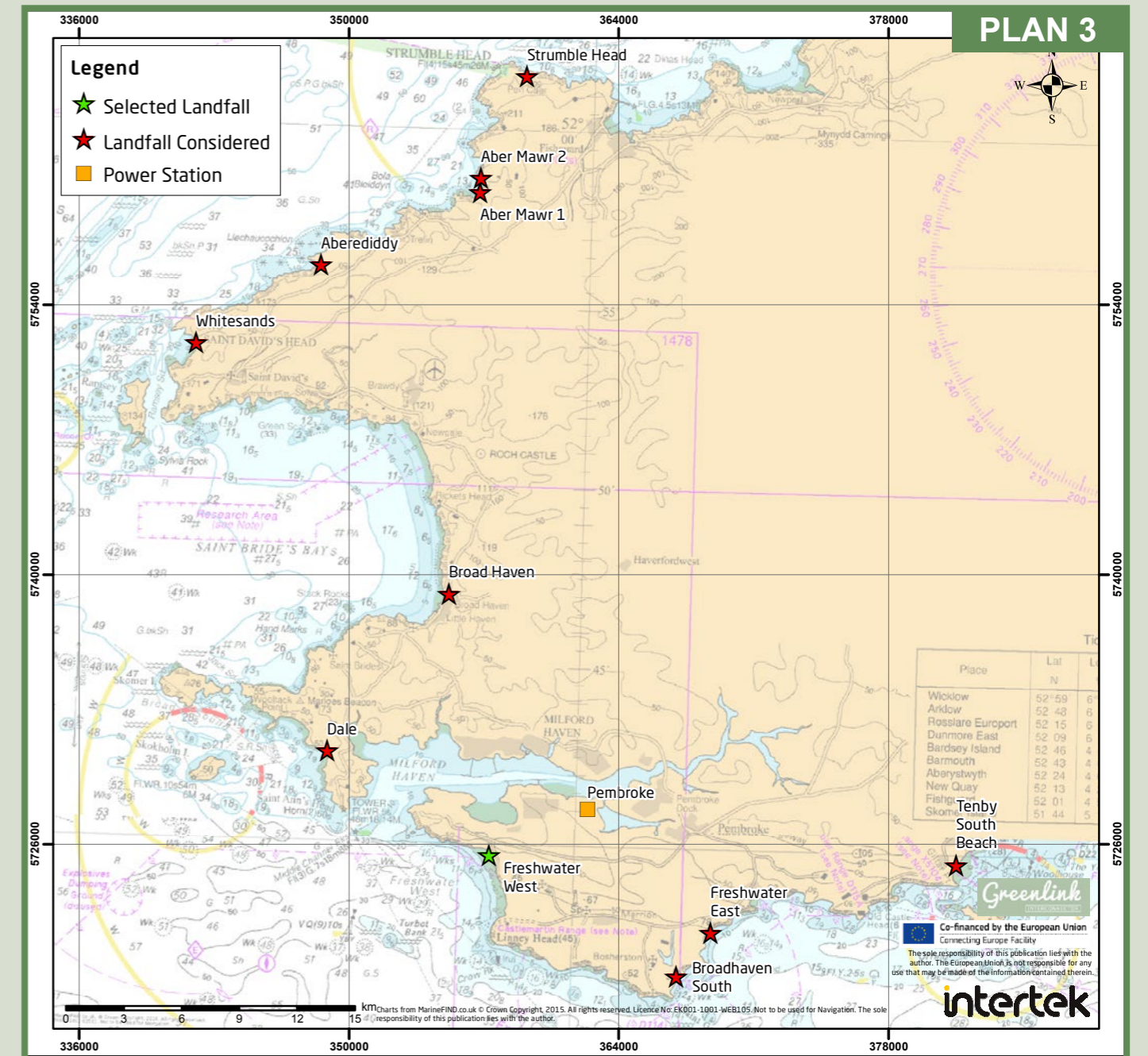
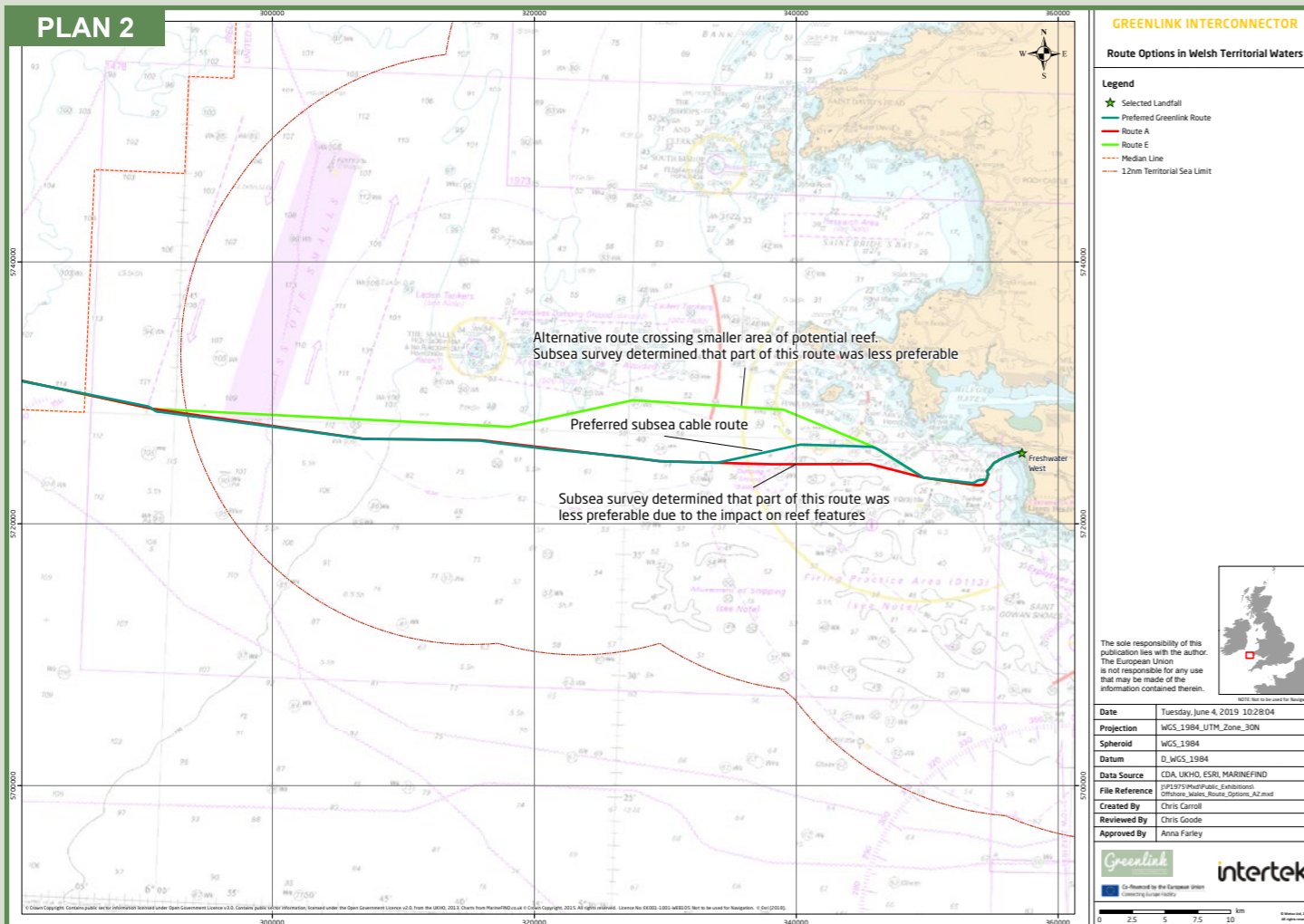
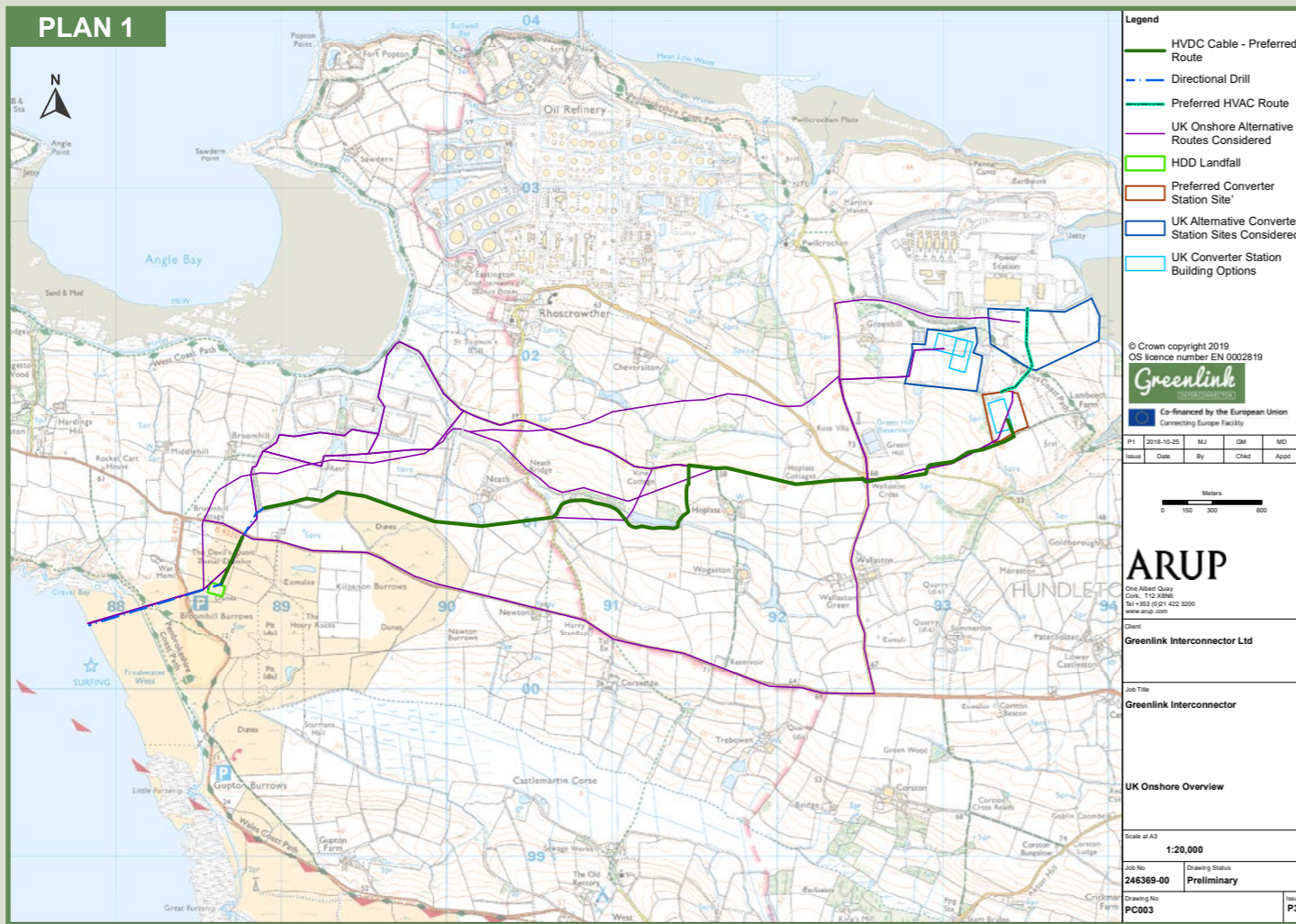
To minimise environmental impact, the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the dunes and beach at Freshwater West.

HDD is a trenchless method of installing underground cables, as detailed on page 13.

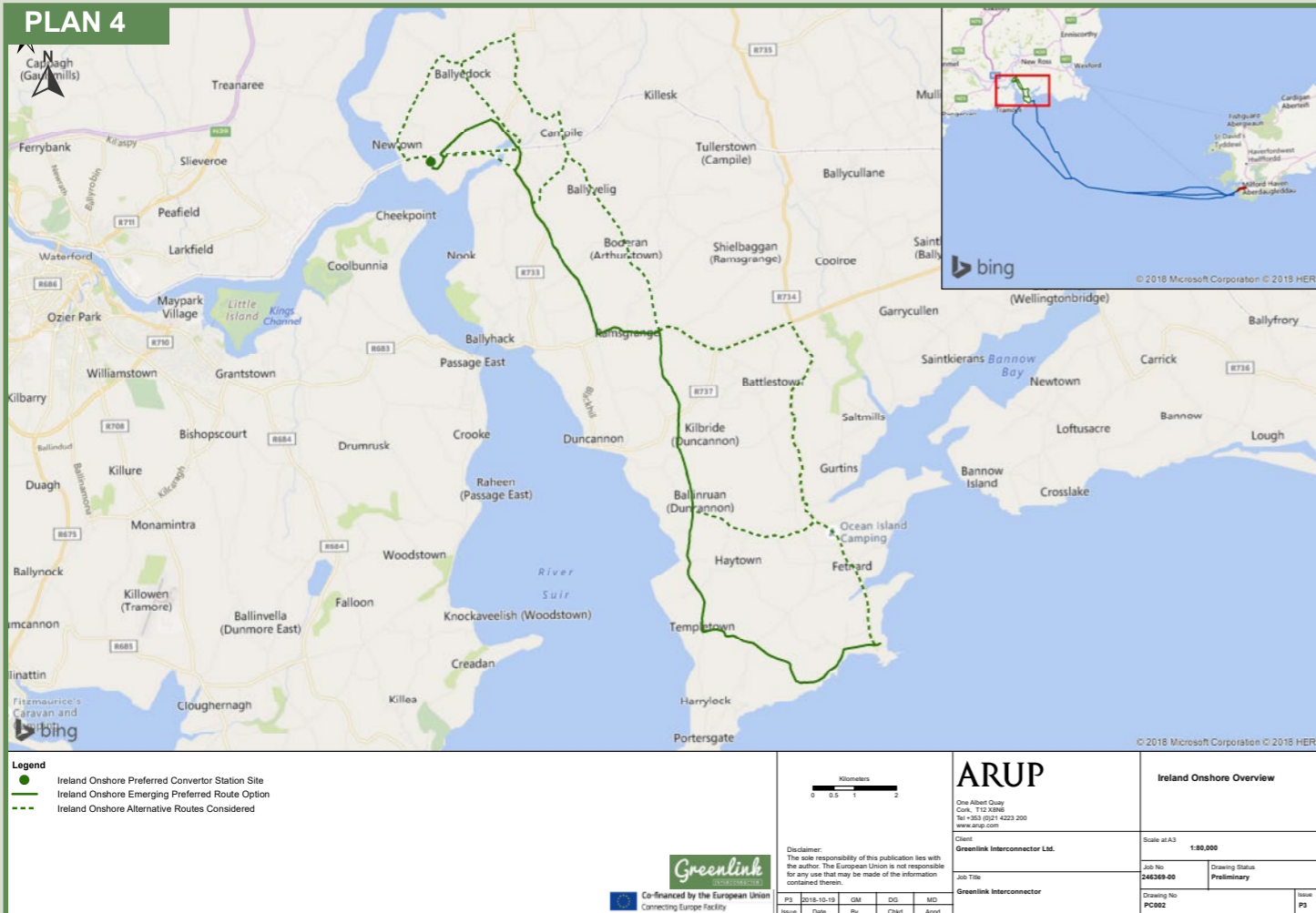
The final subsea route was selected following the conclusion of subsea surveys and consultation with stakeholders.

Two initial routes were subject to subsea surveys. Following the results of surveys confirming the presence of reef habitats a third route was identified and assessed in partnership with Natural Resources Wales. The third route assessed has been confirmed as the preferred subsea cable route. The final subsea route and the two other routes assessed are shown in Plan 2.

The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 3.



PLAN 4



Greenlink in Ireland

In Ireland, Greenlink will connect into the Great Island 220kV substation in County Wexford. The substation at Great Island was identified as the connection point for Greenlink following the completion of assessments and consultation with EirGrid.

AC cables will connect the HVDC converter station to the substation. A site adjacent to the substation has been identified as the most suitable location to construct the HVDC converter station.

The proposed converter station site is shown in Plan 4 along with potential onshore underground cable routes linking the landfall at Baginbun Beach.

The preferred converter station site and cable route options were identified following environmental and technical assessments and consultation with key stakeholders.

The length of the underground onshore cable route could be circa 22km.

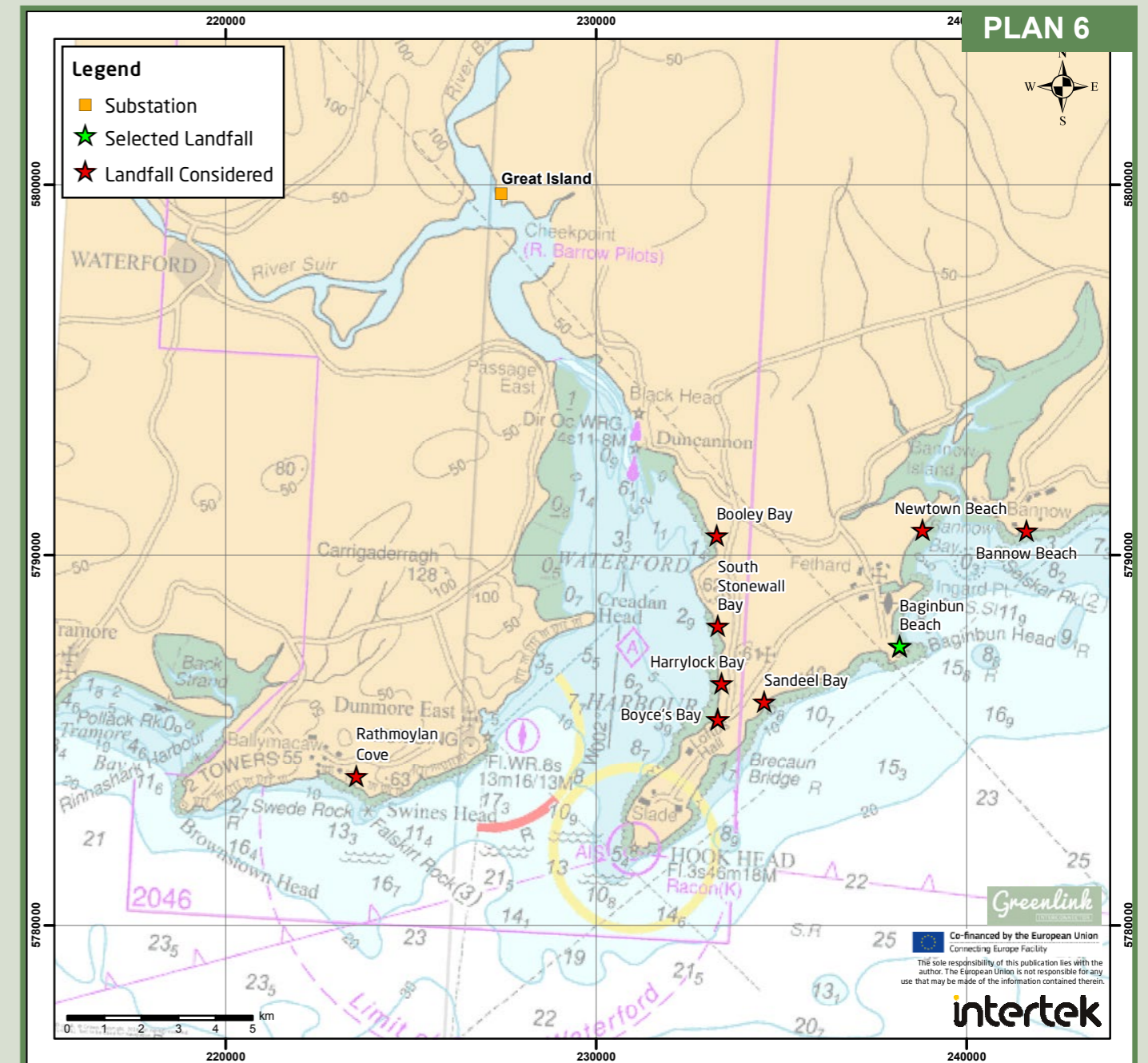
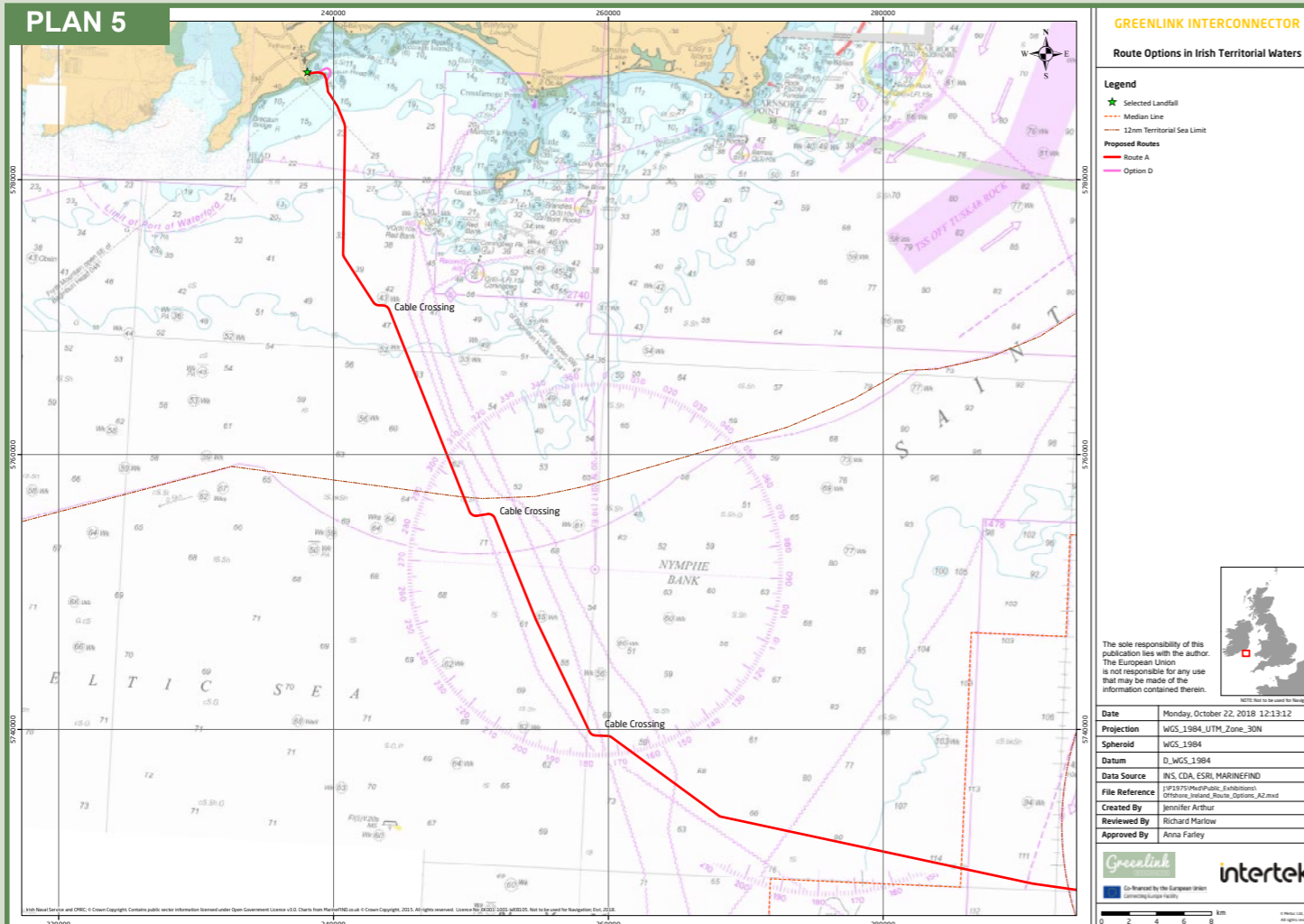
To minimise environmental impact, the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the cliff edge and sand at Baginbun Beach.

HDD is a trenchless method of installing underground cables, as detailed on page 13.

The preferred subsea route was identified following desk-based assessments supported by the results of subsea surveys. The preferred route is shown in Plan 5.

The landfall at Baginbun Beach was selected as the landfall site following a review of potential landfalls in the region. The landfalls assessed are shown in Plan 6.

PLAN 5



PLAN 6



Technical viability

Marine surveys, which commenced in September 2018 and included geophysical and geotechnical surveys, have now all been completed.

Geophysical

The geophysical survey mapped the seabed and sub-surface geology along the survey route corridors to identify marine habitats, optimise cable routing within the survey corridor and enable the assessment of cable target burial depth. It also provided the geophysical data from which a marine archaeological assessment was undertaken as part of the consenting process.

Geotechnical

The geotechnical surveys evaluated the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This was done using a number of techniques, including drilling boreholes and taking shallow core samples.

Marine environmental assessments

Greenlink will cross a number of European Marine Protected Sites: Special Areas of Conservation designated for the protection of habitats and species, and Special Protection Areas designated for the protection of wild birds. To determine if the project is likely to have a significant effect on the conservation objectives of the sites, a Habitats Regulations Assessment (HRA) has been carried out in Wales and a Natura Impact Statement (NIS) has been carried out in Ireland. These processes aim to identify any potential impacts Greenlink may have on designated sites and assesses whether it is likely that the feature of the site will be affected.

Where Greenlink is likely to undermine the conservation objectives of the site e.g. it is possible that condition, characteristics, or distribution of the feature cannot be maintained, then mitigation measures have been proposed to manage or reduce the potential negative impacts identified.

We have completed an Environmental Impact Assessment for Greenlink. An Environmental Statement has been completed for the marine components of the project in Wales and an Environmental Impact Assessment Report has been completed for marine components in Ireland.

The HRA and NIS form part of this larger environmental appraisal. To date, the HRA and NIS conclude that for sites screened as ‘significant effects are likely’, ‘uncertain’ or ‘cannot be ruled out’, that through the implementation of mitigation measures (prescribed at Appropriate Assessment stage) Greenlink will not affect the integrity of the designated sites, either alone or in combination with other plans or projects.

Topics covered by the environmental assessment have included:

- » Coastal processes
- » Protected sites
- » Benthic ecology
- » Fish and shellfish
- » Marine birds
- » Marine mammals and reptiles
- » Marine archaeology and unexploded ordnance
- » Shipping and navigation
- » Recreation and other sea users
- » Cumulative effects

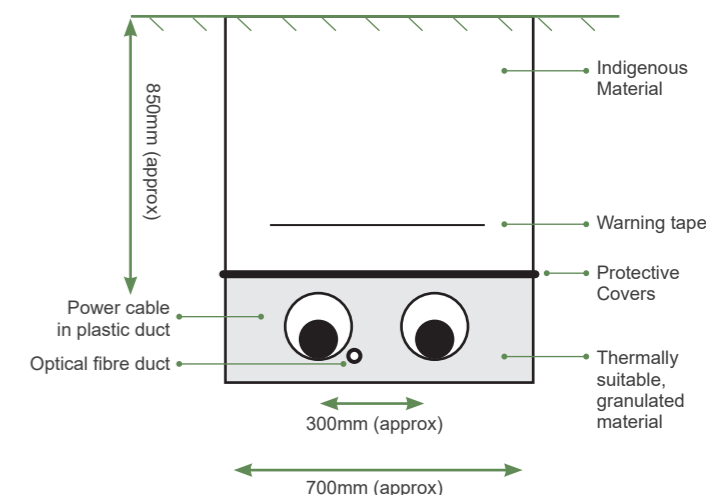
Onshore cable technology and installation techniques

The onshore HVDC cables will be buried underground in a single trench with a typical depth of cover of 850mm. These will be installed in plastic ducts to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape will also be buried along with marker posts at regular intervals at ground level. This arrangement is shown in Figure 1.

It is usual to increase the depth of cover in agricultural land to around 1050mm (from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become).

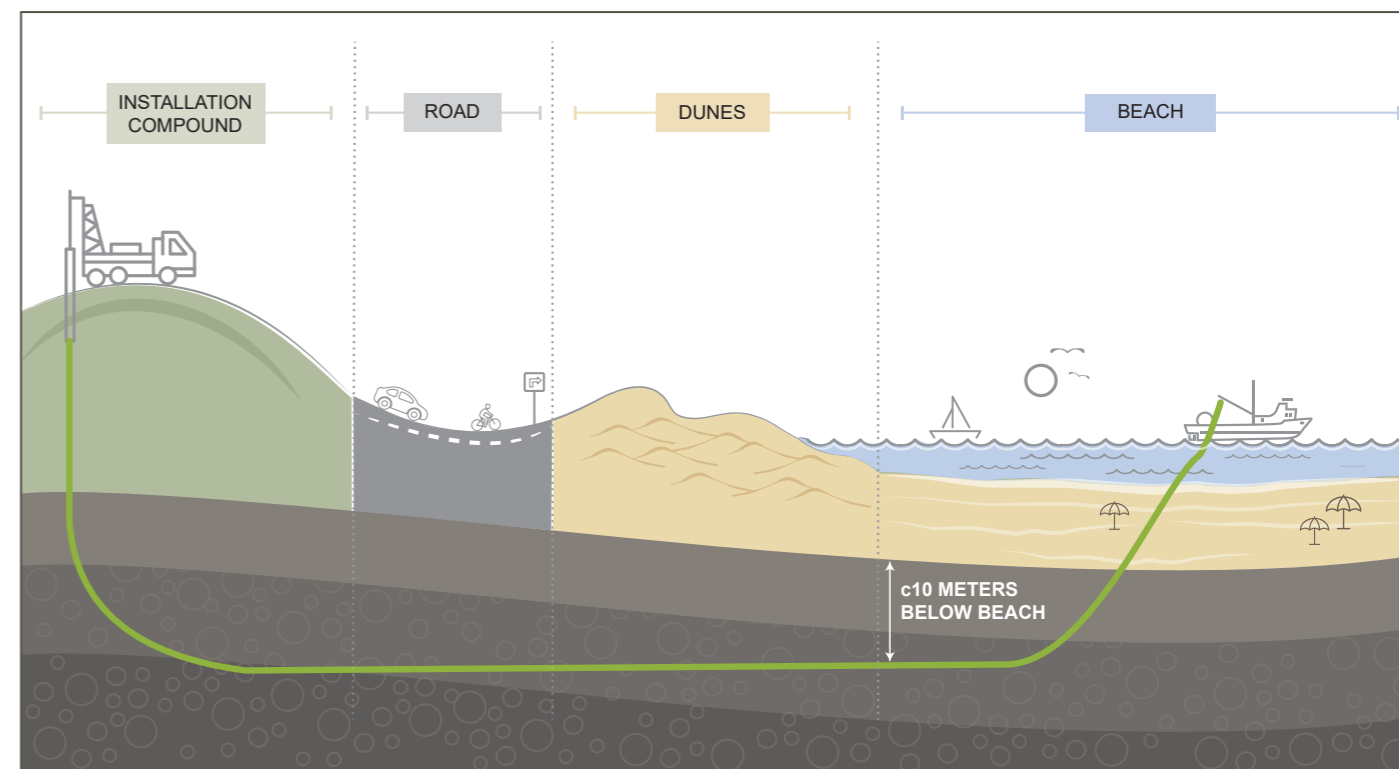
A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

Figure 1 : Indicative underground cable arrangement



Installation of Cables at Landfalls

We are proposing to use a Horizontal Directional Drill to install the cables at both Baginbun Beach (Ireland) and Freshwater West (Wales). Using this method of installation will ensure that cables can be installed without any impact on the beaches at both locations and will avoid any impact on the dune system at Freshwater West. The cable will emerge below the low water mark so no work will take place on either beach. While the construction programme for the full project is anticipated to take around three years, construction work around each landfall would last for approximately 3 months and be scheduled to avoid the most popular periods of use. Below is an illustration of how an HDD might work.

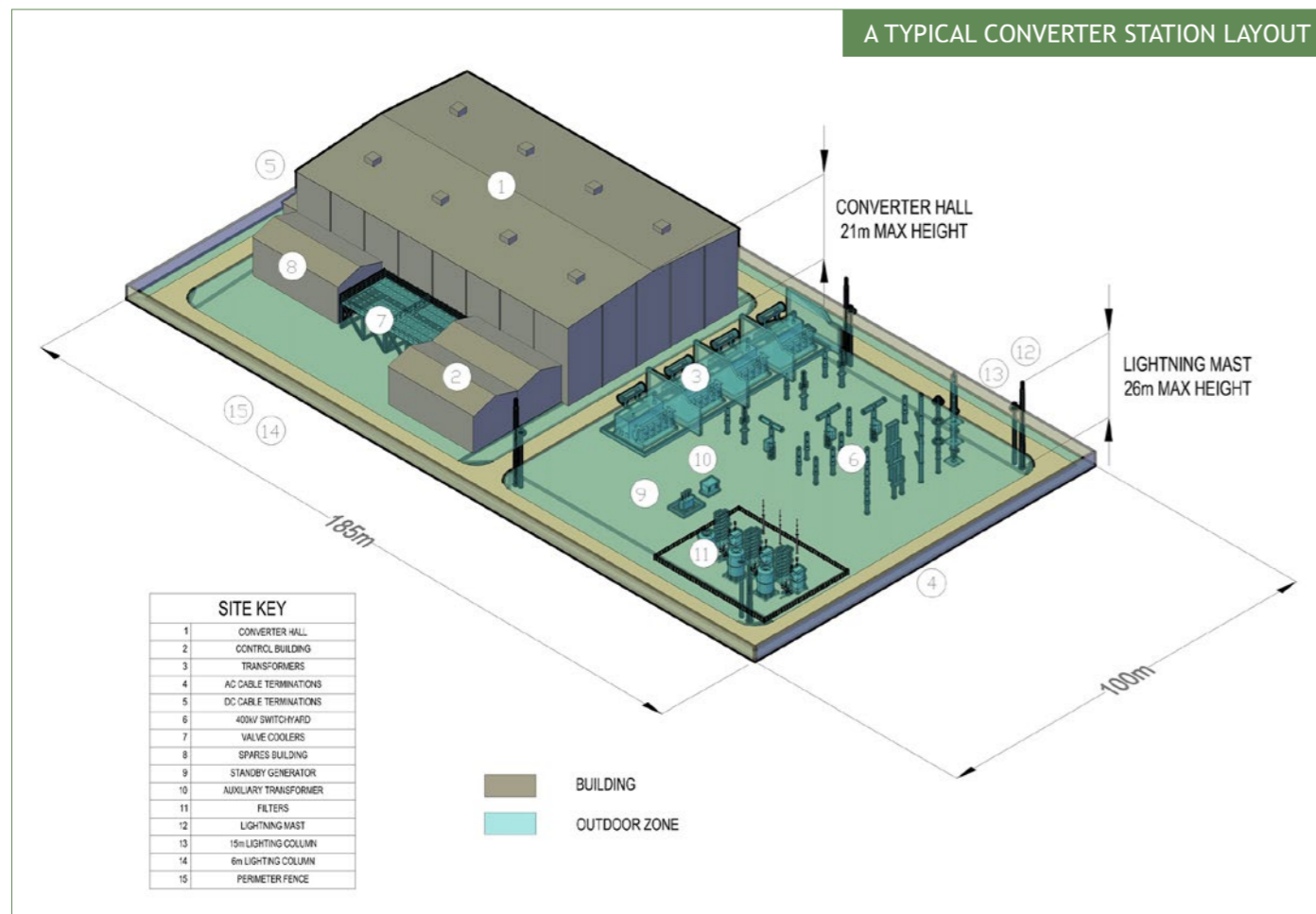


Greenlink will use High Voltage Direct Current Voltage Source Converter (HVDC VSC) technology to link the two power systems. In Ireland and GB, HVDC has been selected over an AC connection because AC is technically difficult over this distance. VSC technology has the benefit that it reduces the size of the converter stations (when compared to similar technologies).

The Greenlink Interconnector Converter Station

The indicative converter station site footprint would be circa 1.85 hectares (185m x 100m).

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonic filters (if required), lightning towers, ancillary plant such as cooling bank and stand-by back-up emergency generators, and a control building. Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.



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Appendix 6

Public Exhibition
– June and August 2018

WELCOME TO THE EXHIBITION

Greenlink
INTERCONNECTOR

Welcome

Welcome and thank you for taking the time to come to the first public exhibition for the Greenlink Interconnector project (Greenlink).

We have prepared the information on display here today to help you find out more about our work on Greenlink.

Members of the project team are here to answer your questions.

About the developer

Greenlink is being developed by Greenlink Interconnector Limited. Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

Element Power has significant experience in developing energy projects, in the UK and Ireland.

For more information on Element Power, please visit our website: www.elpower.com

For more information please visit:
www.greenlinkinterconnector.eu



Your Views

We are very interested to hear your views, so please feel free to fill in a comments form and drop it in the box provided before you leave



elementpower

PROJECT BENEFITS

Greenlink
INTERCONNECTOR



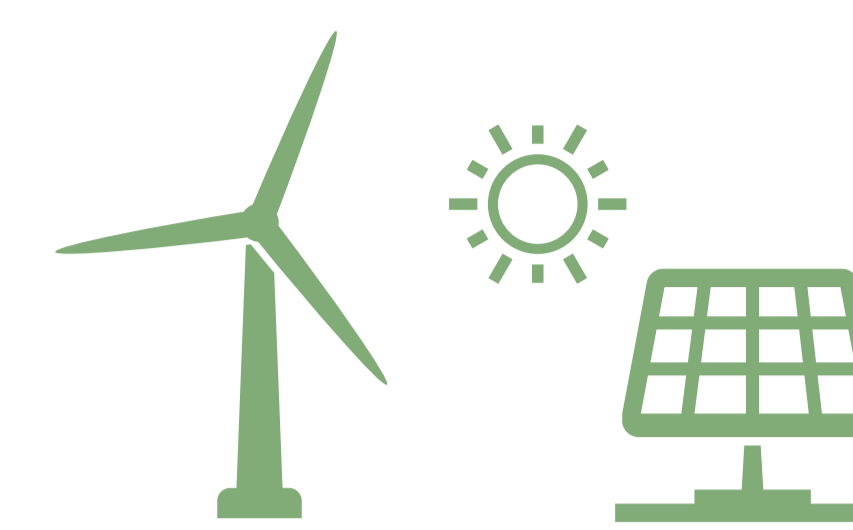
380,000

Potential to power 380,000 homes*



€400m

of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



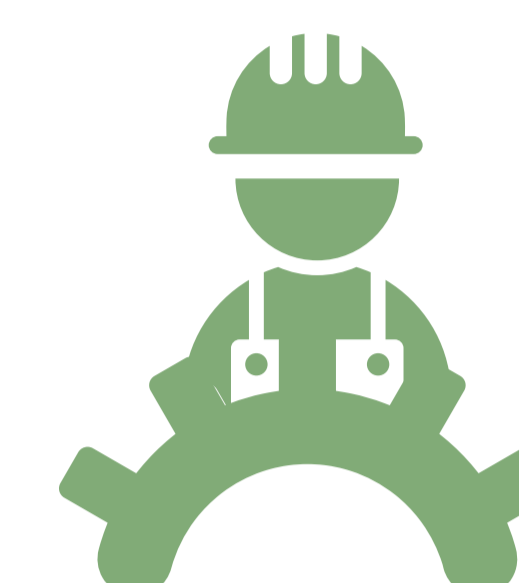
Security

Enhances the security of supply for electricity consumers



**Value
FOR
Money**

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Inward investment and jobs

Greenlink represents c €400m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

For more information about opportunities for local businesses, please see our 'Local Supply Chain' board later in this exhibition

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Security of supply

Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

Benefits for Ireland and Wexford

Greenlink will provide additional transmission network capacity, reinforcing electricity grid in Ireland. It will also offer valuable inward investment to Ireland and Wexford, including jobs and knock-on economic benefits during construction.

IRELAND



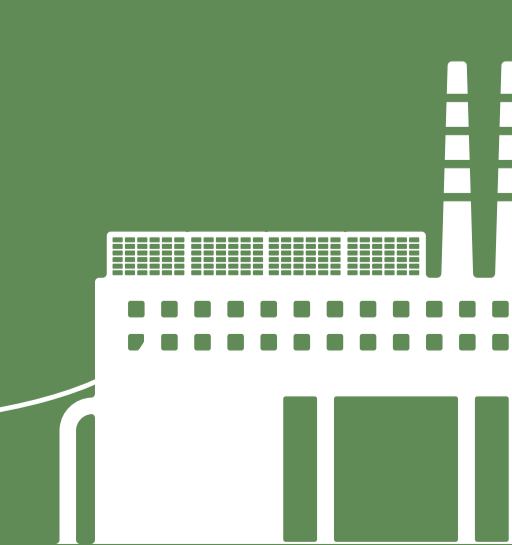
250

jobs in Ireland during construction



Jobs

20 permanent Irish jobs



Grid

Reinforce electricity grid

PROJECT BENEFITS

Greenlink
INTERCONNECTOR



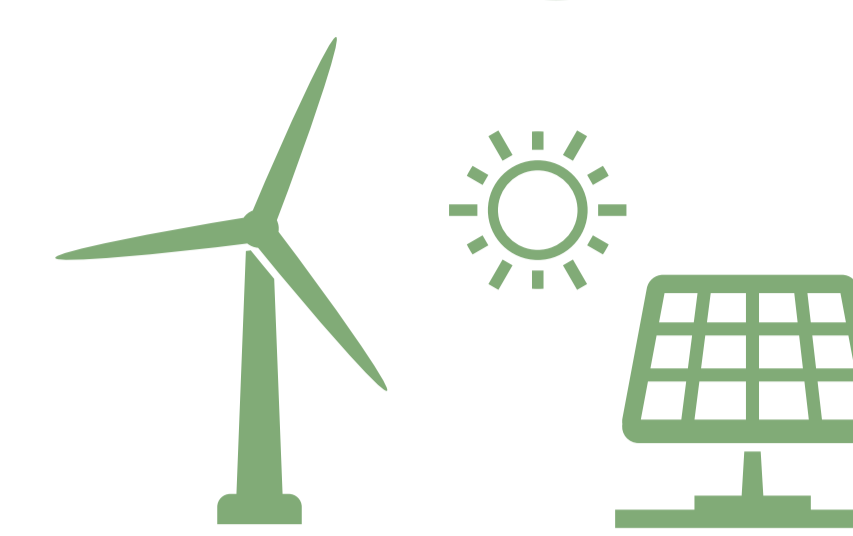
380,000

Potential to power 380,000 homes*



€400m

of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



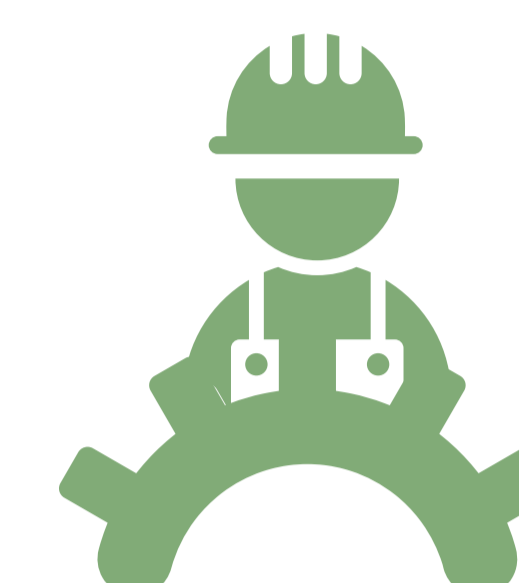
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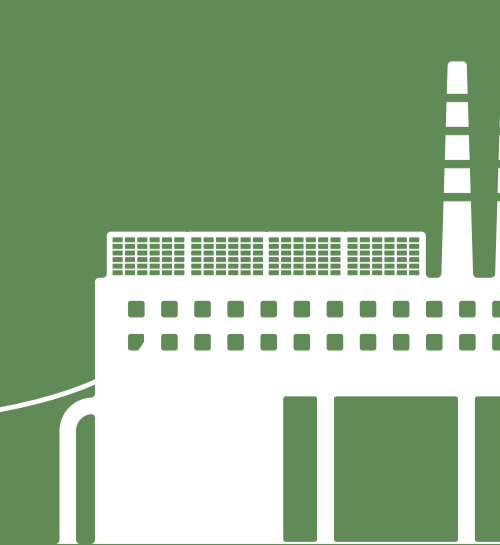
250

jobs in Ireland during construction



Jobs

20 permanent Irish jobs



Grid

Reinforce electricity grid

THE PROPOSAL

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain, allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver increased energy security, inward investment and value for money for consumers and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will consist of two converter stations, each located close to the identified existing substations: Great Island Substation in County Wexford (Ireland) and Pembroke Substation in Pembrokeshire (Wales).

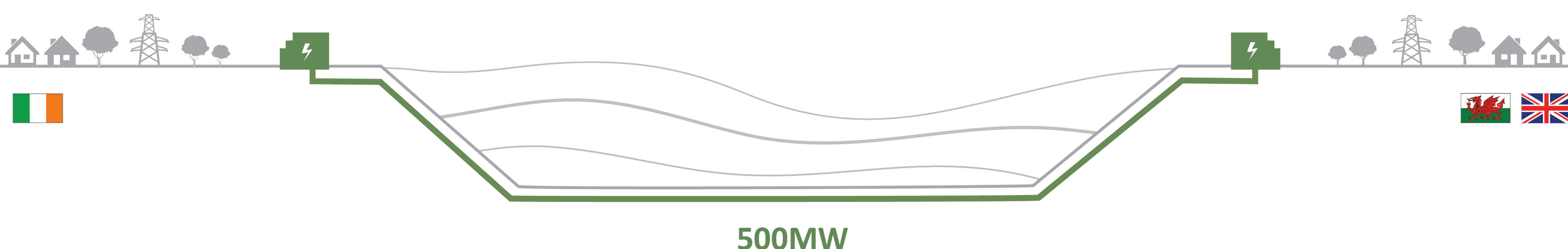
The converter stations will be connected to each other by two electricity cables and a fibre optic cable that will enable the two converter stations to communicate for control purposes.

There will be no overhead lines between the two converter stations and the respective substations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

The project will require planning permission in Ireland and Wales. Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. The Greenlink interconnector is planned for commissioning in 2023.



Sources: Ofgem, TEC Register, 3rd PCI, TYNDP 2016w



WHY GREENLINK?



Greenlink is a new 500 MW interconnector between Ireland and Wales

Ireland is currently connected to Great Britain by two electricity interconnectors, which provide a means of transferring electricity between the two countries - the East West Interconnector (EWIC), which connects County Dublin to North Wales, and the Moyle interconnector between County Antrim, Northern Ireland and Ayrshire, Scotland.

However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Ireland and Great Britain, and within Europe as a whole. This will allow electricity to flow more easily between where it is generated and where it is needed, improving the security and reliability of our energy supplies and supporting the integration of greener, low carbon energy sources in an affordable way.

There is a strong need and significant support within Europe for additional interconnection. The 'Energy Union' is a strategy launched by the European Commission in 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

supporting the integration of greener, low carbon energy sources in an affordable way



Supporting
Renewable
Energy



Improving
Energy
Security



Fighting
Climate
Change



Benefitting
Consumers

GREENLINK COMPONENTS

Greenlink
INTERCONNECTOR

The key components of the scheme are:

- **Two converter stations** - one near the Great Island Substation in County Wexford (Ireland) and one near the Pembroke Substation in Pembrokeshire (Wales)
- **Two subsea HVDC cables and a fibre optic cable** - the onshore cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

What is an HVDC cable?

- High Voltage Direct Current (HVDC) cables allow for efficient transportation of electricity over large distances and in particular for subsea cables.
- HVDC cables have lower electricity losses than comparable AC cables.
- HVDC cables are suitable for undergrounding both onshore and offshore. There will be no overground cables between the two converter stations.
- One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore.



What is a converter station?

A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa. DC electricity is used for the transmission of electricity over long distances between two converter stations and AC electricity is used within the national transmission and distribution networks.



What is a fibre optic cable?

A fibre optic cable is installed to provide communication between the converter stations for system monitoring and safety purposes.

For more information please visit: www.greenlinkinterconnector.eu

CONSULTATION



Public consultation is a core part of the development process and ensures that communities in the vicinity of a new proposal have timely and transparent access to information and can engage with developers to influence the final proposal coming forward. We would like to hear what your thoughts and views are on this proposal.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of the interconnector project.

During the development process we will be looking to fully engage with local residents, councillors, businesses and members of the local community to discuss the proposal and any potential impacts and to obtain feedback on key issues.

We intend to make sure the local community can see that its views have been fully considered and incorporated within the final proposal.

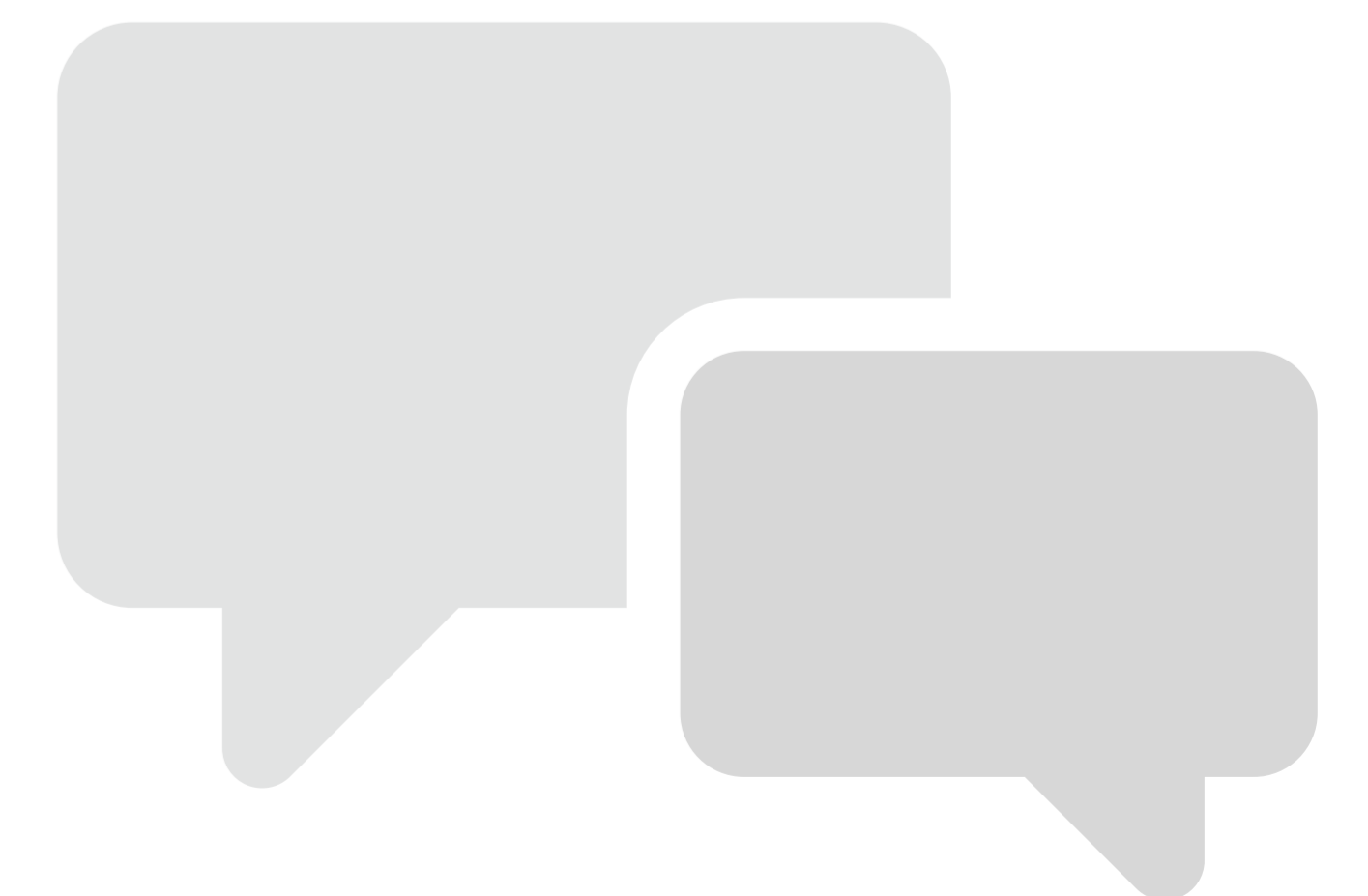
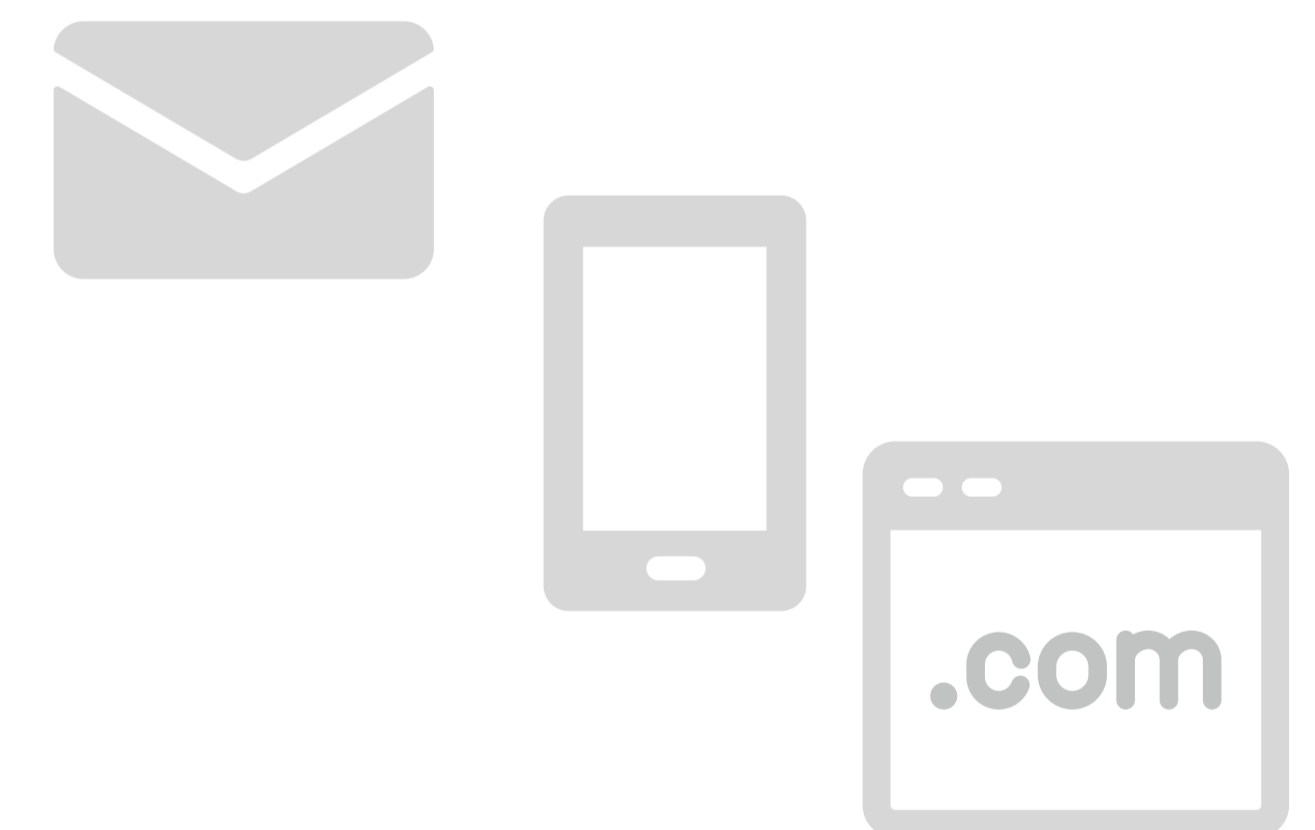
This public exhibition is to allow local residents and stakeholders to view our initial plans, share their views with us, meet the project team and ask questions. We would welcome any feedback that you have now or in the future.

Additional events will be held in due course as the project progresses.



Contact details

If you would like the Greenlink team to keep you directly updated on project news and future consultation events, please leave us your name and contact details on the comment sheet provided.



For more information please visit: www.greenlinkinterconnector.eu

LOCAL SUPPLY CHAIN



Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Construction work on Greenlink is expected to lead to significant expenditure in both Ireland and Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites and will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- Transportation - equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks.
- Office and cleaning supplies
- Site security
- Site services, e.g. portacabins and portaloos
- Fencing
- Waste disposal



“ Your Views

Do you know of a local business that could benefit from the Greenlink interconnector project?

Let us know if you want to be added to our list of local suppliers!



For more information please visit: www.greenlinkinterconnector.eu

SITE ASSESSMENT - OVERVIEW

As part of the development process, a series of environmental and technical assessment studies are being carried out to establish the viability of all the proposed sites and cable routes and to consider any potential impacts and opportunities arising from the development.

Onshore studies include assessments on:

- Biodiversity
- Historic environment
- Landscape & visual impact
- Flooding & hydrology
- Geology & hydrogeology
- Noise & vibration
- Traffic & transport
- Electromagnetic fields (EMFs)
- Socio-economics & human health
- Air quality & climate change
- Cumulative & transboundary effects

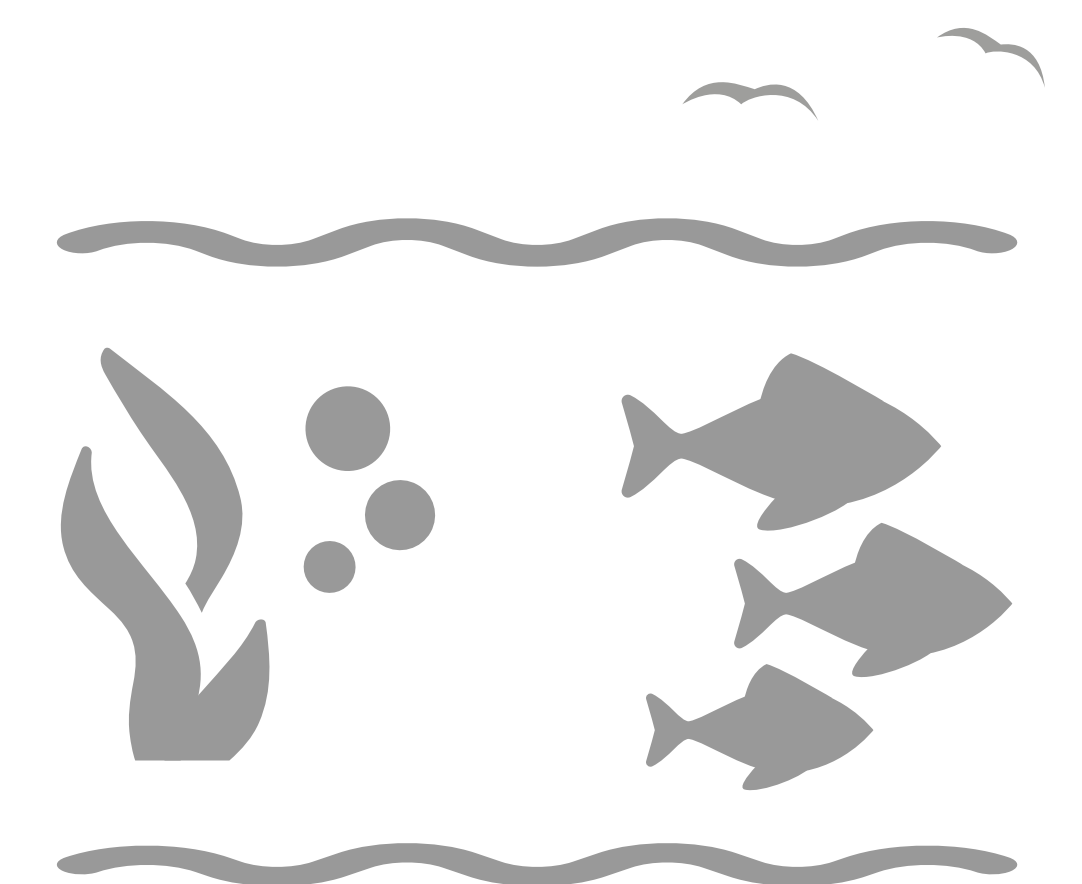
Offshore studies include assessments on:

- Geophysical & geotechnical surveys
- Marine biodiversity (benthic/seabed environment, fish and shellfish, marine birds, marine mammals and reptiles etc)
- Protected designations
- Commercial fisheries
- Shipping & navigation
- Aviation & military
- Marine archaeology & UXOs

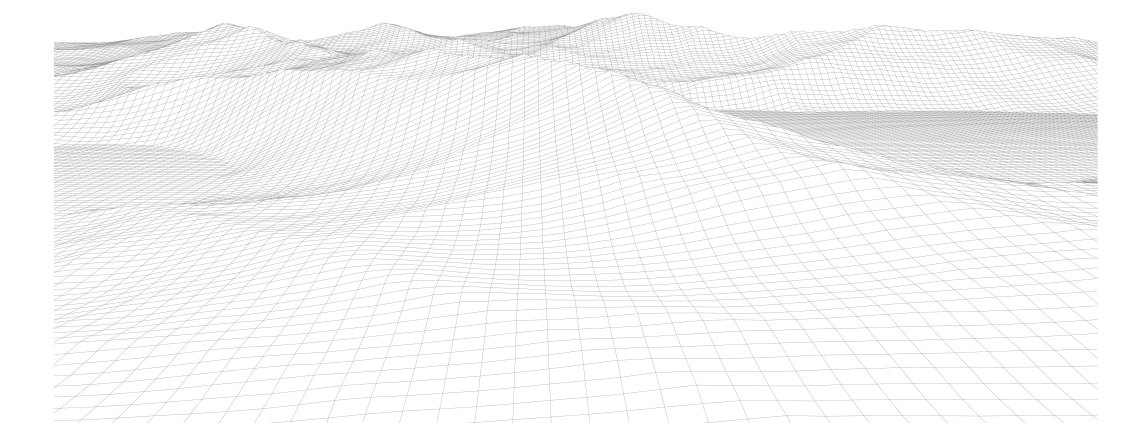
Further information on the nature of these assessments is available within the project Environmental Scoping documents.



Noise & vibration



Marine biodiversity



Landscape & visual impact

LANDSCAPE & VISUAL IMPACT

Greenlink
INTERCONNECTOR

Landscape

This assessment relates to changes in the physical landscape, brought about by Greenlink, which may alter its character and how this is experienced.

Visual

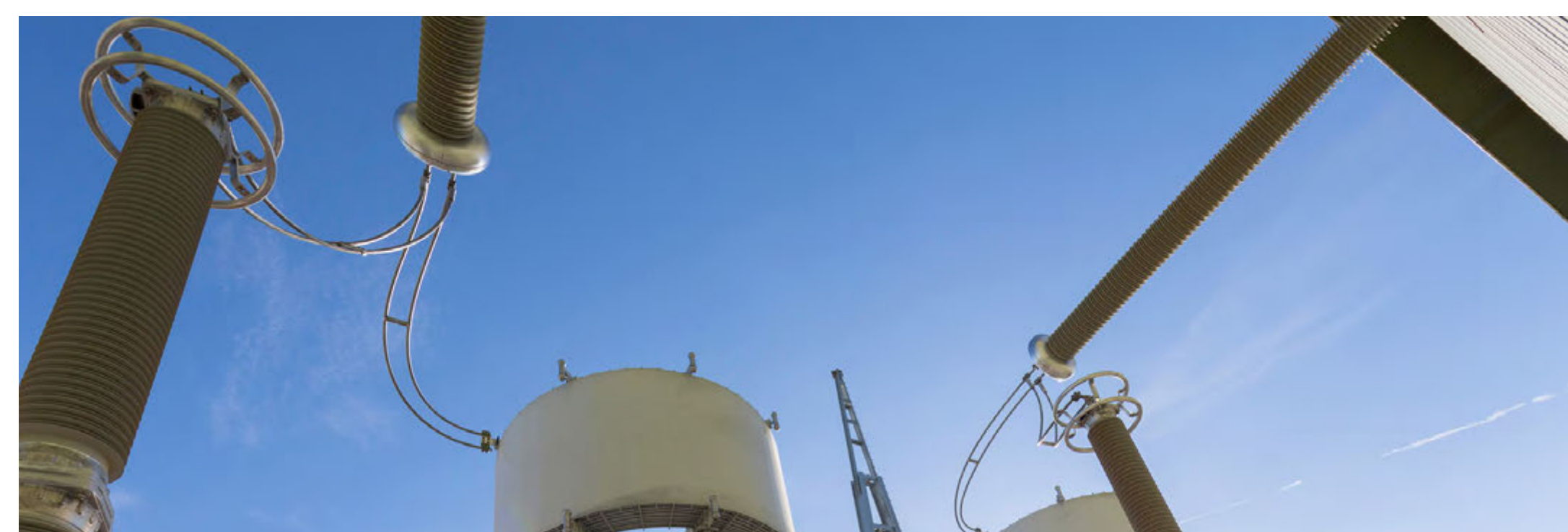
Visual impact assessment relates to changes in the composition of views as a result of changes to the landscape, how these are perceived and the effects on visual amenity.

We will produce visualisations of the converter stations.

Viewpoints will be selected to represent the character of the area and particularly important landscape and heritage sites.

Impacts and mitigation

Converter station



A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant and a control building.

Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. However, the layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

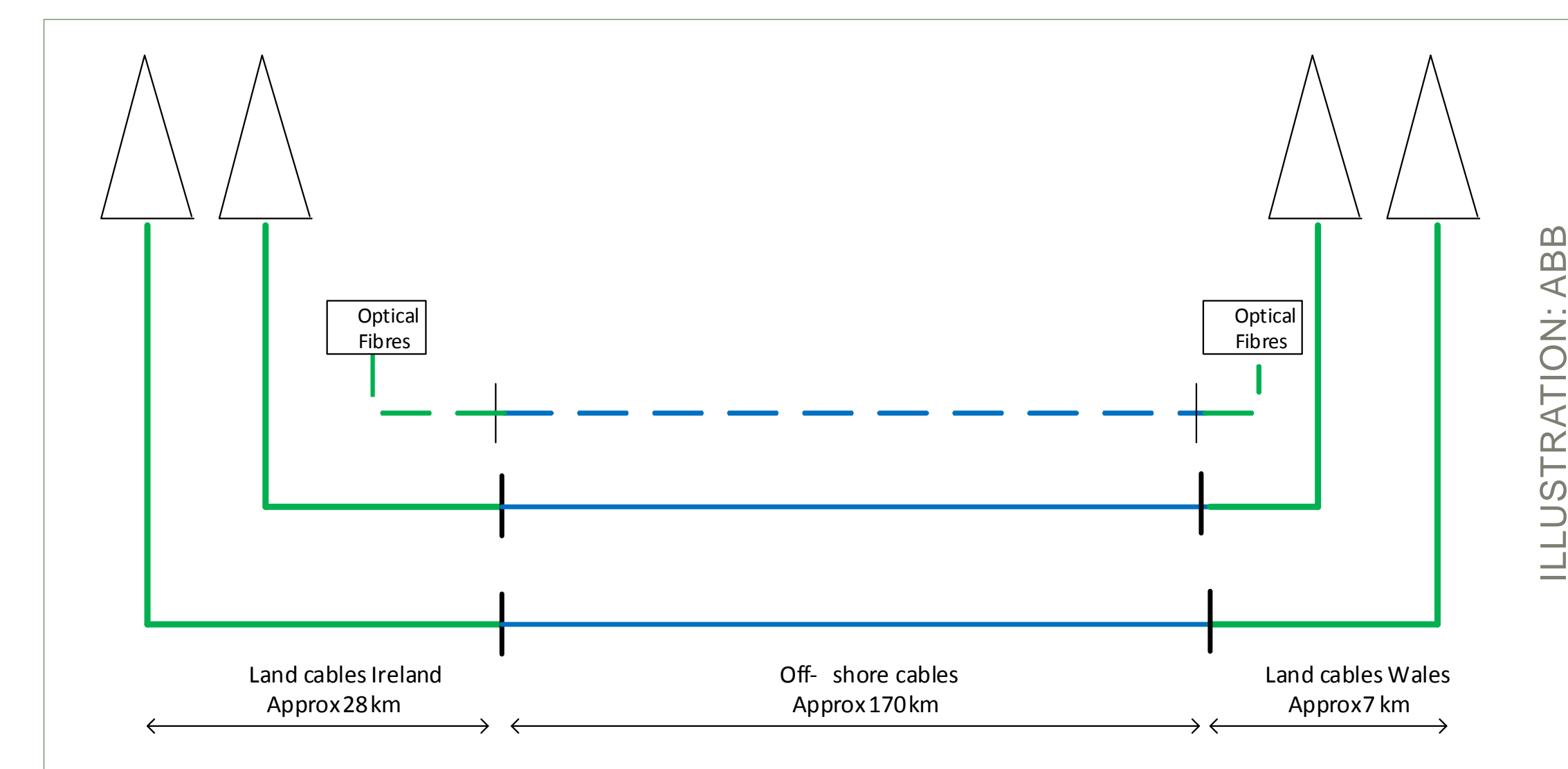
The landscape and visual impact of this will be carefully considered and suitable mitigation, such as landscaping, building finishes, among others, will be proposed.

Cable route

There is the potential for impact from the cable route from vegetation clearance during construction, particularly where the cable route diverges from the road network.

Landscape and visual impacts during cable installation are predicted to be minor and not significant due to the temporary and reversible nature of the change (vegetation clearance) which can be adequately mitigated through replanting.

Following installation and restoration there are not predicted to be any residual landscape and visual effects from the cable route.



Your views ... Do you have any suggestions for viewpoints to be assessed?
What sort of landscaping planting would you like to see in and around the converter station?



WATER AND SOIL

Flooding & hydrology

This assessment considers the existing surface and ground water resources in the proximity of Greenlink from the landfall in Baginbun or Boyce's Bay to the proposed converter station location.

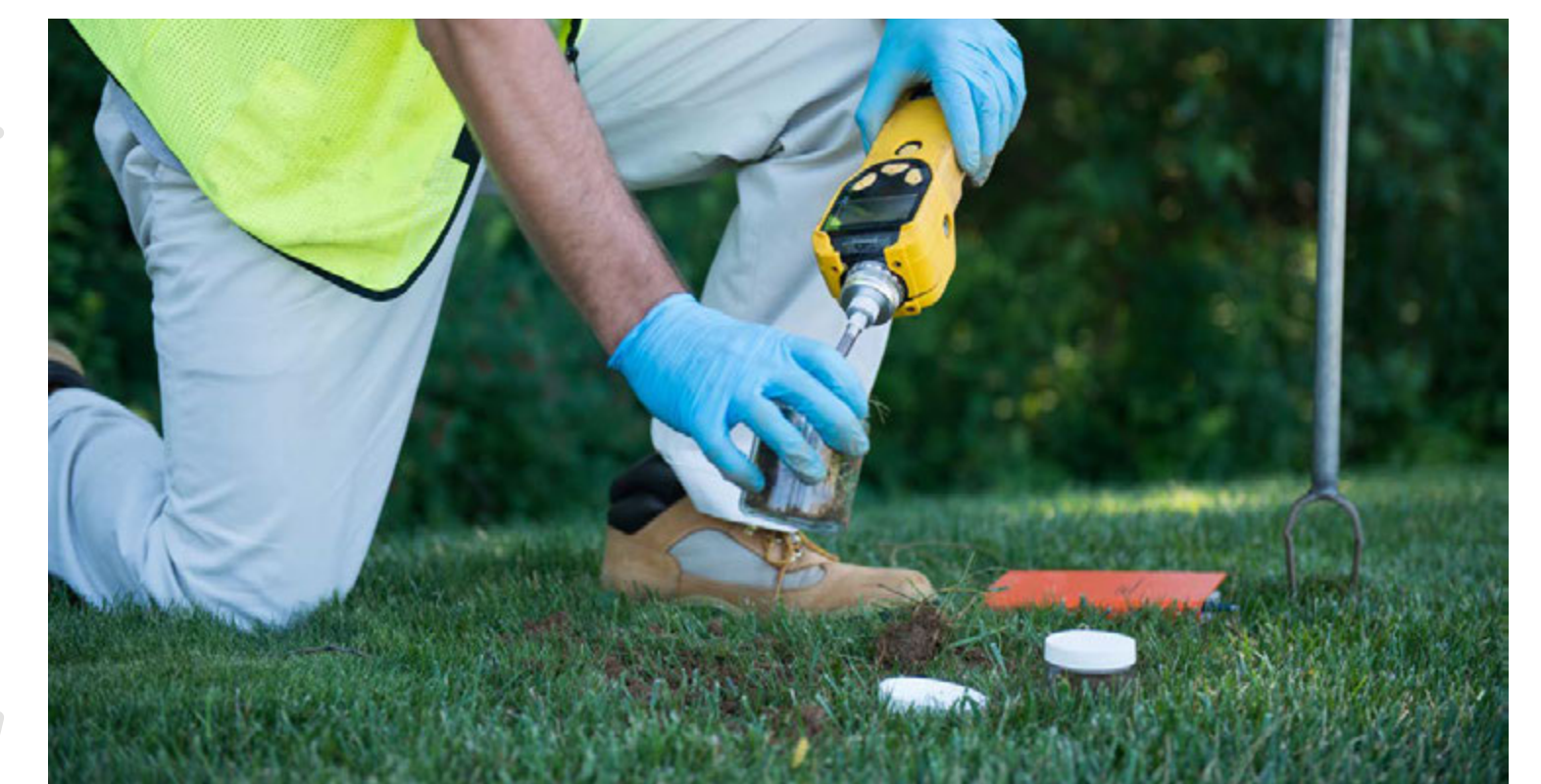
It will assess potential impacts to water bodies, surface water drainage and flood risk due to Greenlink during the construction and operational phases.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.

The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered.

The assessment will also consider potential effects posed by any potentially contaminated land along the proposed route.



NOISE & VIBRATION

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The proposed underground cable routes pass through predominantly rural areas which are likely to experience low ambient existing noise levels. The converter station site is also located in a rural area but is adjacent to an existing substation with its associated operating noise levels.

Noise surveys and assessment

- The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.
- Noise-sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship etc) and public open spaces.
- A study area of 300m around the cable route corridor and converter station site will be considered for potential construction noise impacts and an area of 50m will be considered for potential construction vibration impacts.
- For operational noise, an assessment will be undertaken at sensitive receptors within 300m of the converter station.

Impacts and mitigation

The construction of the converter station has the potential to give rise to temporary noise and vibration impacts. However, given the distance between the converter station location and sensitive receptors it is likely that any impact will be low.

The construction of the cable route has the potential to give rise to temporary noise and vibration impacts in isolated locations along the route, particularly where directional drilling is required at watercourses and road crossings.

There will be noise from the electrical and mechanical plant during the operation of the converter station, most of which will be located indoors in the converter hall.



Your views

Do you have concerns regarding noise and vibration you wish to be assessed?



BIODIVERSITY

Surveys will be carried out and the data assessed to ensure that the final onshore elements of the proposal are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Studies will cover the landfall site and the various cable routes under consideration and the possible converter station location.

Studies commenced in 2018 include:

- Extended Phase 1 Habitat Survey
- Breeding Bird Surveys

As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles and amphibians.

Consideration is also being given to local vegetation, including hedgerows, trees, important habitats and invasive species.

The surveys will be used to avoid, reduce and offset any impacts on biodiversity through sensitive design and mitigation measures as required.



Your views

Do you know of any local environmental groups that Greenlink should consult?
Are there specific issues you feel should be assessed that aren't currently being assessed?



HISTORIC ENVIRONMENT

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets within a study area of 1.5 km from the converter station site and within a 200m study area from the cable route corridor.

Cultural heritage encompasses valued features and remains, including buildings, monuments and archaeological remains. It can also include landscapes shaped by human occupation and design, such as historic parks and gardens.

The importance of cultural heritage is recognised in legislation and planning policy.

The converter station site is located in an area with a rich archaeological and historic heritage but is also located in such a way as to complement the existing industrial surrounds.

Sites of interest in the wider area include Kilmokea Church and Graveyard, Dunbrody Abbey and Castle, Duncannon Fort and the historic Norman landing place at Baginbun Beach.

Given the large number of sites relating to prehistoric activity in this region, there is also a potential for the development to uncover as yet unknown archaeological remains.

Impacts and mitigation

During construction the potential impact of the onshore cables, landfall site and the converter station could be the loss or interference with a site or feature of archaeological, architectural and cultural heritage significance caused by excavations or by construction related vibrations.

The importance of cultural heritage is recognised in legislation and planning policy

Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects on archaeology and heritage assets within the study area. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

TRAFFIC & TRANSPORT



The traffic impact assessment will address the traffic impacts on the road network from the construction and operation of the Greenlink project. The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A Transport Assessment (TA) will be produced in accordance with best practice.

The methodology for the TA will be agreed with Wexford County Council. It will include a review of the existing traffic patterns and an estimation of the traffic volumes which will be generated by the construction of the onshore cable, the landfall site and the converter station. The traffic generated by the construction workforce and by the transport of materials and equipment will also be predicted.

The potential disruption to the road network during the installation of the cables and the availability of alternative routes will be assessed. The traffic distribution pattern on the local road network during construction will be examined and impacts determined.

We will work hard to limit the impact of traffic and transport on local residents and businesses as much as possible and recommendations will be made to mitigate any potential traffic impacts on the road network.

Potential impacts and mitigation

There is potential for traffic impact from Greenlink during the construction phase which will temporarily give rise to additional traffic on the road network.

Installation of the cables may require partial or full road closures and traffic may have to use alternative routes. Where the cable route diverges from the road, the impacts will be reduced.

Once the Greenlink project is in operation, the potential for a traffic impact is minimal. The level of operations and maintenance workforce will be low, so that the impact on any particular road will be insignificant.



Traffic Management Plan (TMP)

As part of the planning application process a Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink.

Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.



Your views

Do you have any specific concerns? Are there local organisations (businesses, schools etc) that we need to involve in the Traffic Management Plan?



ELECTROMAGNETIC FIELDS

Electric and Magnetic Fields (EMFs) are produced both naturally (Earth has both an electric and a magnetic field) and by humans - wherever electricity is used, both in the home and from the equipment that makes up the Irish electricity system.

For example, there are background EMFs present in all houses that come from the house wiring, electrical appliances, and the distribution cables that carry electricity along streets.

Electric fields depend on the operating voltage of the equipment. The operating voltage of transmission equipment is generally constant and so the electric field produced is also nearly constant. Magnetic fields, on the other hand, depend on the electrical currents flowing, which vary according to the electrical power requirement at any given time.

In order to protect members of the public, in locations where people spend significant time, the Council of the European Union passed Recommendation 1999/519/EC on limiting public exposure to electromagnetic fields.

The policy of both National Grid (UK) and ESB (Ireland) is to design and operate their equipment in compliance with the EU recommendation and subsequent legislation.

There are a number of existing sources of EMF in the vicinity of the Greenlink study area.

These include:

- The local electricity distribution system
- Wiring and appliances in nearby homes and other buildings
- Great Island Substation
- Overhead transmission lines

The Greenlink electrical infrastructure (converter station and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

SOCIO-ECONOMICS

This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects to the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy.

Local tourism

The Hook Peninsula has a rich built heritage and attractive beaches, and it is an important tourist destination in Ireland's Southeast. Tourist attractions close to the cable route include Dunbrody Abbey, Loftus Hall and Baginbun Beach and Martello Tower. The Ring of Hook Coastal Drive is a popular route which may partially coincide with the cable route, and appropriate traffic management will be required to minimise disruption to tourist traffic during the cable construction within the roadway.

The cable will be horizontally drilled under the beach at the landfall, with the construction area set well back from the beach and cliffs. It is not envisaged that the construction work will have adverse effects on tourist activity at the beach.



Potential impacts

There will be temporary impacts on road traffic during the cable construction, with the requirement for partial or full road closures and diversions, for short periods.

Direct and indirect employment will be created for both the construction and operational phase.

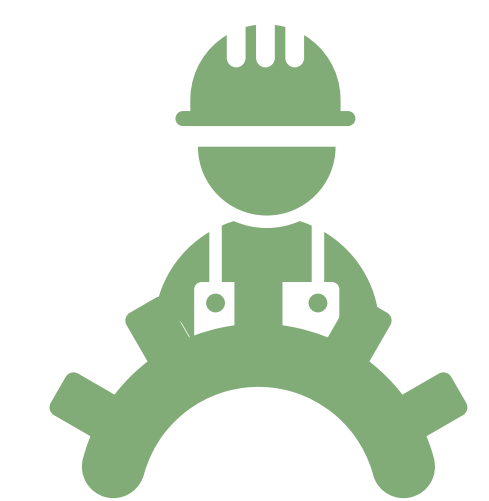
The construction of the cables and converter station have the potential to have a negative impact on residential amenity in the immediate vicinity of the construction activities. Once the cables and converter station are operational, the potential for negative impact on residential amenity is minimal.



Your views

Please let us know of any local tourism business or group we need to consider and involve in project discussions.

Are there any particular local events that attract tourists that Greenlink needs to be aware of?



Jobs

Jobs and knock-on economic benefits during construction

AIR QUALITY

Greenlink
INTERCONNECTOR



This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be addressed.

The construction phase of Greenlink has the potential to generate dust emissions, which could give rise to nuisance for local residents. Construction plant and equipment, and the traffic generated by the construction process, have the potential to give temporary rise to emissions of oxides of nitrogen and particulate matter, which could impact on local air quality.

Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

The operational phase of Greenlink is not expected to adversely affect local air quality as no new sources of emission to air will be introduced and additional road traffic associated with maintenance of the converter station is anticipated to be minimal.

Consideration of the impact of the Greenlink project on the climate (e.g. greenhouse gas emissions) and its vulnerability to climate change is also factored in.



For more information please visit: www.greenlinkinterconnector.eu

MARINE SURVEYS

The proposed marine cable will run from the Hook Head Peninsula in County Wexford, Ireland to Freshwater West, Pembrokeshire, Wales. All routes are being assessed for technical viability and potential environmental impacts.

Technical viability

Marine surveys are taking place in the summer of 2018 and will include geophysical and geotechnical surveys.

Geophysical

The geophysical survey will look to map the seabed and sub-surface geology along the proposed route in order to be able to optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route.

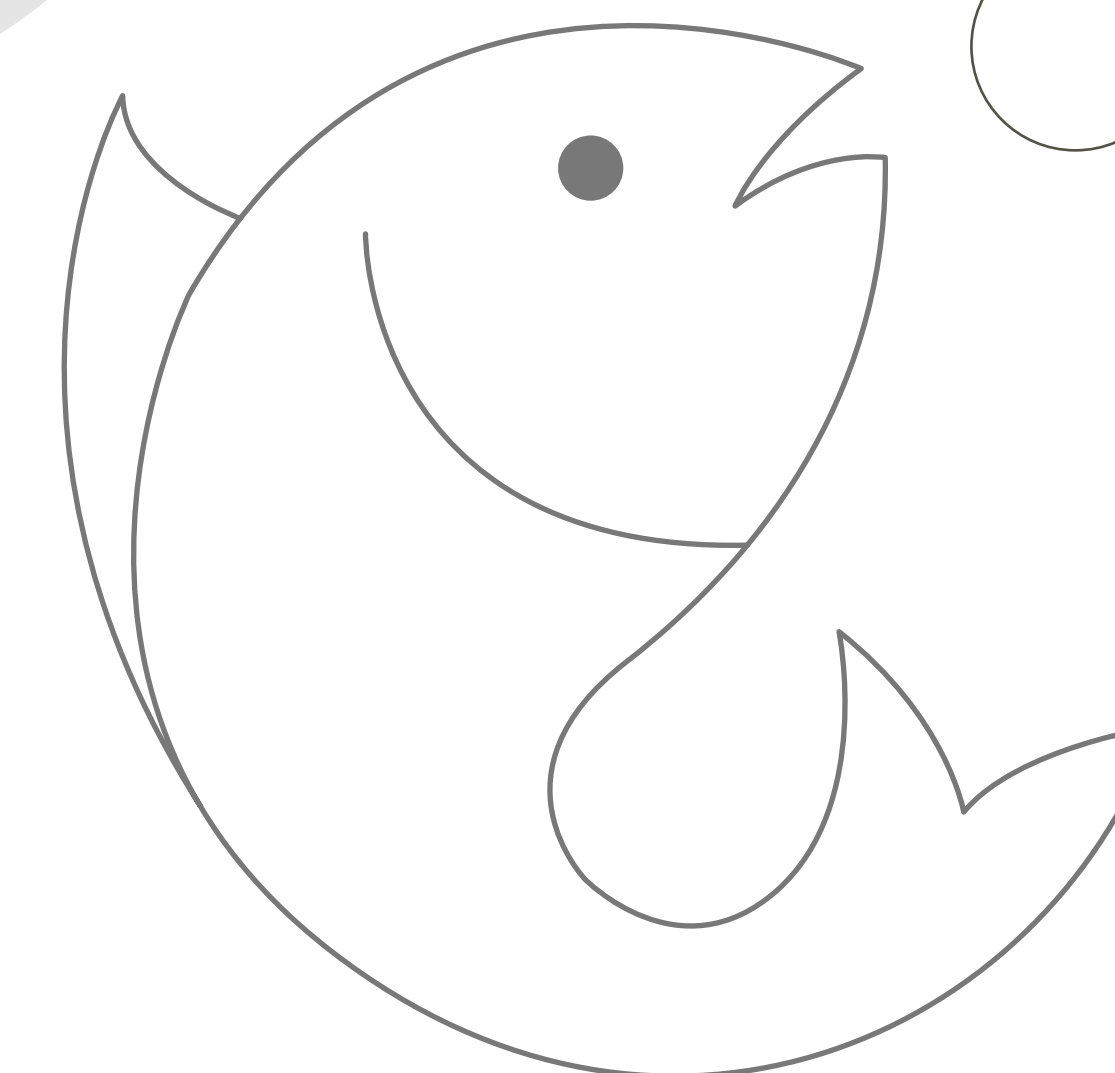
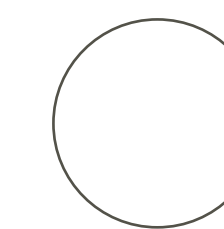
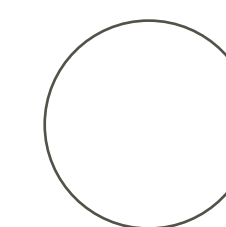
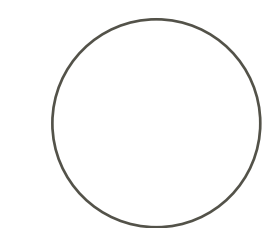
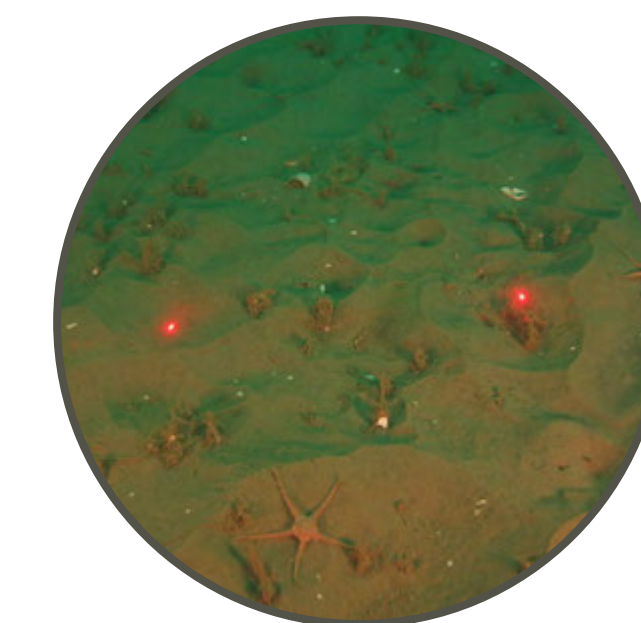
It will also look to provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical

The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This will be done using a number of techniques, including drilling boreholes and digging trial pits.

Environmental impacts

The initial marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey will then be used to inform the environmental assessment.



MARINE ENVIRONMENTAL ASSESSMENTS

Greenlink
INTERCONNECTOR

The aims of the environmental assessment will be to identify potential impacts, including:

- Penetration and/or disturbance of the substrate below the surface of the seabed
- Visual disturbance
- Underwater noise changes
- Siltation rate changes
- Hydrological changes
- Physical loss (permanent change)
- Electromagnetic changes
- Possible in-combination effects

Mitigation

Once potential impacts have been established, mitigation measures will be proposed to ensure that impacts are minimised or removed.

Topics covered by the environmental assessment will include:

- Protected sites
- Benthic ecology
- Fish and shellfish
- Marine birds
- Marine mammals and reptiles
- Marine archaeology and UXOs
- Coastal processes
- Fisheries
- Shipping and navigation
- Recreation
- Cumulative effects

“

Your views

Greenlink has appointed a Fisheries Liaison officer to liaise with local fishing interests. Do you want our Fisheries Liaison officer to contact you?

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For more information please visit: www.greenlinkinterconnector.eu

PROJECT TIMELINE



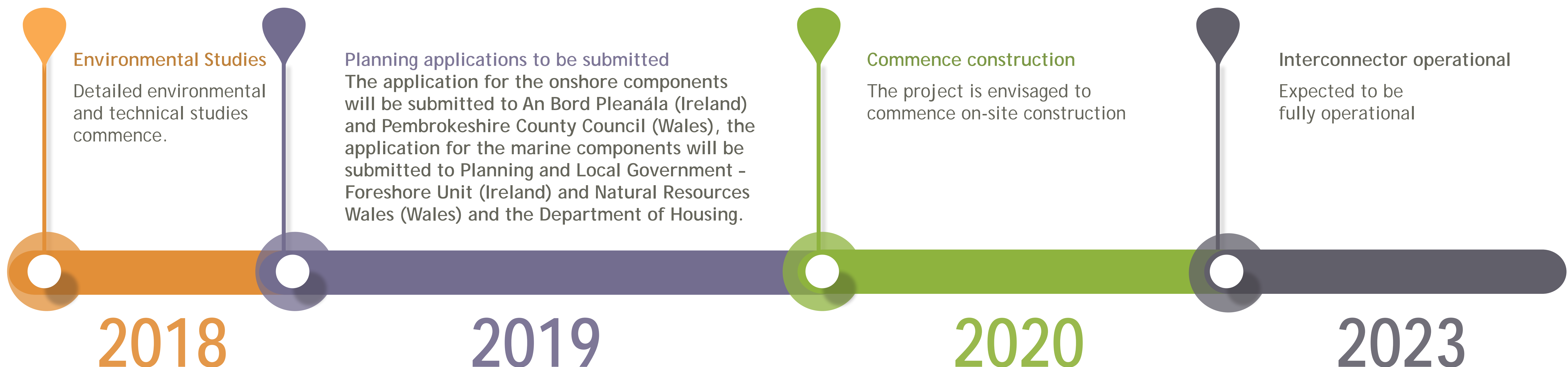
A large infrastructure project such as the Greenlink interconnector takes several years from development to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design have been put together, permits and licences will need to be obtained from: An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland; and Pembrokeshire County Council, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales.

Once the appropriate permits and licences have been obtained, the scheme will need to be constructed, which could take around 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023



THE PLANNING PROCESS (IRELAND)



Following consultation with statutory consultees, Greenlink is of the view that the interconnector does not require the completion of an Environmental Impact Assessment (EIA).

However, Greenlink is committed to carrying out a comprehensive and thorough development process and will therefore be producing a non-statutory Environmental Report with a structure that aligns with the EIA process. This will ensure that all environmental issues are addressed effectively.

Onshore components in Ireland

Due to the nature and size of the proposed development, it is likely that it will be considered to be Strategic Infrastructure Development, as defined by the Planning and Development Act 2000, as amended.

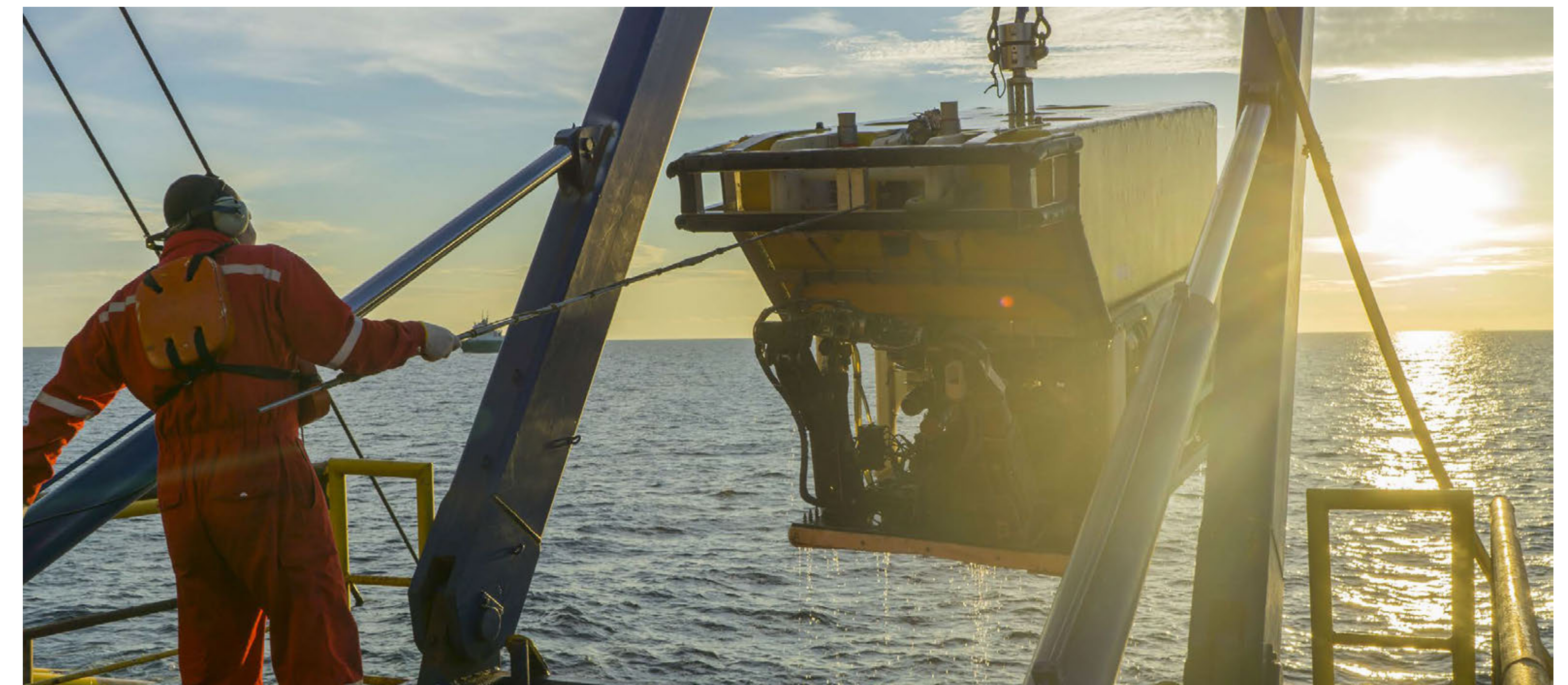
As Strategic Infrastructure, the planning application will be made directly to An Bord Pleanála (the Board), and all planning documents, including an environmental report, will be publicly available on a dedicated website.

Any person or body may make submissions to the Board in relation to the proposed development, and the Board may decide to hold an oral hearing, having regard to the issues arising.

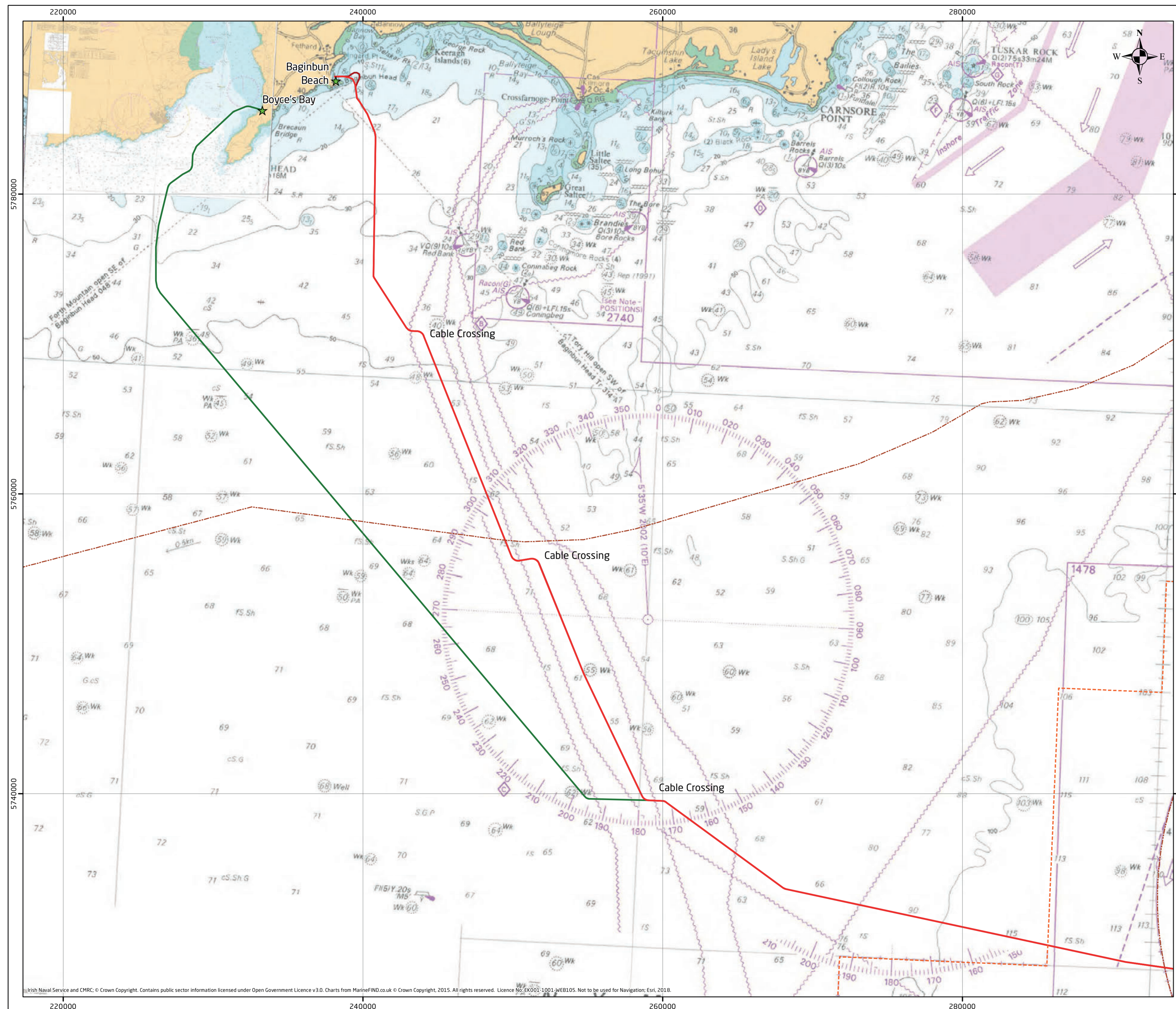
The planning application is expected to be submitted in March 2019, once all the technical and environmental assessments have been completed and the choice of sites / cable routes and the designs finalised. The planning application will address all of the onshore elements of the project in Ireland, including the converter station, the on-road cable, and the off-road sections of cable.

Marine components in Ireland

Subsea surveys are scheduled to be undertaken during the summer of 2018. The results of these surveys will be used to finalise the subsea cable route and be incorporated into a Foreshore Licence application submitted to the Foreshore Unit of the Department of Housing, Planning and Local Government. This application is expected to be submitted in April 2019.



OFFSHORE IRELAND ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Irish Territorial Waters

Legend

- ★ Landfall Option
- Median Line
- 12nm Territorial Sea Limit
- Greenlink Interconnector Proposed Routes
- Route A Rev 0
- Option C Rev 0
- Option D Rev 0

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.

NOTE: Not to be used for Navigation

Date	Thursday, May 10, 2018 16:06:14
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Datum	D_WGS_1984
Data Source	INS, CDA, ESRI, MARINEFIND
File Reference	J:\P1975\Mxd\Public_Exhibitions\Offshore_Ireland_Route_Options_A2.mxd
Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

Greenlink **intertek**

Co-financed by the European Union
Connecting Europe Facility

0 2 4 6 8 km

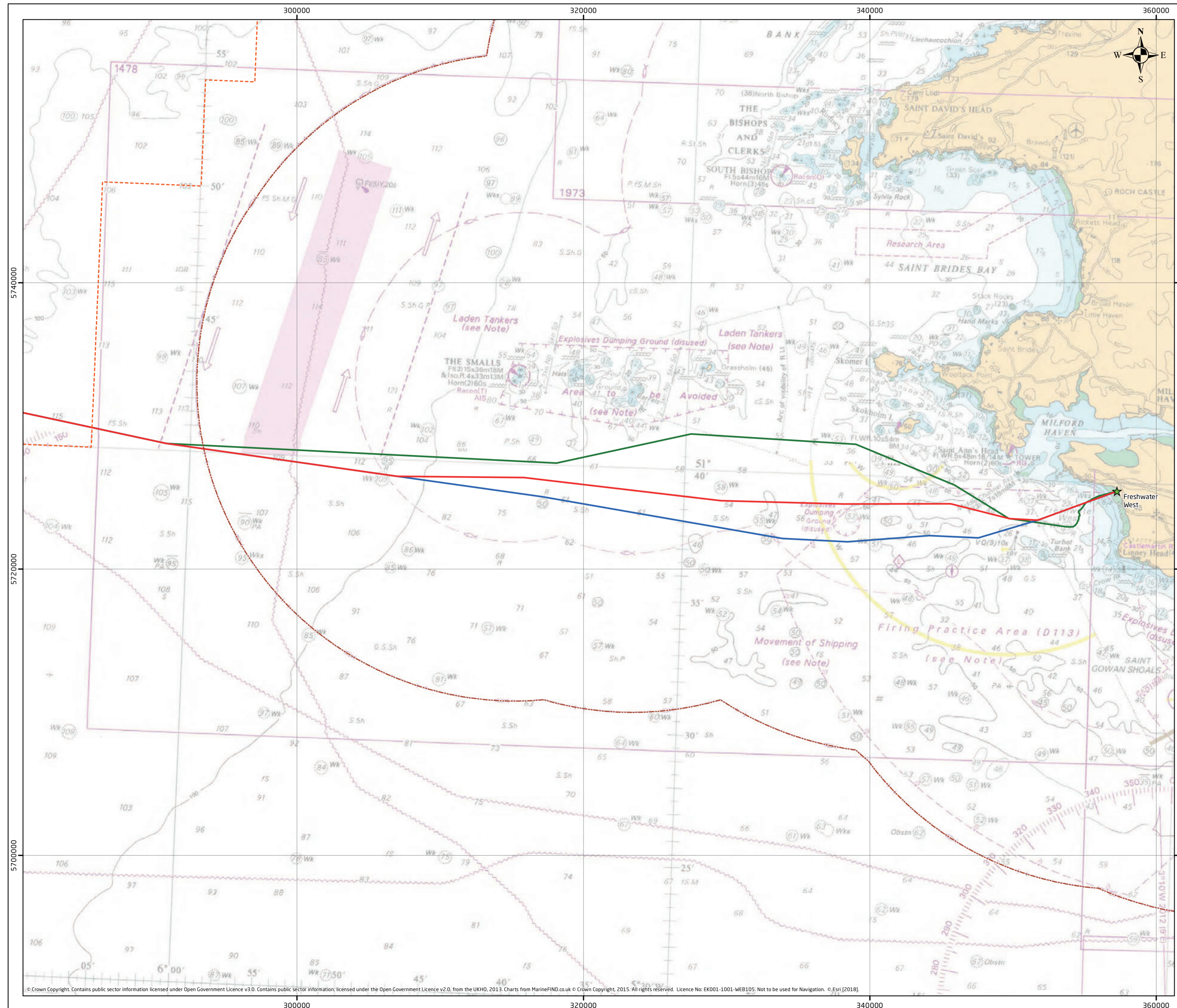
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There are currently two subsea routes being assessed off the Irish coast. The routes under assessment are shown in this plan.

The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

For more information please visit: www.greenlinkinterconnector.eu

OFFSHORE WALES ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Welsh Territorial Waters

Legend

- ★ Landfall Option
- Median Line
- 12nm Territorial Sea Limit
- Greenlink Proposed Route Option
- Route A Rev 0
- Route B Rev 0
- Route E Rev 1

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NOTE: Not to be used for Navigation

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Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

Greenlink **intertek**

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Connecting Europe Facility

0 2.5 5 7.5 10 km

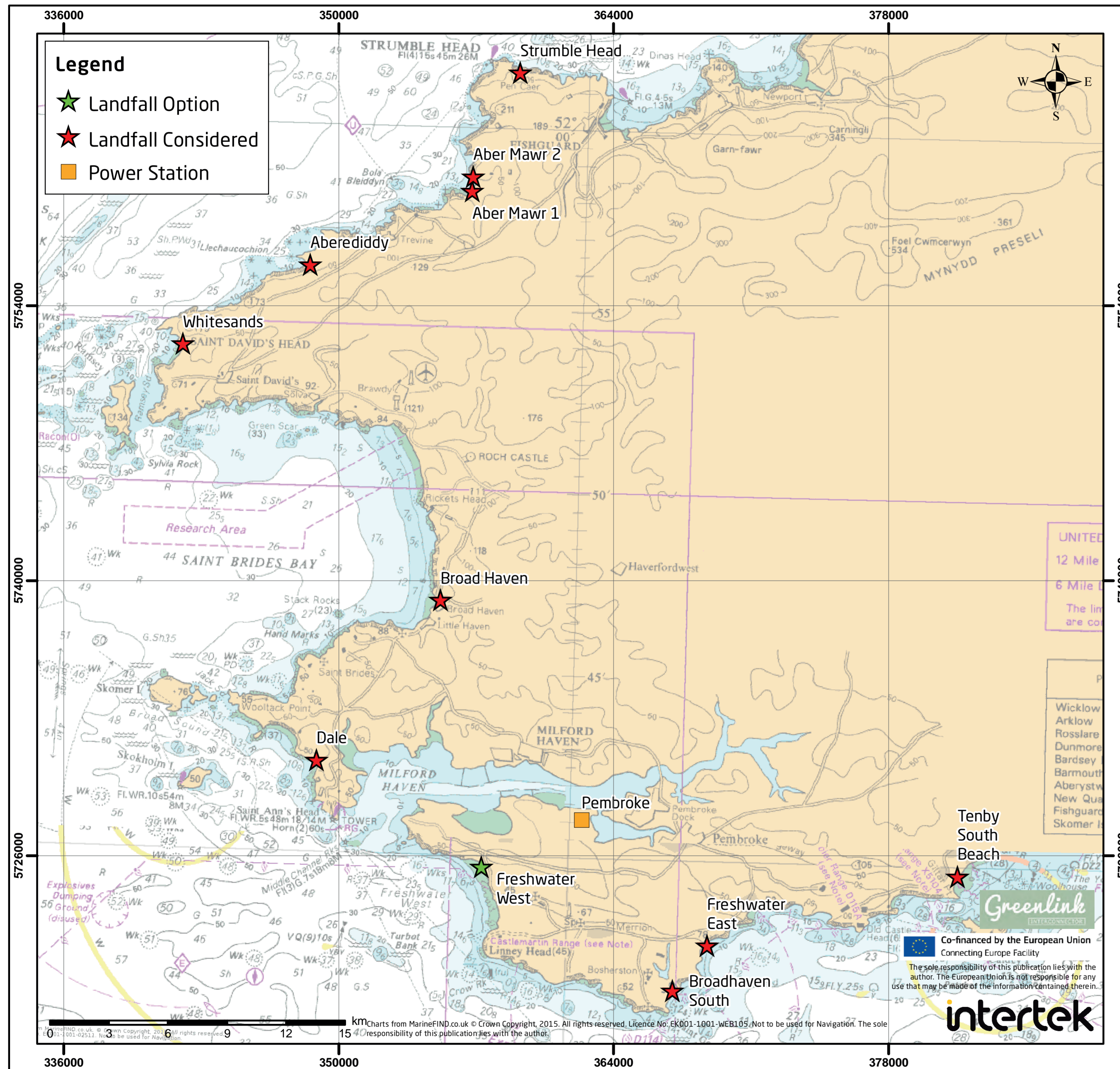
© Hesse Ltd, 2018. All rights reserved.

There are currently three subsea routes being assessed off the Welsh coast. The routes under assessment are shown in his plan.

The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

For more information please visit: www.greenlinkinterconnector.eu

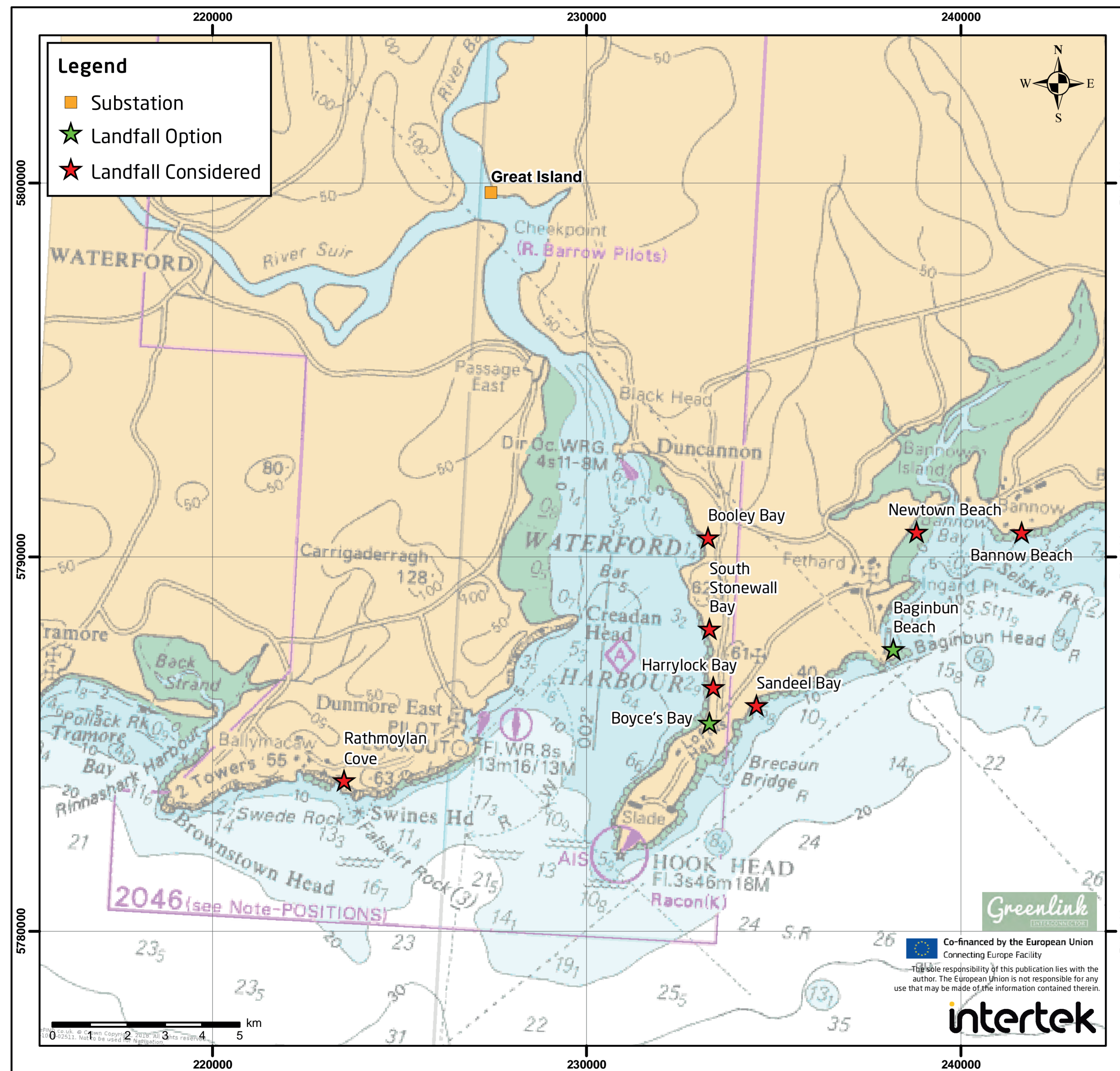
WELSH LANDFALLS



The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 7km.

The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

IRISH LANDFALLS



The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 28km.

The landfalls at Boyce's Bay and Baginbun Beach were selected for further investigation following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.



Greenlink Interconnector Project

PUBLIC EXHIBITION

Greenlink is a proposed electricity interconnector that will link the Irish electricity transmission system in Wexford with that of GB via underground and subsea cables.

It is proposed that the subsea cables will come onshore underground at either Baginbun Beach or Boyce's Bay (under the existing beach), carry on underground in the direction of Great Island Substation, where they will connect to a new purpose-built converter station located nearby.

Greenlink brings significant benefits on both sides of the Irish Sea for employment, energy security and the integration of low carbon energy sources.

We are committed to working with local residents and stakeholders to design and develop a project that is of the highest standard. To that end we would welcome your input throughout the development process.

Further information is available on the project website: www.greenlinkinterconnector.eu

To find out more about the proposal, and to share your views, please come along to our public exhibition on:

27TH JUNE 2018
4PM TO 8PM

St Marys Hall,
(Corner Main St and Ralph Road)
Fethard-on-Sea,
New Ross,
Co Wexford,
Y34 HH58



Greenlink Interconnector Project

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WHEN?

WEDNESDAY
15th August 2018
4pm to 8pm

WHERE?

Star of the Sea
Pastor Centre
Duncannon
Co Wexford

Appendix 7

Public Exhibition
– January 2019

WELCOME TO THE EXHIBITION



Greenlink
INTERCONNECTOR

Welcome

Welcome and thank you for taking the time to come to this public exhibition for the Greenlink Interconnector project (Greenlink).

We have prepared the information on display here today to help you find out more about our work on Greenlink.

Members of the project team are here to answer your questions.

About the developer

Greenlink is being developed by Greenlink Interconnector Limited. Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

For more information please visit:
www.greenlinkinterconnector.eu



Your Views

We are very interested to hear your views, so please feel free to fill in a comments form and drop it in the box provided before you leave.



PROJECT BENEFITS

Greenlink
INTERCONNECTOR



380,000

Potential to power 380,000 homes*



Investment

€400m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



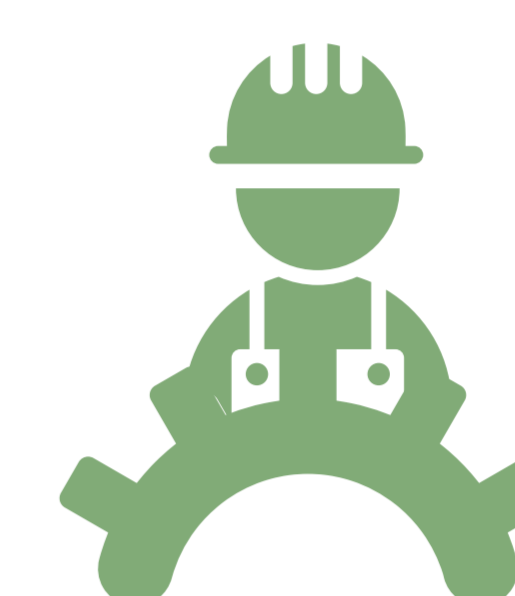
Security

Enhances the security of supply for electricity consumers



Value
for
Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents €400m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

Benefits for Ireland and Co. Wexford

Greenlink will provide additional transmission network capacity, reinforcing the electricity grid in Ireland. It will also offer valuable regional investment to Ireland and Co. Wexford, including jobs and knock-on economic benefits during construction.

For more information about opportunities for local businesses, please see our 'Local Supply Chain' board later in this exhibition

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

IRELAND



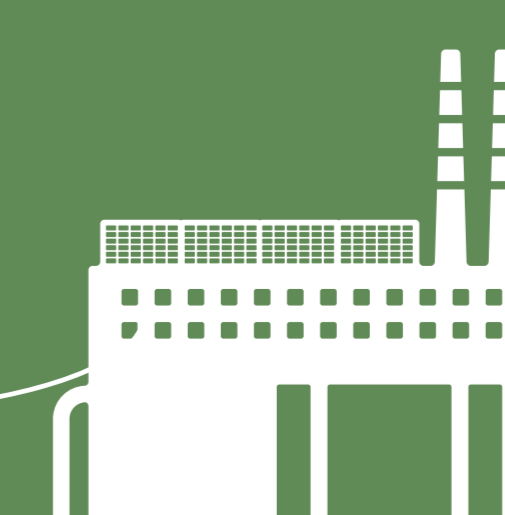
250

jobs in Ireland during construction



Jobs

20 permanent Irish jobs



Grid

Reinforce electricity grid

THE PROPOSAL

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain, allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver increased energy security, regional investment and value for money for consumers and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will include two converter stations, each located close to the identified existing substations: Great Island Substation in County Wexford (Ireland) and Pembroke Substation in Pembrokeshire (Wales).

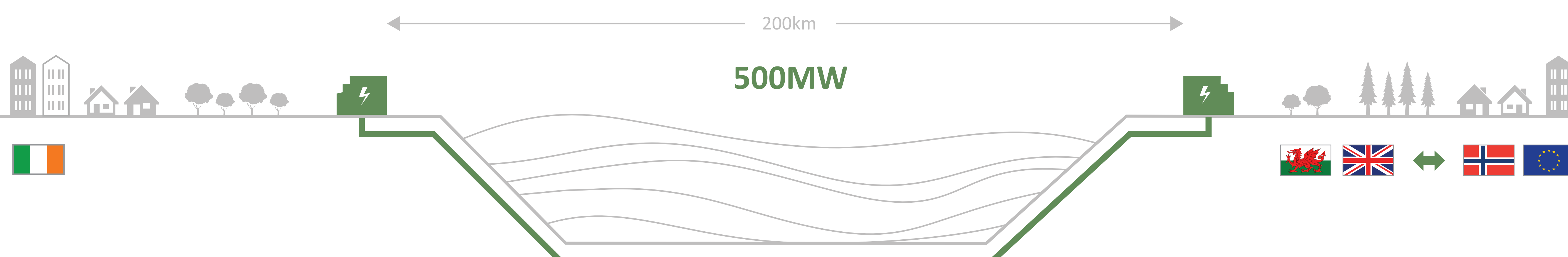
The converter stations will be connected to each other by two electricity cables and a fibre optic cable that will enable the two converter stations to communicate for control purposes.

There will be no overhead lines between the two converter stations and the respective substations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

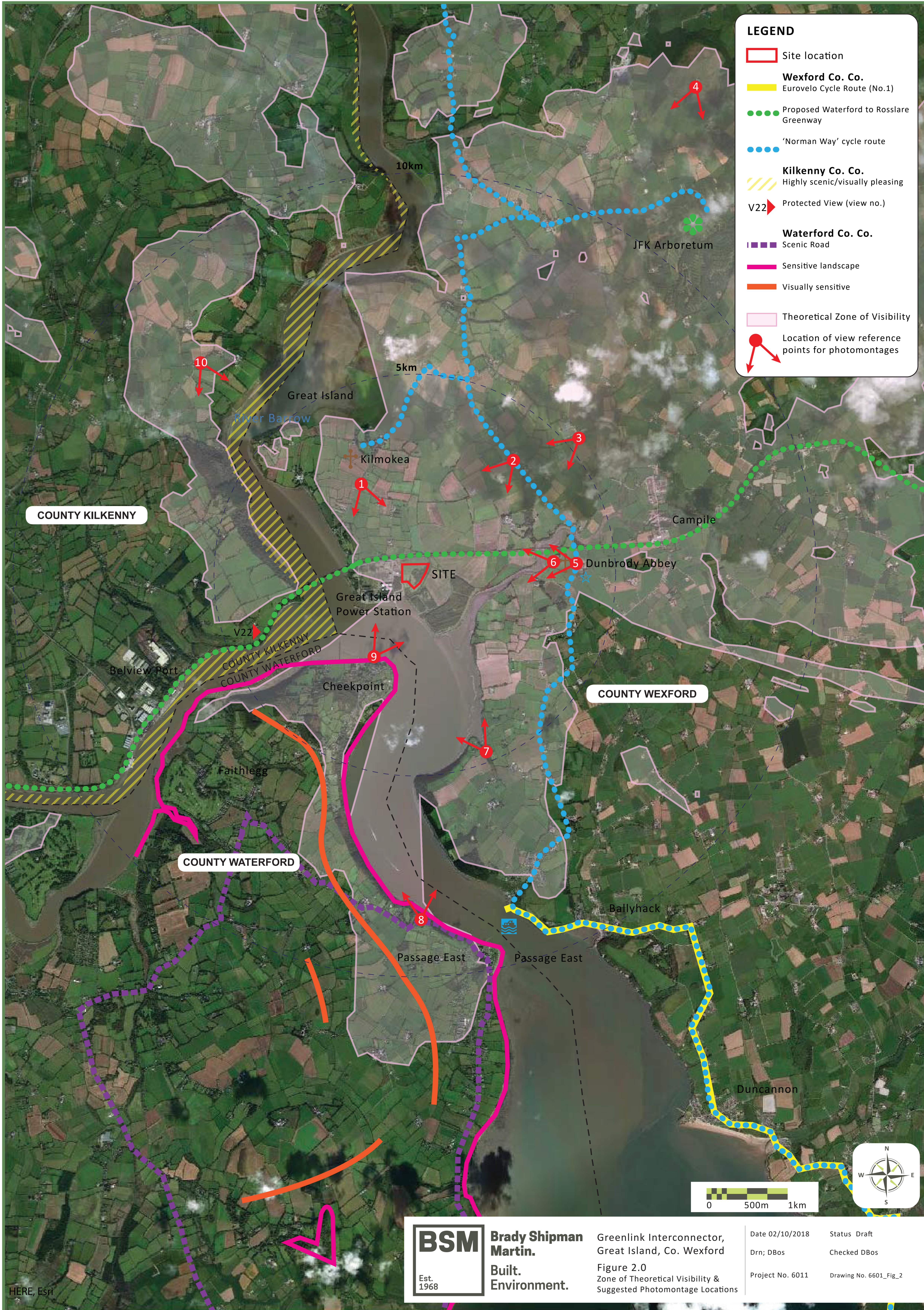
The project will require planning permission in Ireland and Wales. Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. Greenlink is planned for commissioning in 2023.



Sources: Ofgem, TEC Register, 3rd PCI, TYNDP 2016w



VIEWPOINT LOCATIONS



“

Your views

Do you have any other suggestions for a viewpoint location?

”

BIODIVERSITY

Greenlink
INTERCONNECTOR

Surveys will be carried out and the data assessed to ensure that the final onshore elements of the proposal are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Studies cover the landfall site, the preferred cable route and the possible converter station locations.

As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles, and amphibians. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats and invasive species.

The surveys will be used to avoid, reduce and offset any impacts on biodiversity through sensitive design and mitigation measures as required.

“ Your views

Do you know of any local environmental groups that Greenlink should consult?

Are there specific issues you feel should be assessed that aren't currently being assessed?

”



For more information please visit: www.greenlinkinterconnector.eu

CONSULTATION

Greenlink
INTERCONNECTOR



Public consultation is a core part of the development process and ensures that communities in the vicinity of a new proposal have timely and transparent access to information and can engage with developers to influence the final proposal coming forward. We would like to hear what your thoughts and views are on this proposal.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of the interconnector project.

During the development process we will be looking to fully engage with local residents, councillors, businesses and members of the local community to discuss the proposal and any potential impacts and to obtain feedback on key issues.

We intend to make sure the local community can see that its views have been fully considered and incorporated within the final proposal.

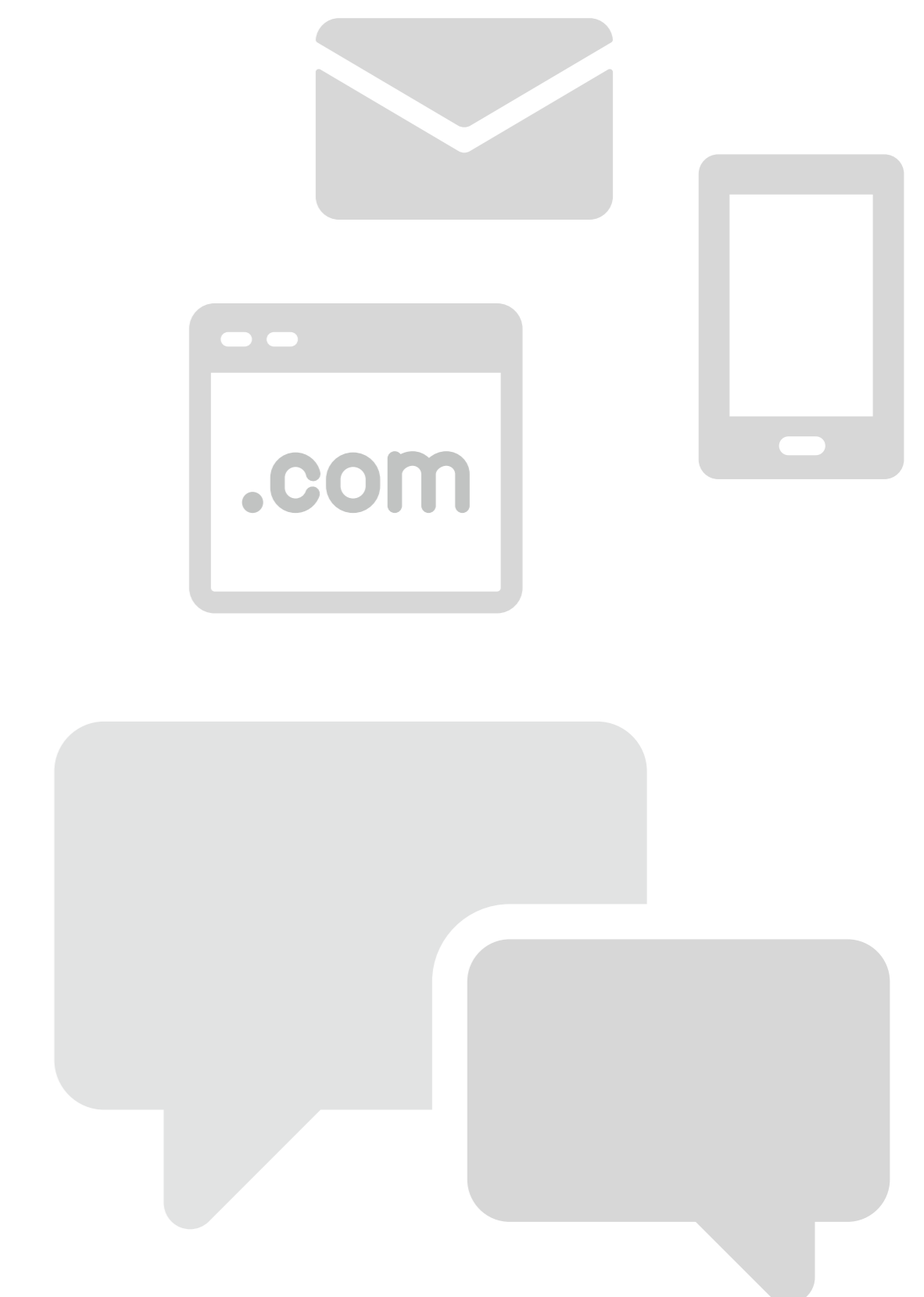
This public exhibition is to allow local residents and stakeholders to view our current plans, hear about project progress, share their views with us, meet the project team and ask questions. We would welcome any feedback that you have now or in the future.

Additional events will be held in due course as the project progresses.



Contact details

If you would like the Greenlink team to keep you directly updated on project news and future consultation events, please leave us your name and contact details on the comment sheet provided.



For more information please visit: www.greenlinkinterconnector.eu

GREENLINK COMPONENTS

Greenlink
INTERCONNECTOR

The key components of the scheme are:

- **Two converter stations** - one near the Great Island Substation in County Wexford (Ireland) and one near the Pembroke Substation in Pembrokeshire (Wales)
- **Two subsea HVDC cables and a fibre optic cable** - the onshore cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

What is an HVDC cable?

- High Voltage Direct Current (HVDC) cables allow for efficient transportation of electricity over large distances and in particular for subsea cables.
- HVDC cables have lower electricity losses than comparable AC cables.
- HVDC cables are suitable for undergrounding both onshore and offshore. There will be no overground cables between the two converter stations.
- One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore.



IMAGE: PRYSMIAN

What is a converter station?

A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa. DC electricity is used for the transmission of electricity over long distances between two converter stations and AC electricity is used within the national transmission and distribution networks.



What is a fibre optic cable?

A fibre optic cable is installed to provide communication between the converter stations for system monitoring and safety purposes.

GREENLINK IN IRELAND

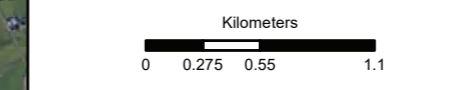
Greenlink
INTERCONNECTOR



Legend
 ● Indicative Joint Bay Locations
 - - - Emerging Preferred Route

Greenlink
INTERCONNECTOR
 Co-financed by the European Union
 Connecting Europe Facility

PO	2019-01-10	GM	MM	MD
Issue	Date	By	Chkd	Appd



ARUP

Client
Greenlink Interconnector Ltd

Job Title
Greenlink Interconnector

Emerging Preferred Cable Route Ireland

Scale at A2
1:40,000

Job No
246369-00

Drawing Status
Preliminary

Drawing No
SK064

A preferred cable route and converter station site have been identified following consultation with stakeholders and analysis of the results of ongoing environmental and technical work. The preferred cable route and converter station site are shown here.

For more information please visit: www.greenlinkinterconnector.eu

HISTORIC ENVIRONMENT

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets within a study area of 1.5 km from the converter station site and within a 200m study area from the cable route corridor.

Cultural heritage encompasses valued features and remains, including buildings, monuments and archaeological remains. It can also include landscapes shaped by human occupation and design, such as historic parks and gardens.

The importance of cultural heritage is recognised in legislation and planning policy.

The converter station site is located in an area with a rich archaeological and historic heritage but is also located in such a way as to complement the existing industrial surrounds.

Sites of interest in the wider area include Kilmokea Church and Graveyard, Dunbrody Abbey and Castle, Duncannon Fort and the historic Norman landing place at Baginbun Beach.

Given the large number of sites relating to prehistoric activity in this region, there is also a potential for the development to uncover as yet unknown archaeological remains.

Impacts and mitigation

During construction the potential impact of the onshore cables, landfall site and the converter station could be the loss or interference with a site or feature of archaeological, architectural and cultural heritage significance caused by excavations or by construction related vibrations.

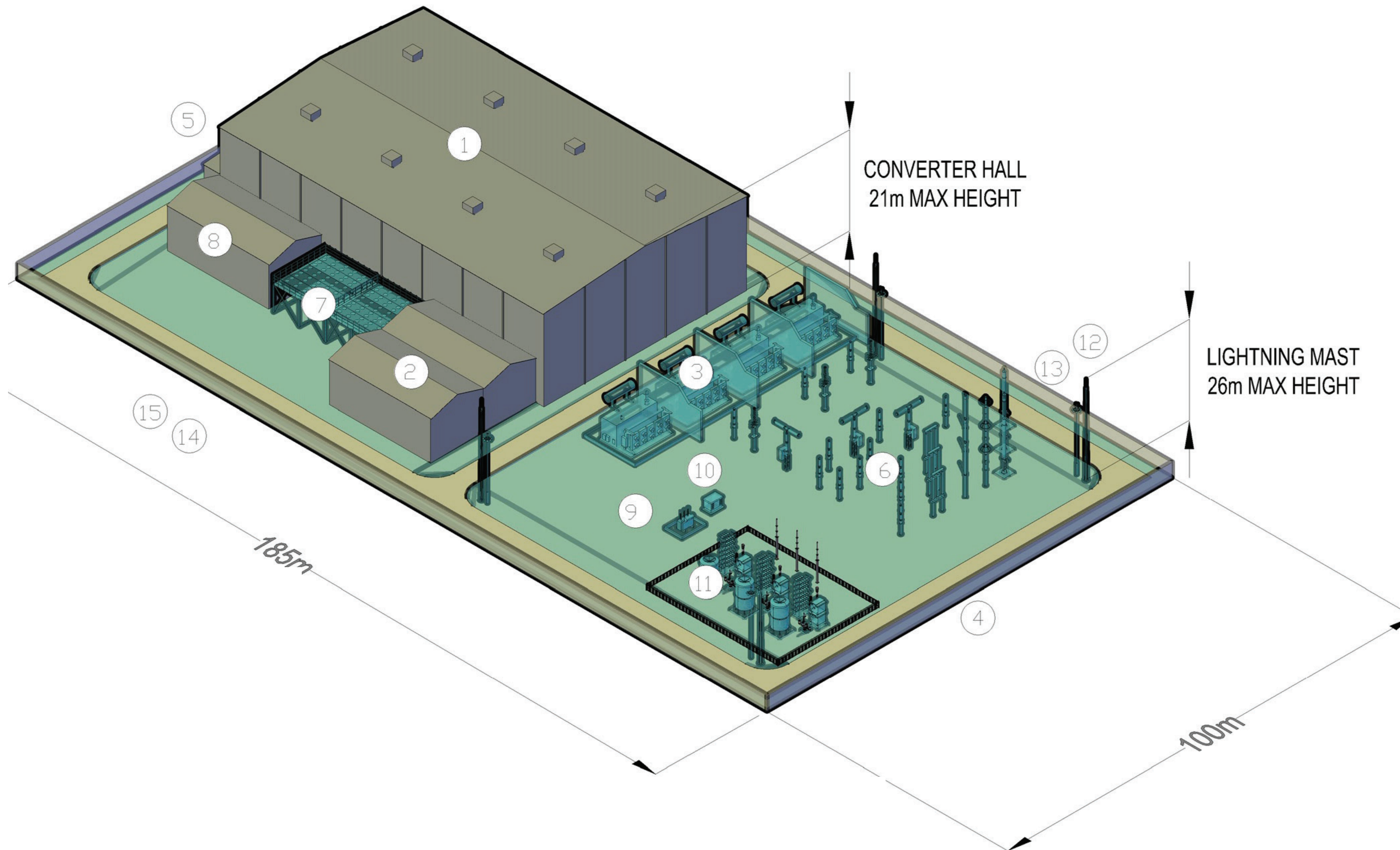
The importance of cultural heritage is recognised in legislation and planning policy

Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects on archaeology and heritage assets within the study area. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

INDICATIVE CONVERTER STATION

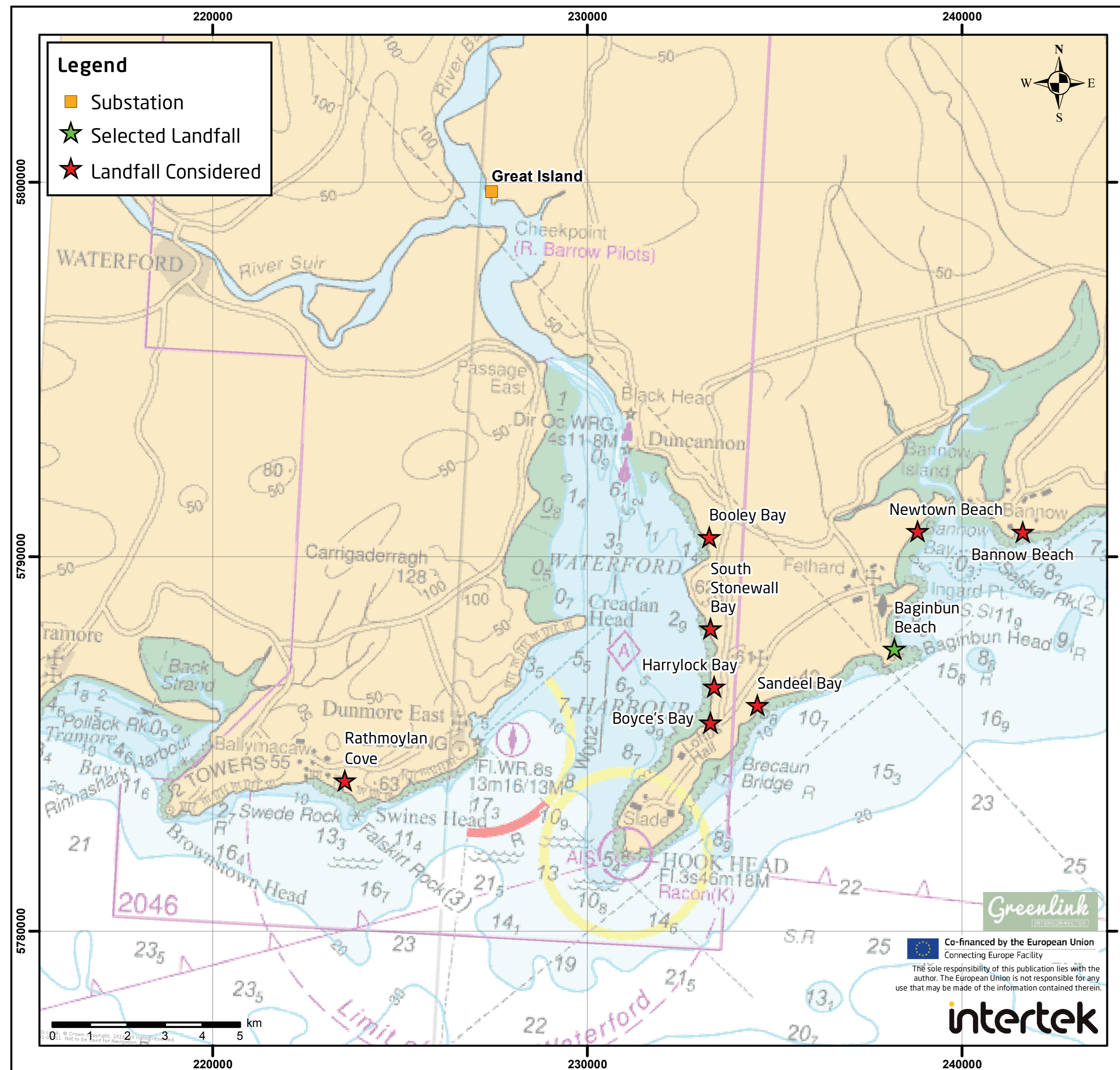
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SITE KEY	
1	CONVERTER HALL
2	CONTROL BUILDING
3	TRANSFORMERS
4	AC CABLE TERMINATIONS
5	DC CABLE TERMINATIONS
6	400kV SWITCHYARD
7	VALVE COOLERS
8	SPARES BUILDING
9	STANDBY GENERATOR
10	AUXILIARY TRANSFORMER
11	FILTERS
12	LIGHTNING MAST
13	15m LIGHTING COLUMN
14	6m LIGHTING COLUMN
15	PERIMETER FENCE

For more information please visit: www.greenlinkinterconnector.eu

IRISH LANDFALLS



The landfall at Baginbun Beach was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

LANDSCAPE & VISUAL IMPACT

Landscape

This assessment relates to changes in the physical landscape, brought about by Greenlink, which may alter its character and how this is experienced.

Visual

Visual impact assessment relates to changes in the composition of views as a result of changes to the landscape, how these are perceived and the effects on visual amenity.

We will produce visualisations of the converter stations from viewpoints to be agreed with An Bord Pleanála. Viewpoints will be selected to represent the character of the area and particularly important landscape and heritage sites. Proposed locations can be seen on the 'viewpoint locations' board.

Impacts and mitigation

Converter station



A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant and a control building.

Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. However, the layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

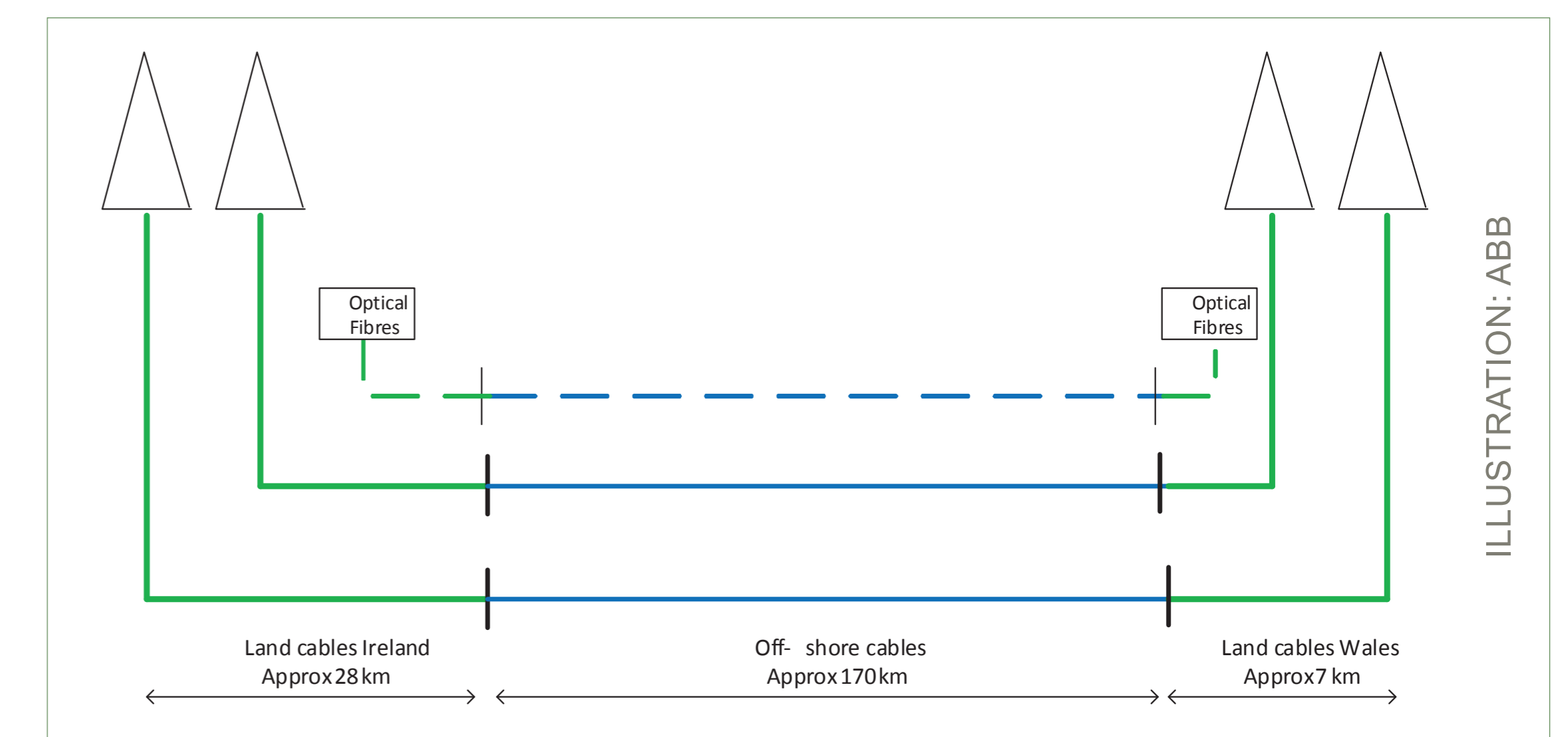
The landscape and visual impact of this will be carefully considered and suitable mitigation, such as landscaping and building finishes, among others, will be proposed.

Cable route

There is the potential for impact from the cable route from vegetation clearance during construction, particularly where the cable route diverges from the road network.

Landscape and visual impacts during cable installation are predicted to be minor and not significant due to the temporary and reversible nature of the change (vegetation clearance) which can be adequately mitigated through replanting.

Following installation and restoration there are not predicted to be any residual landscape and visual effects from the cable route.



Your views ... Do you have any suggestions for viewpoints to be assessed?
What sort of landscaping planting would you like to see in and around the converter station?



For more information please visit: www.greenlinkinterconnector.eu

LOCAL SUPPLY CHAIN

Greenlink
INTERCONNECTOR

Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Construction work on Greenlink is expected to lead to significant expenditure in both Ireland and Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites and will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- Transportation - equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks
- Office and cleaning supplies
- Site security
- Site services, e.g. portacabins and portaloos
- Fencing
- Waste disposal



“ Your Views

Do you know of a local business that could benefit from the Greenlink interconnector project?

Let us know if you want to be added to our list of local suppliers!

”



For more information please visit: www.greenlinkinterconnector.eu

MARINE ENVIRONMENTAL ASSESSMENTS



The aims of the Environmental Impact Assessment will be to identify potential impacts, including:

- Penetration and/or disturbance of the substrate below the surface of the seabed
- Visual disturbance
- Underwater noise changes
- Siltation rate changes
- Hydrological changes
- Physical loss (permanent change)
- Electromagnetic changes
- Possible in-combination effects

Topics covered by the Environmental Impact Assessment will include:

- Protected sites
- Benthic ecology
- Fish and shellfish
- Marine birds
- Marine mammals and reptiles
- Marine archaeology and UXOs
- Coastal processes
- Fisheries
- Shipping and navigation
- Recreation
- Cumulative effects

Mitigation - Once potential impacts have been established, mitigation measures will be proposed to ensure that impacts are minimised or removed.

“ Your views ”

Greenlink has appointed a Fisheries Liaison officer to liaise with local fishing interests. Do you want our Fisheries Liaison officer to contact you?



For more information please visit: www.greenlinkinterconnector.eu

MARINE SURVEYS

The proposed marine cable will run from Freshwater West, Pembrokeshire, Wales to the Hook Head Peninsula in County Wexford, Ireland.

Technical viability

Marine surveys are currently being undertaken and include geophysical and geotechnical surveys.

Geophysical

The geophysical survey will map the seabed and sub-surface geology along the proposed route in order to be able to optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route.

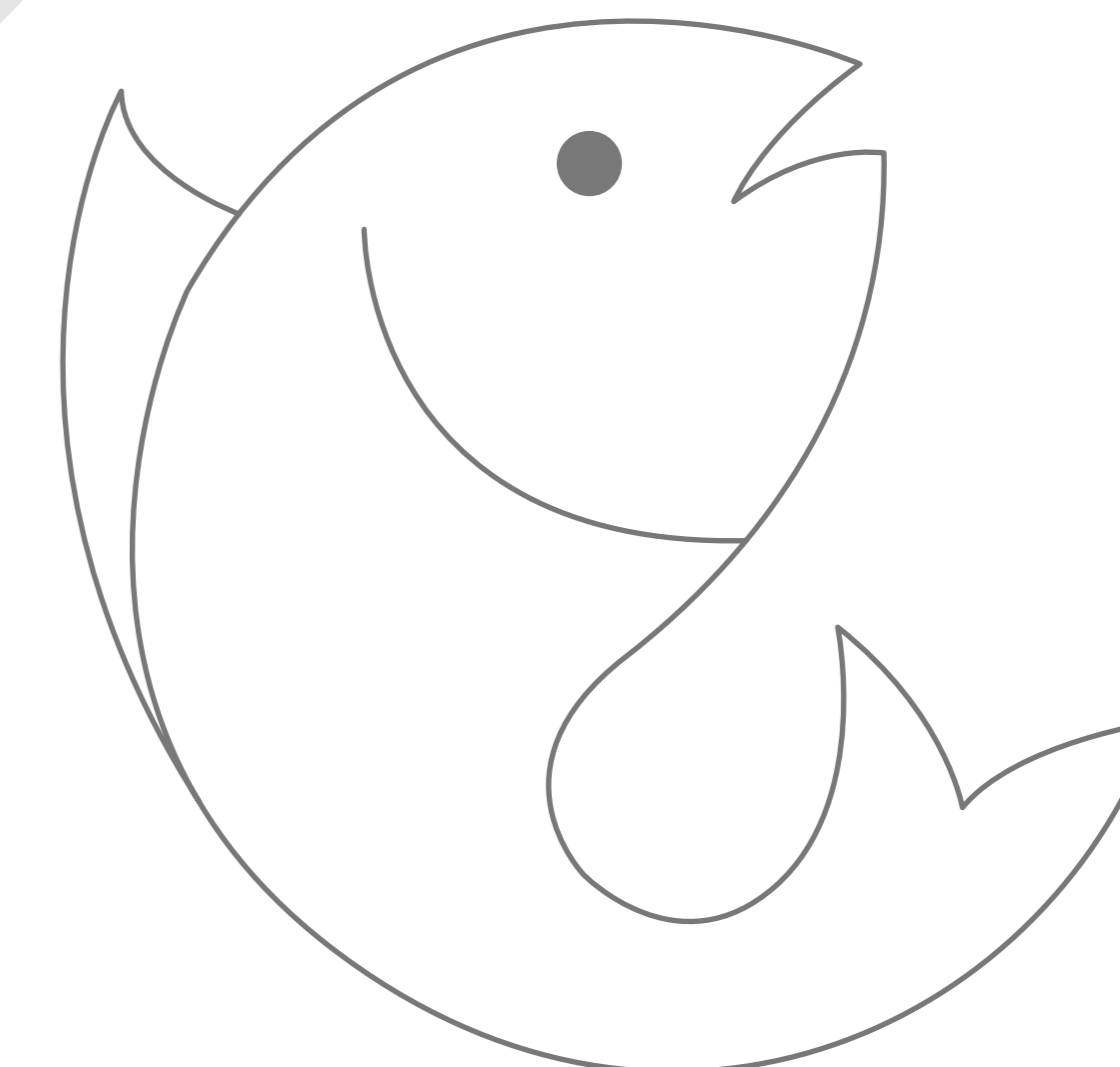
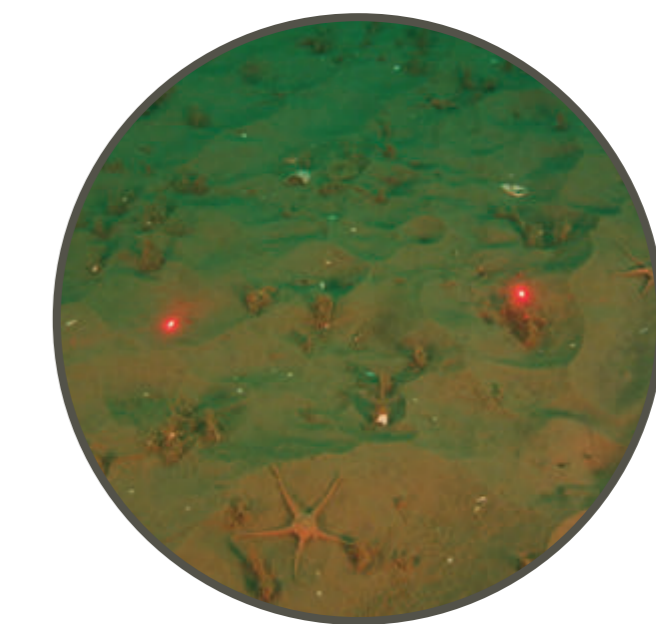
It will also provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical

The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This is being done using a number of techniques, including drilling boreholes.

Environmental impacts

The marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey is being used to inform the Environmental Impact Assessment.



NOISE & VIBRATION

Greenlink
INTERCONNECTOR

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The proposed underground cable routes pass through predominantly rural areas which are likely to experience low ambient existing noise levels. The converter station locations are also located in a rural area but are adjacent to an existing substation with its associated operating noise levels.

Noise surveys and assessment

- The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.
- Noise-sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship etc) and public open spaces (including public footpaths).
- A study area of 300m around the cable route corridor and converter station locations will be considered for potential construction noise impacts and an area of 50m will be considered for potential construction vibration impacts.
- For operational noise, an assessment will be undertaken at sensitive receptors within 300m of the converter station.

Impacts and mitigation

The construction of the converter station has the potential to give rise to temporary noise and vibration impacts. However, given the distance between the converter station locations and sensitive receptors it is likely that any impact will be low.

The construction of the cable route has the potential to give rise to temporary noise and vibration impacts in isolated locations along the route, particularly where directional drilling is required at watercourses and road crossings.

There will be noise from the electrical and mechanical plant during the operation of the converter station, most of which will be located indoors in the converter hall.



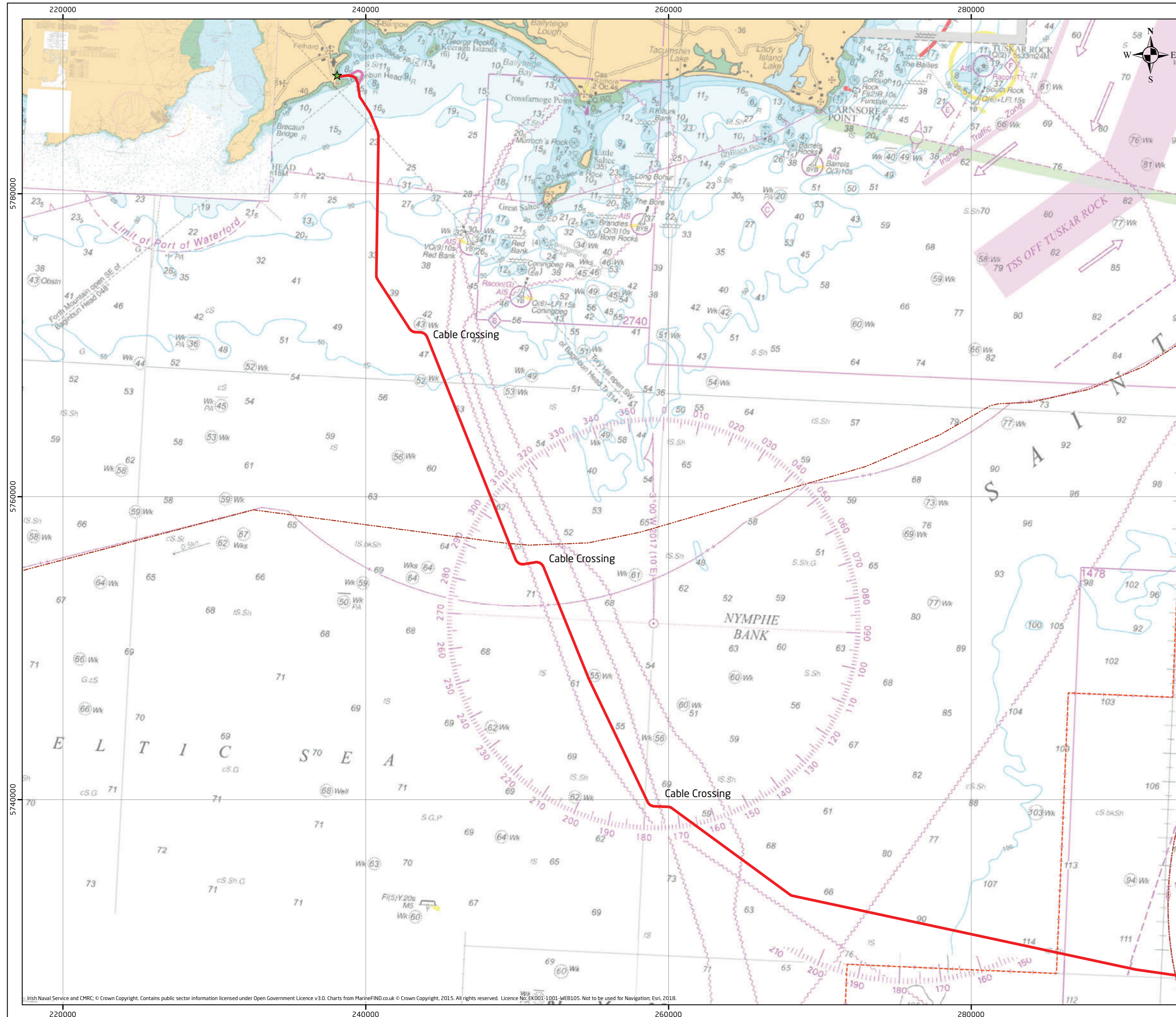
Your views

Do you have concerns regarding noise and vibration you wish to be assessed?



For more information please visit: www.greenlinkinterconnector.eu

OFFSHORE IRELAND ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Irish Territorial Waters

- Legend**
- ★ Selected Landfall
 - Median Line
 - 12nm Territorial Sea Limit
- Proposed Routes**
- Route A
 - Option D

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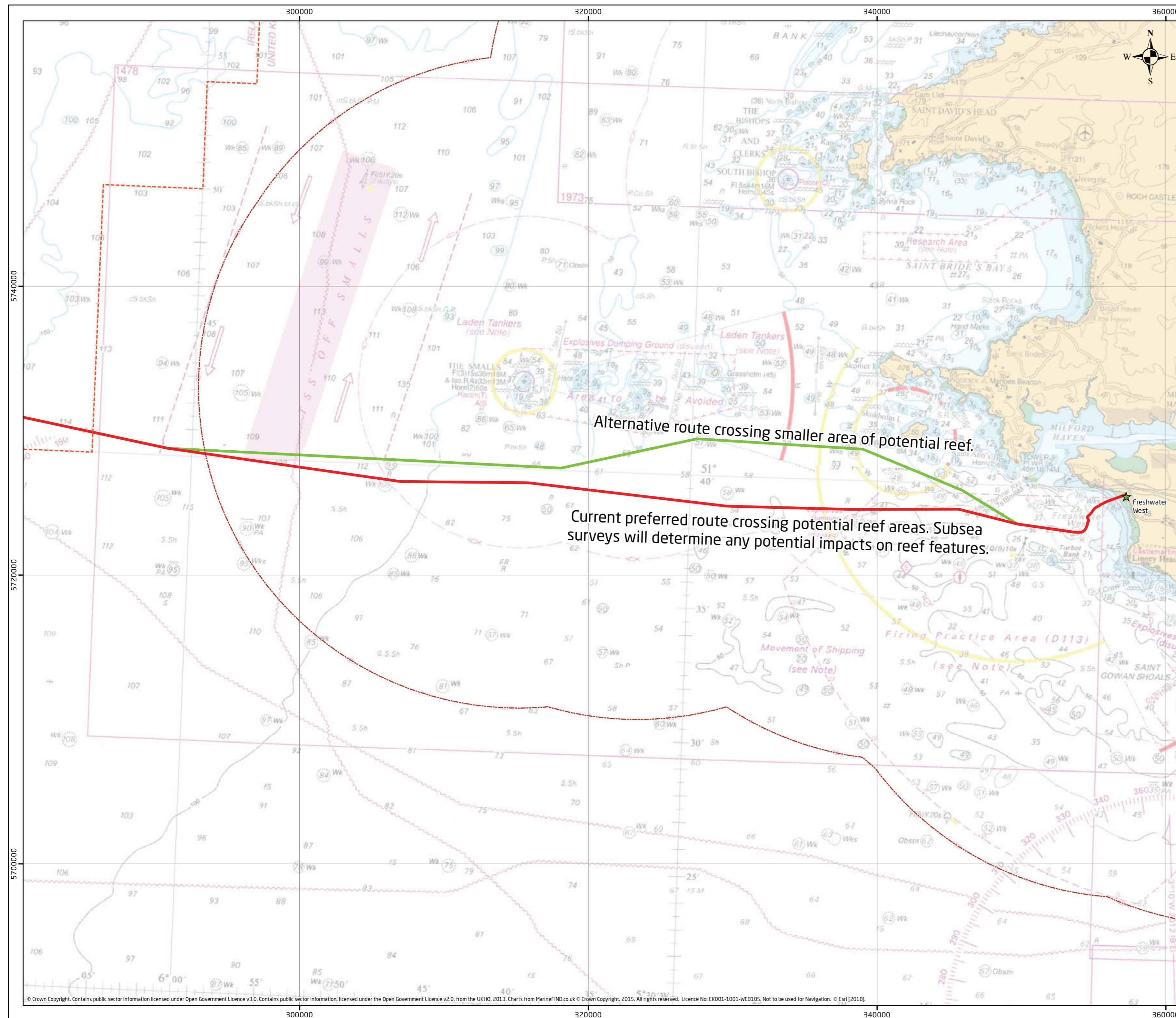


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File Reference	H:\P1975\MudPublic_Exhibitions\Offshore_Ireland_Route_Options_A2.mxd
Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

A preferred subsea route has been identified following desk-based assessments supported by the results of early subsea surveys.

For more information please visit: www.greenlinkinterconnector.eu

OFFSHORE WALES ROUTE OPTIONS



GREENLINK INTERCONNECTOR
Route Options in Welsh Territorial Waters

Legend

- ★ Selected Landfall
- Median Line
- 12nm Territorial Sea Limit
- Route A
- Route E

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NOTE: Not to be used for Navigation

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Created By	Jennifer Arthur
Reviewed By	Richard Marlow
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Greenlink **intertek**

Co-financed by the European Union
Connecting Europe Facility

0 2.5 5 7.5 10 km
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There are currently two subsea routes being assessed off the Welsh coast. The red and green routes under assessment are shown here.

Initial survey data suggests that both routes have environmental constraints and consultation and additional survey work is being undertaken to see if there is an alternative route between the two options.

The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

For more information please visit: www.greenlinkinterconnector.eu

PLANNING

	Wales	Ireland
Converter station	Major Development - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Major Development - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

IMPORTANT PLANNING UPDATE:

ENVIRONMENTAL IMPACT ASSESSMENT

Since the previous round of public consultations Greenlink Interconnector Limited has decided to undertake a voluntary Environmental Impact Assessment (EIA) in support of the Greenlink project. This will result in the application documents facing an increased level of scrutiny from stakeholders. While it is recognised that Greenlink does not require an EIA, we have decided to undertake a voluntary EIA in recognition of the length of the permitting process and the evolving interpretation of the EIA regulations within Ireland.

PROJECT TIMELINE



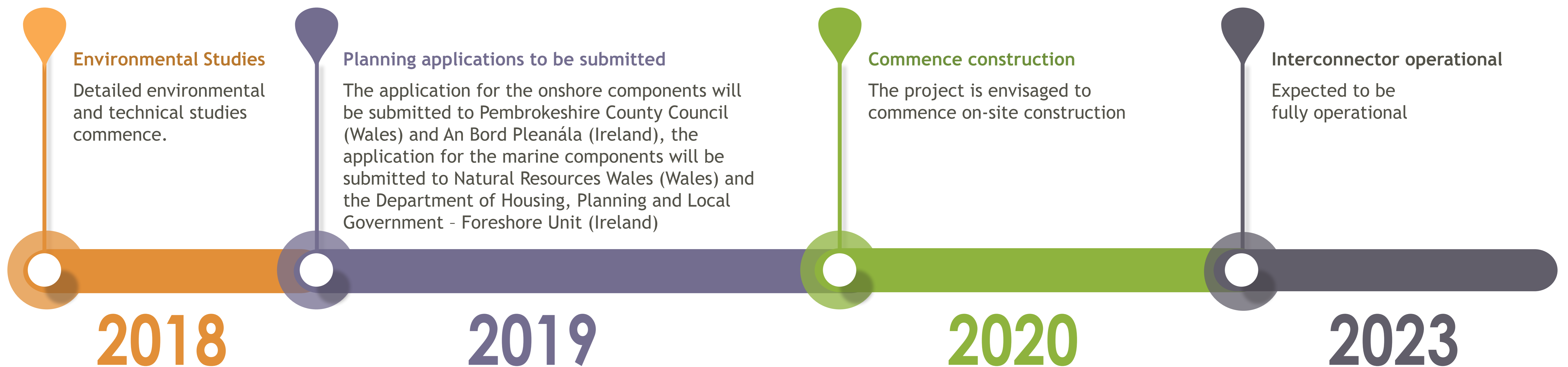
A large infrastructure project such as Greenlink takes several years from development to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design have been put together, permits and licences will need to be obtained from: Pembrokeshire County Council, Pembrokeshire Coast National Park, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will need to be constructed, which could take around 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023



For more information please visit: www.greenlinkinterconnector.eu

SITE ASSESSMENT - OVERVIEW



As part of the development process, a series of environmental and technical assessment studies are being carried out to establish the viability of all the proposed sites and cable routes and to consider any potential impacts and opportunities arising from the development.

Onshore studies include assessments on:

- Biodiversity
- Historic environment
- Landscape & visual impact
- Flooding & hydrology
- Geology & hydrogeology
- Noise & vibration
- Traffic & transport
- Electromagnetic fields (EMFs)
- Agricultural land
- Socio-economics & human health
- Air quality & climate change
- Cumulative & transboundary effects

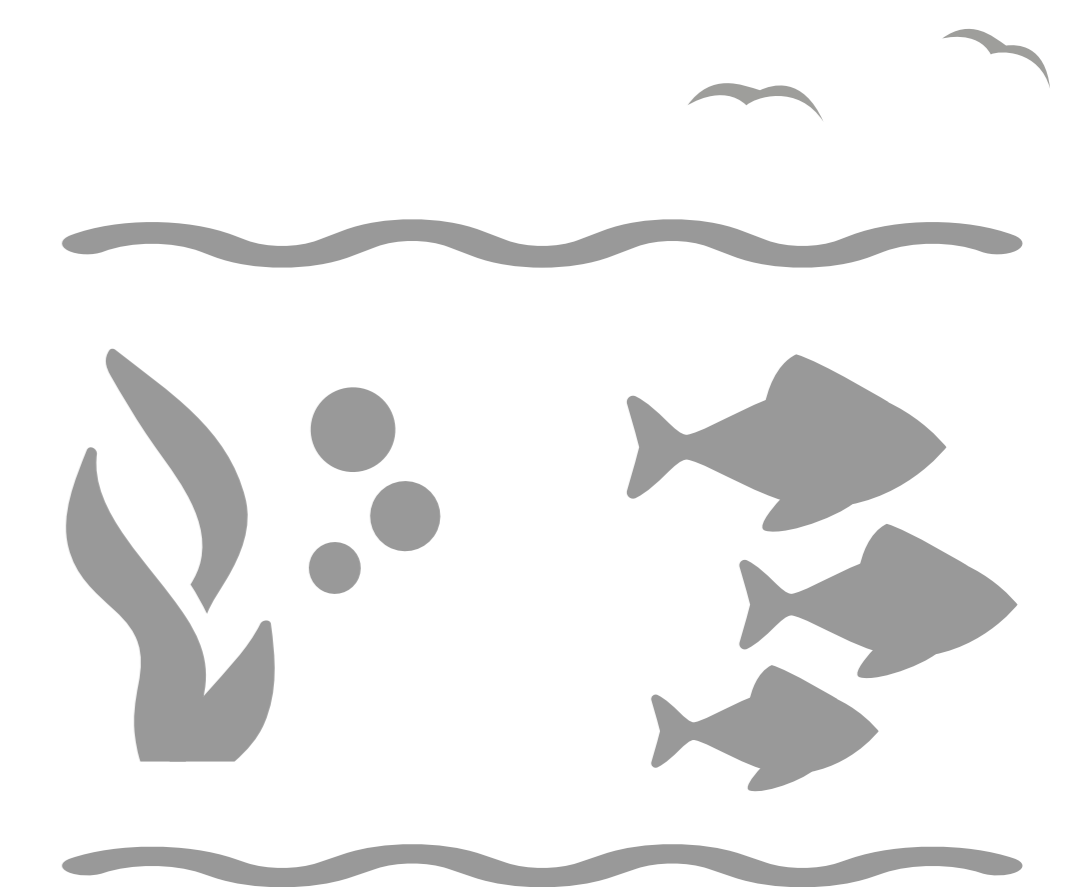
Offshore studies include assessments on:

- Geophysical & geotechnical surveys
- Marine biodiversity (benthic/seabed environment, fish and shellfish, marine birds, marine mammals and reptiles etc)
- Protected designations
- Commercial fisheries
- Shipping & navigation
- Aviation & military
- Marine archaeology & UXOs

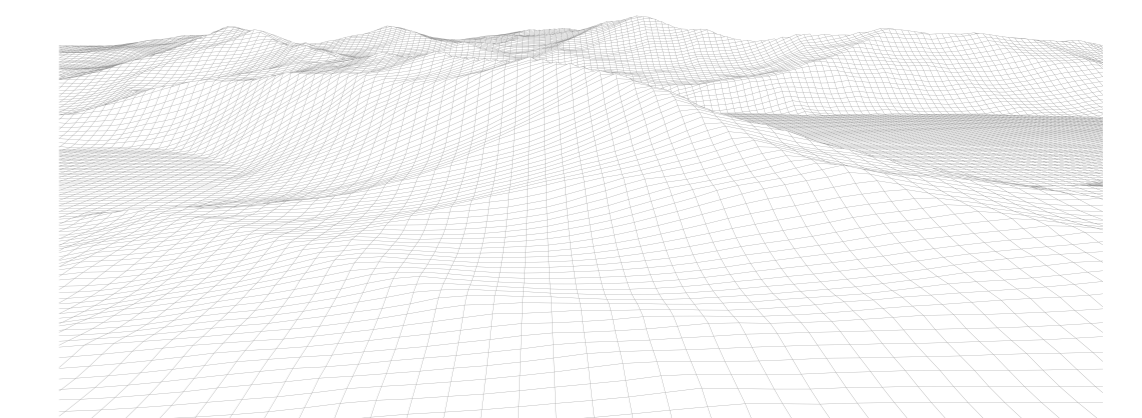
Further information on the nature of these assessments is available within the project Environmental Scoping documents.



Noise & vibration



Marine biodiversity



Landscape & visual impact

For more information please visit: www.greenlinkinterconnector.eu

SOCIO-ECONOMICS



This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects to the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy.

Local tourism



The Hook Head Peninsula has a rich built heritage and attractive beaches, and it is an important tourist destination in Ireland's Southeast. Tourist attractions close to the cable route include Dunbrody Abbey, Loftus Hall and Baginbun Beach and Martello Tower. The Ring of Hook Coastal Drive is a popular route which may partially coincide with the cable route, and appropriate traffic management will be required to minimise disruption to tourist traffic during the cable construction within the roadway.

The cable will be horizontally drilled under the beach at the landfall, with the construction area set well back from the beach and cliffs. It is not envisaged that the construction work will have adverse effects on tourist activity at the beach.

Potential impacts



There will be temporary impacts on road traffic during the cable construction, with the requirement for partial or full road closures and diversions, for short periods.

Direct and indirect employment will be created for both the construction and operational phase.

The construction of the cables and converter station have the potential to have a negative impact on residential amenity in the immediate vicinity of the construction activities. Once the cables and converter station are operational, the potential for negative impact on residential amenity is minimal.

Your views

Please let us know of any local tourism business or group we need to consider and involve in project discussions.

Are there any particular local events that attract tourists that Greenlink needs to be aware of?



For more information please visit: www.greenlinkinterconnector.eu

TRAFFIC & TRANSPORT



The traffic assessment will address the traffic impacts on the road network from the construction and operation of the Greenlink project. The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

The traffic assessment will include a review of the existing traffic patterns and an estimation of the traffic volumes which will be generated by the construction of the onshore cable, the landfall site and the converter station. The traffic generated by the construction workforce and by the transport of materials and equipment will also be predicted.

The potential disruption to the road network during the installation of the cables and the availability of alternative routes will be assessed. The traffic distribution pattern on the local road network during construction will be examined and impacts determined.

We will work hard to limit the impact of traffic and transport on local residents and businesses as much as possible and recommendations will be made to mitigate any potential traffic impacts on the road network.

Potential impacts and mitigation

There is potential for traffic impact from Greenlink during the construction phase which will temporarily give rise to additional traffic on the road network.

Installation of the cables may require partial or full road closures and traffic may have to use alternative routes. Where the cable route diverges from the road, the impacts will be reduced.

Once the Greenlink project is in operation, the potential for a traffic impact is minimal. The level of operations and maintenance workforce will be low, so that the impact on any particular road will be insignificant.



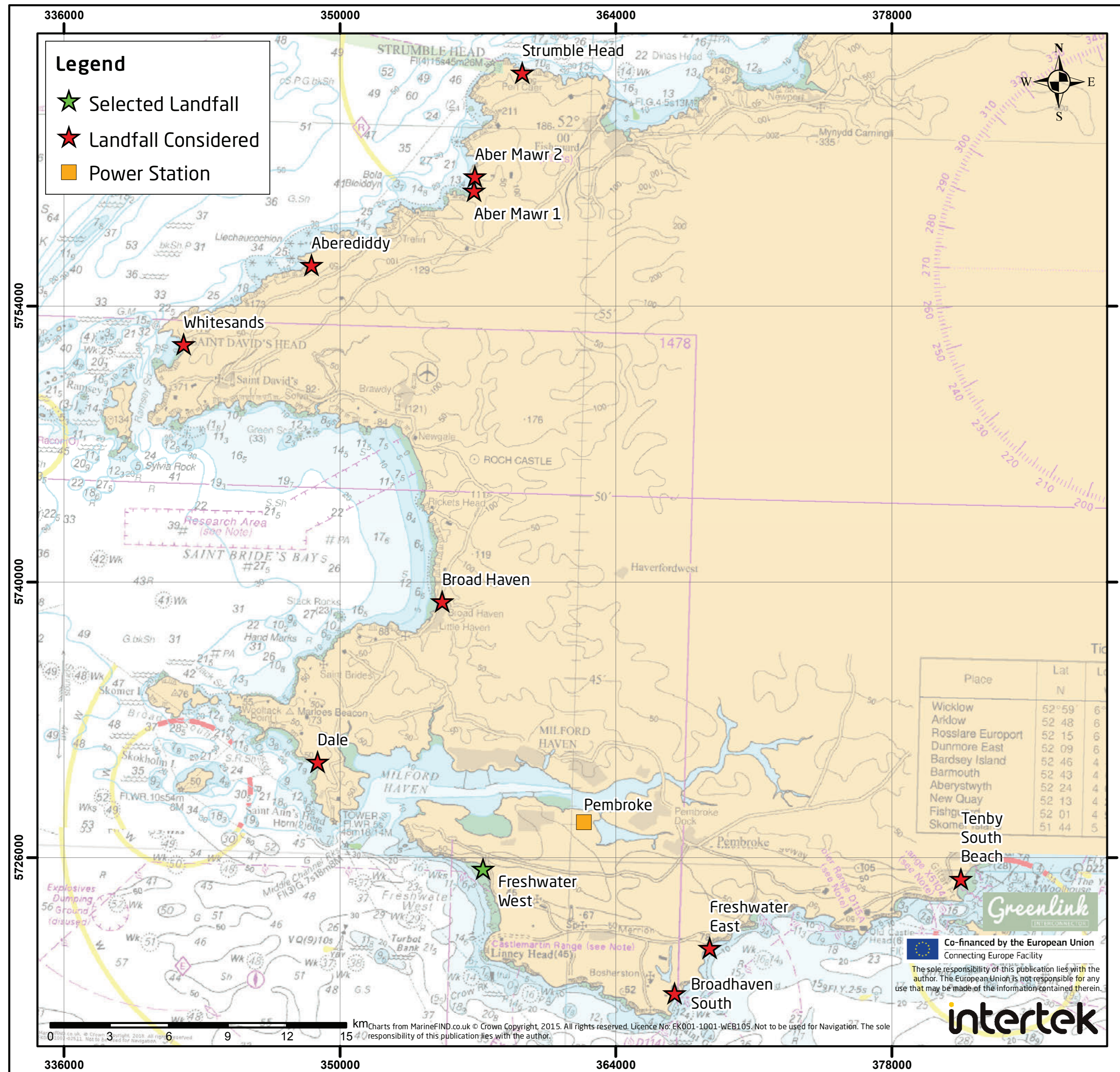
Traffic Management Plan (TMP)

As part of the planning application process, an outline Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink.

Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

“ **Your views**
Do you have any specific concerns? Are there local organisations (businesses, schools etc) that we need to involve in the Traffic Management Plan?
”

WELSH LANDFALLS



The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

WHY GREENLINK?

Greenlink is a new 500 MW interconnector between Ireland and Wales

Ireland is currently connected to Great Britain by two electricity interconnectors, which provide a means of transferring electricity between the two countries - the East West Interconnector (EWIC), which connects County Dublin to North Wales, and the Moyle interconnector between County Antrim, Northern Ireland and Ayrshire, Scotland.

However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Ireland and Great Britain, and within Europe as a whole. This will allow electricity to flow more easily between where it is generated and where it is needed, improving the security and reliability of our energy supplies and supporting the integration of greener, low carbon energy sources in an affordable way.

There is a strong need and significant support within Europe for additional interconnection. The 'Energy Union' is a strategy launched by the European Commission in 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

supporting the integration of greener, low carbon energy sources in an affordable way



Supporting
Renewable
Energy



Improving
Energy
Security



Fighting
Climate
Change



Benefiting
Consumers

For more information please visit: www.greenlinkinterconnector.eu

Appendix 8

Public Exhibition
– March 2019

WELCOME TO THE EXHIBITION



Greenlink
INTERCONNECTOR

Welcome

Welcome and thank you for taking the time to come to this public exhibition for the Greenlink Interconnector project (Greenlink).

We have prepared the information on display here today to help you find out more about our work on Greenlink.

Members of the project team are here to answer your questions.

About the developer

Greenlink is being developed by Greenlink Interconnector Limited. Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

For more information please visit:
www.greenlinkinterconnector.eu



Your Views

We are very interested to hear your views, so please feel free to fill in a comments form and drop it in the box provided before you leave.



PROJECT BENEFITS

Greenlink
INTERCONNECTOR



380,000

Potential to power 380,000 homes*



Investment

€400m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



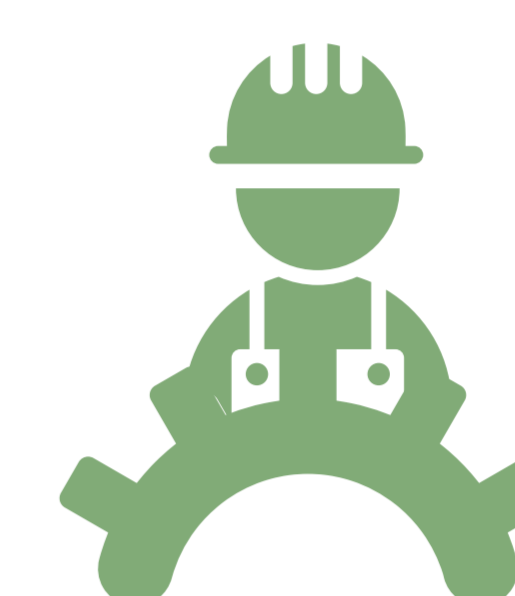
Security

Enhances the security of supply for electricity consumers



Value
for
Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents €400m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

Benefits for Ireland and Co. Wexford

Greenlink will provide additional transmission network capacity, reinforcing the electricity grid in Ireland. It will also offer valuable regional investment to Ireland and Co. Wexford, including jobs and knock-on economic benefits during construction.

For more information about opportunities for local businesses, please see our 'Local Supply Chain' board later in this exhibition

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

IRELAND



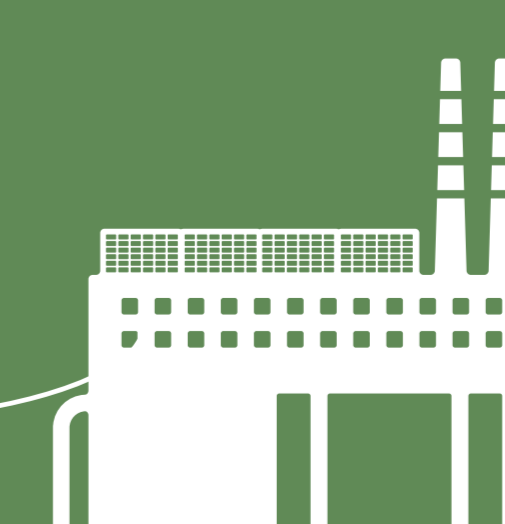
250

jobs in Ireland during construction



Jobs

20 permanent Irish jobs



Grid

Reinforce electricity grid

THE PROPOSAL

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain, allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver increased energy security, regional investment and value for money for consumers and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will include two converter stations, each located close to the identified existing substations: Great Island Substation in County Wexford (Ireland) and Pembroke Substation in Pembrokeshire (Wales).

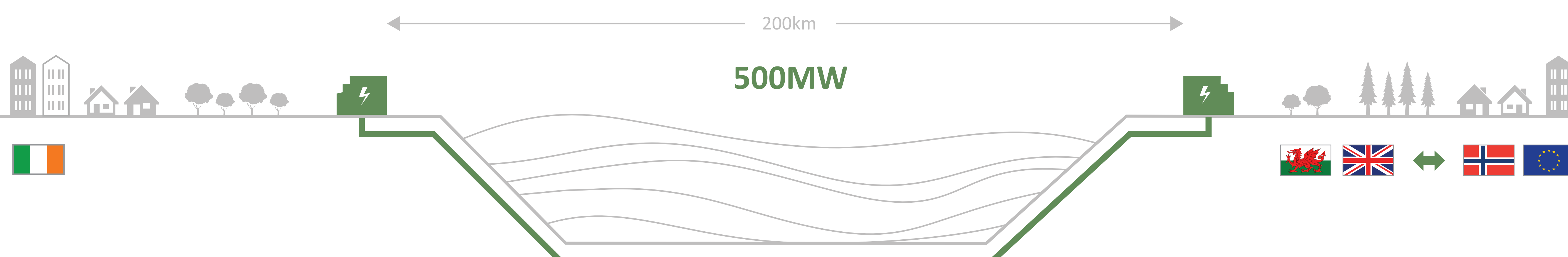
The converter stations will be connected to each other by two electricity cables and a fibre optic cable that will enable the two converter stations to communicate for control purposes.

There will be no overhead lines between the two converter stations and the respective substations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

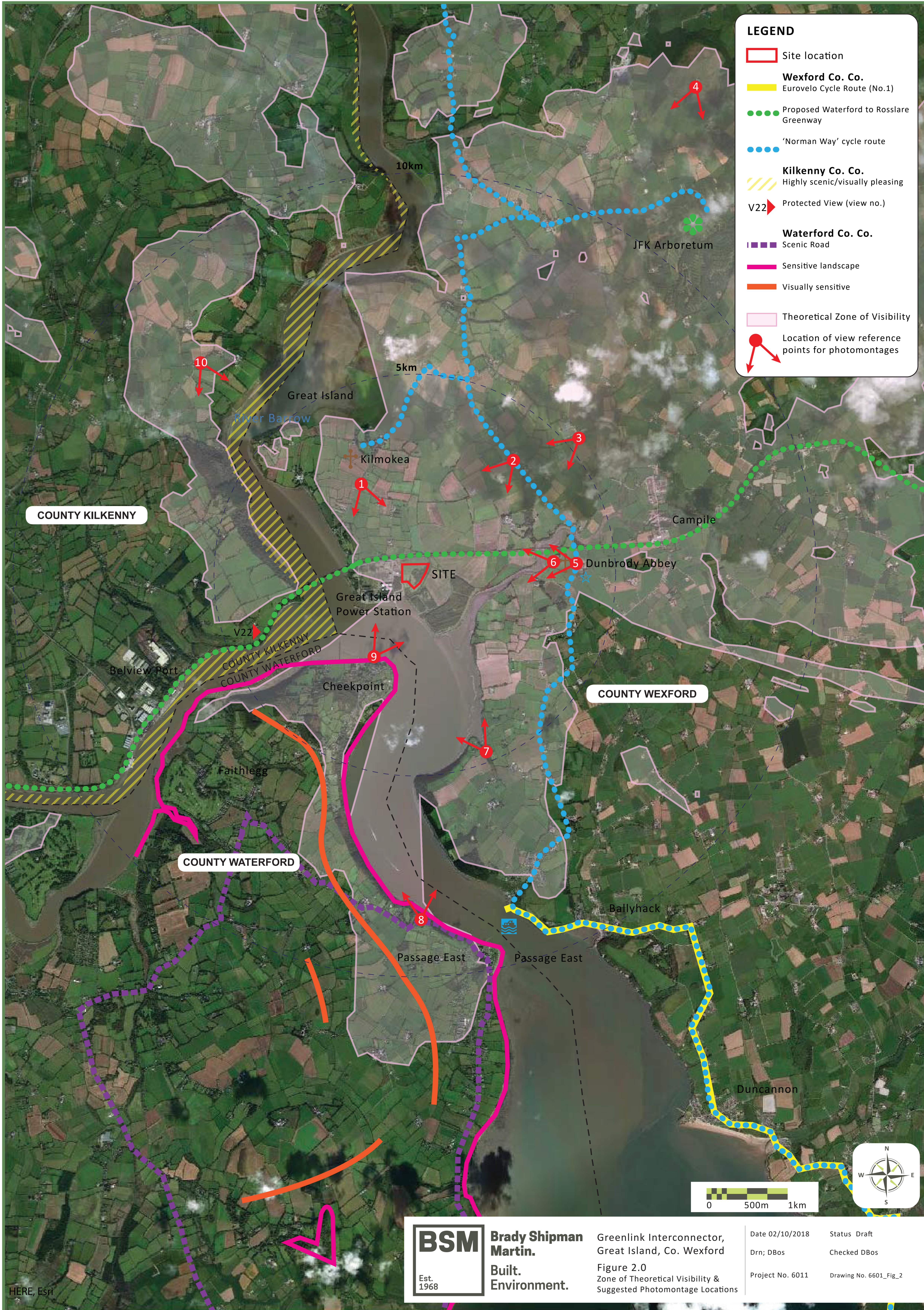
The project will require planning permission in Ireland and Wales. Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. Greenlink is planned for commissioning in 2023.



Sources: Ofgem, TEC Register, 3rd PCI, TYNDP 2016w



VIEWPOINT LOCATIONS



“

Your views

Do you have any other suggestions for a viewpoint location?

”

BIODIVERSITY

Greenlink
INTERCONNECTOR

Surveys will be carried out and the data assessed to ensure that the final onshore elements of the proposal are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Studies cover the landfall site, the preferred cable route and the possible converter station locations.

As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles, and amphibians. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats and invasive species.

The surveys will be used to avoid, reduce and offset any impacts on biodiversity through sensitive design and mitigation measures as required.

“ Your views

Do you know of any local environmental groups that Greenlink should consult?

Are there specific issues you feel should be assessed that aren't currently being assessed?

”



For more information please visit: www.greenlinkinterconnector.eu

CONSULTATION

Greenlink
INTERCONNECTOR



Public consultation is a core part of the development process and ensures that communities in the vicinity of a new proposal have timely and transparent access to information and can engage with developers to influence the final proposal coming forward. We would like to hear what your thoughts and views are on this proposal.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of the interconnector project.

During the development process we will be looking to fully engage with local residents, councillors, businesses and members of the local community to discuss the proposal and any potential impacts and to obtain feedback on key issues.

We intend to make sure the local community can see that its views have been fully considered and incorporated within the final proposal.

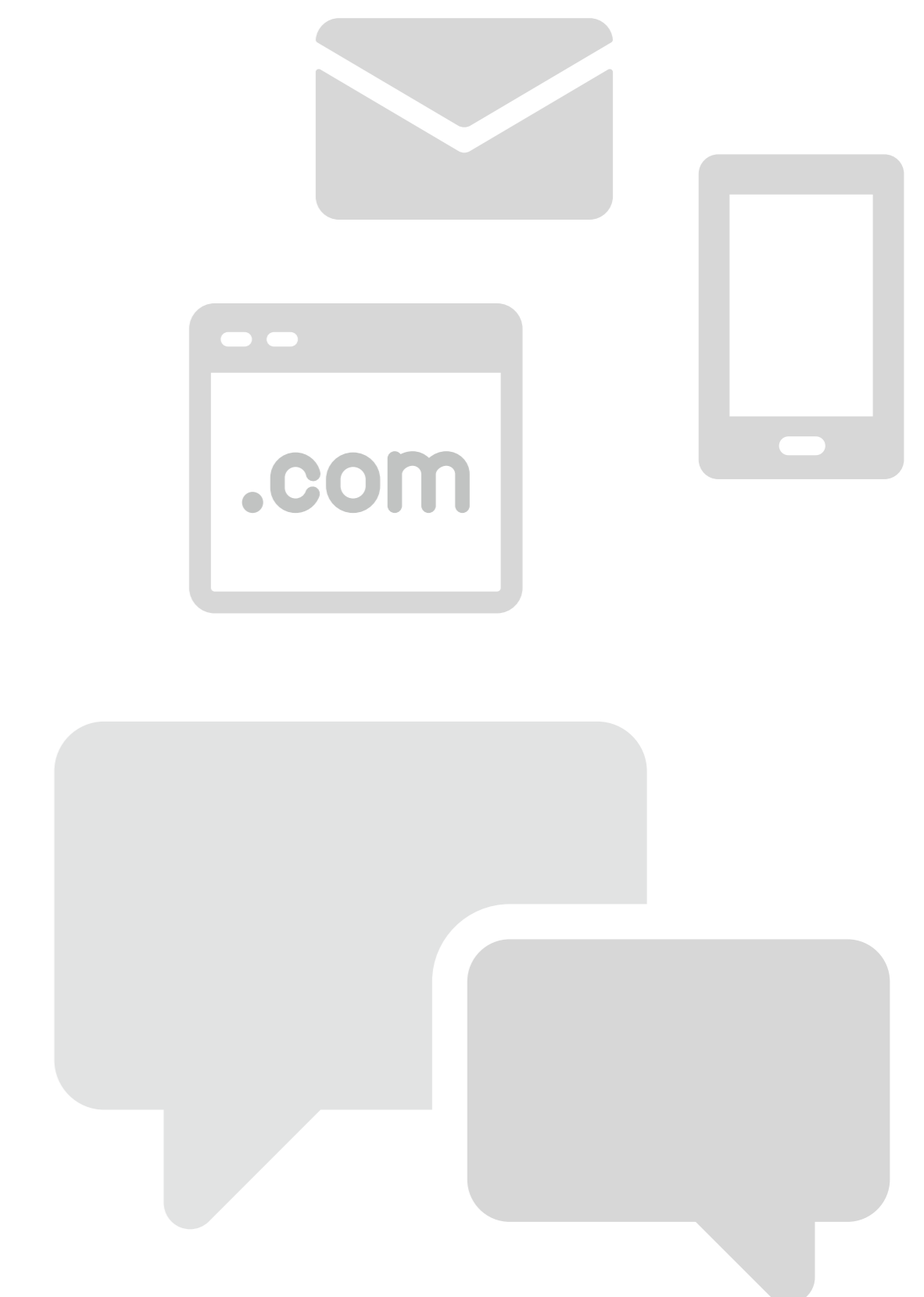
This public exhibition is to allow local residents and stakeholders to view our current plans, hear about project progress, share their views with us, meet the project team and ask questions. We would welcome any feedback that you have now or in the future.

Additional events will be held in due course as the project progresses.



Contact details

If you would like the Greenlink team to keep you directly updated on project news and future consultation events, please leave us your name and contact details on the comment sheet provided.



For more information please visit: www.greenlinkinterconnector.eu

GREENLINK COMPONENTS

Greenlink
INTERCONNECTOR

The key components of the scheme are:

- **Two converter stations** - one near the Great Island Substation in County Wexford (Ireland) and one near the Pembroke Substation in Pembrokeshire (Wales)
- **Two subsea HVDC cables and a fibre optic cable** - the onshore cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

What is an HVDC cable?

- High Voltage Direct Current (HVDC) cables allow for efficient transportation of electricity over large distances and in particular for subsea cables.
- HVDC cables have lower electricity losses than comparable AC cables.
- HVDC cables are suitable for undergrounding both onshore and offshore. There will be no overground cables between the two converter stations.
- One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore.



IMAGE: PRYSMIAN

What is a converter station?

A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa. DC electricity is used for the transmission of electricity over long distances between two converter stations and AC electricity is used within the national transmission and distribution networks.



What is a fibre optic cable?

A fibre optic cable is installed to provide communication between the converter stations for system monitoring and safety purposes.

GREENLINK IN IRELAND

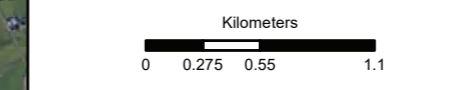
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INTERCONNECTOR



Legend
 ● Indicative Joint Bay Locations
 - - - Emerging Preferred Route

Greenlink
INTERCONNECTOR
 Co-financed by the European Union
 Connecting Europe Facility

PO	2019-01-10	GM	MM	MD
Issue	Date	By	Chkd	Appd



ARUP

Client
Greenlink Interconnector Ltd

Job Title
Greenlink Interconnector

Emerging Preferred Cable Route Ireland

Scale at A2
1:40,000

Job No
246369-00

Drawing Status
Preliminary

Drawing No
SK064

A preferred cable route and converter station site have been identified following consultation with stakeholders and analysis of the results of ongoing environmental and technical work. The preferred cable route and converter station site are shown here.

For more information please visit: www.greenlinkinterconnector.eu

HISTORIC ENVIRONMENT

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets within a study area of 1.5 km from the converter station site and within a 200m study area from the cable route corridor.

Cultural heritage encompasses valued features and remains, including buildings, monuments and archaeological remains. It can also include landscapes shaped by human occupation and design, such as historic parks and gardens.

The importance of cultural heritage is recognised in legislation and planning policy.

The converter station site is located in an area with a rich archaeological and historic heritage but is also located in such a way as to complement the existing industrial surrounds.

Sites of interest in the wider area include Kilmokea Church and Graveyard, Dunbrody Abbey and Castle, Duncannon Fort and the historic Norman landing place at Baginbun Beach.

Given the large number of sites relating to prehistoric activity in this region, there is also a potential for the development to uncover as yet unknown archaeological remains.

Impacts and mitigation

During construction the potential impact of the onshore cables, landfall site and the converter station could be the loss or interference with a site or feature of archaeological, architectural and cultural heritage significance caused by excavations or by construction related vibrations.

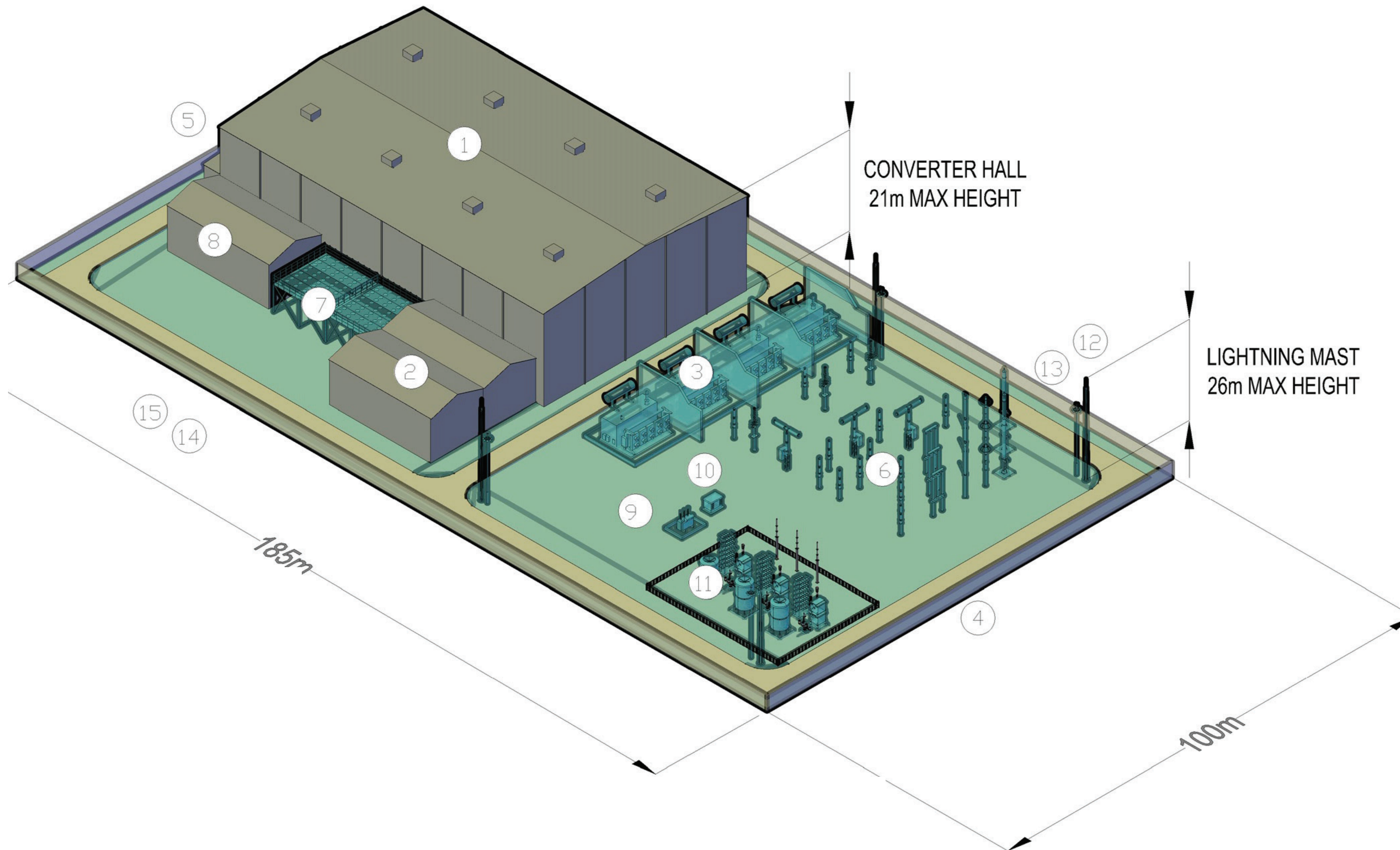
The importance of cultural heritage is recognised in legislation and planning policy

Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects on archaeology and heritage assets within the study area. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

INDICATIVE CONVERTER STATION

Greenlink
INTERCONNECTOR



SITE KEY

1	CONVERTER HALL
2	CONTROL BUILDING
3	TRANSFORMERS
4	AC CABLE TERMINATIONS
5	DC CABLE TERMINATIONS
6	400kV SWITCHYARD
7	VALVE COOLERS
8	SPARES BUILDING
9	STANDBY GENERATOR
10	AUXILIARY TRANSFORMER
11	FILTERS
12	LIGHTNING MAST
13	15m LIGHTING COLUMN
14	6m LIGHTING COLUMN
15	PERIMETER FENCE

For more information please visit: www.greenlinkinterconnector.eu

LANDSCAPE & VISUAL IMPACT

Landscape

This assessment relates to changes in the physical landscape, brought about by Greenlink, which may alter its character and how this is experienced.

Visual

Visual impact assessment relates to changes in the composition of views as a result of changes to the landscape, how these are perceived and the effects on visual amenity.

We will produce visualisations of the converter stations from viewpoints to be agreed with An Bord Pleanála. Viewpoints will be selected to represent the character of the area and particularly important landscape and heritage sites. Proposed locations can be seen on the 'viewpoint locations' board.

Impacts and mitigation

Converter station



A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant and a control building.

Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. However, the layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

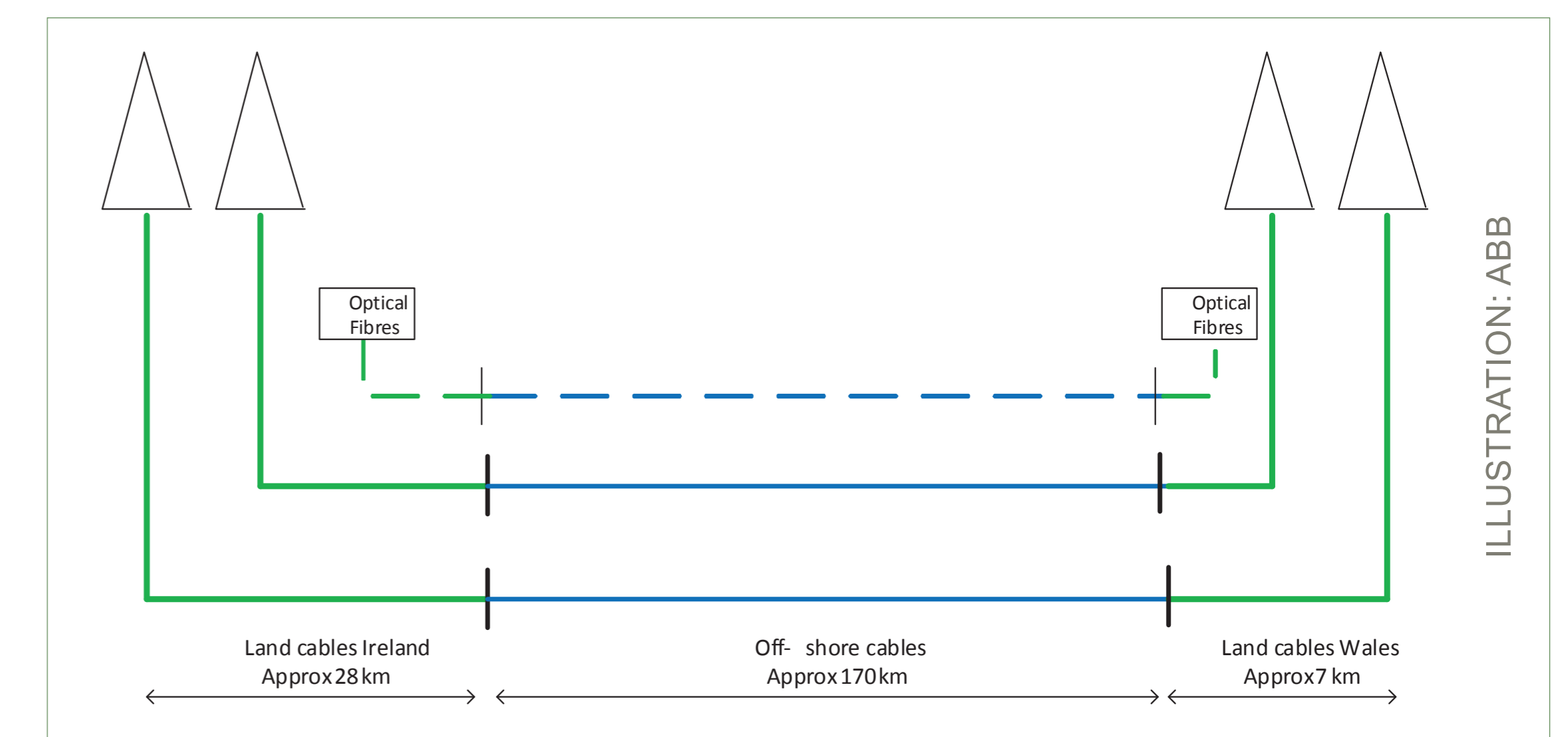
The landscape and visual impact of this will be carefully considered and suitable mitigation, such as landscaping and building finishes, among others, will be proposed.

Cable route

There is the potential for impact from the cable route from vegetation clearance during construction, particularly where the cable route diverges from the road network.

Landscape and visual impacts during cable installation are predicted to be minor and not significant due to the temporary and reversible nature of the change (vegetation clearance) which can be adequately mitigated through replanting.

Following installation and restoration there are not predicted to be any residual landscape and visual effects from the cable route.



Your views ... Do you have any suggestions for viewpoints to be assessed?
What sort of landscaping planting would you like to see in and around the converter station?



For more information please visit: www.greenlinkinterconnector.eu

LOCAL SUPPLY CHAIN

Greenlink
INTERCONNECTOR

Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Construction work on Greenlink is expected to lead to significant expenditure in both Ireland and Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites and will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- Transportation - equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks
- Office and cleaning supplies
- Site security
- Site services, e.g. portacabins and portaloos
- Fencing
- Waste disposal



“ Your Views

Do you know of a local business that could benefit from the Greenlink interconnector project?

Let us know if you want to be added to our list of local suppliers!

”



For more information please visit: www.greenlinkinterconnector.eu

MARINE ENVIRONMENTAL ASSESSMENTS



The aims of the Environmental Impact Assessment will be to identify potential impacts, including:

- Penetration and/or disturbance of the substrate below the surface of the seabed
- Visual disturbance
- Underwater noise changes
- Siltation rate changes
- Hydrological changes
- Physical loss (permanent change)
- Electromagnetic changes
- Possible in-combination effects

Topics covered by the Environmental Impact Assessment will include:

- Protected sites
- Benthic ecology
- Fish and shellfish
- Marine birds
- Marine mammals and reptiles
- Marine archaeology and UXOs
- Coastal processes
- Fisheries
- Shipping and navigation
- Recreation
- Cumulative effects

Mitigation - Once potential impacts have been established, mitigation measures will be proposed to ensure that impacts are minimised or removed.

“ Your views ”

Greenlink has appointed a Fisheries Liaison officer to liaise with local fishing interests. Do you want our Fisheries Liaison officer to contact you?



For more information please visit: www.greenlinkinterconnector.eu

MARINE SURVEYS

The proposed marine cable will run from Freshwater West, Pembrokeshire, Wales to the Hook Head Peninsula in County Wexford, Ireland.

Technical viability

Marine surveys are currently being undertaken and include geophysical and geotechnical surveys.

Geophysical

The geophysical survey will map the seabed and sub-surface geology along the proposed route in order to be able to optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route.

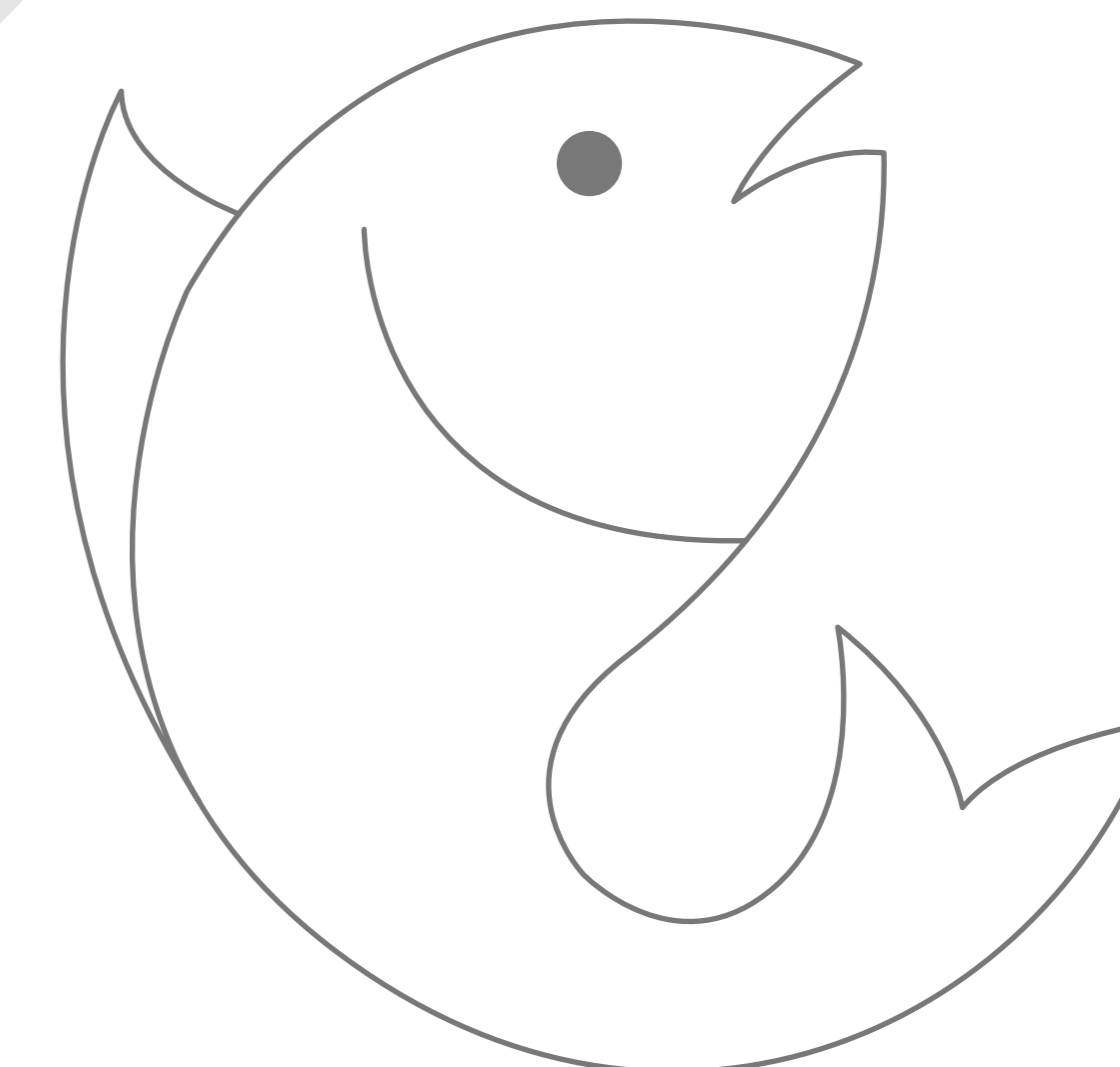
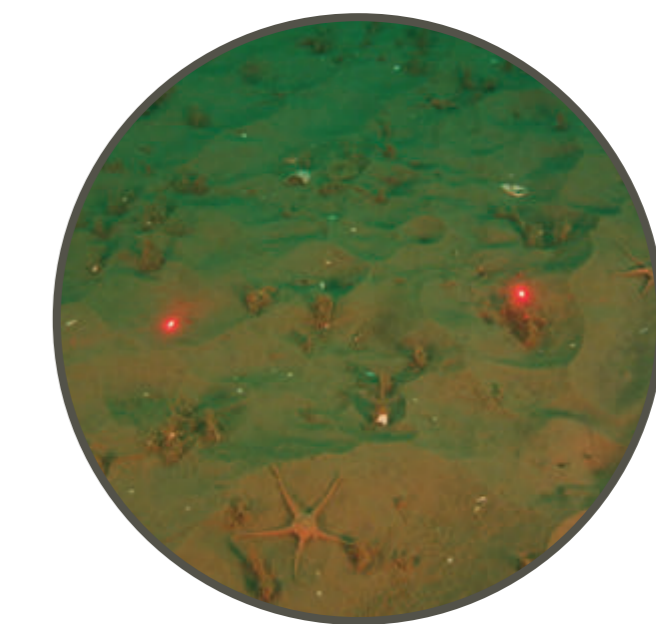
It will also provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical

The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This is being done using a number of techniques, including drilling boreholes.

Environmental impacts

The marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey is being used to inform the Environmental Impact Assessment.



NOISE & VIBRATION

Greenlink
INTERCONNECTOR

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The proposed underground cable routes pass through predominantly rural areas which are likely to experience low ambient existing noise levels. The converter station locations are also located in a rural area but are adjacent to an existing substation with its associated operating noise levels.

Noise surveys and assessment

- The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.
- Noise-sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship etc) and public open spaces (including public footpaths).
- A study area of 300m around the cable route corridor and converter station locations will be considered for potential construction noise impacts and an area of 50m will be considered for potential construction vibration impacts.
- For operational noise, an assessment will be undertaken at sensitive receptors within 300m of the converter station.

Impacts and mitigation

The construction of the converter station has the potential to give rise to temporary noise and vibration impacts. However, given the distance between the converter station locations and sensitive receptors it is likely that any impact will be low.

The construction of the cable route has the potential to give rise to temporary noise and vibration impacts in isolated locations along the route, particularly where directional drilling is required at watercourses and road crossings.

There will be noise from the electrical and mechanical plant during the operation of the converter station, most of which will be located indoors in the converter hall.



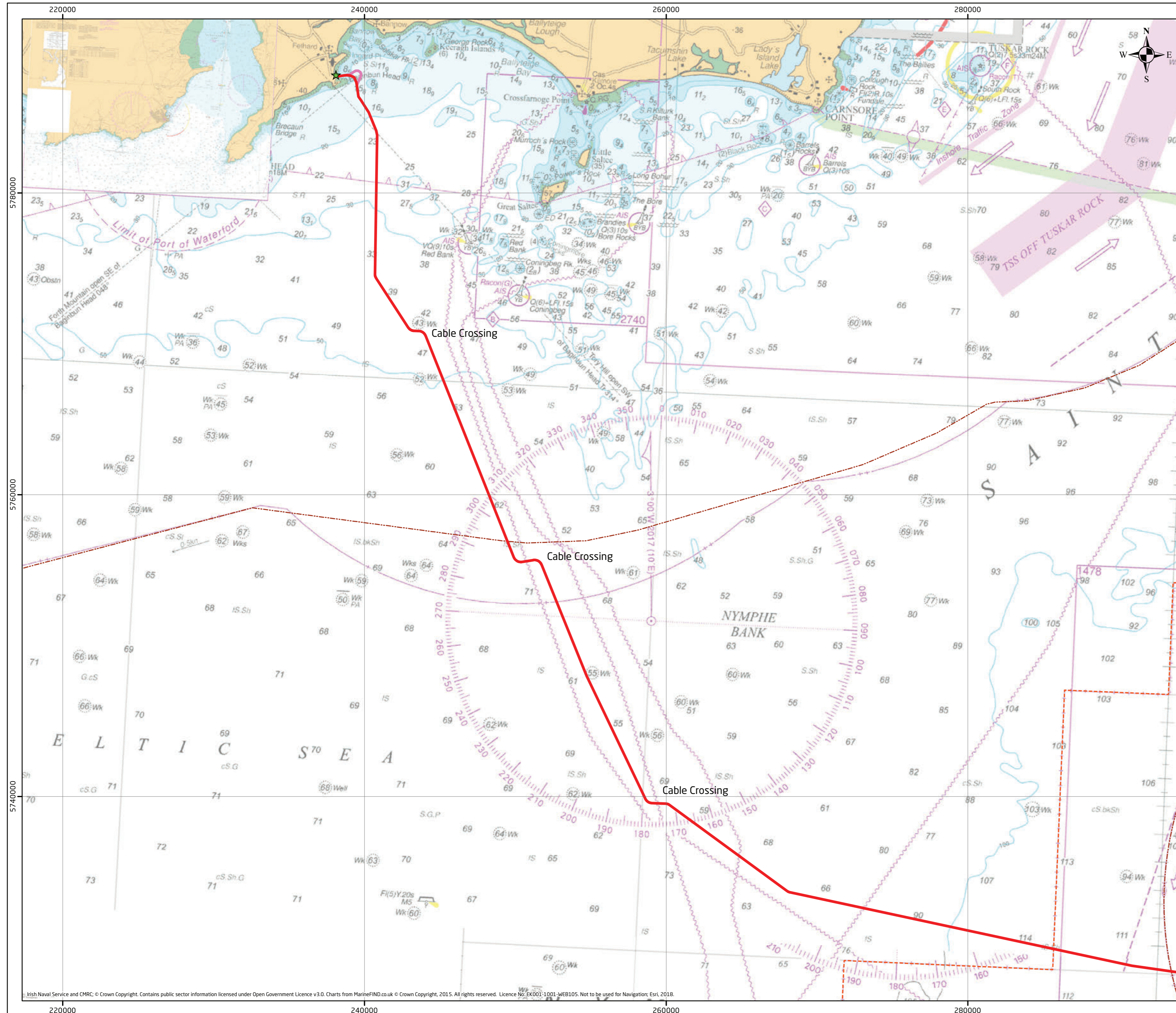
Your views

Do you have concerns regarding noise and vibration you wish to be assessed?



For more information please visit: www.greenlinkinterconnector.eu

OFFSHORE IRELAND ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Irish Territorial Waters

- Legend**
- ★ Selected Landfall
 - Median Line
 - 12nm Territorial Sea Limit
- Proposed Routes**
- Route A
 - Option D

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.

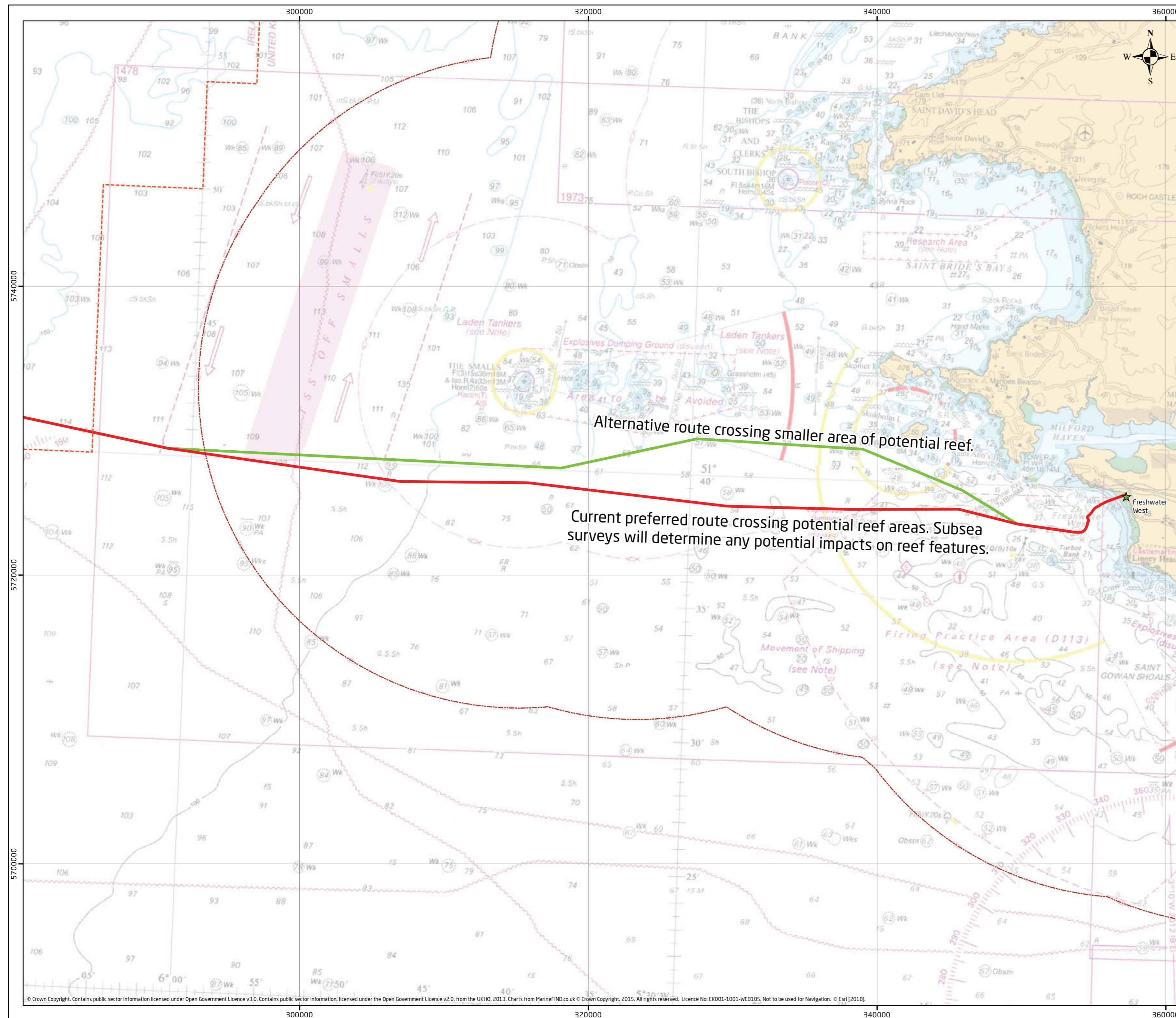


Date	Monday, October 22, 2018 12:13:12
Projection	WGS_1984_UTM_Zone_30N
Spheroid	WGS_1984
Datum	D_WGS_1984
Data Source	INS, CDA, ESRI, MARINEFIND
File Reference	H:\P1975\MudPublic_Exhibitions\Offshore_Ireland_Route_Options_A2.mxd
Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

A preferred subsea route has been identified following desk-based assessments supported by the results of early subsea surveys.

For more information please visit: www.greenlinkinterconnector.eu

OFFSHORE WALES ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Welsh Territorial Waters

Legend

- ★ Selected Landfall
- Median Line
- 12nm Territorial Sea Limit
- Route A
- Route E

There are currently two subsea routes being assessed off the Welsh coast. The red and green routes under assessment are shown here.

Initial survey data suggests that both routes have environmental constraints and consultation and additional survey work is being undertaken to see if there is an alternative route between the two options.

The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

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NOTE: Not to be used for Navigation

Date	Monday, October 22, 2018 12:15:45
Projection	WGS_1984_UTM_Zone_30N
Spheroid	WGS_1984
Datum	D_WGS_1984
Data Source	CDA, UKHO, ESRI, MARINEFIND
File Reference	\\P1975\Mxd\Public_Exhibitions\Offshore_Wales_Route_Options_A2.mxd
Created By	Jennifer Arthur
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PLANNING

	Wales	Ireland
Converter station	Major Development - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Major Development - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

IMPORTANT PLANNING UPDATE:

ENVIRONMENTAL IMPACT ASSESSMENT

Since the previous round of public consultations Greenlink Interconnector Limited has decided to undertake a voluntary Environmental Impact Assessment (EIA) in support of the Greenlink project. This will result in the application documents facing an increased level of scrutiny from stakeholders. While it is recognised that Greenlink does not require an EIA, we have decided to undertake a voluntary EIA in recognition of the length of the permitting process and the evolving interpretation of the EIA regulations within Ireland.

PROJECT TIMELINE



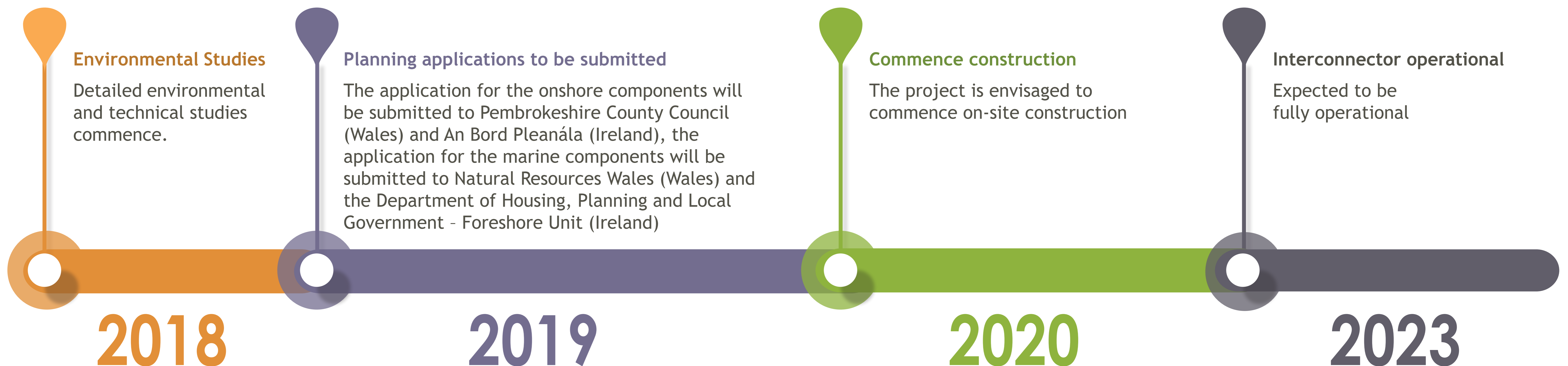
A large infrastructure project such as Greenlink takes several years from development to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design have been put together, permits and licences will need to be obtained from: Pembrokeshire County Council, Pembrokeshire Coast National Park, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will need to be constructed, which could take around 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023



For more information please visit: www.greenlinkinterconnector.eu

SITE ASSESSMENT - OVERVIEW



As part of the development process, a series of environmental and technical assessment studies are being carried out to establish the viability of all the proposed sites and cable routes and to consider any potential impacts and opportunities arising from the development.

Onshore studies include assessments on:

- Biodiversity
- Historic environment
- Landscape & visual impact
- Flooding & hydrology
- Geology & hydrogeology
- Noise & vibration
- Traffic & transport
- Electromagnetic fields (EMFs)
- Agricultural land
- Socio-economics & human health
- Air quality & climate change
- Cumulative & transboundary effects

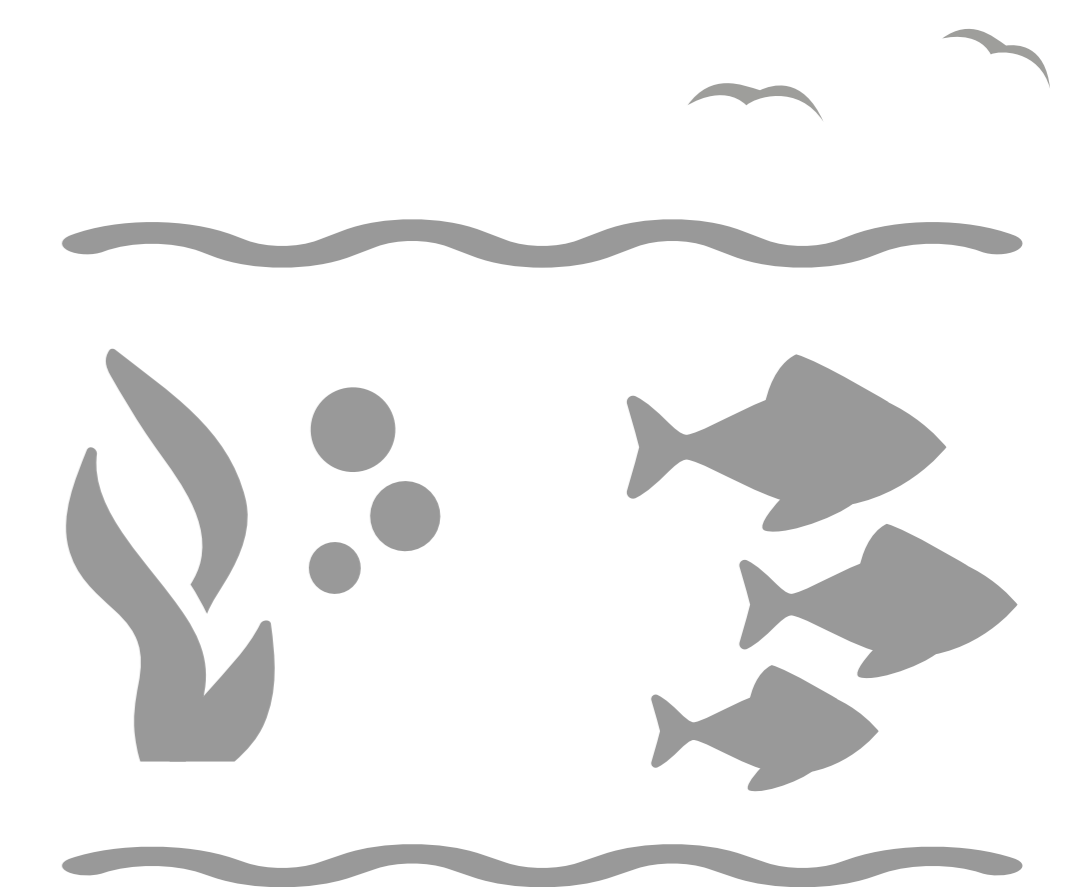
Offshore studies include assessments on:

- Geophysical & geotechnical surveys
- Marine biodiversity (benthic/seabed environment, fish and shellfish, marine birds, marine mammals and reptiles etc)
- Protected designations
- Commercial fisheries
- Shipping & navigation
- Aviation & military
- Marine archaeology & UXOs

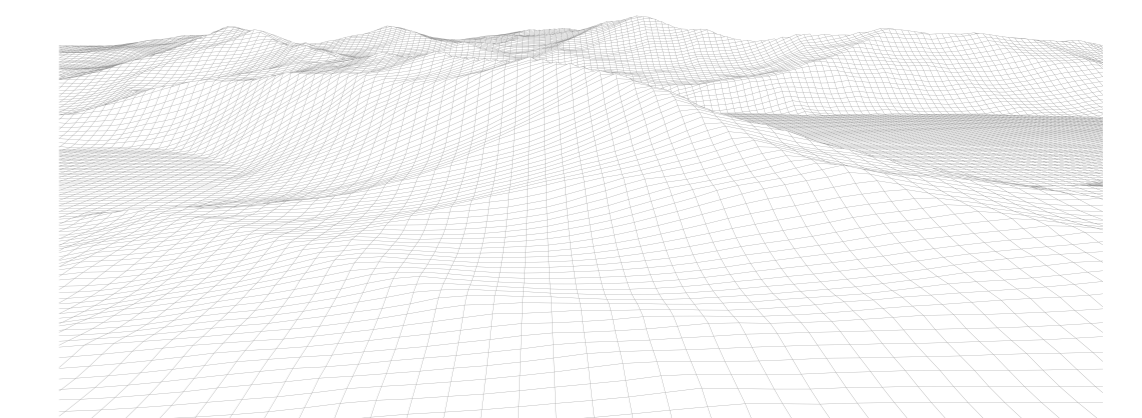
Further information on the nature of these assessments is available within the project Environmental Scoping documents.



Noise & vibration



Marine biodiversity



Landscape & visual impact

For more information please visit: www.greenlinkinterconnector.eu

SOCIO-ECONOMICS



This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects to the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy.

Local tourism



The Hook Head Peninsula has a rich built heritage and attractive beaches, and it is an important tourist destination in Ireland's Southeast. Tourist attractions close to the cable route include Dunbrody Abbey, Loftus Hall and Baginbun Beach and Martello Tower. The Ring of Hook Coastal Drive is a popular route which may partially coincide with the cable route, and appropriate traffic management will be required to minimise disruption to tourist traffic during the cable construction within the roadway.

The cable will be horizontally drilled under the beach at the landfall, with the construction area set well back from the beach and cliffs. It is not envisaged that the construction work will have adverse effects on tourist activity at the beach.

Potential impacts



There will be temporary impacts on road traffic during the cable construction, with the requirement for partial or full road closures and diversions, for short periods.

Direct and indirect employment will be created for both the construction and operational phase.

The construction of the cables and converter station have the potential to have a negative impact on residential amenity in the immediate vicinity of the construction activities. Once the cables and converter station are operational, the potential for negative impact on residential amenity is minimal.

Your views

Please let us know of any local tourism business or group we need to consider and involve in project discussions.

Are there any particular local events that attract tourists that Greenlink needs to be aware of?



For more information please visit: www.greenlinkinterconnector.eu

TRAFFIC & TRANSPORT

Greenlink
INTERCONNECTOR



The traffic assessment will address the traffic impacts on the road network from the construction and operation of the Greenlink project. The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

The traffic assessment will include a review of the existing traffic patterns and an estimation of the traffic volumes which will be generated by the construction of the onshore cable, the landfall site and the converter station. The traffic generated by the construction workforce and by the transport of materials and equipment will also be predicted.

The potential disruption to the road network during the installation of the cables and the availability of alternative routes will be assessed. The traffic distribution pattern on the local road network during construction will be examined and impacts determined.

We will work hard to limit the impact of traffic and transport on local residents and businesses as much as possible and recommendations will be made to mitigate any potential traffic impacts on the road network.

Potential impacts and mitigation

There is potential for traffic impact from Greenlink during the construction phase which will temporarily give rise to additional traffic on the road network.

Installation of the cables may require partial or full road closures and traffic may have to use alternative routes. Where the cable route diverges from the road, the impacts will be reduced.

Once the Greenlink project is in operation, the potential for a traffic impact is minimal. The level of operations and maintenance workforce will be low, so that the impact on any particular road will be insignificant.



Traffic Management Plan (TMP)

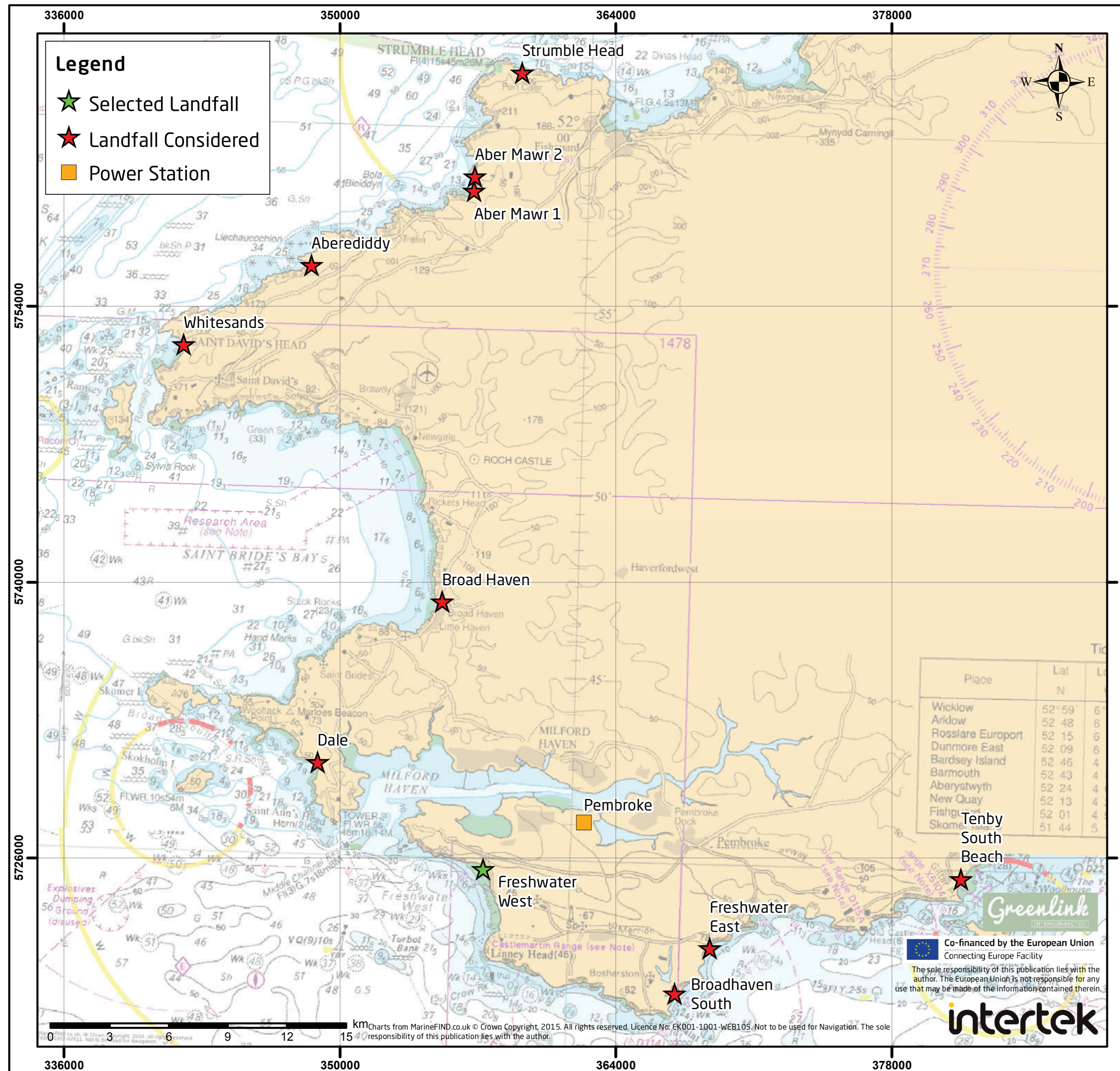
As part of the planning application process, an outline Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink.

Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Your views
Do you have any specific concerns? Are there local organisations (businesses, schools etc) that we need to involve in the Traffic Management Plan?

For more information please visit: www.greenlinkinterconnector.eu

WELSH LANDFALLS



The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

WHY GREENLINK?

Greenlink is a new 500 MW interconnector between Ireland and Wales

Ireland is currently connected to Great Britain by two electricity interconnectors, which provide a means of transferring electricity between the two countries - the East West Interconnector (EWIC), which connects County Dublin to North Wales, and the Moyle interconnector between County Antrim, Northern Ireland and Ayrshire, Scotland.

However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Ireland and Great Britain, and within Europe as a whole. This will allow electricity to flow more easily between where it is generated and where it is needed, improving the security and reliability of our energy supplies and supporting the integration of greener, low carbon energy sources in an affordable way.

There is a strong need and significant support within Europe for additional interconnection. The 'Energy Union' is a strategy launched by the European Commission in 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

supporting the integration of greener, low carbon energy sources in an affordable way



Supporting Renewable Energy



Improving Energy Security



Fighting Climate Change



Benefiting Consumers

For more information please visit: www.greenlinkinterconnector.eu



PUBLIC EXHIBITION

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Greenlink brings significant benefits on both sides of the Irish Sea for employment, energy security and the integration of low carbon energy sources.

We are committed to working with local residents and stakeholders to design and develop a project that is of the highest standard. To that end we would welcome your input throughout the development process.

Further information is available on the project website: www.greenlink.ie

To find out more and to share your views, please come along to our public exhibitions.

Our next public exhibition will be held on:

**THURSDAY
28th March
4-8pm**

**Parocial Hall
Ramsgrange
Co Wexford
Y34 YP70**

Appendix 9

Public Exhibition
– December 2019



PUBLIC EXHIBITIONS

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TUES 10 Dec
4-8pm

Parochial Hall
Ramsgrange
Co Wexford Y34 YP70

WEDS 11 Dec
4-8pm

Star-of-the-Sea
Pastoral Centre
Duncannon
Co Wexford Y34 R668

THURS 12 Dec
1:30-6.30pm

St Mary's Hall,
(Corner Main St
and Ralph Road)
Fethard-on-Sea
New Ross
Co Wexford Y34 HH58





Scouts taking part in the Ballykelly scouts bushcraft camp in Foulksmills.



Meave O'Connell and Luka Pranciliauskis, New Ross scouts.



Harry Long, Josh Shannon, Alex Breen and Eanna Grennan, Ballykelly scouts.

Motorist had taken cannabis

DRIVING with cannabis in his system led to the loss of his licence for a year when the case of Pearse McDermott (31) from 4 Newtown, Ramsgrange, Duncannon, was considered at Wexford District Court.

The same motorist had his disqualification extended to two years after he was also convicted of driving without insurance.

McDermott came to the attention of Sergeant Alan Hayes on December 1 in 2017 at a checkpoint on O'Hanrahan Bridge in New Ross. The defendant failed a roadside drug swab test.

The court was told that he had a certificate allowing him to use cannabis in Alaska where he sustained a crushed hand injury.

However, as Judge Brian O'Shea pointed out, no such certificate could justify drug driving.

The disqualification came with a fine of €200 for the cannabis offence and a further €200 for having no valid insurance.

Remembrance service at Cooney's

FRANCES and Joanne Cooney extend an invitation to all bereaved families to join them at their funeral home in New Ross on Sunday, December 1, at 3 p.m. for their annual Christmas Remembrance Service to remember our deceased loved ones.

A short remembrance service will take place followed by refreshments in the pastoral centre. Remembrance cards available on the day.

Drink driver spared a disqualification

A drink drive suspect who failed to provide a breath sample at the roadside was spared a disqualification when her case was heard by Judge Brian O'Shea.

Mary Murphy (60) of 12 Irishtown Heights, New Ross, entered a plea of guilty at the District Court to an offence committed on May 18 last year.

The court was told how Ms Murphy was found in an Opel which was parked on the N30 road at Bosheen in New Ross at 2.20 a.m. on the date in question.

The lights were on and the engine was running when investigating Garda Sean O'Neill approached the stationary vehicle.

He recalled in his evidence to the court that she woke up when he opened the door of the Opel.

He produced roadside breath test apparatus but no reading was forthcoming because she sucked on the pipe instead of blowing.

Questioned by defending solicitor Gerry Flynn,

the garda accepted that Ms Murphy was pulled up that night about 600 metres from her home.

He also agreed with Mr Flynn that she called to the barracks the next day to apologise for what had happened.

The solicitor described the defendant as an absolutely decent woman, in full time employment some miles from the town of New Ross in a rural setting.

The garda witness accepted that it would be a surprise if Ms Murphy came to adverse garda attention again.

Judge Brian O'Shea concluded that what happened was clearly out of character on the part of someone with a good work ethic.

A conviction was recorded for failure to give the breath sample with a fine of €400 but the judge declined to add a disqualification.

'I presume she understands the close shave she has had,' he commented on his decision not to ban Ms Murphy from driving.

Teenager sprayed graffiti in town park

A TEENAGER who sprayed graffiti on walls in New Ross Town Park was ordered to come up with compensation money or face a conviction for criminal damage.

Ben Skipp (19) of 15 Glenbarra, New Ross, appeared at the District Court in Wexford where he was represented by solicitor

Eric Furlong.

The court learned that the accused, along with two others, painted the walls on August 15.

Mr Furlong entered a guilty plea and stated that his client sat the Leaving Cert last year.

Judge Brian O'Shea asked him whether Skipp took art as one of his subjects in the Leaving.

Solicitor suggested in response that art was more of an extra-curricular interest for the accused.

The young defendant was told to produce €100 compensation.

If the money is paid, then he will be granted the benefit of the Probation Act, with the prospect of a €200 fine if he fails to cough up.

Greenlink
INTERCONNECTOR



PUBLIC EXHIBITIONS

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Co Wexford Y34 YP70

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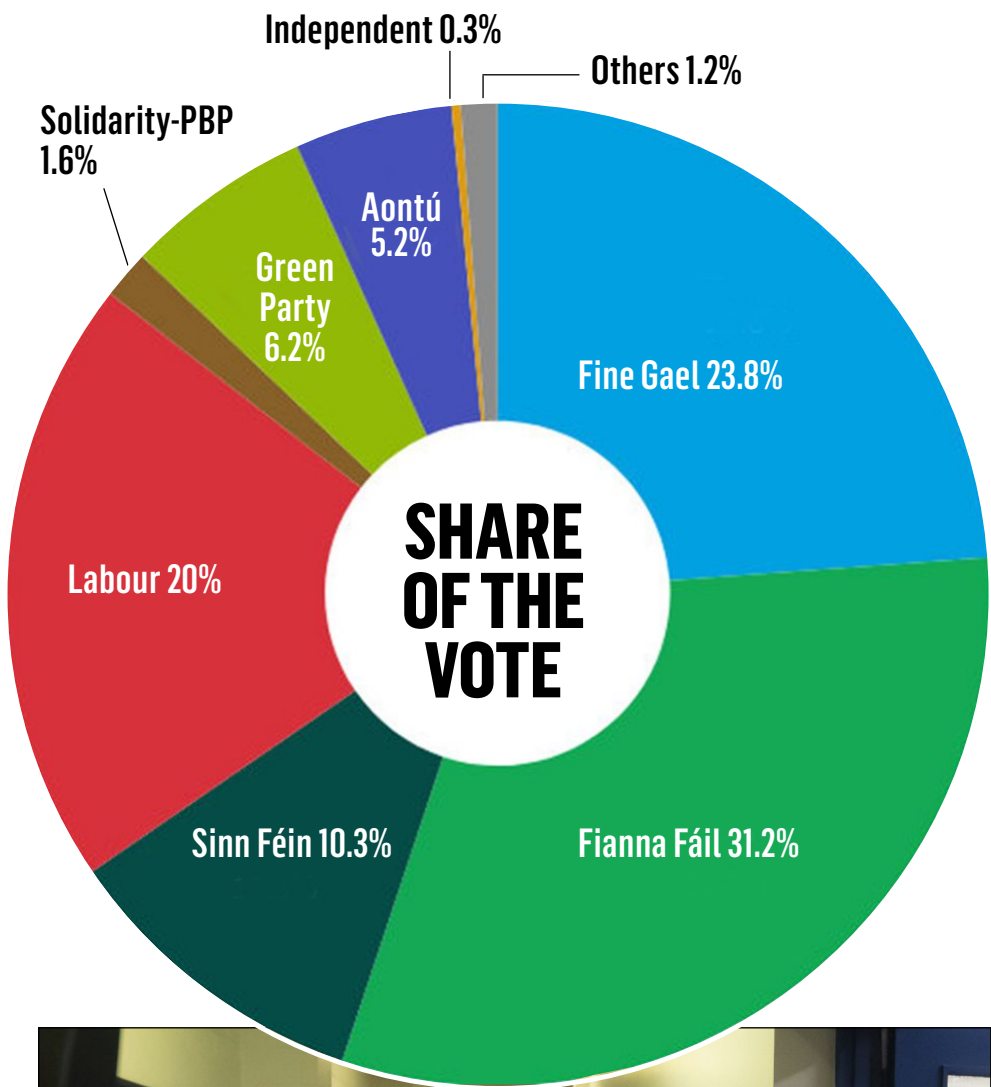
Star-of-the-Sea
Pastoral Centre
Duncannon
Co Wexford Y34 R668

THURS 12 Dec 1:30-6.30pm

St Mary's Hall,
(Corner Main St and Ralph Road)
Fethard-on-Sea
New Ross
Co Wexford Y34 HH58



George Lawlor and Malcolm Byrne share a joke at the St. Joseph's count centre in Wexford on Saturday evening.



Verona Murphy speaks to the media in the Wexford count centre after her elimination.



APEX

SPORT • HEALTH • LEISURE
PHONE NO: 051 445522



CHARITY 24 HOUR SPIN & SWIM

Friday 6th December @ 10am
until Saturday 7th December @ 10am



On Friday 6th December 2019,
The Apex will attempt to keep 4 spinning bikes and 2 swim lanes occupied for 24 hours straight to raise money for 2 local charities.

If you would like to get involved in this challenge and are willing to spin or swim for at least 30 mins, please give the gym or reception staff your contact details and we will be in touch or if not just pop in and throw some money in the buckets to show your support.

You can also email your details to gym@theapex.ie

ALL MONIES RAISED WILL BE SPLIT BETWEEN THE NEW ROSS COMMUNITY HOSPITAL & NEW ROSS MEALS ON WHEELS



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WEDNESDAY
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PLEASE NOTE CHANGE OF VENUE
Fort Conan Hotel
Duncannon, New Ross
Co. Wexford Y34 A522

THURSDAY
12 Dec
1:30-6.30pm
St Mary's Hall,
(Corner Main St and Ralph Road)
Fethard-on-Sea
New Ross
Co Wexford Y34 HH58

Girl Guides get tek-nical

WITH more and more jobs being created in the science, technology, engineering and maths (STEM) sectors, the onus is on ensuring both boys and girls acquire the skills needed to pursue careers in these fields.

And so it was that Michelle Goff, one of the leaders of Clonard Girl Guides, received an unexpected phone call from Wexford Library, offering an opportunity too good to turn down.

'We got a phone call from Lauren at the library saying they had money from a grant which they wanted to use to get girls involved in technology,' Michelle explains.

This led to the Clonard Girl Guides being invited to TEK

Central for a three-week course in comic life, robotics and electronics taught by Frank and Niamh Turner.

The course was catered specifically for the girls, incorporating topics they'd covered in Girl Guides and enabling them to get some of their badges while also learning about STEM.

One of the more popular tasks they undertook was the creation of their own magazine which saw them edit and put together a magazine that included anti-bullying content. As a reward for their work, they each received a copy of the magazine to bring home.

Michelle paid special tribute to Niamh and Frank who she said went to great lengths to

ensure the girls enjoyed themselves.

'Frank and Niamh were great; they added extra bits to the course, including nanobots which we built and by the third week had them walking around the room and everything. The girls had a ball, they got into it in a big way.'

Not only that, the TEK Central hosts have promised to visit the Clonard Girl Guides centre and present classes to the groups who didn't get to take the three-week course.

For Michelle, the experience was an incredibly positive one and she said she and the other leaders would continue to encourage their guides to foster an interest in the STEM topics.



Clonard Girl Guides in TEK Central with Frank and Niamh Turner learning about comic life, robotics and electronics.

Do you need support at home?



Bluebird Care
Providing safe quality care at home
and in your community

For more information

Call: 053 915 39 33 or Email: wexford@bluebirdcare.ie



bluebirdcare.ie



Mary D'Arcy, ICA County Federation president, Breda Doyle and Michael Jordan, Ferns Diocesan Lourdes Assisted Pilgrimage Fund, and Esme O'Connor, ICA, at the cheque presentation of €1,200 to the Ferns Diocesan Lourdes Assisted Pilgrimage Fund.

Country women generously donate to local organisations

TAGOAT Day Care Centre and Ferns Diocesan Assisted Pilgrimage to Lourdes each received a cheque for €1,200 at the November meeting of Wexford ICA Federation, held in the Riverbank House Hotel. This money was raised from ICA Fun Run/Walks, organised by Anne O'Connor, sports officer, and held on September 22 at various venues throughout Co Wexford in atrocious weather conditions.

In addition, Kilmore Quay, Ballyanne, Adamstown, Clonroche, Bree, Wexford Town, Inch and Bunclody guilds were the recipients of An Grianan scholarships bought from proceeds of the 'ICA has got Talent' competition.

The ICA Memory Tree was on display and can be seen in New Ross Library over the Christmas season. Bree ICA were congratulated on winning 'Best community project to improve Accessibility to Infrastructure' for the Bree ICA Garden entry. Mary Somers won the Autumn Foliage Arrangement, Marian McCauley, Bree, was winner of Best Lemon Drizzle Cake, and will represent Wexford at the National Sugarcraft Show in February. Best Carrot and Pineapple Cake with Coconut, a competition sponsored by Gem Pack Foods, was won by Mary D'Arcy, Ballyfad. She will represent Wexford at the National final in An Grianan next March.

Greenlink

INTERCONNECTOR



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Co Wexford Y34 HH58



VISIT OUR NEW LUXURIOUS SALON

€20* BLOW DRY
*CURLY BLOW DRY €6 EXTRA
& LUXURY KERASTASE TREATMENT

REDEEMABLE 1-30 NOVEMBER 2019



Terms & Conditions: A charge of €20 will apply to avail of this promotional offer. For a curly blow dry an additional charge of €6 will apply. This offer is redeemable in Peter Mark Wexford only. This offer is only available all week from 1st to 30th November 2019. This offer cannot be used in conjunction with any other discount or promotion. Peter Mark reserves the right to change the terms and conditions of this offer.

**North Main Street, Wexford. Tel: (053) 915 2120.
Late Nights: Thursday & Friday.**

peter mark



7th cxi
in Customer Experience
*Customer Experience survey 2019.

ALL ABOUT THE HAIR

AN EVENING TO REMEMBER



Deirdre Whitty, Ann Moran and Suzanne Finn at the function in Hotel Rosslare for former staff of the Great Southern Hotel celebrating 50 years since the Great Southern's opening.

Just 'handful' of public comments on traffic plan

By **MARIA PEPPER**

Only a handful of public submissions have been received by Wexford District Council on traffic direction changes around the town during a trial period over the past six weeks.

The revised traffic plan will be reviewed by councillors in December, before a final draft goes to official public consultation.

Independent councillor Leonard Kelly asked for an update on the new arrangements, saying it is an ongoing issue in the town and he is receiving daily enquiries about it.

Cllr. Kelly asked when the results of public submissions on the trial period will be made available.

Ms. Laffan said a 'handful' of email submissions were received during the trial period.

'You have 20,000 people living in Wexford with about another 30,000 using the town and you get six responses', said Director of Services, Tony Larkin, adding that he would hate the whole focus to be based on those six.

Ms. Laffan said draft byelaws will have to be drawn up and passed before any changes can

be officially implemented.

She said the proposed draft bye-laws will be presented at the December meeting and following the approval of members, will go out to public consultation.

'We will be coming back to you following that process. The consultation period will be publicised in the media and people can make written submissions', she said.

She said the decision to block traffic from Lower Rowe Street into Church Lane during daytime hours was working extremely well and has improved the flow of traffic through Key West.

Mayor of Wexford, Cllr. George Lawlor asked if councillors could decide not to include something in the byelaws if they felt it hadn't worked and was told they could.

Fine Gael councillor John Hegarty said the traffic situation in town is getting worse and is a big issue for people. A contributory factor is the increase in the number of cars but that seems to have been lumped in with the idea that the Council is to blame.

'If we ask the public for their views then we should take what

they say seriously', he said.

Cllr. Kelly if the trial changes would stay in force for Christmas and was informed by Ms. Laffan that they would, unless the members had a different view at the next meeting.

Mr. Larkin said he would have the view that it might not be a good idea to 'destabilise the situation' just before Christmas, with the consultation period running into the New Year.

Mr. Larkin said the deadline for submissions on the trial is November 29 but there will be another consultation process on the draft byelaws.

Ms. Laffan told Independent councillor David Hynes that a proposal to remove the right turn from Henrietta Street onto the quay, has not yet been implemented. 'There is a lot of concern about that', said Cllr. Hynes.

Responding to Labour councillor Maura Bell about a promised increase in disabled spaces in the the north end, to compensate for the removal of existing spaces in the area, Ms. Laffan said there are two new spaces in Selskar Street, two in Common Quay Street and another two on the way in Allen Street car park and South Main Street.

Greenlink
INTERCONNECTOR



PUBLIC EXHIBITIONS

Greenlink is a proposed electricity interconnector that will link the Irish electricity transmission system in Wexford with that of GB via underground and subsea cables.

It is proposed that the subsea cables will come onshore underground at Baginbun Beach (under the existing beach), carry on underground in the direction of Great Island Substation, where they will connect to a new purpose-built converter station located nearby.

Greenlink brings significant benefits on both sides of the Irish Sea for employment, energy security and the integration of low carbon energy sources.

We are committed to working with local residents and stakeholders to design and develop a project that is of the highest standard. To that end we would welcome your input throughout the development process.

Further information is available on the project website: www.greenlink.ie

To find out more and to share your views, please come along to our public exhibitions

TUES 10 Dec 4-8pm

Parochial Hall
Ramsgrange
Co Wexford Y34 YP70

WEDS 11 Dec 4-8pm

Star-of-the-Sea
Pastoral Centre
Duncannon
Co Wexford Y34 R668

THURS 12 Dec 1:30-6.30pm

St Mary's Hall,
(Corner Main St and Ralph Road)
Fethard-on-Sea
New Ross
Co Wexford Y34 HH58

Anger over illegal parking at courthouse

Independent councillor Leonard Kelly has called for additional traffic warden resources to be put in place to tackle illegal parking on driveways, paths and roads around Wexford Courthouse.

Cllr. Kelly told a Wexford District Council meeting that he was contacted by local people complaining that 'the amount of parking on footpaths and double yellow lines has become ridiculous'.

One local resident with mobility issues has to use the footpath opposite the court to get to the nearby crossing but finds the path blocked by cars that are not only parked on double yellow

lines but also up on the pathway.

In a dangerous manoeuvre, the person has to attempt to cross the road at the ramp as it is the only place level with the path.

Cllr. Kelly's motion was passed unanimously at the meeting, with an agreement that a carrot and stick approach might improve the situation.

The Council has decided to look at the possibility of introducing reduced daily rate parking charges in the public car park behind the courthouse as well as increasing patrols by traffic wardens, especially on days that the court is in session.

WELCOME TO THE EXHIBITION



Welcome

Welcome and thank you for taking the time to come to this public exhibition for the Greenlink Interconnector project (Greenlink).

We have prepared the information on display here today to help you find out more about our work on Greenlink.

Members of the project team are here to answer your questions.

About the developer

Greenlink is being developed by Greenlink Interconnector Limited.

Greenlink Interconnector Limited is owned jointly by Element Power Holdings, part of Hudson Sustainable Investment, and Partners Group on behalf of its clients. Hudson Sustainable Investment is an independent investment management firm with a strong track record and expertise in investing in and developing sustainable energy infrastructure projects in Ireland, the UK and internationally. Partners Group is a global private markets investment management firm with investment programs under management in private equity, private real estate, private infrastructure and private debt.

Greenlink Interconnector Limited is bringing private capital to the project and will assume the majority of the project risks.

For more information please visit:
www.greenlink.ie



Your Views

We are very interested to hear your views, so please feel free to fill in a comments form and drop it in the box provided before you leave.



 Co-financed by the Connecting Europe Facility of the European Union

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Greenlink
INTERCONNECTOR



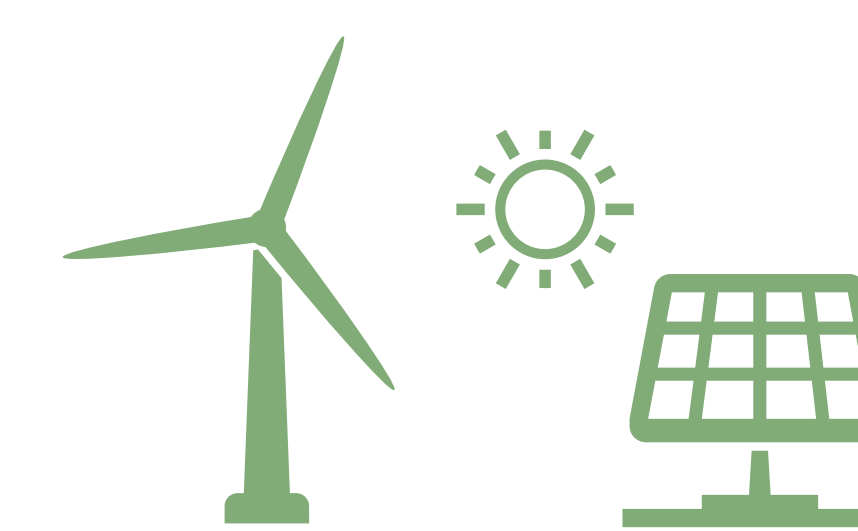
380,000

Potential to power 380,000 homes*



Investment

€400m of private capital investment for Ireland and Wales



Energy

Supports the growth and integration of low carbon energy



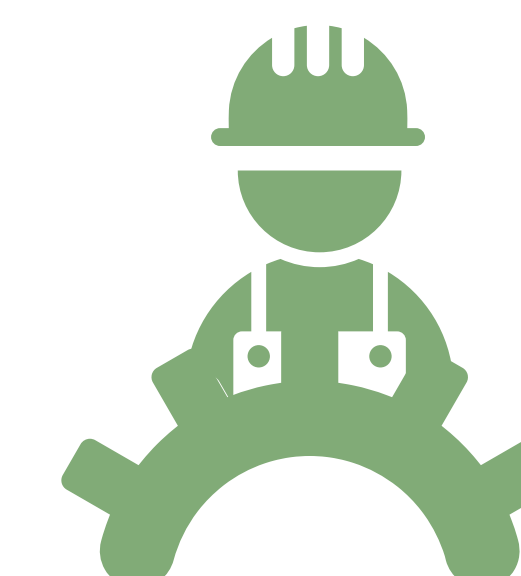
Security

Enhances the security of supply for electricity consumers



Value of Money

Downward pressure on electricity bills



Jobs

Jobs and knock-on economic benefits during construction

Regional investment and jobs

Greenlink represents €400m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

Benefits for Ireland and Co. Wexford

Greenlink will provide additional transmission network capacity, reinforcing the electricity grid in Ireland. It will also offer valuable regional investment to Ireland and Co. Wexford, including jobs and knock-on economic benefits during construction.

For more information about opportunities for local businesses, please see our 'Local Supply Chain' board later in this exhibition

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures - Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

IRELAND



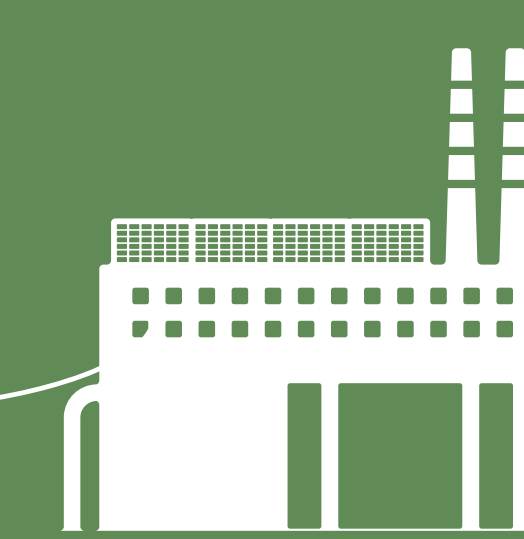
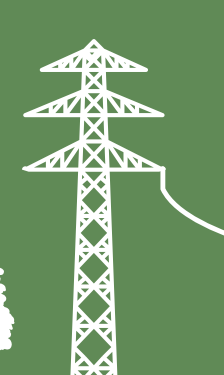
250

jobs in Ireland during construction



Jobs

20 permanent Irish jobs



Grid

Reinforce electricity grid

THE PROPOSAL

Greenlink is a proposed subsea and underground electricity interconnector cable between the existing electricity grids in Ireland and Great Britain (GB), with a nominal capacity of 500 megawatts (MW). Greenlink will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales). The power will be able to flow in either direction, depending on supply and demand in each country.

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver increased energy security, regional investment and value for money for consumers and enable the further integration of low carbon renewable energy sources.

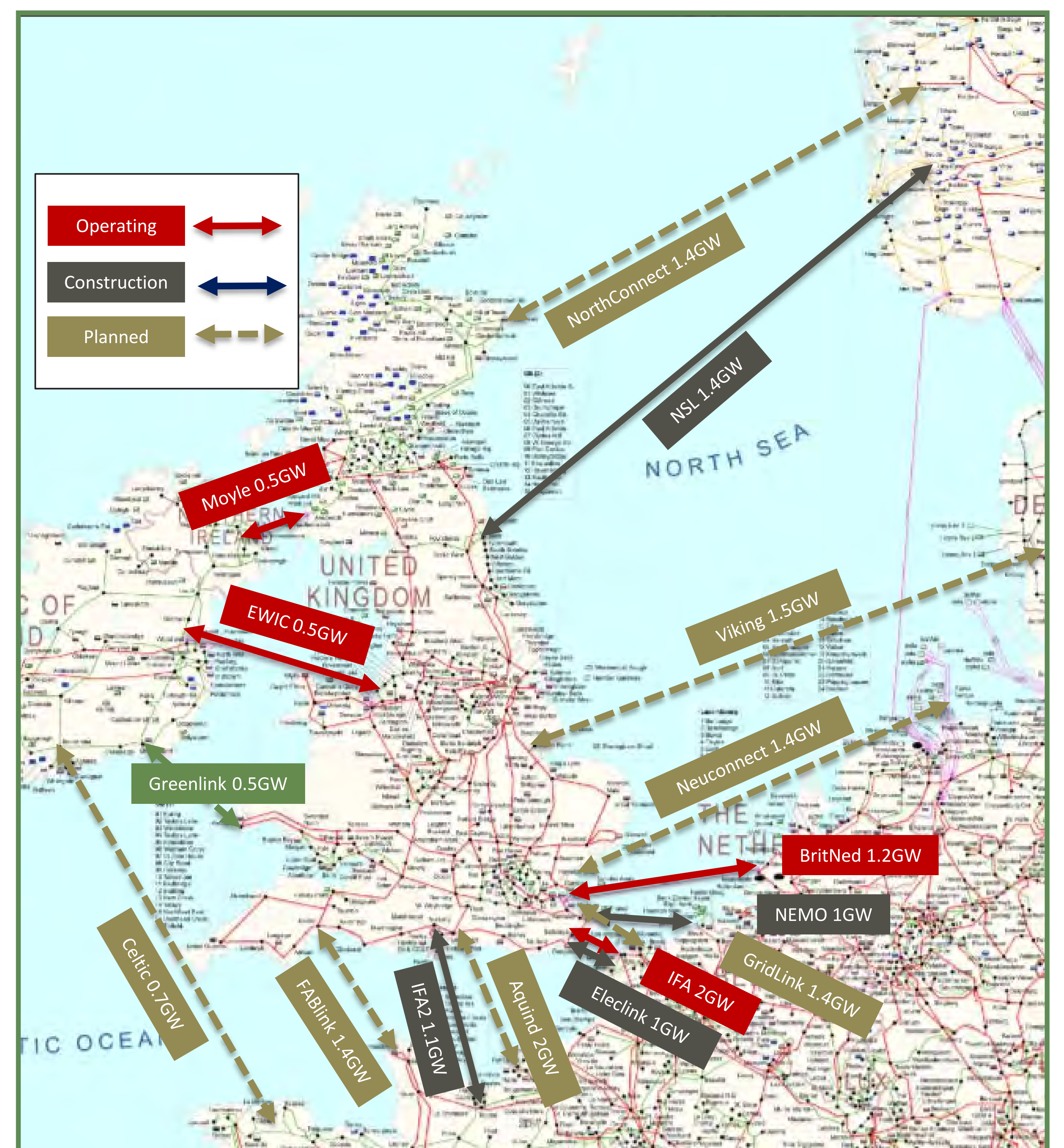
Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will include two converter stations, each located close to the identified existing substations: Great Island Substation in County Wexford (Ireland) and Pembroke Substation in Pembrokeshire (Wales).

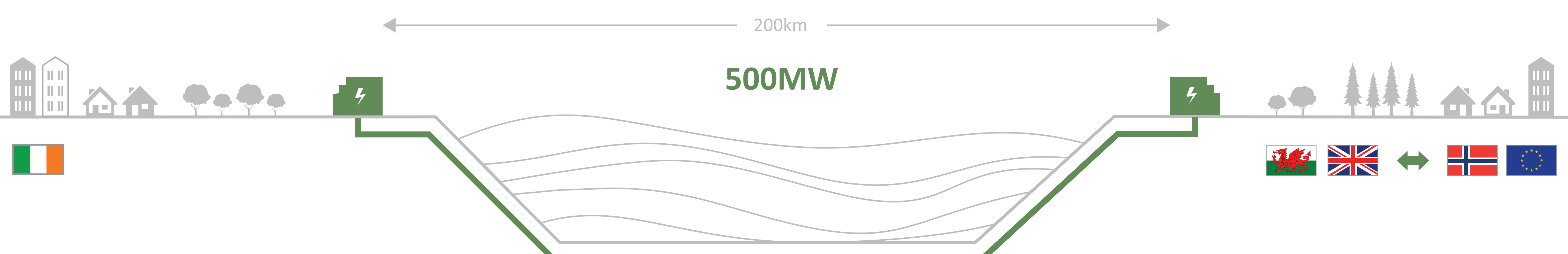
The converter stations will be connected to each other by two electricity cables and a fibre optic cable that will enable the two converter stations to communicate for control purposes.

There will be no overhead lines between the two converter stations and the respective substations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

The project will require planning permission in Ireland and Wales. Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. Greenlink is planned for commissioning in 2023.



Sources: Ofgem, TEC Register, 3rd PCI, TYNDP 2016w



WHY GREENLINK?

Greenlink is a new interconnector between Ireland and Wales with a nominal capacity of 500MW

Ireland is currently connected to Great Britain by two electricity interconnectors, which provide a means of transferring electricity between the two countries - the East West Interconnector (EWIC), which connects County Dublin to North Wales, and the Moyle interconnector between County Antrim, Northern Ireland and Ayrshire, Scotland.

However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Ireland and Great Britain, and within Europe as a whole. This will allow electricity to flow more easily between where it is generated and where it is needed, improving the security and reliability of our energy supplies and supporting the integration of greener, low carbon energy sources in an affordable way.

There is a strong need and significant support within Europe for additional interconnection. The 'Energy Union' is a strategy launched by the European Commission in 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

supporting the integration of greener, low carbon energy sources in an affordable way



Supporting
Renewable
Energy



Improving
Energy
Security

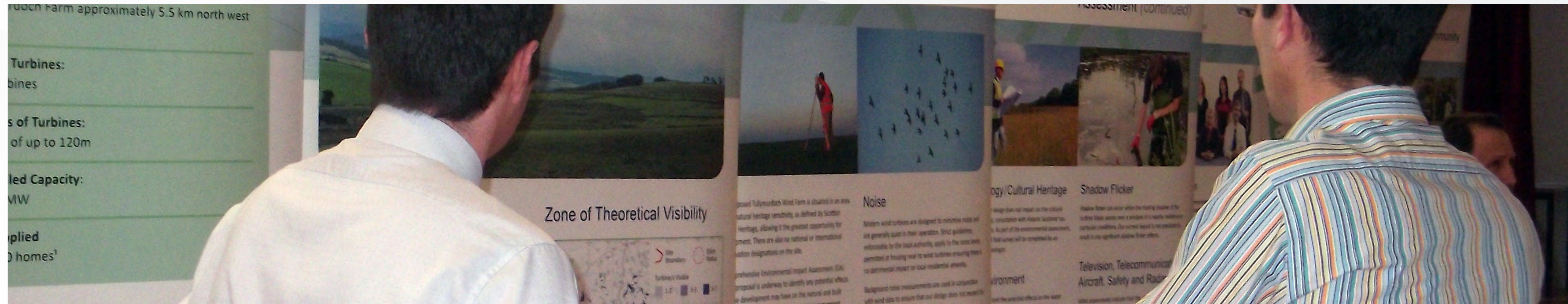


Fighting
Climate
Change



Benefiting
Consumers

CONSULTATION



Your Views

We are particularly interested in hearing your views on ways that Greenlink can be designed to provide additional benefits to the local community.



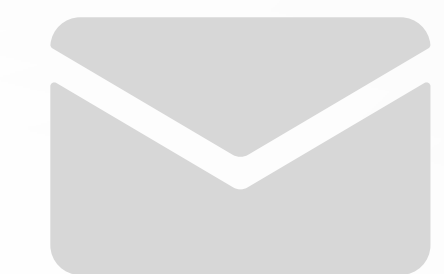
Public consultation is a core part of the development process and ensures that communities in the vicinity of a new proposal have timely and transparent access to information and can engage with developers to influence the final proposal coming forward. We would like to hear what your thoughts and views are on this proposal.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of the interconnector project.

During the development process we have worked to fully engage with local residents, councillors, businesses and members of the local community to discuss the proposal and any potential impacts and to obtain feedback on key issues.

We intend to make sure the local community can see that its views have been fully considered and incorporated within the final proposal.

This public exhibition is to allow local residents and stakeholders to view our current plans, hear about project progress, share their views with us, meet the project team and ask questions. We would welcome any feedback that you have now or in the future.



Surveys have been carried out and the data assessed to ensure that the final onshore elements of the proposal are designed sympathetically to the local environment and wildlife and where possible enhancement measures employed.

Studies cover the landfall site, the cable route and the converter station locations.

As well as birds, wildlife considered by these assessments also include badgers, bats, otters, and amphibians. Consideration was also given to local vegetation, including hedgerows, trees and important habitats.

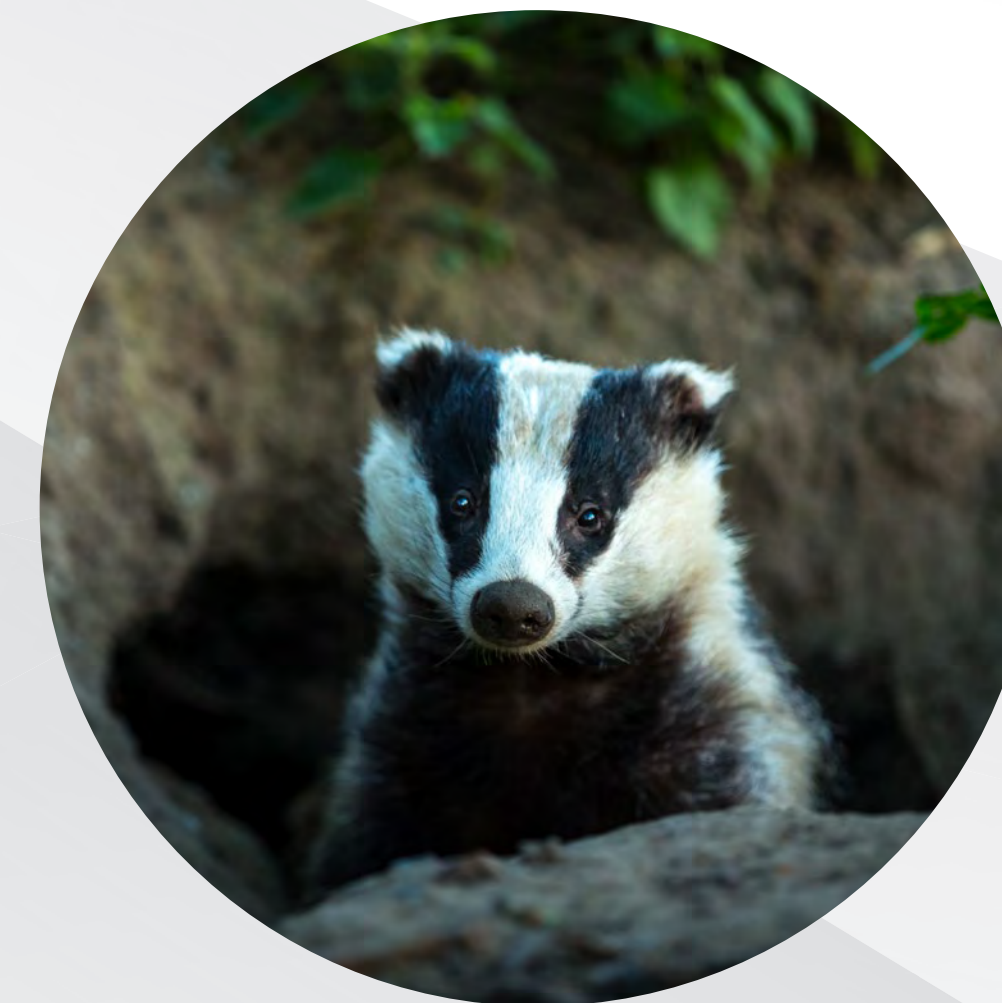
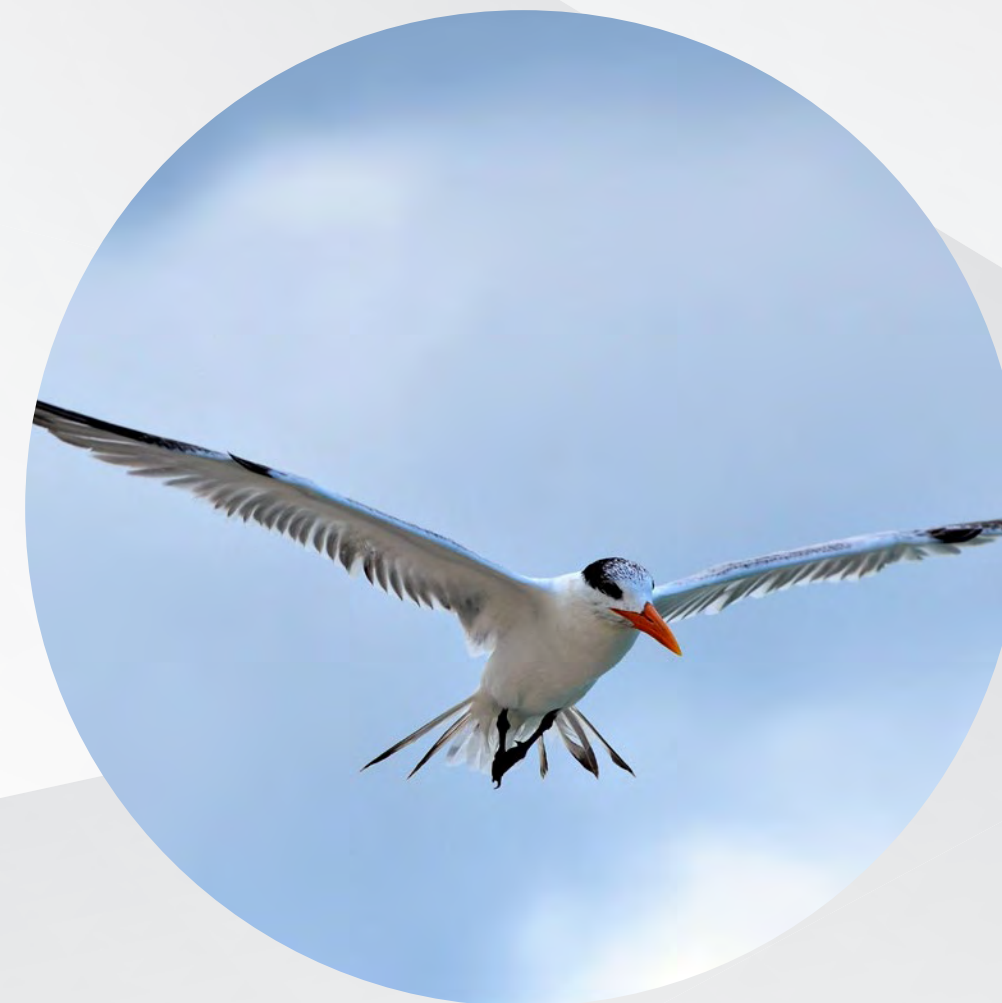
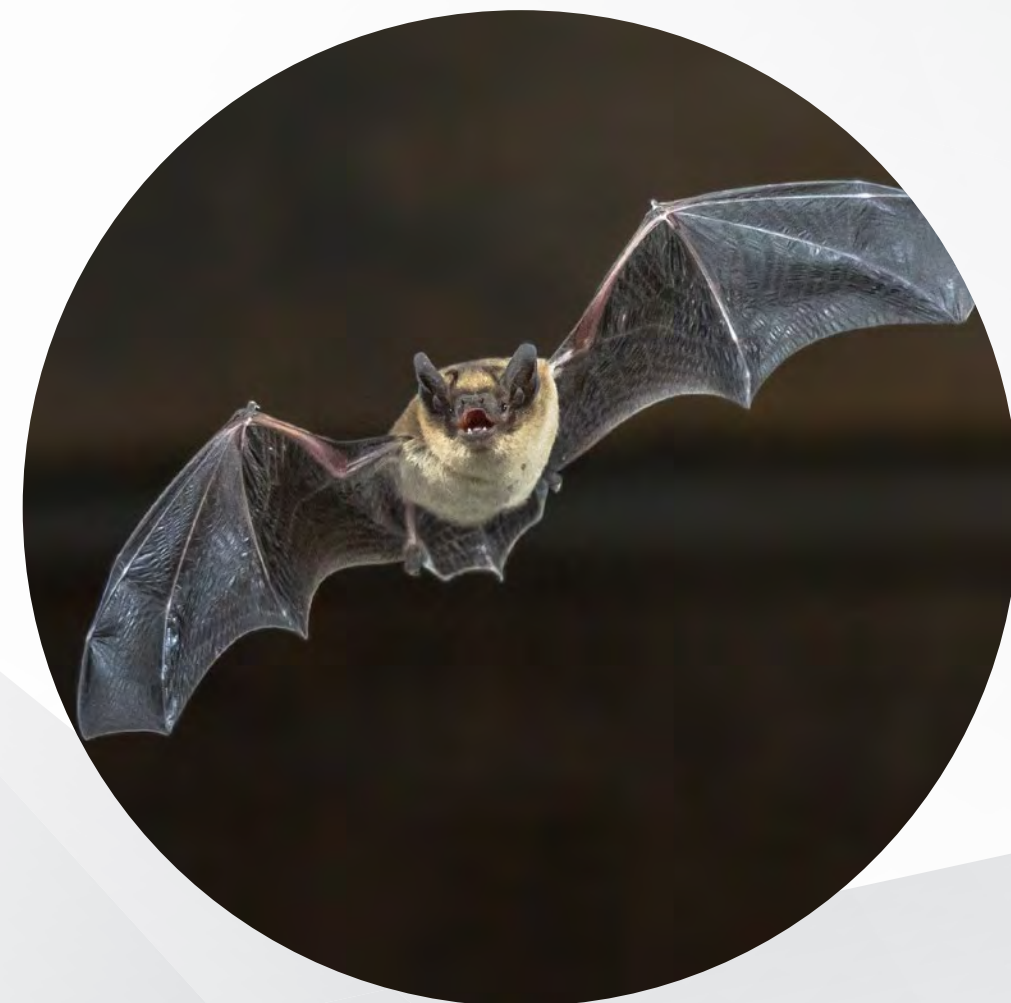
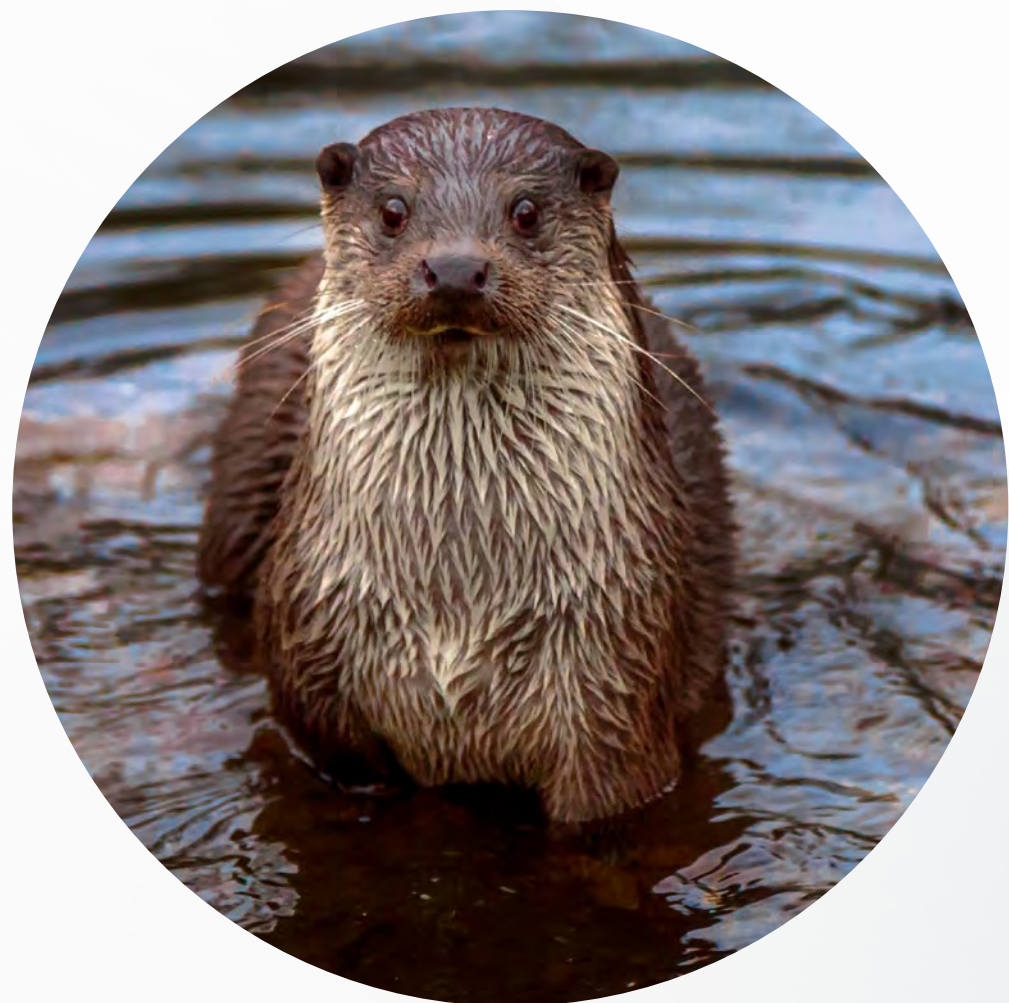
The results of surveys are being used to avoid, reduce and offset any impacts on biodiversity through sensitive design and mitigation measures as required.

“ Your views

Do you know of any local environmental groups that Greenlink should consult?

Are there specific issues you feel should be assessed that aren't currently being assessed?

”



The key components of the scheme are:

- **Two converter stations** - one near the Great Island Substation in County Wexford (Ireland) and one near the Pembroke Substation in Pembrokeshire (Wales)
- **Two subsea HVDC cables and a fibre optic cable** - the onshore cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

What is an HVDC cable?

- High Voltage Direct Current (HVDC) cables allow for efficient transportation of electricity over large distances and in particular for subsea cables.
- HVDC cables have lower electricity losses than comparable AC cables.
- HVDC cables are suitable for undergrounding both onshore and offshore. There will be no overground cables between the two converter stations.
- One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore.



IMAGE: PRYSMIAN

What is a converter station?

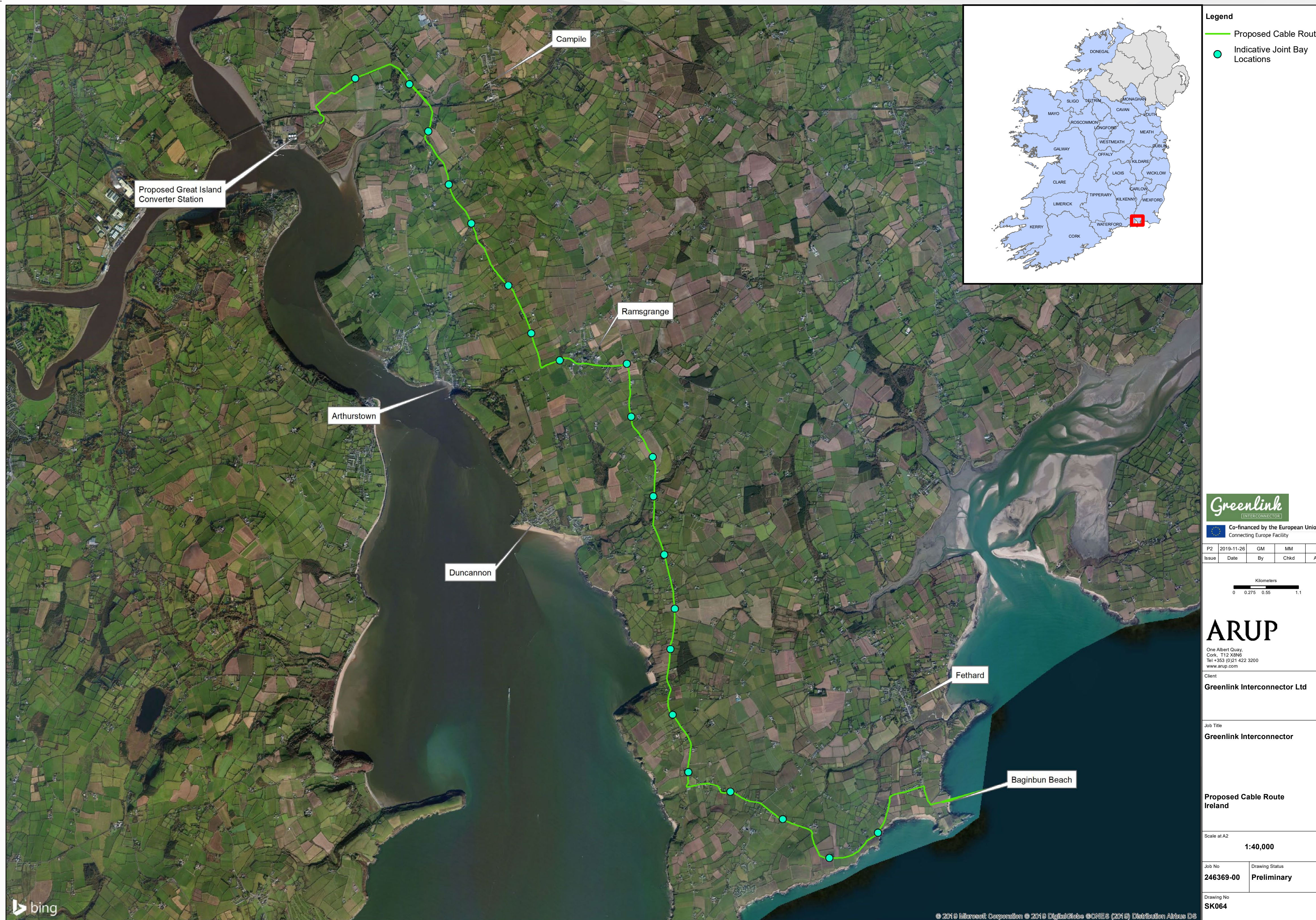
A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa. DC electricity is used for the transmission of electricity over long distances between two converter stations and AC electricity is used within the national transmission and distribution networks.



What is a fibre optic cable?

A fibre optic cable is installed to provide communication between the converter stations for system monitoring and safety purposes.

GREENLINK IN IRELAND



A cable route and converter station site have been identified following consultation with stakeholders and analysis of the results of ongoing environmental and technical work. The cable route and converter station site are shown here.

The potential effects of Greenlink on local archaeology and cultural heritage has been assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets within a study area of 1.5 km from the converter station site and within a 200m study area from the cable route corridor.

Cultural heritage encompasses valued features and remains, including buildings, monuments and archaeological remains. It can also include landscapes shaped by human occupation and design, such as historic parks and gardens.

The importance of cultural heritage is recognised in legislation and planning policy.

The converter station site is located in an area with a rich archaeological and historic heritage but is also located in such a way as to complement the existing industrial surrounds.

Sites of interest in the wider area include Kilmokea Church and Graveyard, Dunbrody Abbey and Castle, Duncannon Fort and the historic Norman landing place at Baginbun Beach.

Given the large number of sites relating to prehistoric activity in this region, there is also a potential for the development to uncover as yet unknown archaeological remains.

Impacts and mitigation

During construction the potential impact of the onshore cables, landfall site and the converter station could be the loss or interference with a site or feature of archaeological, architectural and cultural heritage significance caused by excavations or by construction related vibrations.

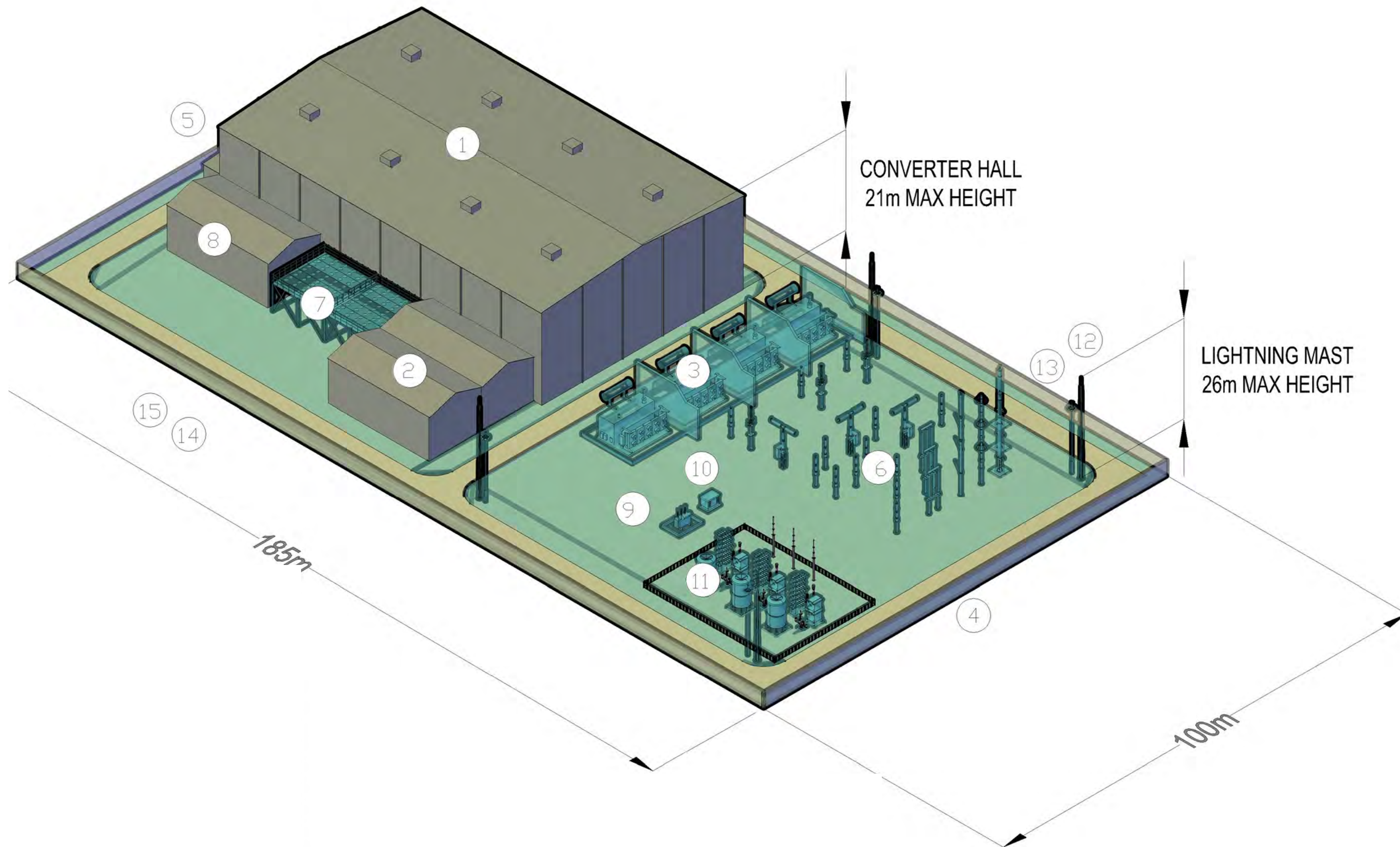
The importance of cultural heritage is recognised in legislation and planning policy

Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects on archaeology and heritage assets within the study area.

Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

INDICATIVE CONVERTER STATION



SITE KEY	
1	CONVERTER HALL
2	CONTROL BUILDING
3	TRANSFORMERS
4	AC CABLE TERMINATIONS
5	DC CABLE TERMINATIONS
6	400kV SWITCHYARD
7	VALVE COOLERS
8	SPARES BUILDING
9	STANDBY GENERATOR
10	AUXILIARY TRANSFORMER
11	FILTERS
12	LIGHTNING MAST
13	15m LIGHTING COLUMN
14	6m LIGHTING COLUMN
15	PERIMETER FENCE

Landscape

This assessment relates to changes in the physical landscape, brought about by Greenlink, which may alter its character and how this is experienced.

Visual

Visual impact assessment relates to changes in the composition of views as a result of changes to the landscape, how these are perceived and the effects on visual amenity.

We have produced visualisations of the converter stations from viewpoint locations agreed with An Bord Pleanála. The viewpoints selected represent the character of the area and particularly important landscape and heritage sites.

Proposed locations can be seen on the 'viewpoint locations' board.

Impacts and mitigation

Converter station

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant and a control building.

Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. However, the layout of the converter station and final dimensions will be finalised with the input of the supplier selected within the ongoing tender process. The design will consider the local terrain, physical constraints, the results of environmental surveys, consultations and commitments made within the planning application documents.

The landscape and visual impact of the proposal has been carefully considered within the planning application and suitable mitigation, such as landscaping have been proposed.

Cable route

There is the potential for visual impact from the cable route as a result of vegetation clearance during construction, particularly where the cable route diverges from the road network.

However, landscape and visual impacts during cable installation are predicted to be minor and not significant due to the temporary and reversible nature of the change (vegetation clearance) which can be adequately mitigated through replanting.

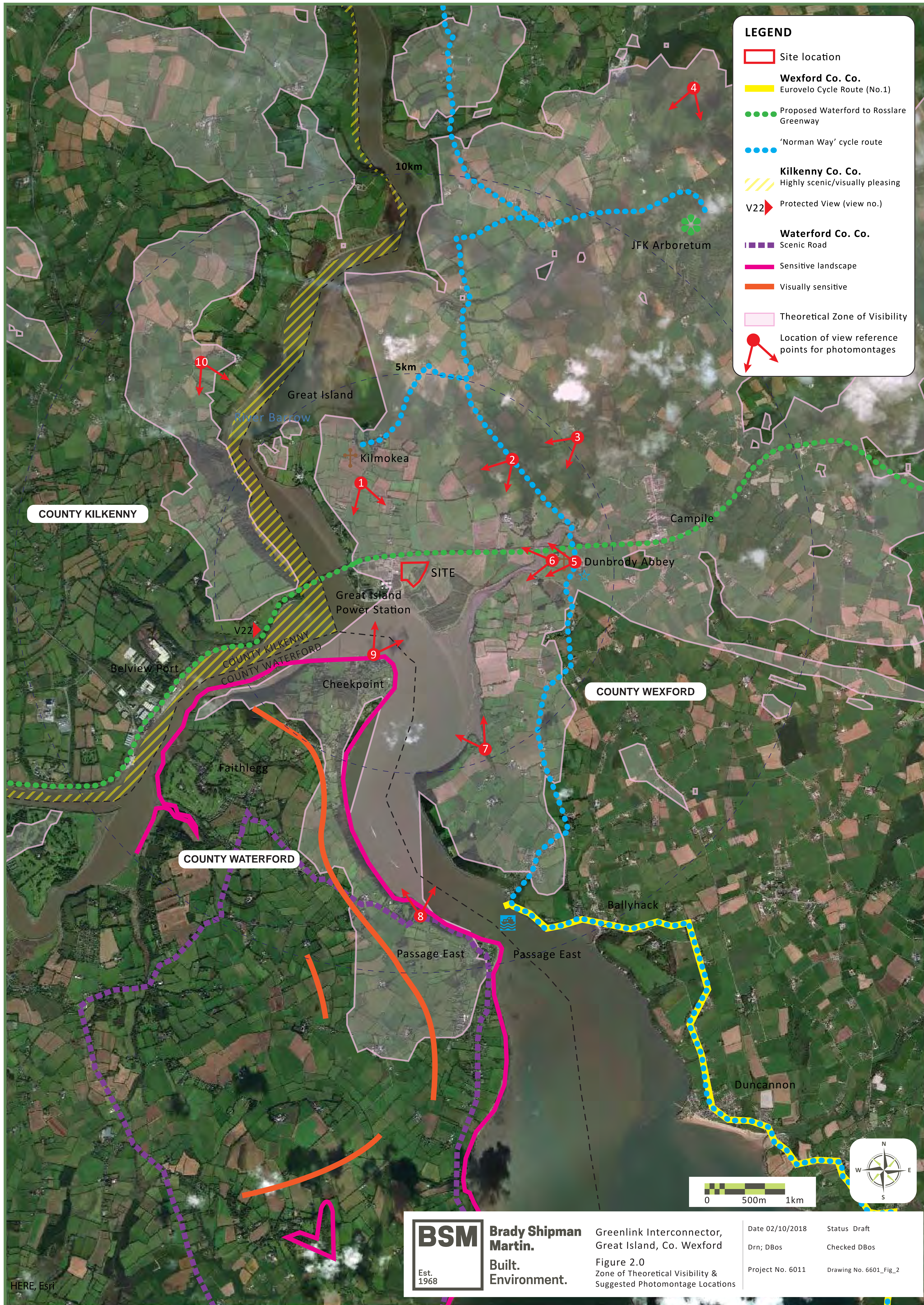
“

Your views...

What sort of landscaping planting would you like to see in and around the converter station? ”



VIEWPOINT LOCATIONS



“
Your views
Do you have any other suggestions for a viewpoint location?
”

LOCAL SUPPLY CHAIN

Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Construction work on Greenlink is expected to lead to significant expenditure in both Ireland and Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites and will require skills and experience available from contractors found in the local area.



The types of services that could be locally sourced include:

- Transportation - equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks.
- Office and cleaning supplies
- Site security
- Site services, e.g. portacabins and portaloos
- Fencing
- Waste disposal

“ Your Views

Do you know of a local business that could benefit from the Greenlink interconnector project?

Let us know if you want to be added to our list of local suppliers!

”



The proposed marine cable will run from Baginbun Beach, County Wexford, Ireland to Freshwater West, Pembrokeshire, Wales.

Technical viability

Marine surveys have been undertaken and included geophysical and geotechnical surveys.

Geophysical

The geophysical survey mapped the seabed and sub-surface geology along the proposed route in order to be able to optimise cable routing within the survey corridor and to enable the assessment of cable target burial depth along the route.

It also provided the geophysical data from which the marine archaeological assessment was undertaken as part of the consenting process.

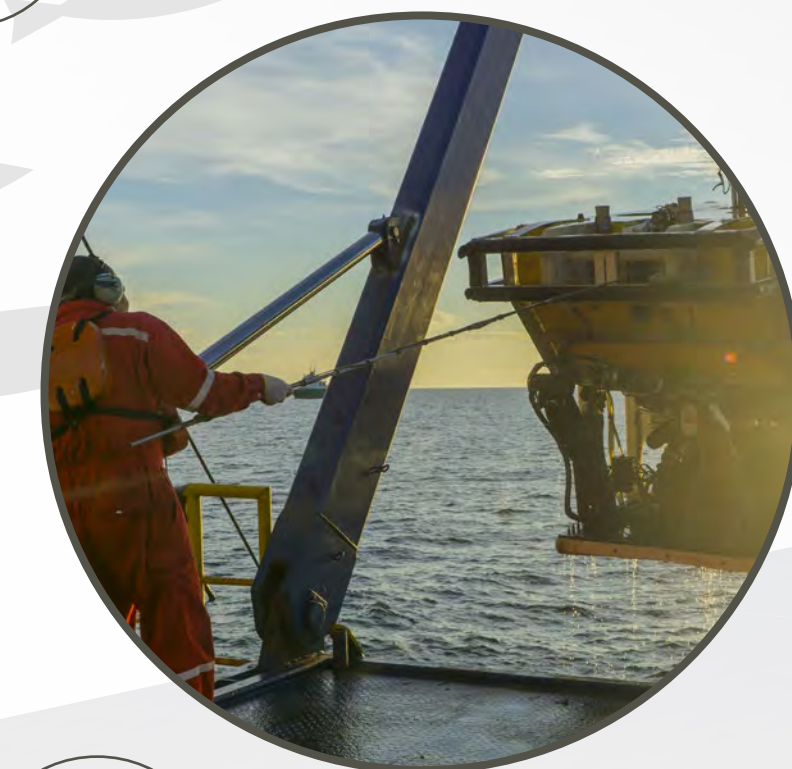
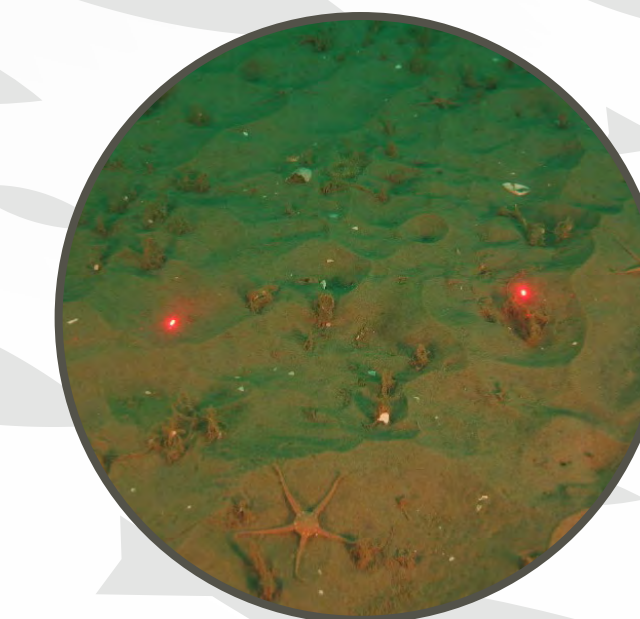
Geotechnical

The purpose of the geotechnical survey was to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This was done using a number of techniques, including drilling boreholes.

Environmental impacts

The marine survey mapped the distribution and extent of marine habitats within the proposed cable corridor.

Data from this survey was used to inform the Environmental Impact Assessment report.



This assessment addresses potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The proposed underground cable routes pass through predominantly rural areas which are likely to experience low ambient existing noise levels. The converter station will also be located in a rural area adjacent to an existing substation with its associated operating noise levels.

Noise surveys and assessment

- The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors have been determined via noise surveys.
- Noise-sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship etc) and public open spaces (including public footpaths).
- A study area of 300m around the cable route corridor and converter station locations is considered for potential construction noise impacts and an area of 50m is considered for potential construction vibration impacts.
- For operational noise, the assessment addresses sensitive receptors within 300m of the converter station.

Impacts and mitigation

The construction of the converter station has the potential to give rise to temporary noise and vibration impacts. However, given the distance between the converter station locations and sensitive receptors it is likely that any impact will be low.

The construction of the cable route has the potential to give rise to temporary noise and vibration impacts in isolated locations along the route, particularly where directional drilling is required at watercourses and road crossings.

There will be noise from the electrical and mechanical plant during the operation of the converter station, most of which will be located indoors in the converter hall.

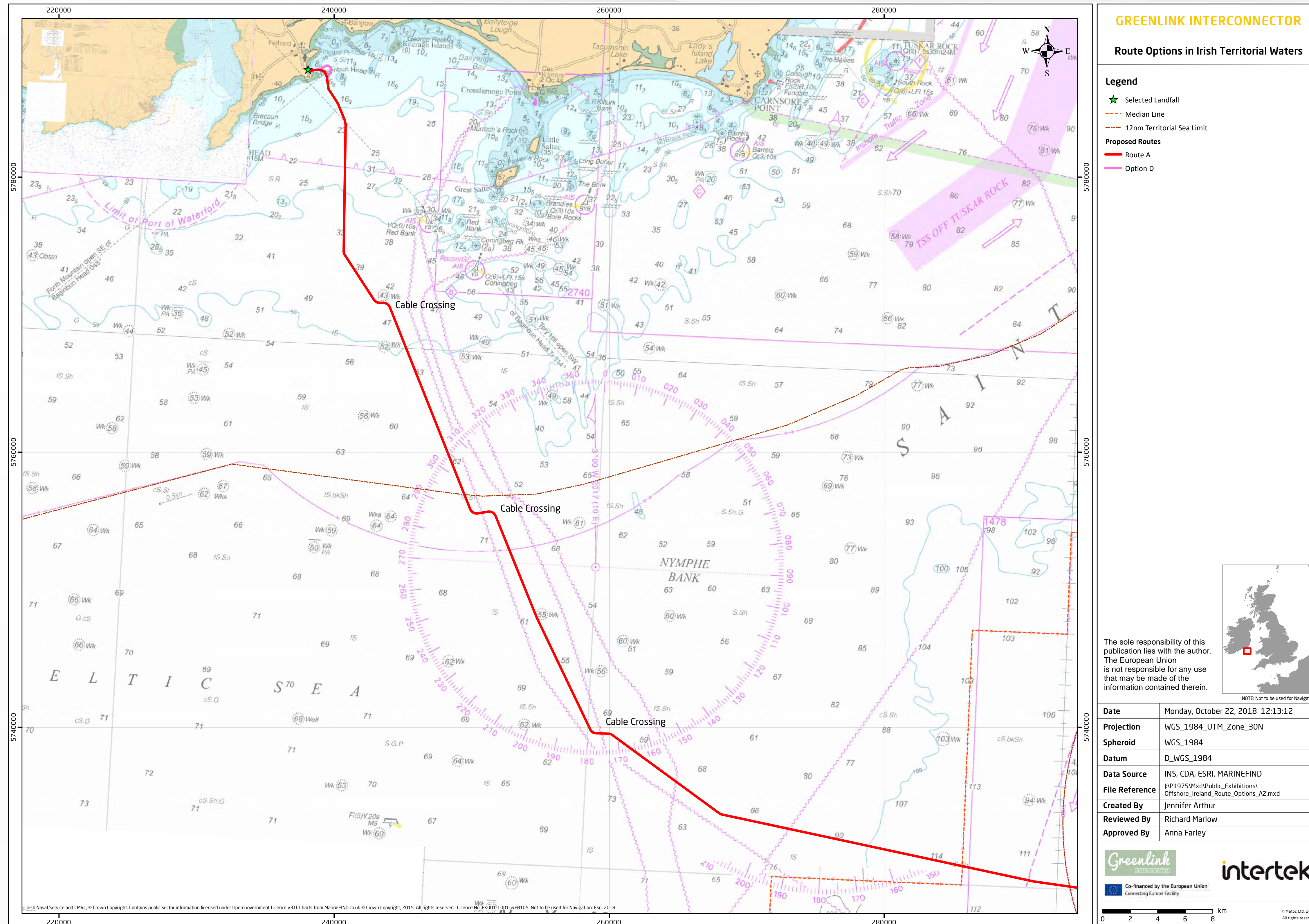


Your views

Do you have concerns regarding noise and vibration you wish to be assessed?



OFFSHORE IRELAND ROUTE



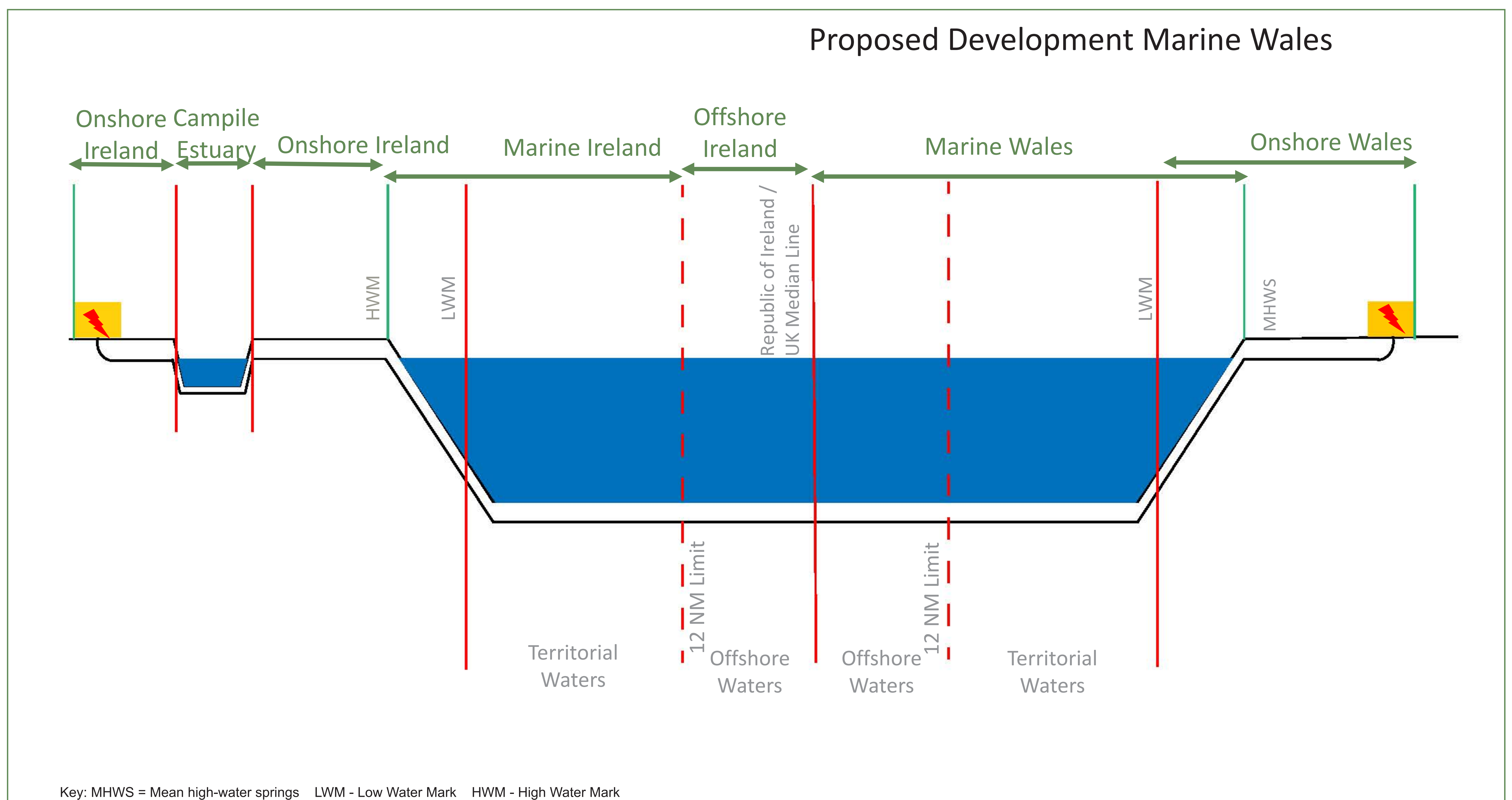
A preferred subsea route has been identified following desk-based assessments supported by the results of early subsea surveys.

This route is outlined in the Foreshore Licence Application recently submitted to the Department of Housing, Planning and Local Government (Foreshore Unit) in Ireland and currently subject to a formal consultation.

	Wales	Ireland
Converter station	Major Development (Outline) - Pembrokeshire County Council	Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Major Development (Full) - Pembrokeshire County Council - Pembrokeshire Coast National Park Authority	Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales - Submitted Marine Works Licence - Milford Haven Port Authority - Submitted	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit) - Submitted

IMPORTANT PLANNING UPDATE: MARINE LICENCE APPLICATION

Formal consultation has commenced on Greenlink’s Foreshore Licence application. The consultation ends on 8th January 2020. Advice on how to respond is available at this exhibition. Following consultation on our draft onshore applications Greenlink hopes to submit the onshore applications in January 2020.



PROJECT TIMELINE

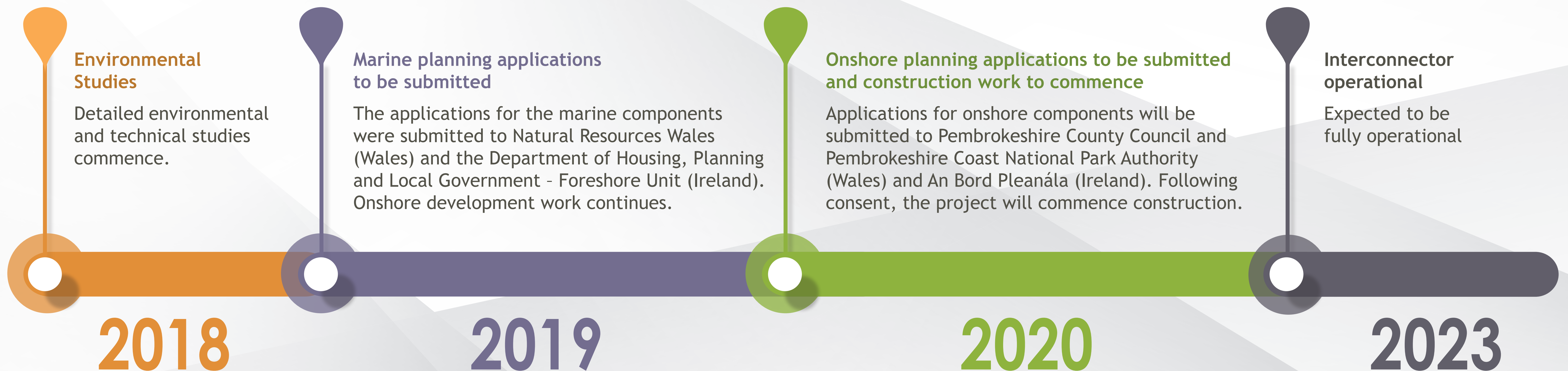
A large infrastructure project such as Greenlink takes several years from development to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have been identified and fully assessed to ensure that they are considered within the final design. Detailed environmental and technical assessment surveys commenced in 2018 and were completed in 2019. This followed the completion of desk-based assessments and consultation with statutory consultees.

Permits and licences will need to be obtained from: An Bord Pleanála and the Department of Housing, Planning and Local Government - Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland; and Pembrokeshire County Council, Pembrokeshire Coast National Park, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales.

Once the appropriate permits and licences have been obtained, the scheme will need to be constructed, which could take around 36 months from start to finish.

The project is expected to commence on-site construction in 2020 and be fully operational in 2023



SITE ASSESSMENT OVERVIEW

As part of the development process, a series of environmental and technical assessment studies were completed to ensure that the final proposed cable route and converter station site were designed sympathetically to the local environment and potential impacts and opportunities arising from Greenlink identified.

Onshore studies include assessments of:

- Biodiversity
- Historic environment
- Landscape and visual impact
- Flooding and hydrology
- Geology and hydrogeology
- Noise and vibration
- Traffic and transport
- Agricultural land
- Socio-economics and human health
- Air quality and climate change
- Cumulative and transboundary effects

Offshore studies include assessments on:

- Geophysical and geotechnical surveys
- Marine biodiversity (benthic/seabed environment, fish and shellfish, marine birds, marine mammals and reptiles etc)
- Protected designations
- Commercial fisheries
- Shipping and navigation
- Marine archaeology
- Unexploded ordnance

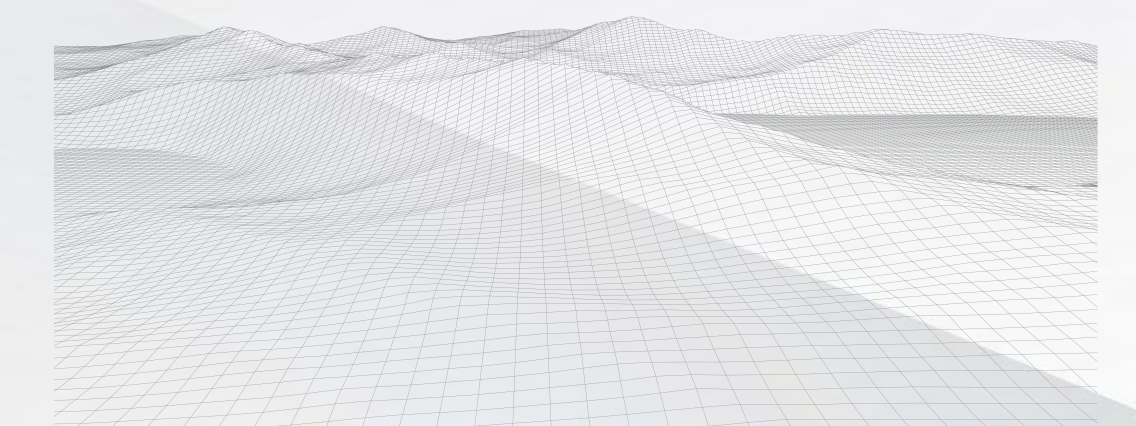
The results of assessments and surveys are presented in the Greenlink planning applications.



Noise & vibration



Marine biodiversity



Landscape & visual impact

This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects to the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy.

Local tourism



The Hook Head Peninsula has a rich built heritage and attractive beaches, and it is an important tourist destination in Ireland's Southeast. Tourist attractions close to the cable route include Dunbrody Abbey, Loftus Hall and Baginbun Beach and Martello Tower. The Ring of Hook Coastal Drive is a popular route which may partially coincide with the cable route, and appropriate traffic management will be required to minimise disruption to tourist traffic during the cable construction within the roadway.

The cable will be horizontally drilled under the beach at the landfall, with the construction area set well back from the beach and cliffs. It is not envisaged that the construction work will have adverse effects on tourist activity at the beach.

Potential impacts



There will be temporary impacts on road traffic during the cable construction, with the requirement for partial or full road closures and diversions, for short periods.

Direct and indirect employment will be created for both the construction and operational phase.

The construction of the cables and converter station have the potential to have a negative impact on residential amenity in the immediate vicinity of the construction activities. Once the cables and converter station are operational, the potential for negative impact on residential amenity is minimal.

“ Your views

Please let us know of any local tourism business or group we need to consider and involve in project discussions.

Are there any particular local events that attract tourists that Greenlink needs to be aware of?



Jobs

Jobs and knock-on economic benefits during construction



The traffic assessment addresses the traffic impacts on the road network from the construction and operation of the Greenlink project. The assessment includes the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce is also addressed.

During the construction phase we will engage with the local community to minimise the impact of traffic and transport on local residents and businesses as much as possible and recommendations will be made to mitigate any potential traffic impacts on the road network.

The traffic assessment includes a review of the existing traffic patterns and an estimation of the traffic volumes which will be generated by the construction of the onshore cable, the landfall site and the converter station. The traffic generated by the construction workforce and by the transport of materials and equipment is also predicted.

The potential disruption to the road network during the installation of the cables and the availability of alternative routes is assessed. The traffic distribution pattern on the local road network during construction is examined and impacts determined.

Potential impacts and mitigation

There is potential for traffic impact from Greenlink during the construction phase which will temporarily give rise to additional traffic on the road network.

Installation of the cables may require partial or full road closures and traffic may have to use alternative routes. Where the cable route diverges from the road, the impacts will be reduced.

Once the Greenlink project is in operation, the potential for a traffic impact is minimal. The level of operations and maintenance workforce will be low, so that the impact on any particular road will be insignificant.



Traffic Management Plan (TMP)

An outline Traffic Management Plan (TMP) will be compiled that will outline measures for managing and mitigating the construction traffic caused by Greenlink.

Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.



Your views

Do you have any specific concerns? Are there local organisations (businesses, schools etc) that we need to involve in the Traffic Management Plan?



HORIZONTAL DIRECTIONAL DRILL INSTALLATION

We are proposing to use a Horizontal Directional Drill (HDD) to install the cables at both Baginbun Beach (Ireland) and Freshwater West (Wales). Using this method of installation will ensure that cables can be installed without any impact on the beaches at both locations and will avoid any impact on the dune system at Freshwater West. The cable will emerge below the low water mark so no work will take place on either beach.

While the construction programme for the full project is anticipated to take around three years, construction work around each landfall would last for approximately 3 months and be scheduled to avoid the most popular periods of use.

Once the cables emerge the proposed cable route has been designed to avoid the most sensitive marine habitats.

To the right is an example of a typical HDD cable installation arrangement and demonstrates how it can be used across different terrains.

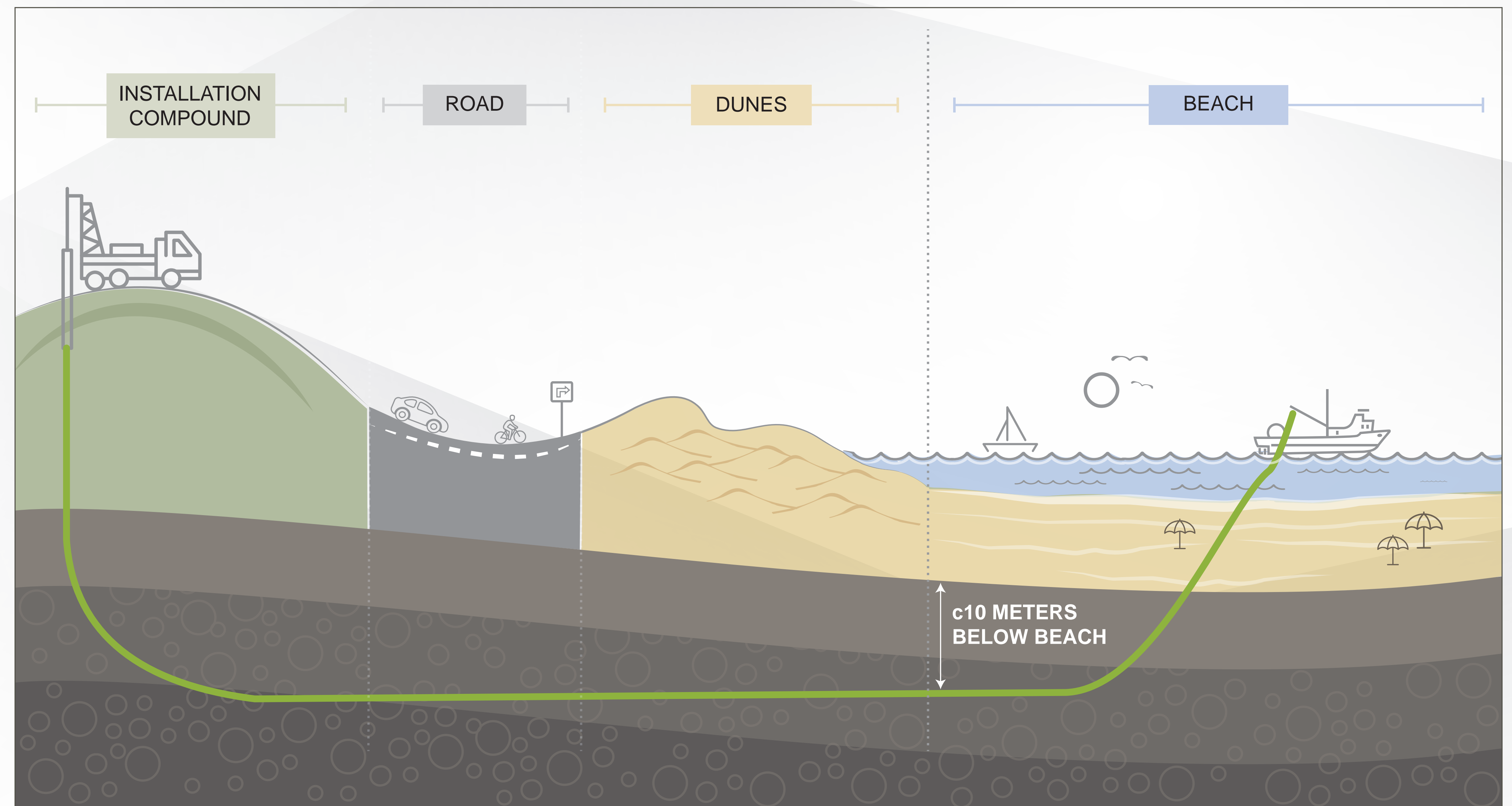
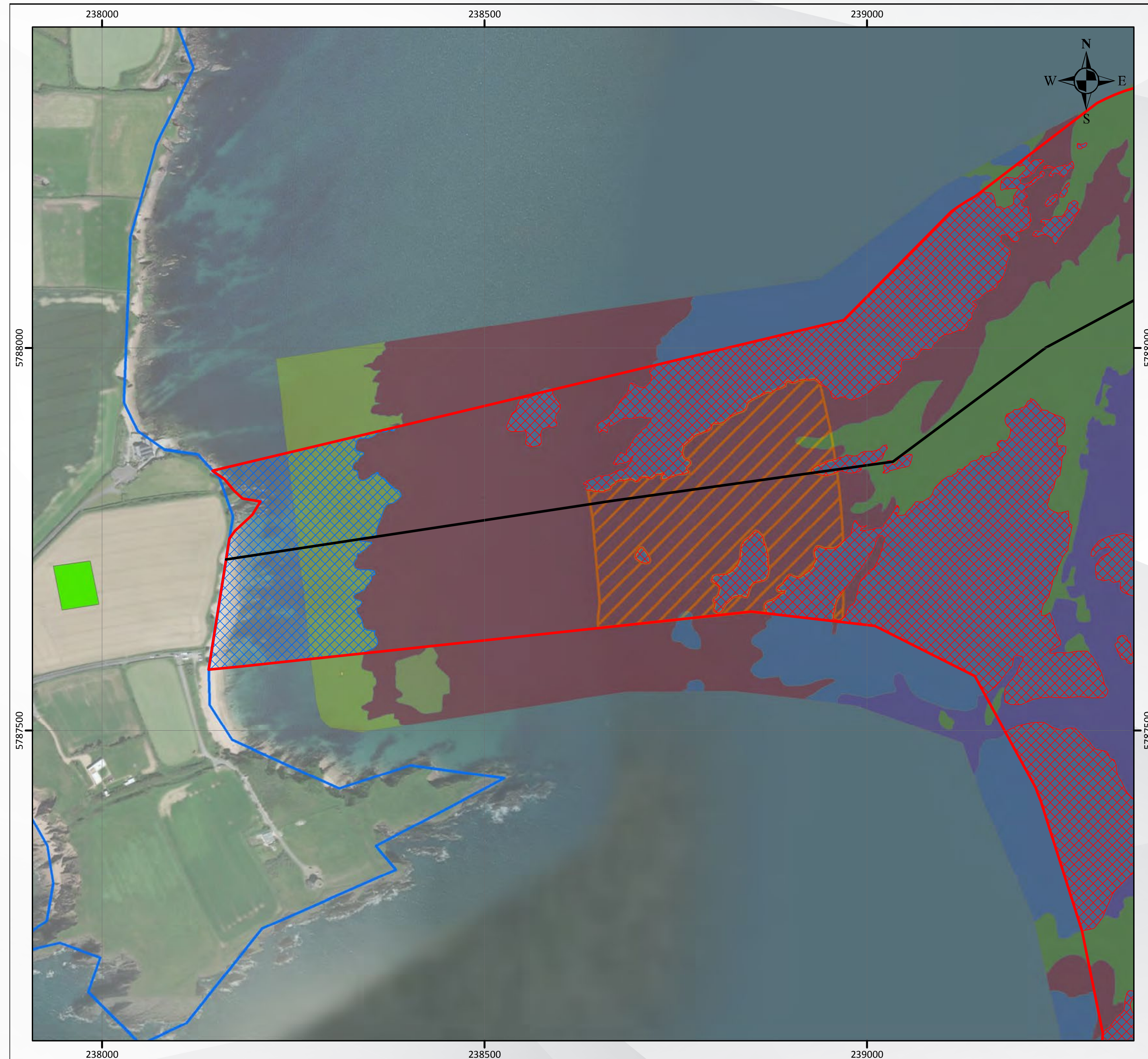


ILLUSTRATION OF HOW AN HDD MIGHT WORK

INSTALLATION AT BAGINBUN BEACH



GREENLINK INTERCONNECTOR INSTALLATION Indicative HDD Exit Point - ROI Landfall

Drawing No: P1975-INST-002 | A

Legend

- Indicative Greenlink Route Centreline
- ▭ Proposed Development
- Mean High Water Mark
- HDD Compound
- ▭ Indicative HDD Exit Point
- ▭ Trenching Exclusion Zone
- ▭ Annex I Habitat Exclusion Zone

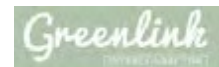

EUNIS Habitat Classification


- A3.11
- A3.2
- A5.23
- A5.24
- A5.43
- A5.44

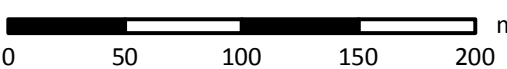
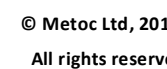


NOTE: Not to be used for Navigation

Date	Wednesday, May 8, 2019 11:00:32
Projection	WGS_1984_UTM_Zone_30N
Spheroid	WGS_1984
Datum	D_WGS_1984
Data Source	OSOD; MMT; ESRI; Greenlink
File Reference	J:\P1975\Mxd\15_INST\ P1975-INST-002.mxd
Created By	Chris Goode
Reviewed By	Chris Carroll
Approved By	Anna Farley

 Co-financed by the European Union
Connecting Europe Facility

To avoid impacts on the Baginbun Beach it is proposed to install the cables using a Horizontal Directional Drill under the beach and below the low water mark.

This is the proposed installation method contained within the Foreshore Licence Application submitted to Department for Housing, Planning and Local Government (Foreshore Unit).

Once the cables emerge the proposed cable route has been designed to avoid the most sensitive marine habitats.

FORESHORE LICENCE APPLICATION CONSULTATION



The formal consultation process for Greenlink's Foreshore Licence Application commenced on Wednesday 13th November and closes on 8th January 2020.

Copies of the environmental statement are available to view on the project website (www.greenlink.ie/foreshorelicenceapplicationireland) and on the Department's website (www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford).



Within 8 weeks from the publication of this notice, a copy of the application, the Environmental Impact Assessment Report and any other relevant report or information (including copies of any submissions, comments, or questions received by the appropriate Minister) may be inspected free of charge during the hours 10:00 to 13:00 and 14:00 to 17:00 Monday to Friday.

Foreshore Unit
Department for Housing
Planning Local Government
Newtown Road
Wexford
Co. Wexford



Submissions, comments in relation to the proposal may be made in writing within 8 weeks from the publication of this notice to the Minister for Housing, Planning and Local Government at Foreshore Unit, Department for Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford

Or by e-mail to foreshore@housing.gov.ie (Quoting Ref: FS007050). The closing date for the receipt of written submissions, comments or questions is therefore 17:30 on 08/01/2020.

Representations should be dated and clearly state the name (in block capitals) and the full return email or postal address of the person making the representation.

Please note that while the standard formal consultation period is 42 days, due to interaction with the Christmas period we have agreed an extension to the consultation period of two weeks with NRW. This extends the consultation period to 56 days with the closing date of formal consultation set at 17:30hrs on Wednesday 8th January 2020.

Appendix 10

Public Notices

This notice in TED website: <https://ted.europa.eu/udl?uri=TED:NOTICE:371269-2018:TEXT:EN:HTML>

**Ireland-Cork: Electrical machinery, apparatus, equipment and consumables; lighting
2018/S 162-371269**

Contract notice – utilities

Works

Legal Basis:

Directive 2014/25/EU

Section I: Contracting entity

I.1) Name and addresses

Greenlink Interconnector Limited
Element Power, Unit C Building, 4200 Cork Business Park
Cork
Ireland
Contact person: Philip Flynn (Greenlink Procurement Manager)
E-mail: greenlink.procurement@wsp.com
NUTS code: IE052

Internet address(es):

Main address: www.greenlinkinterconnector.eu

I.2) Information about joint procurement

I.3) Communication

Access to the procurement documents is restricted. Further information can be obtained at:
www.greenlinkinterconnector.eu/project/suppliers-and-procurement
Additional information can be obtained from the abovementioned address
Tenders or requests to participate must be submitted to the abovementioned address

I.6) Main activity

Electricity

Section II: Object

II.1) Scope of the procurement

II.1.1) Title:

Greenlink Interconnector Project

II.1.2) Main CPV code

31000000

II.1.3) Type of contract

Works

II.1.4) Short description:

Greenlink Interconnector Limited is developing a 500 MW HVDC interconnector system between the existing electricity grids in Ireland and Wales (UK). The interconnector will provide a new grid connection between Great Island transmission substation in County Wexford, Ireland and Pembroke transmission substation in South Wales. The Greenlink Interconnector cable route is approximately 205 km in length between the Pembroke

Converter Station and the Great Island Converter Station of which 7 km is onshore in Wales, 170 km is subsea and 28 km is onshore in Ireland.

II.1.5) **Estimated total value**

II.1.6) **Information about lots**

This contract is divided into lots: yes

Tenders may be submitted for one lot only

Maximum number of lots that may be awarded to one tenderer: 1

The contracting authority reserves the right to award contracts combining the following lots or groups of lots:

Greenlink Interconnector Limited reserves the right to award contracts for works and maintenance services for the following Lots:

Lot 1: (Converter Stations, HVAC Cables and Grid Connections);

Lot 2: (HVDC Cables — subsea and underground) and

Lot 3: (Optional) — Lot 1 + Lot 2 (Converter Stations, HVAC Cables, Grid Connections, and HVDC Cables).

(See Section II.2.4 for details)

II.2) **Description**

II.2.1) **Title:**

Greenlink Interconnector Project — Converter Stations, HVAC cable (including accessories) and Grid Connections

Lot No: 1

II.2.2) **Additional CPV code(s)**

31000000

31121110

31200000

31321300

45000000

45315400

45314310

50532000

50532400

51110000

51112000

II.2.3) **Place of performance**

NUTS code: IE052

NUTS code: UKL14

Main site or place of performance:

Great Island, County Wexford, Ireland and Pembroke, Wales, United Kingdom

II.2.4) **Description of the procurement:**

While Greenlink does not consider itself a “contracting entity” for the purposes of the EU Utilities Directive (Directive 2014/25/EU) and any national implementing legislation, it is conducting this procurement voluntarily in accordance with the terms of the Directive 2014/25/EU to ensure an open, transparent and competitive tender process.

The scope of requirements of lot 1 within this contract notice are:

— the detailed design,

— engineering,

- procurement,
- manufacture,
- supply,
- transportation,
- installation,
- construction (including civil works),
- testing,
- commissioning,
- maintenance and supply and delivery of spares of:

(a) 2 x HVDC Converter Stations (1 in Great Island, County Wexford, Ireland and 1 in Pembroke, Wales, UK);

(b) All HVAC cables and accessories required to connect the HVDC converter stations to the grid connection equipment in Great Island, County Wexford, Ireland and Pembroke, Wales, UK (optional for Ireland and / or UK at the sole discretion of Greenlink Interconnector Limited);

(c) Grid connection equipment in grid connection substation in Great Island, County Wexford, Ireland and/or grid connection substation in Pembroke, Wales, UK (optional for Ireland and/or UK at the sole discretion of Greenlink Interconnector Limited);

(d) Spares (both strategic and operational spares) and

(e) Provision of maintenance services for a mandatory initial period after take over to align with the warranty period under the EPC contract (see II.2.7 for current anticipated take over date) and supply and delivery of replenishment spares under a separate maintenance services agreement including options to extend at the sole discretion of Greenlink Interconnector Limited.

Further details of the scope of lot 1 are provided in the Pre-Qualification Questionnaire (PQQ) and Invitation to Negotiate (ITN) documents.

See Section VI.3 of this Contract Notice for more details about the procurement process.

II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6) Estimated value

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Start: 30/06/2020

End: 30/06/2023

This contract is subject to renewal: no

II.2.9) Information about the limits on the number of candidates to be invited

Envisaged number of candidates: 5

Objective criteria for choosing the limited number of candidates:

Details will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

II.2.10) Information about variants

Variants will be accepted: yes

II.2.11) Information about options

Options: yes

Description of options:

The following options will be included in the procurement of Lot 1:

- (1) The scope of the detailed design, engineering, procurement, manufacture, supply, transportation, installation, construction (including civil works), testing, commissioning, maintenance and supply and delivery of spares (as detailed in the procurement documents) of HVAC cables and accessories required to connect the HVDC converter stations to the grid connection equipment in Great Island, County Wexford, Ireland and / or Pembroke, Wales, UK will each be optional at the sole discretion of Greenlink Interconnector Limited;
- (2) The scope of the detailed design, engineering, procurement, manufacture, supply, transportation, installation, construction (including civil works), testing, commissioning, maintenance and supply and delivery of spares (as detailed in the procurement documents) of the grid connection equipment at the Great Island, County Wexford and / or Pembroke, Wales, UK grid substations will each be optional at the sole discretion of Greenlink Interconnector Limited and
- (3) Extension to the term of the Maintenance Services Agreement procured under this lot 1 will be optional at the sole discretion of Greenlink Interconnector Limited.

II.2.12) **Information about electronic catalogues**

II.2.13) **Information about European Union funds**

The procurement is related to a project and/or programme financed by European Union funds: yes

Identification of the project:

EU Project of Common Interest Reference 1.9.1 Ireland - United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) currently know as "Greenlink".

II.2.14) **Additional information**

II.2) **Description**

II.2.1) **Title:**

Greenlink Interconnector Project — HVDC Cables and Accessories
Lot No: 2

II.2.2) **Additional CPV code(s)**

31000000
31320000
31321300
31321400
31321500
45000000
45314300
45314310
45315400

II.2.3) **Place of performance**

NUTS code: IE052

NUTS code: UKL14

Main site or place of performance:

At and between Great Island, County Wexford, Ireland and Pembroke, Wales, United Kingdom, including the Irish Sea.

II.2.4) **Description of the procurement:**

While Greenlink does not consider itself a "contracting entity" for the purposes of the EU Utilities Directive (Directive 2014/25/EU) and any national implementing legislation, it is voluntarily conducting this procurement in accordance with the terms of Directive 2014/25/EU to ensure an open, transparent and competitive tender process.

The scope of requirements of lot 2 within this contract notice are: the detailed design, engineering, procurement, manufacture, supply, transportation, installation, construction (including civil works), testing, commissioning, inspection, maintenance, repair, supply, delivery and storage of spares:

(a) Subsea and underground HVDC cables and accessories required to connect the HVDC converter stations in Great Island, County Wexford, Ireland to the converter station in Pembroke, Wales, UK

(b) Spares (both strategic and operational spares);

(c) Provision of maintenance services for a mandatory initial period after take over to align with the warranty period under the EPC (see II.2.7 for current anticipated take over date) and supply and delivery of replenishment spares under a separate maintenance services agreement including options to extend at the sole discretion of Greenlink Interconnector Limited.

Further details of the scope of lot 2 are provided in the Pre-Qualification Questionnaire (PQQ) and Invitation to Negotiate (ITN) documents.

See Section VI.3 of this Contract Notice for more details about the procurement process.

II.2.5) **Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6) **Estimated value**

II.2.7) **Duration of the contract, framework agreement or dynamic purchasing system**

Start: 30/06/2020

End: 30/06/2023

This contract is subject to renewal: no

II.2.9) **Information about the limits on the number of candidates to be invited**

Envisaged number of candidates: 5

Objective criteria for choosing the limited number of candidates:

Details will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

II.2.10) **Information about variants**

Variants will be accepted: yes

II.2.11) **Information about options**

Options: yes

Description of options:

The following options will be included in the procurement of Lot 2:

(1) Extension to the term of the maintenance services agreement procured under this lot 2 will be optional at the sole discretion of Greenlink Interconnector Limited.

II.2.12) **Information about electronic catalogues**

II.2.13) **Information about European Union funds**

The procurement is related to a project and/or programme financed by European Union funds: yes

Identification of the project:

EU Project of Common Interest Reference 1.9.1 Ireland - United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) currently known as "Greenlink".

II.2.14) **Additional information**

II.2) **Description**

- II.2.1) **Title:**
Greenlink Interconnector Project — Converter Stations, HVAC Cables, Grid Connections, HVDC Cables and accessories
Lot No: 3
- II.2.2) **Additional CPV code(s)**
31000000
31320000
31321300
31321400
31321500
45000000
45314300
45314310
45315400
- II.2.3) **Place of performance**
NUTS code: IE052
NUTS code: UKL14
Main site or place of performance:
At and between Great Island, County Wexford, Ireland and Pembroke, Wales, United Kingdom, including the Irish Sea.
- II.2.4) **Description of the procurement:**
While Greenlink does not consider itself a “contracting entity” for the purposes of the EU Utilities Directive (Directive 2014/25/EU) and any national implementing legislation, it is voluntarily conducting this procurement in accordance with the terms of Directive 2014/25/EU to ensure an open, transparent and competitive tender process.
The scope of requirements of lot 3 within this contract notice are: the detailed design, engineering, procurement, manufacture, supply, transportation, installation, construction (including civil works), testing, commissioning, inspection, maintenance, repair, supply, delivery and storage of spares:
(a) 2 x HVDC Converter Stations (1 in Great Island, County Wexford, Ireland and 1 in Pembroke, Wales, UK);
(b) All HVAC cables required to connect the HVDC converter stations to the grid connection equipment in both Great Island, County Wexford, Ireland and/or Pembroke, Wales, UK (optional for UK and/or Ireland at the sole discretion of Greenlink Interconnector Limited);
(c) Grid connection equipment in grid connection substation in Great Island, County Wexford, Ireland and/or grid connection substation in Pembroke, Wales, UK (optional for Ireland and/or UK at the sole discretion of Greenlink Interconnector Limited);
(d) Subsea and underground HVDC cables and accessories required to connect the HVDC converter stations in Great Island, County Wexford, Ireland to the converter station in Pembroke, Wales, UK;
(e) Spares (both strategic and operational spares);
(f) Provision of ancillary maintenance services for a mandatory initial period after take over to align with the warranty period under the EPC (see II.2.7 for current anticipated take over date) and supply and delivery of replenishment spares under a separate Maintenance Services Agreement including options to extend at the sole discretion of Greenlink Interconnector Limited.
Further details of the scope of lot 2 are provided in the Pre-Qualification Questionnaire (PQQ) and Stage 1 Invitation to Negotiate (ITN) documents.

lot 3 is optional and under consideration. Greenlink Interconnector Limited reserves the unconditional right to withdraw inclusion of lot 3 prior to issuing of the Stage 1 ITN.

lot 3 option will be conditional upon an applicant having applied for both lot 1 and lot 2.

Applicants will be requested to confirm their interest in this lot 3 option in the PQQ submission.

Further details of the scope of lot 3 are provided in the Pre-Qualification Questionnaire (PQQ) and Invitation to Negotiate (ITN) documents.

See Section VI.3 of this Contract Notice for more details about the procurement process.

II.2.5) **Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6) **Estimated value**

II.2.7) **Duration of the contract, framework agreement or dynamic purchasing system**

Start: 30/06/2020

End: 30/06/2023

This contract is subject to renewal: no

II.2.9) **Information about the limits on the number of candidates to be invited**

Envisaged number of candidates: 5

Objective criteria for choosing the limited number of candidates:

Details will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

II.2.10) **Information about variants**

Variants will be accepted: yes

II.2.11) **Information about options**

Options: yes

Description of options:

The following options will be included in the procurement of lot 3 (lot 1 + lot 2):

(1) The scope of the detailed design, engineering, procurement, manufacture, supply, transportation, installation, construction (including civil works), testing, commissioning, maintenance and supply and delivery of spares (as detailed in the procurement documents) of HVAC cables and accessories required to connect the HVDC converter stations to the grid connection equipment in Great Island, County Wexford, Ireland and/or Pembroke, Wales, UK will each be optional at the sole discretion of Greenlink Interconnector Limited;

(2) The scope of the supply construction (including civil works) installation test and commissioning (as detailed in the procurement documents) of the grid connection equipment at the Great Island and Pembroke grid substations will each be optional at the sole discretion of Greenlink Interconnector Limited and

(3) Extension of the maintenance services agreement procured under this lot 3 at the sole discretion of Greenlink Interconnector Limited.

II.2.12) **Information about electronic catalogues**

II.2.13) **Information about European Union funds**

The procurement is related to a project and/or programme financed by European Union funds: yes

Identification of the project:

EU Project of Common Interest Reference 1.9.1 Ireland - United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) currently know as "Greenlink".

II.2.14) **Additional information**

Section III: Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.1) Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers

List and brief description of conditions:

Details will be described in the Pre-Qualification Questionnaire (PQQ).

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ).

III.1.2) Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

III.1.4) Objective rules and criteria for participation

List and brief description of rules and criteria:

Details will be described in the Pre-Qualification Questionnaire (PQQ).

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ).

III.1.5) Information about reserved contracts

III.1.6) Deposits and guarantees required:

Guarantees and Bonds are required and will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

III.1.7) Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them:

Details will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

III.1.8) Legal form to be taken by the group of economic operators to whom the contract is to be awarded:

Greenlink Interconnector Limited reserves the right to require bidders in a consortium to take a particular legal form or require a single contractor take primary liability or to require each party in a consortium to take joint and several liability.

All members of a joint venture or consortium group:

(a) must make an application and submit a PQQ;

(b) not breach the exclusion grounds specified in the PQQ document and

(c) meet all the minimum requirements as specified in the PQQ document with the exception of the minimum technical capability where at least 1 member of the consortium group must be designated as the lead member and meet the minimum technical manufacturing capability requirement.

Applicants must provide full details of the proposed consortium arrangements (including the legal form) and proposed contracting structures including key sub-contractors.

Details of the conditions applied to joint ventures and consortium groups are stated in the PQQ.

III.2) Conditions related to the contract

III.2.2) **Contract performance conditions:**

Details will be described in the Pre-Qualification Questionnaire (PQQ) and/or Invitation to Negotiate (ITN) documents.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

III.2.3) **Information about staff responsible for the performance of the contract**

Section IV: Procedure

IV.1) **Description**

IV.1.1) **Type of procedure**

Negotiated procedure with prior call for competition

IV.1.3) **Information about a framework agreement or a dynamic purchasing system**

IV.1.4) **Information about reduction of the number of solutions or tenders during negotiation or dialogue**

Recourse to staged procedure to gradually reduce the number of solutions to be discussed or tenders to be negotiated

IV.1.6) **Information about electronic auction**

IV.1.8) **Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: no

IV.2) **Administrative information**

IV.2.1) **Previous publication concerning this procedure**

Notice number in the OJ S: [2018/S 090-204808](#)

IV.2.2) **Time limit for receipt of tenders or requests to participate**

Date: 12/10/2018

Local time: 12:00

IV.2.3) **Estimated date of dispatch of invitations to tender or to participate to selected candidates**

Date: 02/11/2018

IV.2.4) **Languages in which tenders or requests to participate may be submitted:**

English

IV.2.6) **Minimum time frame during which the tenderer must maintain the tender**

IV.2.7) **Conditions for opening of tenders**

Section VI: Complementary information

VI.1) **Information about recurrence**

This is a recurrent procurement: no

VI.2) **Information about electronic workflows**

VI.3) **Additional information:**

Applicants wishing to participate should submit their company name, main contact name and main contact email address to Greenlink Procurement Manager at email address greenlink.procurement@wsp.com

Applicants will then receive a "Non-Disclosure" Agreement ("NDA") and an "Expression of Interest" ("EOI") form for signature. The NDA and EOI should be submitted to the Greenlink Procurement Manager at email address greenlink.procurement@wsp.com

The PQQ and subsequent ITN processes will be run using the ACONEX procurement software.

After the NDA and EOI forms have been submitted, the PQQ document will then be issued to each applicant including submission instructions and which will be available from 31.8.2018.

Following the evaluation of the PQQ submissions in accordance with the PQQ instructions up to five (5) candidates will be shortlisted for each lot in accordance with the selection criteria specified in PQQ document to proceed to the invitation to negotiate ("ITN") phase.

The ITN phase will be conducted in two (2) stages. At the end of Stage 1 ITN two (2) candidates will be shortlisted to proceed to Stage 2 ITN in accordance with the award criteria specified in the Stage 1 ITN document and Greenlink Interconnector Limited will confirm whether it will include the lot 3 option in the Stage 2 ITN process. At the end of Stage 2 ITN one (1) candidate will be appointed as the Preferred Bidder for lot 2 in accordance with the Stage 2 award criteria specified in the Stage 1 ITN. The award criteria specified in the Stage 1 ITN and Stage 2 ITN will be set on the basis of the most economically advantageous tender.

Greenlink Interconnector Limited reserve the right to alter or amend the conditions described in the Pre-Qualification Questionnaire (PQQ) and/or the Invitation to Negotiate (ITN) documents.

In the event that two separate contracts are awarded for lot 1 and lot 2 the Candidates to whom the contracts will be awarded may be required to enter into an Interface Agreement.

Greenlink Interconnector Limited will apply a non-mandatory "standstill" period of a minimum of 10 days from the day following the date of notification to participating tenderers of the award of contract or contracts.

VI.4) **Procedures for review**

VI.4.1) **Review body**

High Court of Justice
Queens Bench Divisional Court, Royal Courts of Justice, Strand
London
WC2A 2LL
United Kingdom

VI.4.2) **Body responsible for mediation procedures**

VI.4.3) **Review procedure**

VI.4.4) **Service from which information about the review procedure may be obtained**

VI.5) **Date of dispatch of this notice:**

22/08/2018

PUBLIC NOTICE OF APPLICATION FOR A FORESHORE CONSENT

Greenlink Interconnector Limited for Interconnector between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales)

Notice is hereby given pursuant to Section 19A of the Foreshore Act 1933 (as amended), that Greenlink Interconnector Limited, Mason Hayes and Curran, South Bank House, Barrow Street, Dublin 4 has applied for consent under the Foreshore Acts to occupy an area of foreshore for an Interconnector between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

An Environmental Impact Assessment Report (EIAR) has been prepared in respect of this proposal. The foreshore application, EIAR, associated documents, all relevant maps, site plans and drawings may be inspected at the following locations:

- **Waterford Garda Station, Patrick Street, Waterford City**
- **New Ross Garda Station Marshmeadows, New Ross, Co. Wexford**
- **Wexford Public Library, Mallin St., Wexford (Monday to Saturday, during the hours 10.30am to 5.30pm)**
- **Wexford County Council, County Hall, Carricklawn, Wexford (Monday to Friday, during the hours 9am-1pm/2pm-5pm)**

A hard copy of the Environmental Impact Assessment Report may be purchased from the applicant.

A Non Technical Summary may be obtained free of charge.

CDs that include the Environmental Impact Assessment Report, maps, site plans and drawings, and a copy of the foreshore application are available free of charge from the applicant at the address stated above or by emailing energy.water.bst@intertek.com.

The application may also be viewed on the following dedicated website: www.greenlink.ie/foreshore/licenceapplicationireland and on the Department's website: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford.

The Minister for Housing, Planning and Local Government is responsible for making a decision on this application and he may either grant, approve or consent to the application with or without covenants, conditions or agreements, where applicable, or refuse the application.

Section 19C of the Foreshore Act applies to this application.

Submissions, comments in relation to the proposal may be made in writing within 8 weeks from the publication of this notice to the Minister for Housing, Planning and Local Government at Foreshore Unit, Department for Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford

or by e-mail to foreshore@housing.gov.ie (Quoting Ref: FS007050). The closing date for the receipt of written submissions, comments or questions is therefore 17:30 on 08/01/2020.

Within 8 weeks from the publication of this notice, a copy of the application, the Environmental Impact Assessment Report and any other relevant report or information (including copies of any submissions, comments, or questions received by the appropriate Minister) may be inspected free of charge at the Foreshore Unit, Department for Housing, Planning Local Government, Newtown Road, Wexford, Co. Wexford during the hours 10:00 to 13:00 and 14:00 to 17:00 Monday to Friday. All of this material, including submissions from the public, will also be published on the website of the Department for Housing, Planning and Local Government at: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford

Dated this day of 12/11/2019.

Greenlink Interconnector Limited, Mason Hayes and Curran, South Bank House, Barrow Street, Dublin 4

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INTERCONNECTOR

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Dated this day of 12/11/2019.

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INTERCONNECTOR

Spanish 'Skating' in Irish Waters

The Sea-Fisheries Protection Authority (SFPA) has welcomed the ruling by Judge Seán O'Donabháin on 4th November 2019 who imposed a fine of €20,000 in addition to the forfeiture of €60,000 of catch and gear on the Spanish vessel, the Novo Alborada, following a guilty plea at Cork Circuit Court.

The Spanish registered fishing vessel was detained in Castletownbere on 9th July 2019 for skate fishing infringements, resulting from a joint operation with the UK Marine Management Organisation (MMO) and An Gardaí. The master of the vessel, Manuel Juncal Juncal pleaded guilty to the charge of retention of a prohibited species of fish and a second charge of mis-reporting the vessel's fishing activity on its logbook. Fifty-two boxes of critically endangered blue skate were incorrectly recorded as long-nosed skate in the vessel's logbook.

Susan Steele, Chair, SFPA highlighted the success of this operation and praised the interagency co-operation. "The blue skate is an endangered species that requires our protection and we have a zero tolerance approach to any vessels illegally fishing endangered species in our waters. We liaised with the UK MMO on this case and their close cooperation with Irish authorities led to the infringement being detected following inspection, which has now led to a successful prosecution. We will continue to work with authorities in the UK and across Europe to deter and detect any future illegal fishing violations."

Less than a week after the court ruling against the Novo Alborada, the SFPA informed the Marine Times that a Spanish registered fishing vessel had been detained for alleged skate fishing infringements following an inspection by Sea-Fisheries Protection Officers of the SFPA in Castletownbere on 12th November 2019. The alleged infringements relate to the retention of Blue skate on board. Current EU regulations prohibit blue skate from being fished, retained on board, trans-shipped, or landed. This is the highest protection possible under the EU's Common Fisheries Policy.

The SFPA ensures compliance with national fishing quotas which ensures equality and fairness for all fishers and the continued sustainability of Ireland's valuable marine resources. It monitors all vessels operating within the Irish EEZ electronically with the support of the Naval Service and reviews and assesses their declared catches for compliance with EU sea-fisheries legislation. Where non-compliances are found, prosecutions may follow as with any incident of non-compliance with the law.

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Section 19C of the Foreshore Act applies to this application.

Submissions, comments in relation to the proposal may be made in writing within 8 weeks from the publication of this notice to the Minister for Housing, Planning and Local Government at Foreshore Unit, Department for Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford or by e-mail to foreshore@housing.gov.ie (Quoting Ref: FS007050). The closing date for the receipt of written submissions, comments or questions is therefore 17:30 on 08/01/2020.

Within 8 weeks from the publication of this notice, a copy of the application, the Environmental Impact Assessment Report and any other relevant report or information (including copies of any submissions, comments, or questions received by the appropriate Minister) may be inspected free of charge at the Foreshore Unit, Department for Housing, Planning Local Government, Newtown Road, Wexford, Co. Wexford during the hours 10:00 to 13:00 and 14:00 to 17:00 Monday to Friday. All of this material, including submissions from the public, will also be published on the website of the Department for Housing, Planning and Local Government at: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford

Dated this day of 12/11/2019.

Greenlink Interconnector Limited,
Mason Hayes and Curran, South Bank House,
Barrow Street, Dublin 4

Greenlink **intertek**
INTERCONNECTOR



The sole responsibility for this information lies with Greenlink. The European Union is not responsible for any use that may be made of this information.

PUBLIC NOTICE

APPLICATION FOR A FORESHORE LICENCE

Notice is hereby given pursuant to Section 19 of the Foreshore Act, 1933 that Greenlink Interconnector Limited, Unit C, Building 4200, Cork Airport Business Park, has applied to the Minister of Housing, Planning and Local Government for a licence under Section 3 of the said Act for Marine Surveys in relation to a proposed Interconnector Cable at Hook Head, Co. Wexford.

A copy of the application, and the relevant maps, plans, and drawings, are available for inspection for the next 21 working days, free of charge, at Waterford Garda Station, Ballybricken, Waterford City.

The documentation is available on the Department's website <http://www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-limited>

Any person who wishes to make an objection to, or a representation in respect of the grant of the licence sought should do so in writing, giving reasons, within 21 working days of publication of this Notice (quoting ref: FS006582), to the Foreshore Unit, Department of Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford or foreshore@housing.gov.ie. The closing date for submissions is close of business on 22nd February 2018.

All objections and representations received will be forwarded to the applicant for comment prior to any decision being made in the matter. Material upon which the Minister shall determine this application may be published on the Department's website. In this regard the Department wishes to draw attention to its policy on defamatory material that may be contained in submissions it receives, which may be found at: <http://www.housing.gov.ie/planning/foreshore/public-participation-foreshore-consent-process>

Dated this day 23rd January of 2018

Name and address: Tom Brinicombe, Development Manager, Unit C Building 4200, Cork Airport Business Park, Cork, Ireland

**GREENLINK Ireland-Wales Interconnector Project
Offshore and Nearshore Surveys 2018**

Mariners are advised that survey vessels and equipment will be used in the offshore area of the southern Irish sea waters between Pembroke, Wales and Southern Ireland. Further nearshore and landfall survey work will be concentrated around Freshwater West, Pembroke, Wales and Baginbun, Co Wexford, Ireland.

The geophysical survey work will be carried out by MMT using survey vessels MV FRANKLIN and MV SEABEAM from 19th September through to November.



Vessel: Franklin
Owner: Northern Survey
Call Sign: SEIN
IMO: 8301797
GSM: +46 31 31 00 301
Email: om-franklin@mmt.se



Vessel: Seabeam
Owner: MMT
Call Sign: 2BGN2
MMSI: 235065925
GSM: +46 73 85 39 334
Email: om-seabeam@mmt.se

During this survey the vessels will be deploying underwater survey equipment at which such times, the survey vessels may have restricted ability to manoeuvre and approaching vessels are requested to pass at a safe speed and distance.

Project Description

Greenlink Interconnector survey will be conducted by MMT on behalf of Greenlink Interconnector Limited. Further details of the project can be found at www.greenlinkinterconnector.eu

Survey task

A detailed geophysical survey will be carried out in an area between Freshwater West, Pembroke, Wales and Baginbun, Co Wexford, Ireland. The geophysical survey work will be conducted with hull mounted Multibeam sonar work with towed sidescan sonar, sub-bottom profiler and magnetometer.

Mariners are advised to keep an aft safety clearance of the vessels no less than 350m.

Port of Operation

Franklin will mobilise in the port of Pembroke from 19th September and Seabeam from 1st October.

The geophysical survey is planned for approximately 40 days but may extend if weather becomes poor.

Survey work will begin in blocks 05 and 06 from the 19th September to clear the Castlemartin firing range areas before moving to block 01 at the beginning of October to commence full survey from the Irish coast working east.

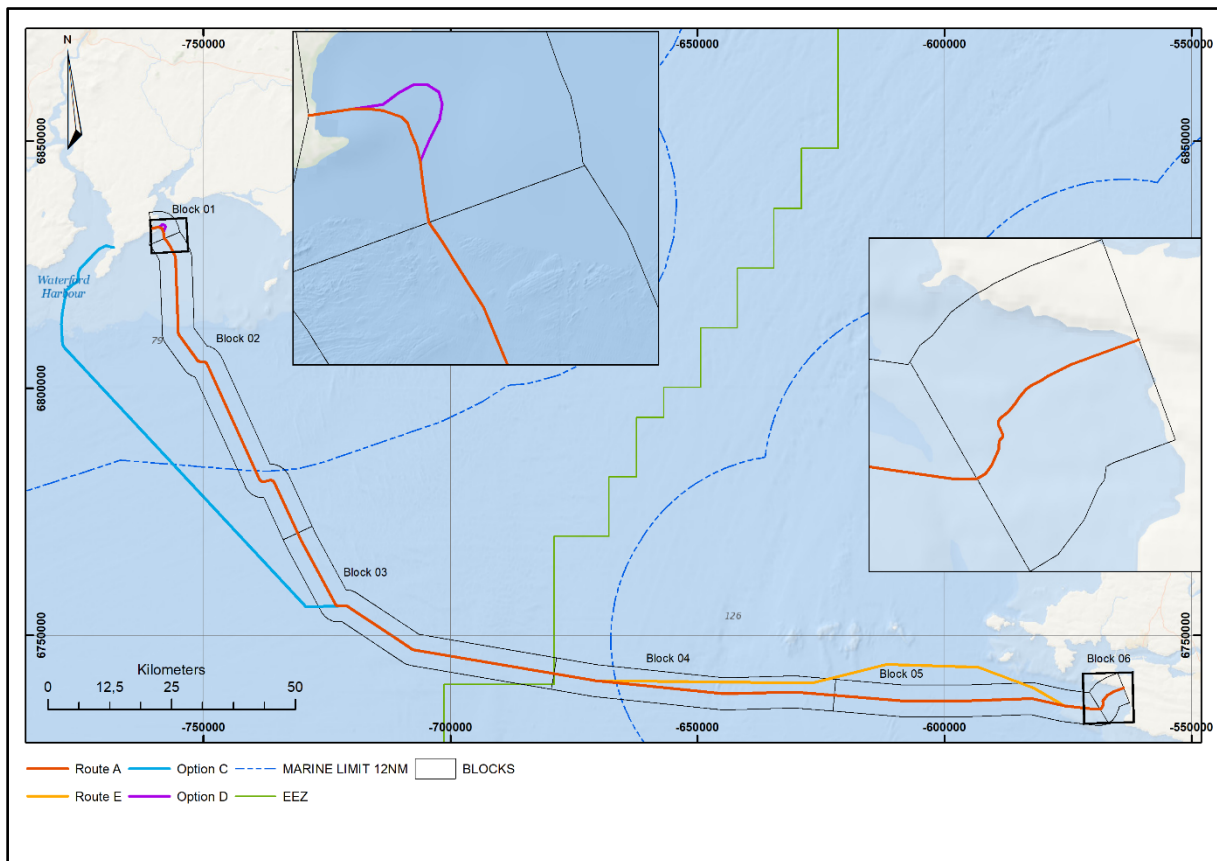


Figure 1 – Location and selected areas to be surveyed showing the sub-divided area blocks along the survey route. Note the survey corridor width is +/- 250m centred on the RPL (Red).

SURVEY ROUTE A COORDINATES

Greenlink Interconnector Route

N 52.17765	W 6.83063
N 52.17865	W 6.82270
N 52.17875	W 6.82018
N 52.17863	W 6.81718
N 52.17804	W 6.81390
N 52.17742	W 6.81271
N 52.17631	W 6.81196

N 52.17486	W 6.81079
N 52.17319	W 6.81002
N 52.17027	W 6.80918
N 52.16644	W 6.80790
N 52.16441	W 6.80529
N 52.16212	W 6.80269
N 52.15731	W 6.79717
N 52.14669	W 6.78892
N 52.14405	W 6.78786
N 52.06149	W 6.78303
N 52.06131	W 6.78301
N 52.06114	W 6.78299
N 52.06096	W 6.78295
N 52.06079	W 6.78290
N 52.06061	W 6.78284
N 52.06044	W 6.78276
N 52.06027	W 6.78268
N 52.06011	W 6.78259
N 52.05994	W 6.78248
N 52.05978	W 6.78237
N 52.05962	W 6.78224
N 52.05946	W 6.78211
N 52.05931	W 6.78196
N 52.05916	W 6.78181
N 52.05901	W 6.78164
N 52.03072	W 6.74835
N 52.03058	W 6.74818
N 52.03044	W 6.74799
N 52.03031	W 6.74780
N 52.03018	W 6.74760
N 52.03005	W 6.74739
N 52.02994	W 6.74717
N 52.02982	W 6.74695
N 52.02971	W 6.74672
N 52.02961	W 6.74648
N 52.02952	W 6.74623
N 52.02943	W 6.74598
N 52.02934	W 6.74572
N 52.02927	W 6.74546
N 52.02920	W 6.74520
N 52.02913	W 6.74492
N 52.02907	W 6.74465
N 52.02902	W 6.74437
N 52.02898	W 6.74409
N 52.02894	W 6.74380
N 52.02891	W 6.74352
N 52.02889	W 6.74323
N 52.02888	W 6.74294
N 52.02887	W 6.74265

N 52.02887	W 6.74236
N 52.02890	W 6.73782
N 52.02890	W 6.73753
N 52.02889	W 6.73724
N 52.02888	W 6.73695
N 52.02886	W 6.73666
N 52.02883	W 6.73638
N 52.02879	W 6.73610
N 52.02875	W 6.73581
N 52.02870	W 6.73554
N 52.02864	W 6.73526
N 52.02858	W 6.73499
N 52.02851	W 6.73473
N 52.02843	W 6.73446
N 52.02835	W 6.73421
N 52.02826	W 6.73396
N 52.02816	W 6.73371
N 52.02806	W 6.73347
N 52.02795	W 6.73324
N 52.02784	W 6.73302
N 52.02772	W 6.73280
N 52.02760	W 6.73259
N 52.02747	W 6.73239
N 52.02734	W 6.73220
N 52.02720	W 6.73201
N 52.02706	W 6.73184
N 52.02691	W 6.73167
N 52.02676	W 6.73151
N 52.02661	W 6.73137
N 52.02645	W 6.73123
N 52.02629	W 6.73111
N 51.89720	W 6.63529
N 51.89704	W 6.63517
N 51.89688	W 6.63503
N 51.89672	W 6.63489
N 51.89657	W 6.63473
N 51.89643	W 6.63457
N 51.89628	W 6.63439
N 51.89614	W 6.63421
N 51.89601	W 6.63401
N 51.89588	W 6.63381
N 51.89576	W 6.63360
N 51.89564	W 6.63339
N 51.89553	W 6.63316
N 51.89542	W 6.63293
N 51.89532	W 6.63269
N 51.89522	W 6.63245
N 51.89513	W 6.63220
N 51.89505	W 6.63194

N 51.89497	W 6.63168
N 51.89490	W 6.63141
N 51.89484	W 6.63114
N 51.89478	W 6.63087
N 51.89473	W 6.63059
N 51.89469	W 6.63031
N 51.89465	W 6.63003
N 51.89462	W 6.62974
N 51.89460	W 6.62945
N 51.89458	W 6.62916
N 51.89458	W 6.62888
N 51.89458	W 6.62859
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N 51.89462	W 6.62772
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N 51.89619	W 6.61562
N 51.89621	W 6.61533
N 51.89621	W 6.61505
N 51.89621	W 6.61476
N 51.89621	W 6.61447
N 51.89619	W 6.61418
N 51.89617	W 6.61390
N 51.89614	W 6.61361
N 51.89610	W 6.61333
N 51.89606	W 6.61305
N 51.89601	W 6.61277
N 51.89595	W 6.61250
N 51.89589	W 6.61223
N 51.89582	W 6.61197
N 51.89575	W 6.61171
N 51.89566	W 6.61145
N 51.89557	W 6.61120
N 51.89548	W 6.61096
N 51.89538	W 6.61072
N 51.89527	W 6.61049
N 51.89516	W 6.61026
N 51.89504	W 6.61005
N 51.89492	W 6.60984
N 51.89479	W 6.60964
N 51.89466	W 6.60944
N 51.89452	W 6.60926
N 51.89438	W 6.60908
N 51.89424	W 6.60892
N 51.89409	W 6.60876

N 51.89393	W 6.60862
N 51.89378	W 6.60848
N 51.89362	W 6.60835
N 51.82876	W 6.55966
N 51.75735	W 6.49766
N 51.75720	W 6.49752
N 51.75705	W 6.49738
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N 51.75676	W 6.49706
N 51.75663	W 6.49688
N 51.75649	W 6.49670
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N 51.70599	W 6.35629
N 51.70593	W 6.35604
N 51.70587	W 6.35578
N 51.70582	W 6.35551
N 51.70578	W 6.35524
N 51.70574	W 6.35498
N 51.70571	W 6.35470
N 51.67099	W 6.02441
N 51.65606	W 5.79046
N 51.65828	W 5.66261
N 51.64809	W 5.46310
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N 51.65077	W 5.23126
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N 51.65073	W 5.23075
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N 51.64524	W 5.10148
N 51.64555	W 5.10102
N 51.64579	W 5.10074
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N 51.64688	W 5.10118
N 51.64771	W 5.10187
N 51.64846	W 5.10200
N 51.64900	W 5.10149
N 51.65007	W 5.09936
N 51.65148	W 5.09767
N 51.65249	W 5.09656
N 51.65395	W 5.09481
N 51.65462	W 5.09342
N 51.65554	W 5.09064
N 51.65628	W 5.08903
N 51.65839	W 5.08249

N 51.66284 W 5.06460

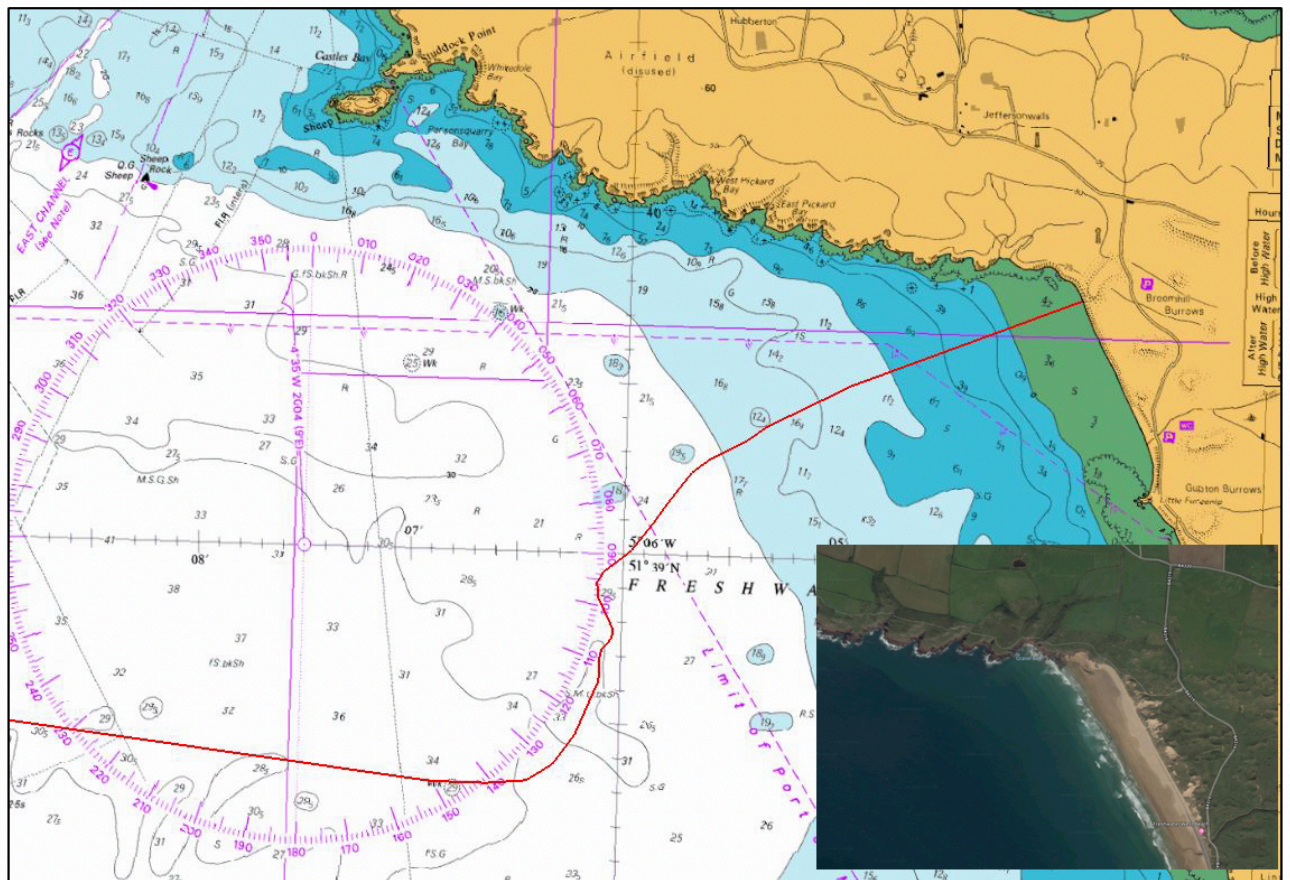


Figure 2 – Freshwater West, Pembroke, Wales - Survey Area

APPROXIMATE COORDINATES

Freshwater, Pembroke, Wales

N 51.656 W 005.063

N 51.650 W 005.086

N 51.646 W 005.099

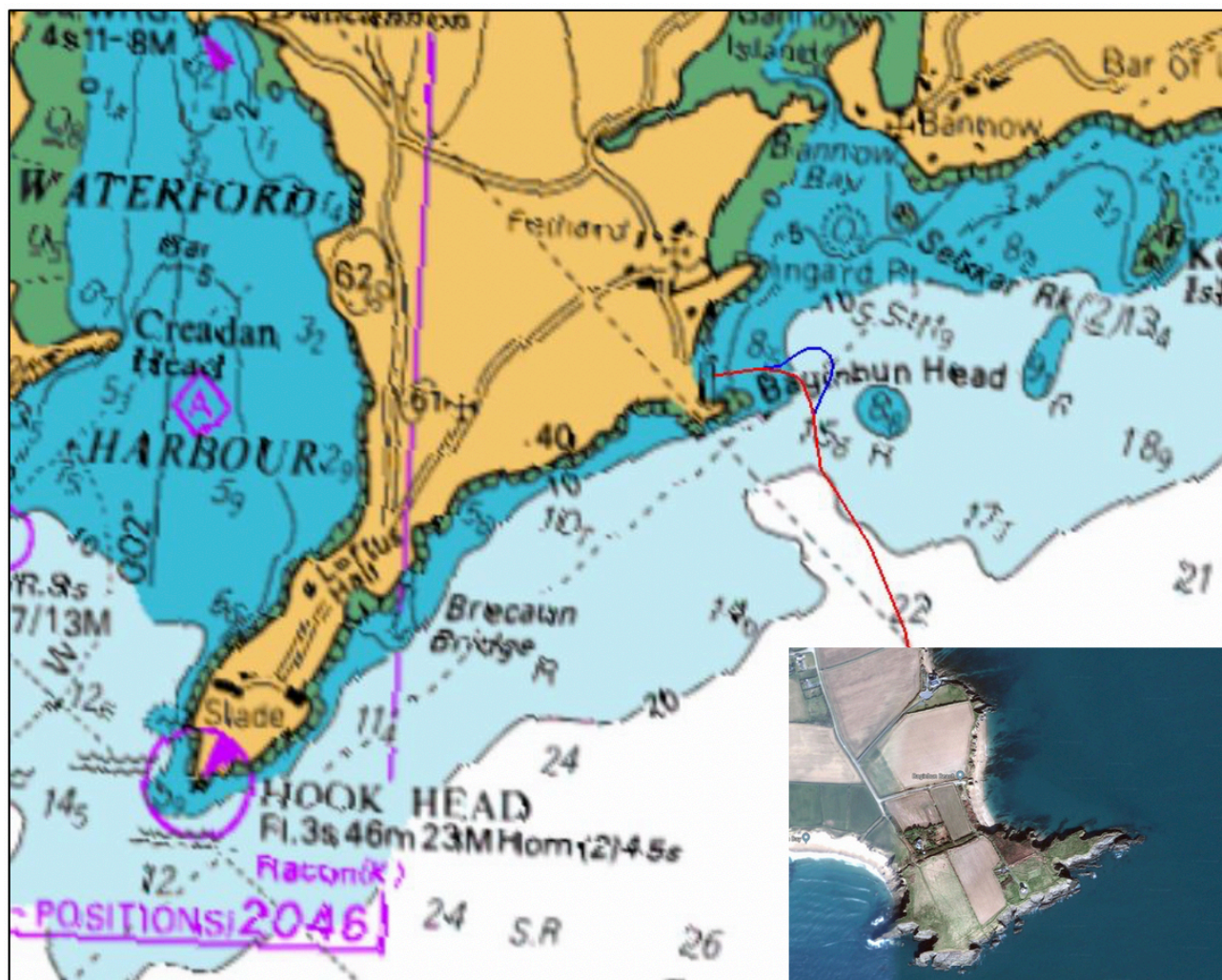


Figure 3 – Baginbun, Co Wexford, Ireland - Survey Area

APPROXIMATE COORDINATES

Baginbun, Co Wexford, Ireland

N 52.181 W 006.829

N 52.176 W 006.815

N 52.168 W 006.810

The geotechnical survey work will be carried out by MMT using offshore survey vessels MV Edda Fonn and RED7 Jack-up rig Seariser 2 from mid-October through to November. Nearshore multicat vessels may be also be deployed in shallow coastal areas but will be confirmed later



Vessel: Edda Fonn
Owner: Mökster
Call Sign: LAZT7
IMO: 9273662
GSM: +47 23 67 61 32
Email: om-edda_fonn@mmt.se



Vessel: Seariser 2
Owner: Red7
Email: om-onshore@mmt.se

During this survey the vessels will be deploying underwater geotechnical survey equipment along the survey route at which such times, the survey vessels may have restricted ability to manoeuvre and other vessels are requested to pass at a safe speed and distance.

Project Description

Greenlink Interconnector survey will be conducted by MMT on behalf of Greenlink Interconnector Limited. Further details of the project can be found at www.greenlinkinterconnector.eu

Survey task

A detailed geotechnical survey will be carried out in an area between Freshwater West, Pembroke, Wales and Baginbun, Co Wexford, Ireland from mid-October. The geotechnical survey work will be conducted with CPT and Vibrocorer from vessel Edda Fonn approximately every 1.5km along the route. Boreholes will be drilled in intertidal locations at Baginbun and Freshwater in November.

Mariners are advised to keep an aft clearance of the geotechnical vessels no less than 350m.

Contact Details:

Further enquiries should be addressed to the following people in the following order:

1. Martin Godfrey (MMT Project Manager), T: +44 1295 817 748, martin.godfrey@mmt.se
2. Kalle Flink (MMT Operations), T: +46 708 11 28 43, kalle.flink@mmt.se
3. Claire Griffiths (Fisheries Liason), T +44 7498 550 586, claire.griffiths@marinespace.co.uk

Distribution List:

MRCC Milford Haven

H.M. Coastguard
+44 (0)1646 690909
milfordhaven.coastguard@mcga.gov.uk

National Maritime Operations Centre

National Maritime Operation Centre
Unit 12, Kites Croft Business Park
Fareham PO14 4LW
+44 (0)2932 552 100

PORTS

Pembroke Port, Wales

Head Office
Gorsewood Drive
Milford Haven
Pembrokeshire SA73 3EP
+44 (0)1646 696100
enquiries@mhpa.co.uk

Waterford, Ireland

3rd Floor, Marine Point
Belview Port
Waterford
Ireland X91 W0XW
+353-(0)51-874907
info@portofwaterford.com

- DIO SD Trg-WW Castlemartin STSO (Poole, John Maj) DIOSDTrg-WWCastlemartinSTSO@mod.uk
- DIO SD Trg-WW HQ Comd (Howard-Gash, Richard Col) DIOSDTrg-WWHQComd@mod.uk
- Mike.ryan@mhpa.co.uk
- g.r.w.springett@bangor.ac.uk
- ian.holmes@cefas.co.uk

- r.k.f.unsworth@swansea.ac.uk
 - dd@portofwaterford.com
 - fr@portofwaterford.com
 - Jonny.Lewis@marinespace.co.uk
 - claire.griffiths@marinespace.co.uk
 - Anna.farley@intertek.com
 - UK Hydrographic Office
 - National Maritime Operations Centre nmocontroller@hmcg.gov.uk.
 - Irish Maritime Safety Directorate
 - Marine Survey office Dublin
- info@bomborawave.com

FISHERIES

Kingfisher Information Services
kingfisher@seafish.co.uk

PUBLIC NOTICE OF APPLICATION FOR A FORESHORE CONSENT

Greenlink Interconnector Limited for Interconnector between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales)

Notice is hereby given pursuant to Section 19A of the Foreshore Act 1933 (as amended), that Greenlink Interconnector Limited, Mason Hayes and Curran, South Bank House, Barrow Street, Dublin 4 has applied for consent under the Foreshore Acts to occupy an area of foreshore for an Interconnector between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

An Environmental Impact Assessment Report (EIAR) has been prepared in respect of this proposal. The foreshore application, EIAR, associated documents, all relevant maps, site plans and drawings may be inspected at the following locations:

- **Waterford Garda Station, Patrick Street, Waterford City**
- **New Ross Garda Station, Marshmeadows, New Ross, Co. Wexford**
- **Wexford Public Library, Mallin St., Wexford (Monday to Saturday, during the hours 10.30 am to 5.30 pm)**
- **Wexford County Council, County Hall, Carricklawn, Wexford (Monday to Friday, during the hours 9am - 1pm / 2pm - 5pm)**

A hard copy of the Environmental Impact Assessment Report may be purchased from the applicant. A Non Technical Summary may be obtained free of charge.

CDs that include the Environmental Impact Assessment Report, maps, site plans and drawings, and a copy of the foreshore application are available free of charge from the applicant at the address stated above or by emailing energy.water.bst@intertek.com.

The application may also be viewed on the following dedicated website: www.greenlink.ie/foreshorelicenceapplicationireland and on the Department's website: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford.

The Minister for Housing, Planning and Local Government is responsible for making a decision on this application and he may either grant, approve or consent to the application with or without covenants, conditions or agreements, where applicable, or refuse the application.

Section 19C of the Foreshore Act applies to this application.

Submissions, comments in relation to the proposal may be made in writing within 8 weeks from the publication of this notice to the Minister for Housing, Planning and Local Government at Foreshore Unit, Department for Housing, Planning and Local Government, Newtown Road, Wexford, Co. Wexford or by e-mail to foreshore@housing.gov.ie (Quoting Ref: FS007050). The closing date for the receipt of written submissions, comments or questions is therefore 17:30 on 08/01/2020.

Within 8 weeks from the publication of this notice, a copy of the application, the Environmental Impact Assessment Report and any other relevant report or information (including copies of any submissions, comments, or questions received by the appropriate Minister) may be inspected free of charge at the Foreshore Unit, Department for Housing, Planning Local Government, Newtown Road, Wexford, Co. Wexford during the hours 10:00 to 13:00 and 14:00 to 17:00 Monday to Friday. All of this material, including submissions from the public, will also be published on the website of the Department for Housing, Planning and Local Government at: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford

Dated this day of 12/11/2019.

Greenlink Interconnector Limited,
Mason Hayes and Curran, South Bank House,
Barrow Street, Dublin 4

Greenlink **intertek**
INTERCONNECTOR

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The application may also be viewed on the following dedicated website: www.greenlink.ie/foreshore/licence/application/ireland and on the Department's website: www.housing.gov.ie/planning/foreshore/applications/greenlink-interconnector-wexford.

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Dated this day of 12/11/2019.

Greenlink Interconnector Limited,
Mason Hayes and Curran,
South Bank House,
Barrow Street,
Dublin 4

intertek

Greenlink

INTERCONNECTOR



Appendix 11

Feedback Form

– YOUR VIEWS –

We are very interested in hearing your views. Please feel free to capture in this form your comments on our proposal and some of the specific issues we have raised at the exhibition. Thank you for your input!

1. Your contact details

Name	
Address	
Phone/mobile number	
Email	
Do you want Greenlink to send you project updates?	Yes / No
Preferred method of contact	

Appendix 12

Press articles

Greenlink press coverage Ireland: May 2017 - present

26th October 2017 CRU announcement

<https://www.irishtimes.com/business/energy-and-resources/energy-watchdog-backs-1.5bn-power-line-investments-1.3268996>

<http://www.southeastradio.ie/2017/10/e500m-electricity-interconnector-to-be-set-up-between-wexford-and-wales/>

7th November 2017: Wexford People

Publication Name: Wexford People
Published Date: November 07, 2017
Media Reach: -
Media Cost: €3,996,00
Page Numbers: 25

RUEPOINT MEDIA

Go-ahead for electricity link between Wexford and Wales

By MARIA PEPPER

THE green light has been given for the advancement of a €500 million electricity interconnector project between Wexford and Wales.

The Commission for Regulating Utilities (CRU) has given Eirgrid the go-ahead to begin processing an application for connection to the national electricity grid.

The privately backed company Element Power based in Cork and London is behind the plan to establish an electricity cable called Greenlink joining Wexford with Wales.

The cable will begin underground from Great Island power station in Campile and continue under the Irish Sea where it will join up with the Pembrokeshire Power station in Wales.

The idea behind the plan is to ensure a continuity of supply and reduce electricity prices in both Ireland and the UK. It is scheduled to come into operation in 2023.

The CRU has approved a similar plan to connect Ireland with France at a cost of €1 billion, linking Cork with Brittany.



The €500m project will see a cable laid on the seabed between Wexford and Wales.

CRU has told Eirgrid to begin processing applications for the connection of both projects to the national electricity grid.

The CRU's direction indicates the watchdog's approval for both developments and moves them to the next stage of development.

Between them the cables will carry enough electricity to power more than 800,000 homes and the promoters say they will help cut energy prices by opening up new sources of supply to the Republic and other jurisdictions.

Both developments have common interest status which means the European Union regards them as essential to completing Europe's internal energy market, designed to provide cheap and secure energy across the EU. The EU recently pledged to pay €4 million towards the Celtic Interconnector's planning costs. Element Power points out that the EU is 'firmly committed' to its projects of common interest status, despite Brexit. The company has estimated that its interconnector could cut €800 million off Irish electricity bills over the project's lifetime.

1st December 2017: Eolas Magazine feature

<http://www.eolasmagazine.ie/greenlink-connecting-irish-british-power-markets/>

2018

31st January 2018: DCCAE consultation

<https://www.irishtimes.com/business/energy-and-resources/developer-of-ireland-wales-power-line-welcomes-consultation-1.3374909>

21st March 2018: CRU announcement

<http://renews.biz/110569/greenlink-under-irish-scrutiny/>

18th June: Recharge (indepth): Emerald Isle ready to shine in offshore wind

<http://www.rechargenews.com/wind/1513894/emerald-isle-ready-to-shine-in-offshore-wind>

19th June: reNews: Greenlink Offers Consumer Benefit

<http://renews.biz/111525/greenlink-offers-consumer-benefit/>

6th July 2018: DCCAE policy announcement

<https://renewablesnow.com/news/irish-policy-statement-recognises-role-of-interconnection-619512/>

29th July 2018: start of sales process for Element Power

<https://www.independent.ie/business/irish/irish-wind-farms-set-to-change-hands-with-element-power-on-the-block-37163842.html>

24th August 2018: construction procurement announcement

<http://renews.biz/112234/element-seeks-greenlink-muscle/>

<https://www.constructionnews.co.uk/markets/sectors/infrastructure/bidding-starts-for-360m-interconnector-deals/10034576.article>

24th September 2018: Press release: start of marine surveying

<https://renews.biz/48122/mmt-probes-greenlink-route/>

<https://www.newcivilengineer.com/latest/marine-works-begin-on-350m-ireland-wales-electricity-connector/10035482.article>

<https://www.marinetechologynews.com/news/marine-survey-starts-greenlink-564932>

27th September 2018: S&P Global Platts Power in Europe feature

<https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/100818-irish-gb-power-link-makes-sense-irrespective-of-brexit-could-benefit-from-iem-exit>

1st October 2018: Sale of Element Power Ireland and UK to Statkraft – references to Greenlink

<https://www.businesspost.ie/business/statkraft-acquire-element-power-british-energy-assets-e100m-426793>

<https://www.independent.ie/business/irish/norwegian-utility-close-to-buying-irish-windfarm-development-assets-37365680.html>

<https://www.thetimes.co.uk/article/norwegian-energy-group-statkraft-charges-in-for-element-power-s-wind-projects-gkw3mrgff>

18th October 2018: CRU determination

<https://renews.biz/48611/irish-back-500mw-greenlink/>

<https://www.newcivilengineer.com/latest/wales-ireland-electricity-connector-given-green-light/10036432.article>

<https://www.irishsun.com/news/258147045/ireland-to-benefit-from-eur400-million-205km-interconnector>

2nd November 2018: Opinion piece for British Irish Chamber of Commerce blog

<https://www.britishirishchamber.com/2018/11/02/interconnection-under-brexit-continuing-the-positive-power-relationship/>

2019

12th February 2019: EU €3.6m funding announcement

<https://renews.biz/51570/greenlink-nets-eu-36m-boost/>

12th March 2019: Partners Group investment

<https://renews.biz/51958/greenlink-interconnector-secures-new-backer/>

<https://www.thetimes.co.uk/article/element-power-s-greenlink-interconnector-energises-partners-group-th587rrbr>

25th March 2019: Construction Business (Ireland)

<http://www.constructionbusiness.ie/an-overview-of-the-irish-construction-pipeline/>

13th April 2019: public exhibition at Ramsgrange, Co Wexford

<https://www.independent.ie/regionals/newrossstandard/news/baginbun-interconnector-plan-unveiled-37994680.html>

4th May 2019: start of marine surveying work Ireland

<https://www.independent.ie/regionals/newrossstandard/news/work-starts-on-connection-of-ireland-and-uk-electricity-grids-38061672.html>

13th June 2019: appointment of Pdraig McManus

<https://renews.biz/53717/greenlink-hires-ex-esb-chief/>

2nd August 2019: S&P Global article – mention of Greenlink

<https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/080219-frances-neoen-buys-into-irish-wind-market>

5th August 2019: appointment of Tim Cowhig and Johnny Shine to Greenlink

<https://renews.biz/54644/greenlink-bolsters-executive-team/>

<https://www.offshore-energy.biz/greenlink-boosts-team-with-two-appointments/>

8th August 2019: interview in Sunday Business Post (Ireland) with Johnny Shine and Angus Norman

<https://www.businesspost.ie/news/greenlink-boosts-management-team-shine-cowhig-449554>

27th September 2019: EirGrid launches five year strategy: references to Greenlink in coverage

<https://www.irishtimes.com/business/energy-and-resources/eirgrid-to-spend-2bn-on-network-upgrades-over-next-five-years-1.4031793>

<https://www.constructionireland.ie/construction-news/264872/strategy-launched-to-double-renewable-energy-levels-by-2030>

26th October 2019: New Ross standard article ‘Blue Flag for Duncannon Beach could be years away’ includes reference to Greenlink:

<https://www.independent.ie/regionals/newrossstandard/blue-flag-for-duncannon-beach-could-be-years-away-38616964.html>

12th November 2019: Submission of Foreshore Licence application in Ireland

<https://www.irishtimes.com/business/energy-and-resources/project-to-connect-electricity-grids-in-ireland-and-wales-submits-plans-1.4079609>

<https://utilityweek.co.uk/consultation-launches-greenlink-interconnector/>

<https://www.businessgreen.com/bg/news/3083638/progress-in-plans-for-subsea-cable-connecting-irish-and-uk-electricity-systems>

<https://www.maritimejournal.com/news101/marine-civils/marine-civils/greenlink-planning-applications-in>

<https://www.independent.ie/regionals/newrossstandard/public-to-have-say-on-interconnector-plan-38681683.html>

16th November 2019: Public exhibitions in Wexford

<https://www.independent.ie/regionals/newrossstandard/public-to-have-say-on-interconnector-plan-38681683.html>

16th December 2019: Nigel Beresford appointed as CEO

<https://renews.biz/56989/new-skipper-takes-greenlink-helm/>

<https://www.offshore-energy.biz/greenlink-welcomes-beresford-as-ceo/>

4th January 2020: New Ross Standard 'Concerns raised about interconnector plans'

<https://www.independent.ie/regionals/newrossstandard/news/concerns-raised-about-interconnector-plans-38822590.html>

13th January 2020: Greenlink at Irish Renewable Energy Summit 2020

<http://enviro-solutions.com/dailynews2/100120-r-e-summit.html>

27th March 2020: CRU consultation: Greenlink welcomes Irish regulator's positive consultation on new support regime.

<https://renews.biz/59381/greenlink-welcomes-positive-consultation/>

<https://www.4coffshore.com/news/cru-publishes-greenlink-consultation-results-nid17067.html>

Appendix 13

Presentation to BICC
Roundtable June 2018

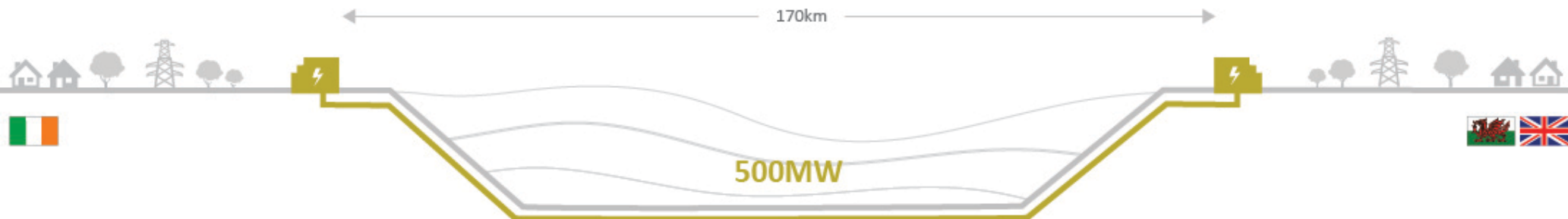
Greenlink

INTERCONNECTOR

GREENLINK INTERCONNECTOR UPDATE

Buswells Hotel – Round Table Discussion 13 June 2018

Simon Ludlam
Project Director



PROJECT OVERVIEW

Greenlink is Ireland's next interconnector



TECHNICAL PARAMETERS

- 500MW
- HVDC $\sim\pm 300\text{kV}$ - single symmetrical monopole
- Voltage Source Convertors

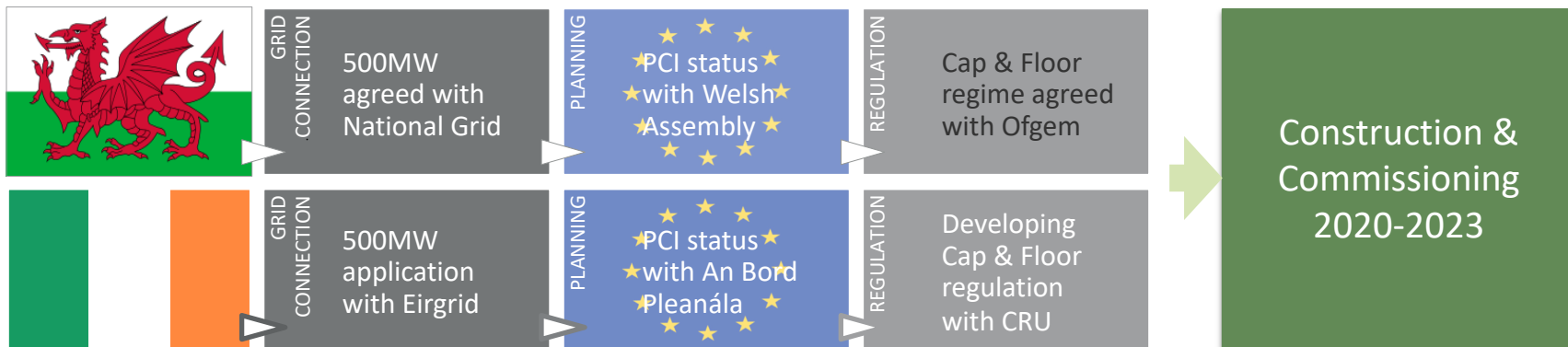
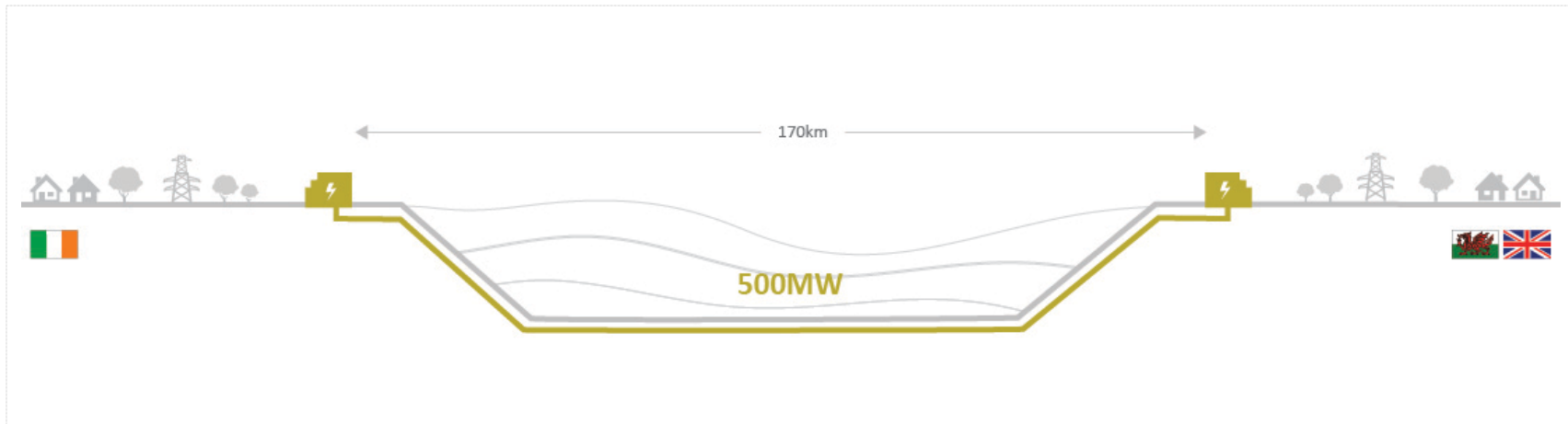
CABLE ROUTE

- Great Island sub station - County Wexford
- Pembroke sub station – Wales
- $\sim 200\text{km}$ of HVDC land and marine cable and $\sim 1\text{km}$ of HVAC

PROJECT TIMING

- Regulatory finalisation in 2H 2019
- Construction 2020 - 2023

Greenlink is fully supported by the CRU, Ofgem and EU. The path to financial close is now established and the project is targeting 2020 for construction



CRU and DDCAE have a clear trajectory for the establishment of Irish interconnector policy



24 October 2017

30 January 2018

21 March 2018

[June 2018]

[June 2018]

Grid Connections for Electricity Interconnectors with PCI status

Information Note
Reference: CRU/13/006 | Date Published: 24/10/2017 | Query Code: N/A

Draft National Policy on Electricity Interconnection in Ireland: Public Consultation

Aim of this Public Consultation:

- To inform the development of Ireland's electricity interconnection policy
- To identify the evidence base appropriate in the evaluation of proposed electricity interconnectors

Electricity Interconnectors Information Paper

Information
Reference: CER/16/006 | Date Published: 21/03/2016 | Query Code: [EUC/16/006](#)

[Policy Decision]

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[Policy Decision]

Information
Reference: CER/16/006 | Date Published: 21/03/2016 | Query Code: [EUC/16/006](#)

Electricity Interconnectors Information Paper

[Greenlink IPA Paper]

Information
Reference: CER/16/006 | Date Published: 21/03/2016 | Query Code: [EUC/16/006](#)

Greenlink will stimulate investment in affordable offshore wind

Irish wind resource is plentiful and predictable

- Typical North Atlantic low pressure moving north easterly across Ireland

Irish wholesale prices fall and surplus energy is exported to GB

- Less curtailment - by 5,500 GWh^(a) through 2047
- Higher renewable revenues - for longer avg. €3.20/MWh in GB
- Better returns for renewable investment
- Lower cost to consumers - €800m^{(b)(c)}

Further interconnection with higher priced markets will increase the affordability of nascent Irish offshore wind

- Greater economies of scale but larger initial investment
- Capturing Ireland's greatest natural resource?



a) Sum of avoided curtailment between 2023-2047

b) NPV@3.5%, real 2017 €

c) Source: Baringa 2017, Greenlink CBA analysis Reference Case

Post Brexit the UK remains a natural stepping stone to connect to Europe's energy markets

In the event of a hard Brexit

- UK and EU are both WTO members
- No tariffs on the trading of interconnector capacity
- ISEM prevails
- GB does not participate in market coupling – remains a higher priced market

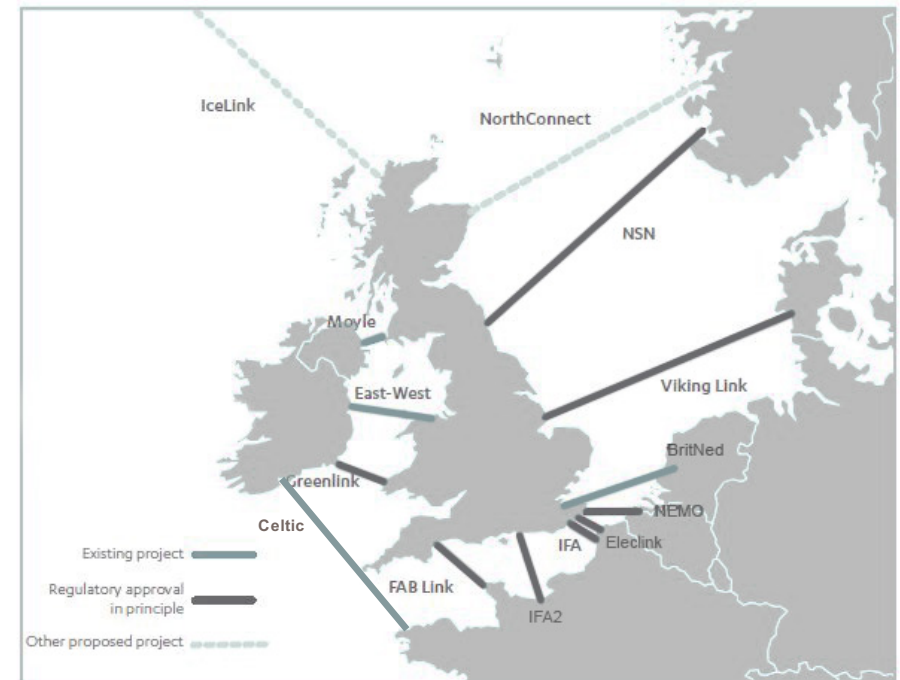
UK continues to support Greenlink

- PCI status
- Proactive and coordinated approach with CRU
- Security of supply policy independent of Brexit

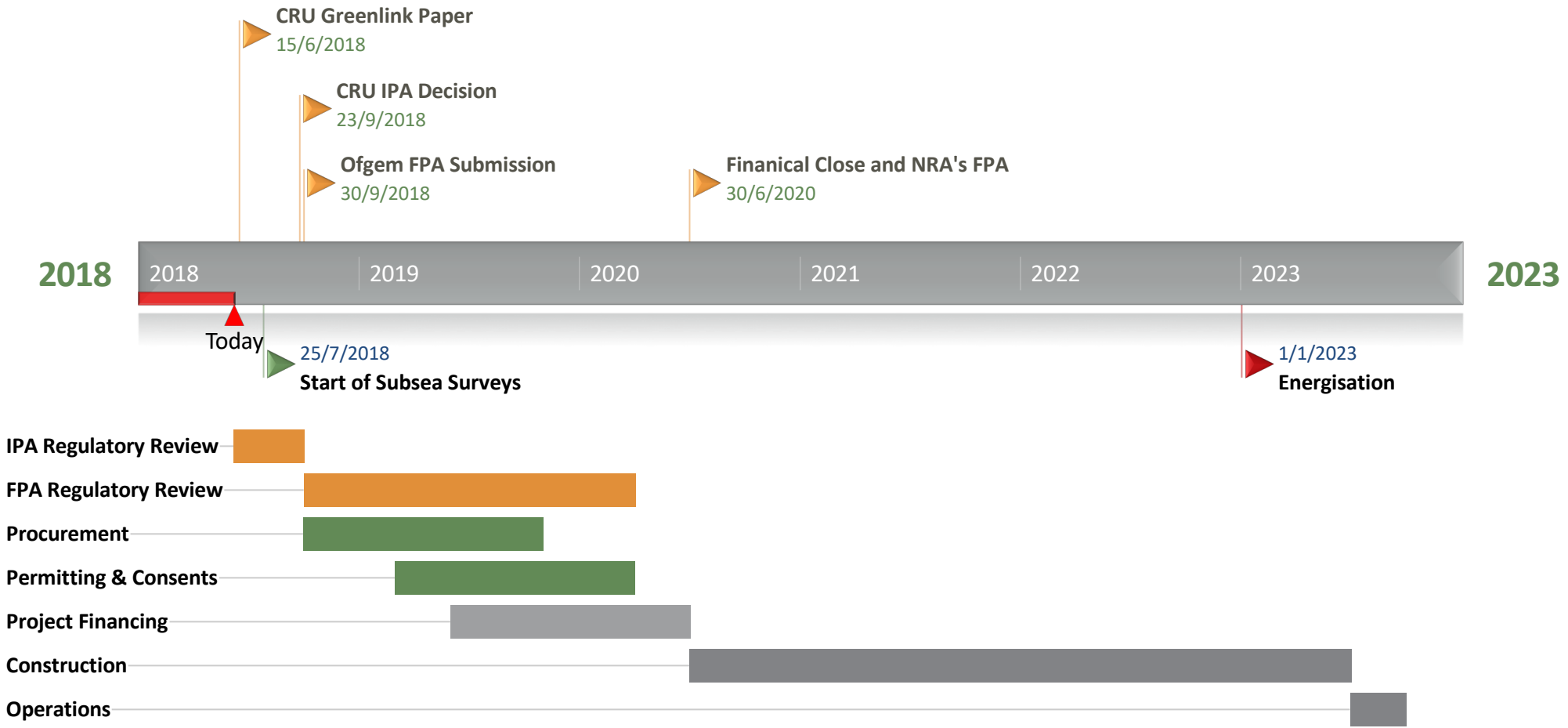
UK is the third largest generator in Europe

- UK 338.6 TWh cf. Ireland 30.4 TWh
- Forecast 10GW of interconnector capacity with continental Europe and Scandinavia
- A natural link to Europe that avoids excessive capex and line losses

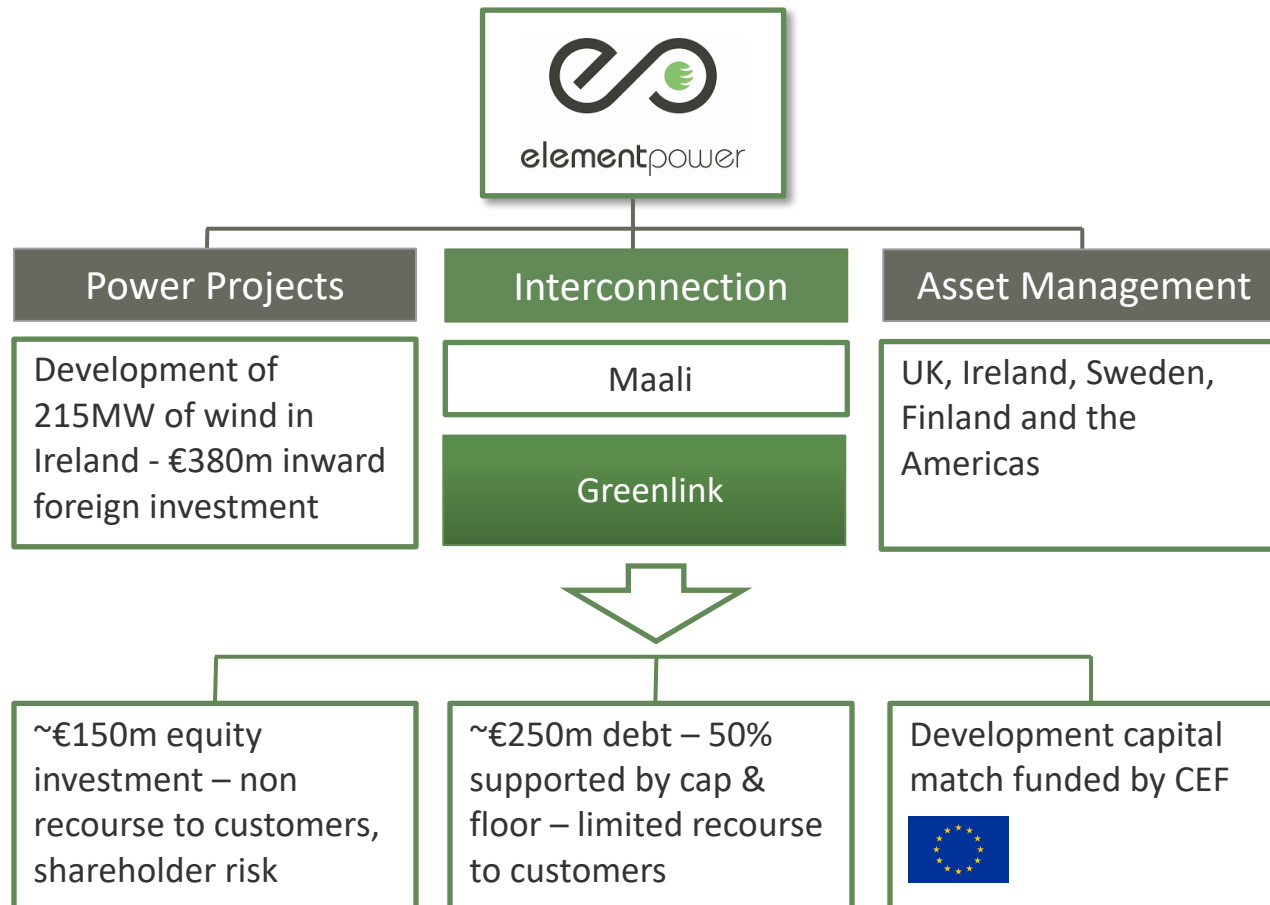
Existing interconnectors and the future pipeline



PROJECT TIMELINE



A privately sponsored project – limited recourse to consumers



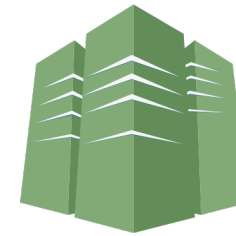
Greenlink is a cost-efficient source of future interconnection for Ireland



250 Irish jobs
during construction



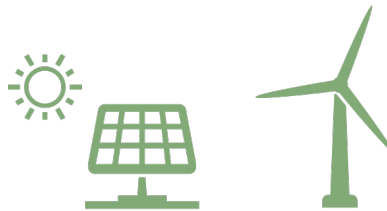
Potential to power
380,000 homes



Enough to power 10
new large data centres



20 permanent
Irish jobs



Savings to consumers of
over €800m over life



€400m of private capital
for Ireland and Wales



Co-financed by the European Union
Connecting Europe Facility

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.

Appendix 14

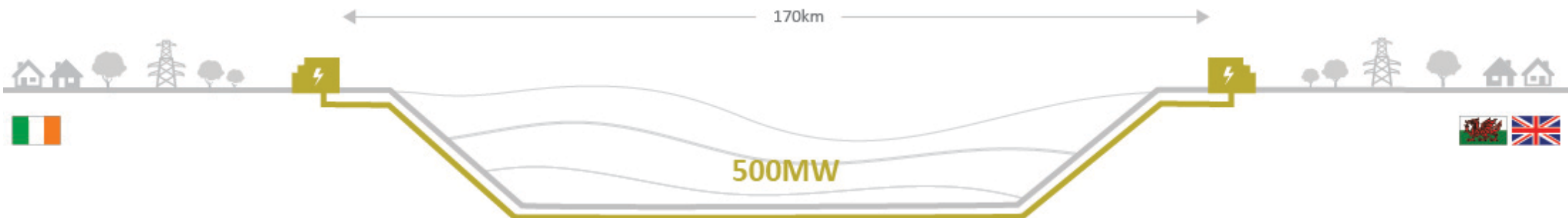
Presentation to
Wexford County Council
- June 2018

Greenlink

INTERCONNECTOR

GREENLINK INTERCONNECTOR UPDATE

Wexford County Council 20th June 2018



PROJECT OVERVIEW

Greenlink is Ireland's next interconnector



TECHNICAL PARAMETERS

- Nominal 500MW
- HVDC $\sim \pm 300\text{kV}$ - single symmetrical monopole
- Voltage Source Convertors

CABLE ROUTE

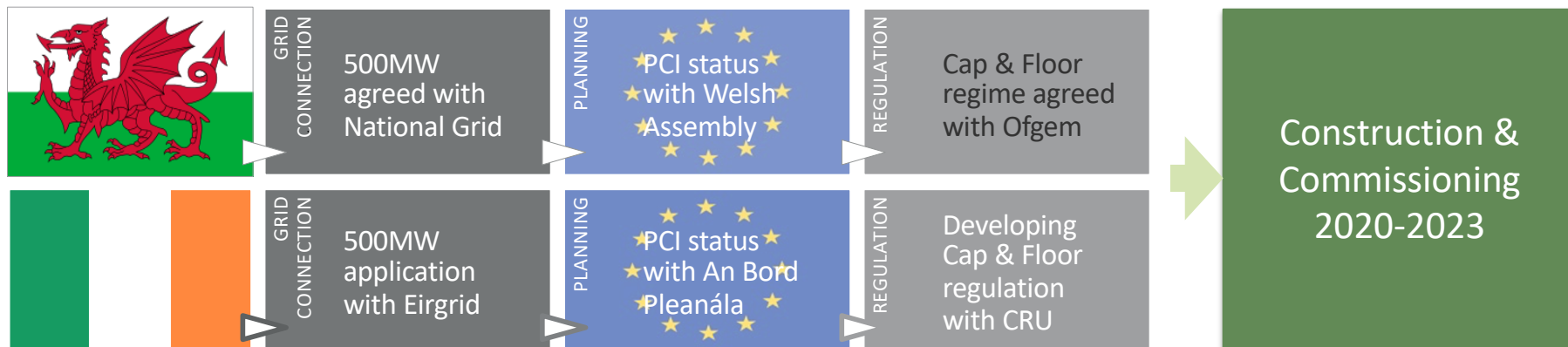
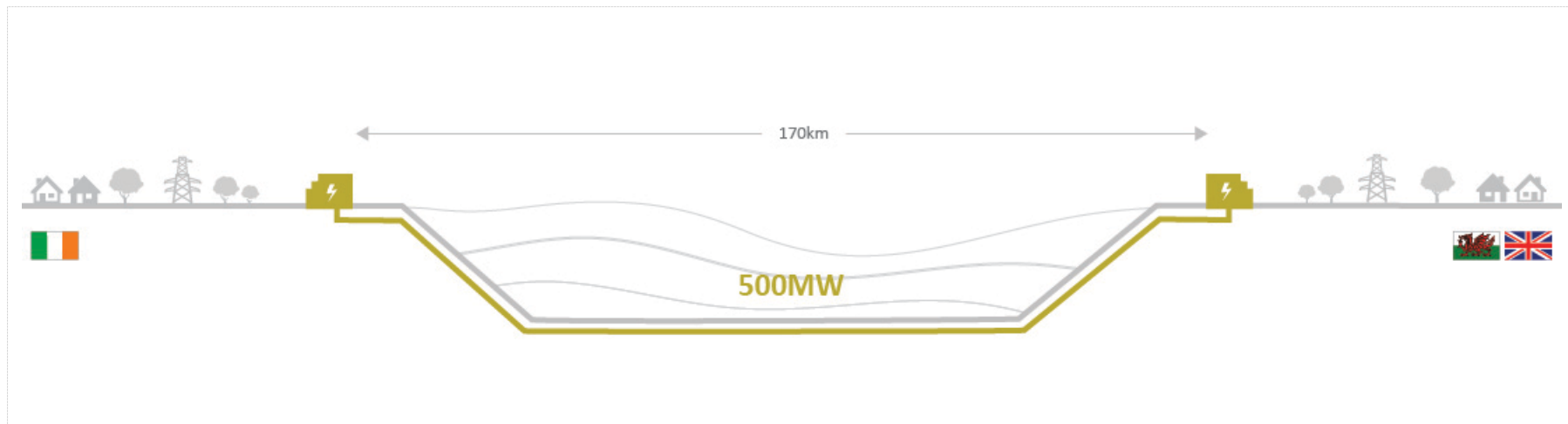
- Great Island sub station - County Wexford
- Pembroke sub station – Wales
- $\sim 200\text{km}$ of HVDC land and marine cable and $\sim 1\text{km}$ of HVAC

PROJECT TIMING

- Planning Appl. Q1 2019
- Regulatory finalisation in 2H 2019
- FID for $\text{€}400\text{m}$ in 2H 2020
- Construction 2020 - 2023

GREENLINK PROJECT STATUS

Greenlink is fully supported by the CRU, Ofgem and EU. The path to financial close is now established and the project is targeting 2020 for construction



CRU and DDCAE have a clear trajectory for the establishment of Irish interconnector policy



Grid Connections for Electricity Interconnectors with PCI status

Information Note
Reference: CRU/17/016 Date Published: 24/10/2017 Status: N/A

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Aim of this Public Consultation:

- To inform the development of Ireland's electricity interconnection policy
- To identify the evidence base appropriate in the evaluation of proposed electricity interconnectors

Electricity Interconnectors Information Paper

Information
Reference: CRU/18/008 Date Published: 21/03/2018 Status: N/A

[Policy Decision]

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- To inform the development of Ireland's electricity interconnection policy
- To identify the evidence base appropriate in the evaluation of proposed electricity interconnectors

[Policy Decision]

Information
Reference: CRU/18/008 Date Published: 21/03/2018 Status: N/A

Electricity Interconnectors Information Paper

[Greenlink IPA Paper]

Information
Reference: CRU/18/008 Date Published: 21/03/2018 Status: N/A

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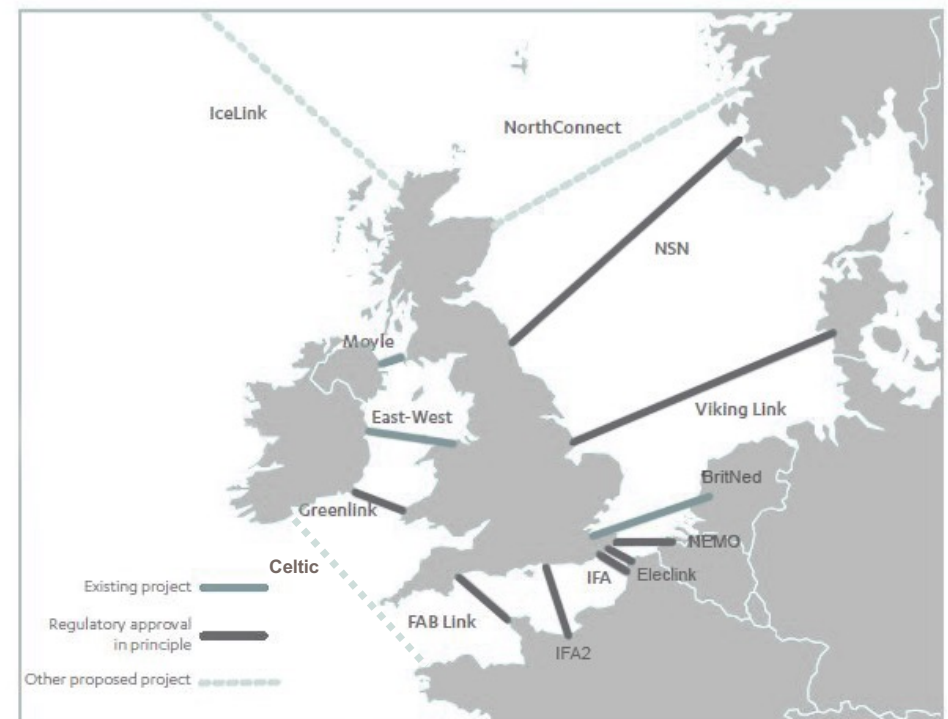
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- PCI status
- Proactive and coordinated approach with CRU
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UK is the third largest generator in Europe

- UK 338.6 TWh cf. Ireland 30.4 TWh
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Existing interconnectors and the future pipeline



PROJECT TIMELINE





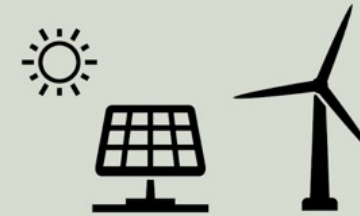
380,000

Potential to power
380,000 homes*



€400m

of private capital
investment for
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Energy

Supports the growth
and integration of
low carbon energy



Security

Enhances the
security of supply for
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**Value
FOR
Money**

Downward pressure
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Jobs

Jobs and knock-on
economic benefits
during construction

*Figure for number of homes is based on typical annual Irish household use of 4,200 kWh (CER, Review of Typical Consumption Figures – Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

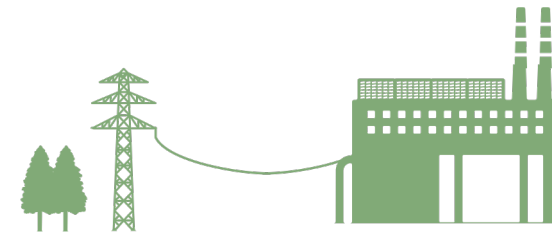
Greenlink is a cost-efficient source of future interconnection for Ireland



250 Irish jobs
during construction



20 permanent
Irish jobs



Reinforce
electricity grid

- ✓ Additional transmission network capacity, reinforcing the electricity grid in Ireland
- ✓ Valuable regional investment to Ireland and Co. Wexford
- ✓ Direct jobs and knock-on economic benefits throughout the supply chain during construction

Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Types of skills and services that could be locally sourced include:

- Transportation – equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks
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- Site security
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Converter Station (Ireland)

- adjacent to Great Island Power Station

HVAC cables (c. <0.5km)

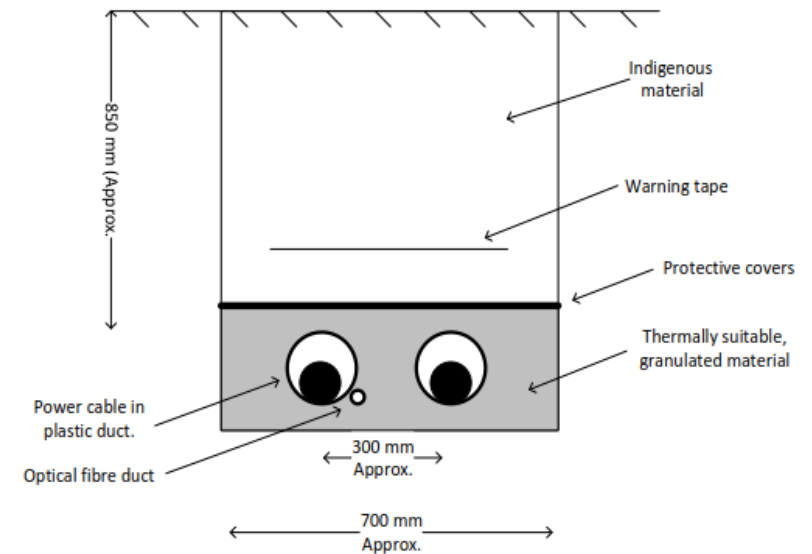
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HVDC cable (Onshore Ireland, 28km approx.)

- Underground cable technology
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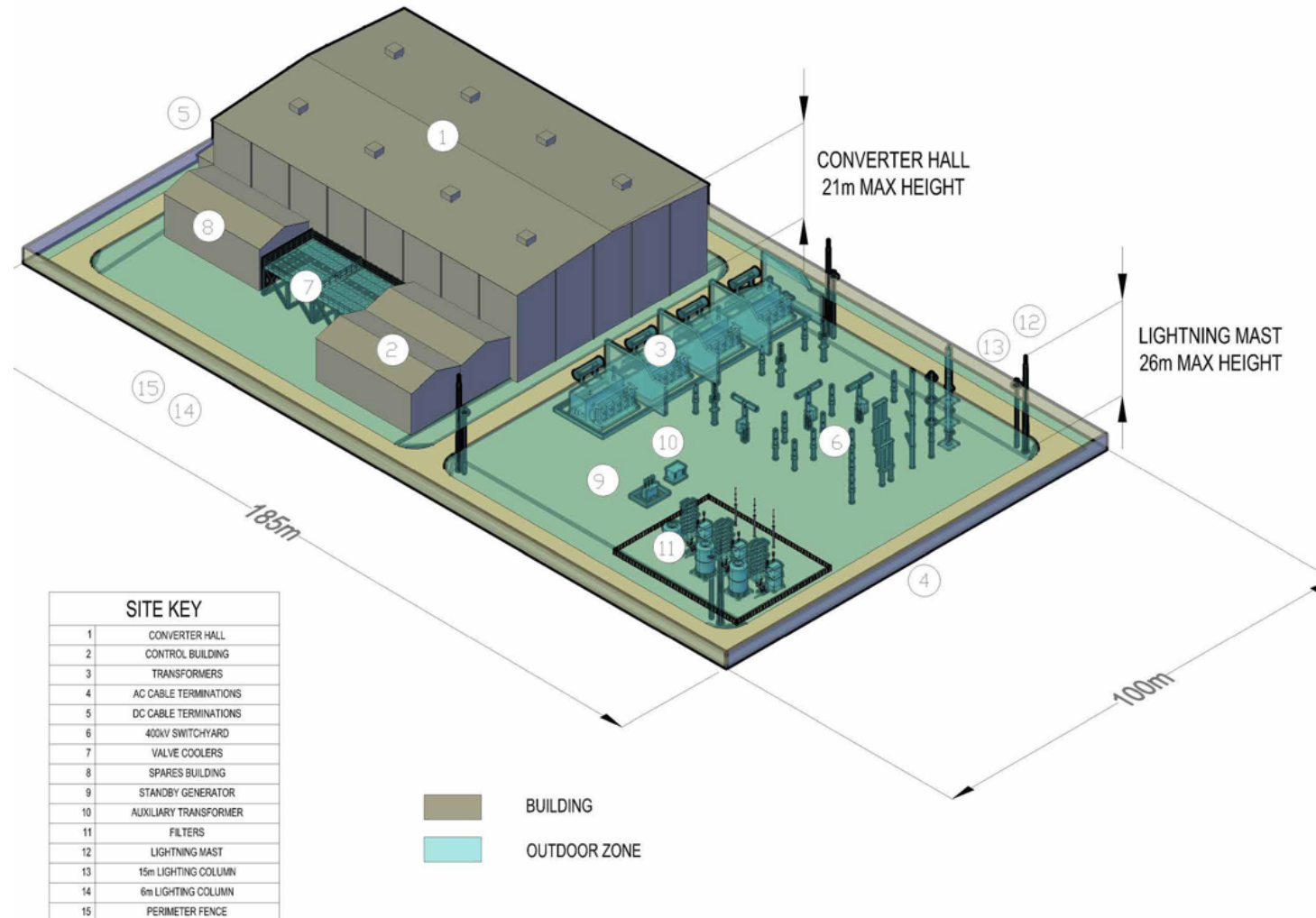
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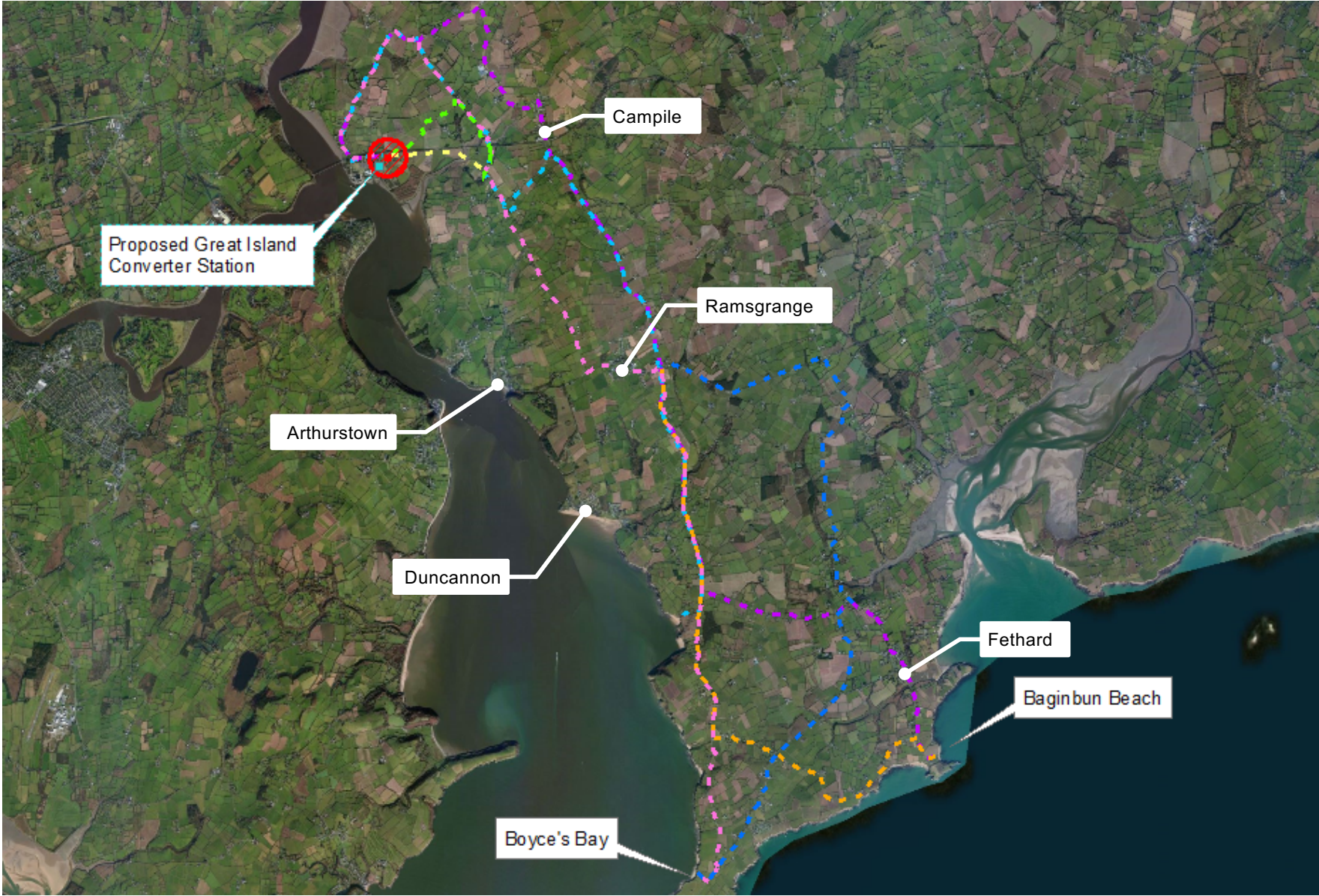


On-road HVDC cable trench detail

INDICATIVE CONVERTER STATION



CABLE ROUTE OPTIONS UNDER CONSIDERATION



EMERGING PREFERRED ROUTE



Public consultation is a core part of the development process

- Early and transparent access to information
- Opportunities to input & influence final proposal
- Information brochure (3 editions to date)
- Public exhibitions at key stages in the development
- Two rounds (May 2018 and November 2018) and further events coming up
- Website including all planning documents and FAQs
- Clear contact details to enable questions and one-to-one engagement
- Presentations to community forums
- Engagement with local supply chain
- Demonstration that local community's views have been fully considered in final plans



Greenlink

INTERCONNECTOR



Co-financed by the European Union
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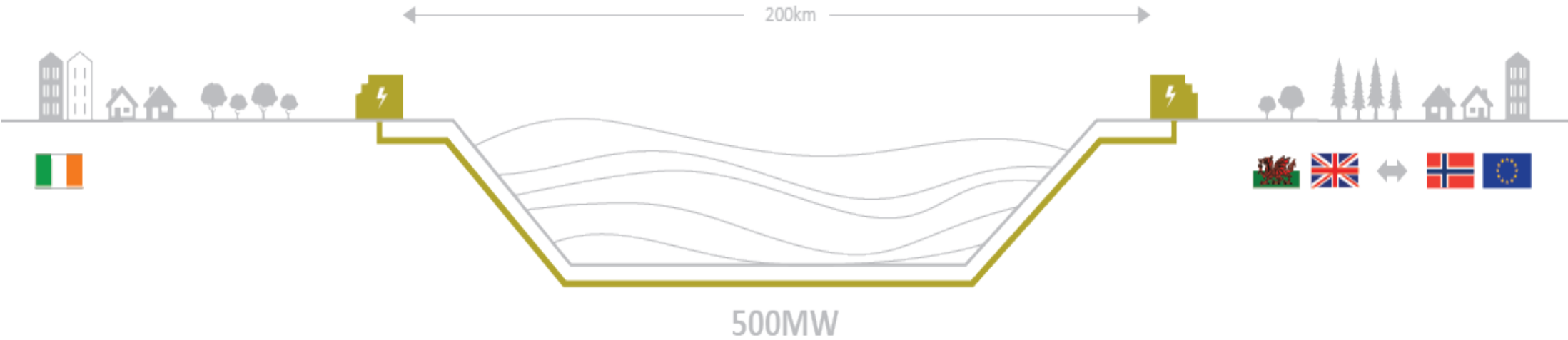
Appendix 15

Presentation to
Wexford County Council
- September 2019

GREENLINK INTERCONNECTOR PROJECT UPDATE



Wexford County Council 11th September 2019



Greenlink is Ireland's next interconnector



TECHNICAL PARAMETERS

- Nominal 500MW
- HVDC $\sim \pm 300\text{kV}$ - single symmetrical monopole
- Voltage Source Convertors

CABLE ROUTE

- Great Island sub station - County Wexford
- Pembroke sub station – Wales
- $\sim 200\text{km}$ of HVDC land and marine cable and $\sim 1\text{km}$ of HVAC

PROJECT TIMING

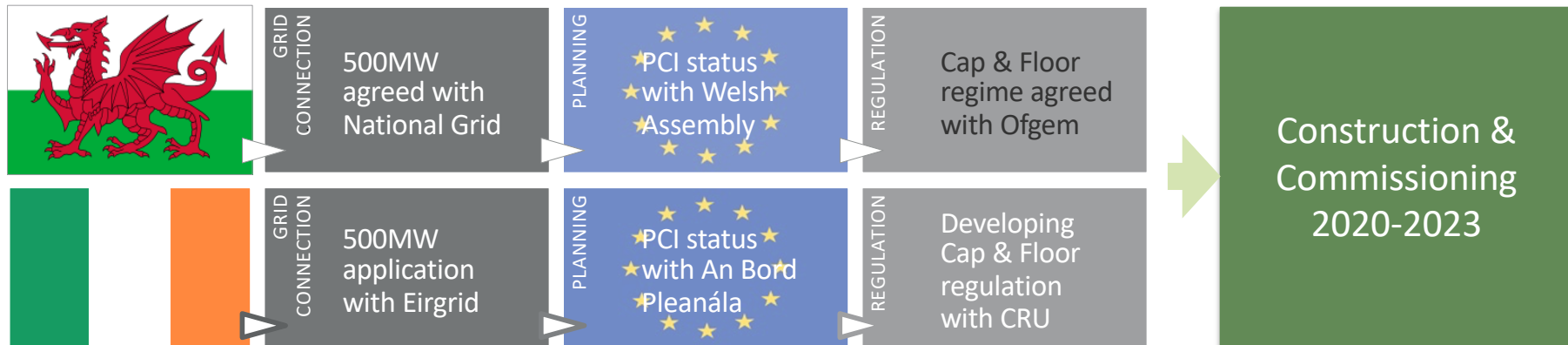
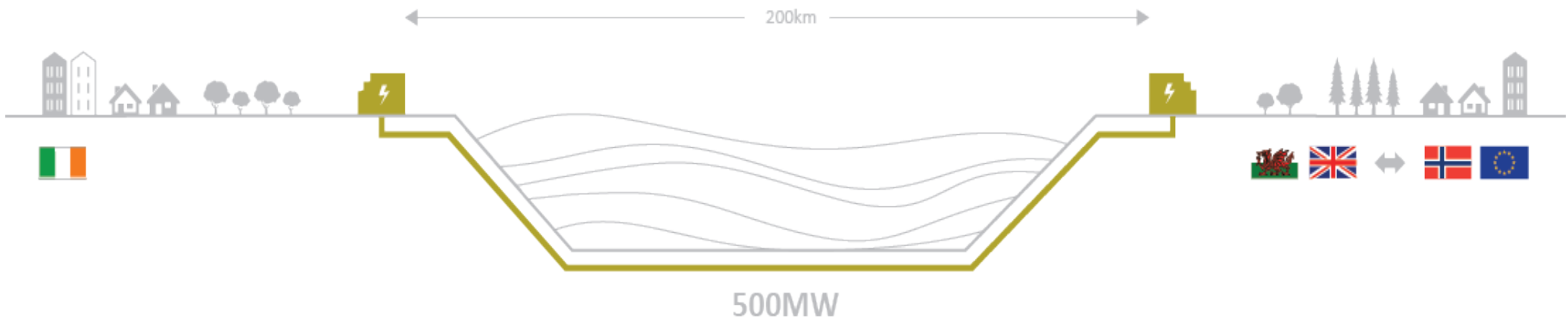
- Planning Appl. Q4 2019
- Regulatory finalisation in 2H 2019
- FID for €400m in 2H 2020
- Construction 2020 - 2023

PROJECT TIMELINE



GREENLINK PROJECT STATUS

Greenlink is fully supported by the CRU, Ofgem and EU. The path to financial close is now established and the project is targeting 2020 for construction



CRU and DDCAE have a clear trajectory for the establishment of Irish interconnector policy



24 October 2017

30 January 2018

21 March 2018

[June 2018]

[June 2018]

Grid Connections for Electricity Interconnectors with PCI status

Information Note
Reference: CRU/17/016 Date Published: 24/10/2017 Status: N/A

Draft National Policy on Electricity Interconnection in Ireland: Public Consultation

Aim of this Public Consultation:

- To inform the development of Ireland's electricity interconnection policy
- To identify the evidence base appropriate in the evaluation of proposed electricity interconnectors

Electricity Interconnectors Information Paper

Information
Reference: CRU/18/018 Date Published: 21/03/2018 Status: N/A

[Policy Decision]

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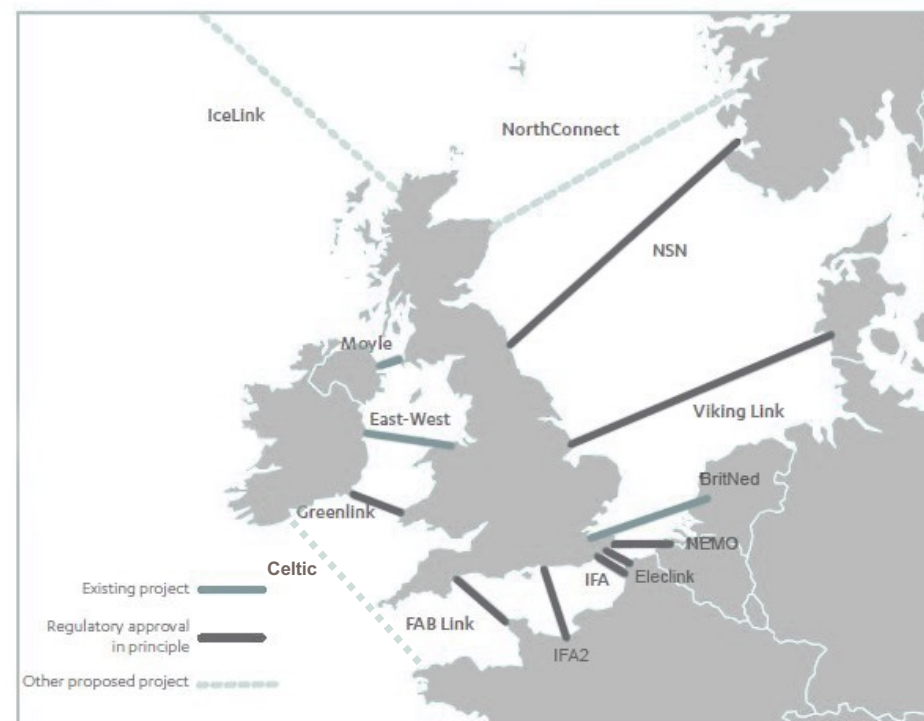
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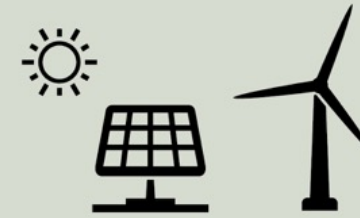
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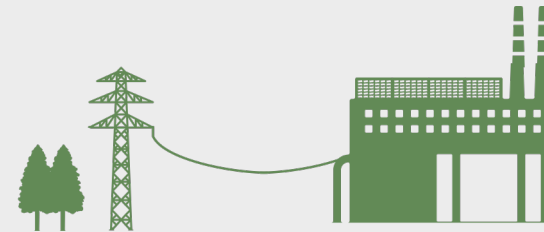
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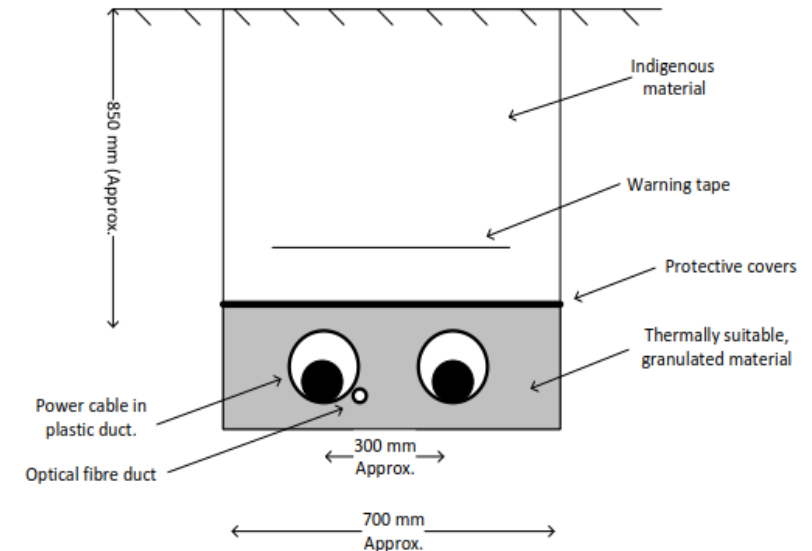
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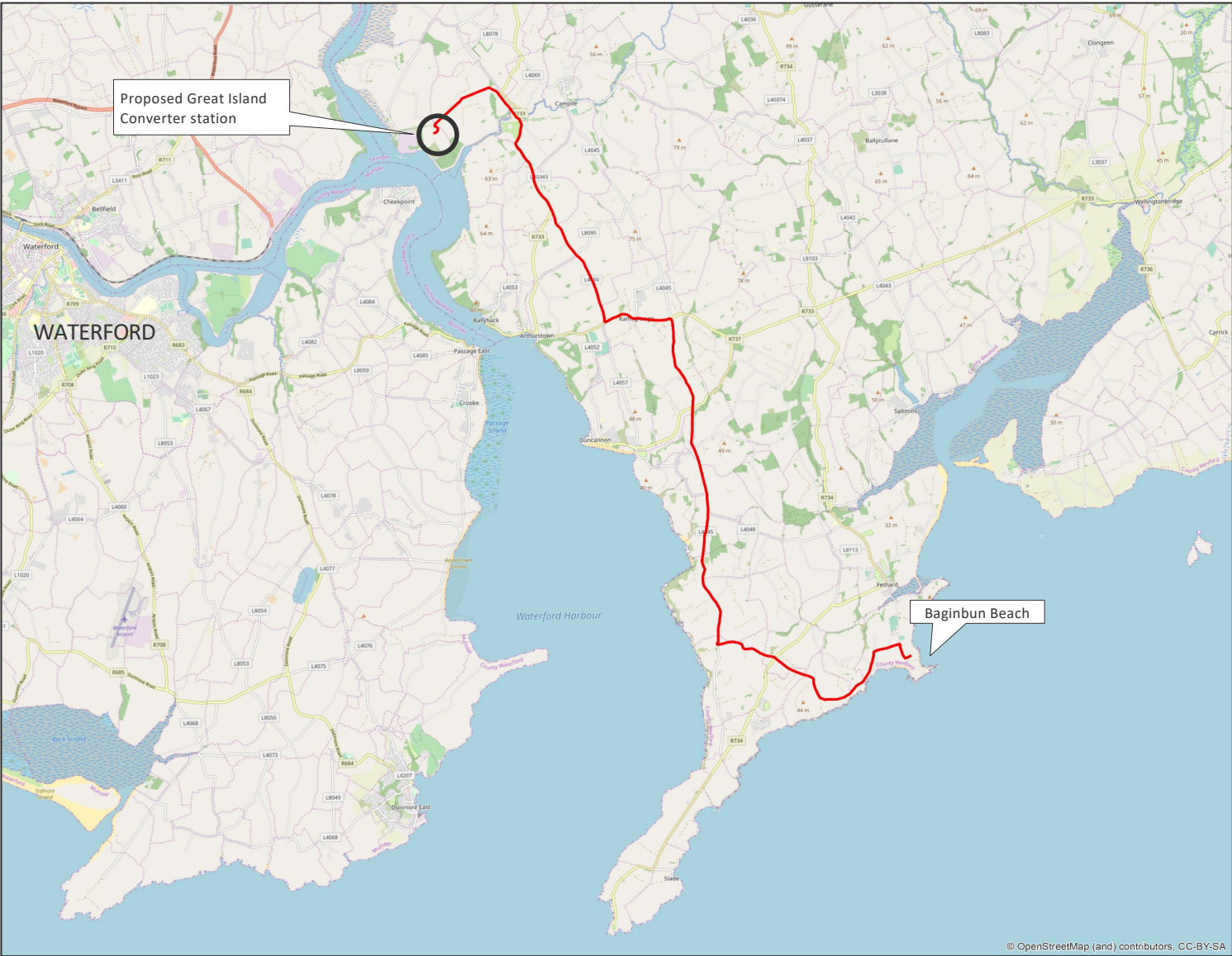
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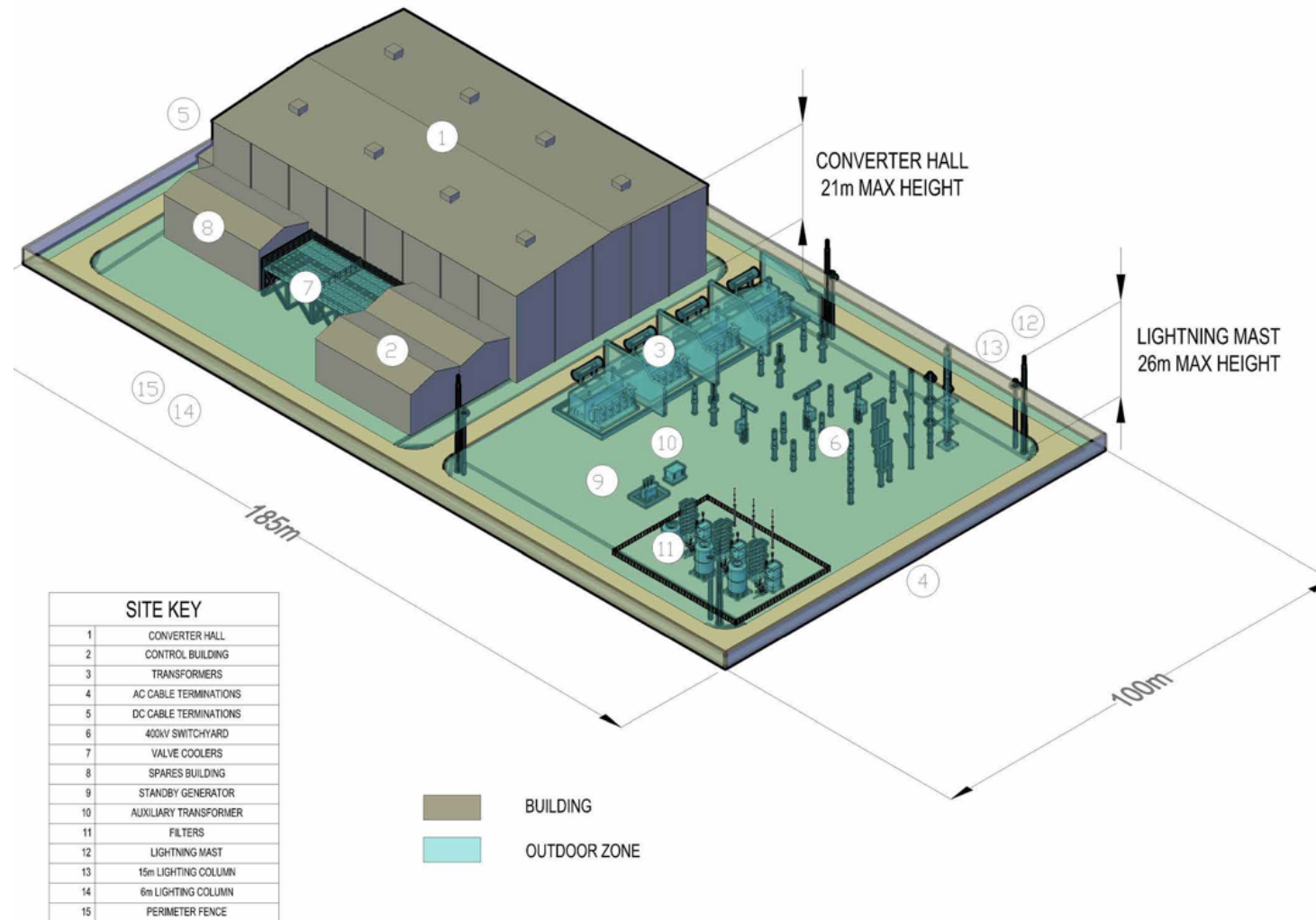
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CABLE ROUTE





INDICATIVE CONVERTER STATION



Early and transparent access to information

Opportunities to input & influence final proposal

Information brochure (3 editions to date)

Public exhibitions at key stages in the development

Presentation to Wexford CC 20th June 2018

Website including all planning documents and FAQs

Clear contact details to enable questions and one-to-one engagement

Public Exhibitions

- June/July 2018 Fethard & Duncannon
- January 2019- Fethard & Duncannon
- March 2019 Ramsgrange

Engagement with local supply chain

Demonstration that local community's views have been fully considered in final plans

Public consultation is a core part of the development process



Greenlink

INTERCONNECTOR



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Appendix 16

Letters to cable route
residents

22nd March 2019

Greenlink Interconnector Ltd

c/o Mason Hayes & Curran Ltd
South Bank House
Barrow Street
Dublin 4
D04 TR29
Ireland

Dear Sir or Madam

T +353 (1) 571 0773

Greenlink Interconnector: inviting your feedback
Public exhibition 28th March 2019, 4-8-pm, Parocial Hall, Ramsgrange, Y34 YP70

www.greenlink.ie

As you may be aware, we are currently working to develop an electricity interconnector between Ireland and Wales known as Greenlink.

The aim of the project is to connect the power markets of Ireland and Great Britain, to bring a number of benefits, including: strengthening security of supply for energy consumers; creating downward pressure on electricity bills; and delivering jobs and knock-on benefits to the local economy during construction.

On 28th of March we will be holding a further exhibition about the proposal as part of our local consultation and would like to invite you to attend. If you are unable to make this date, I would be more than happy to discuss the proposal in more detail with you - by phone or email or by arranging a convenient time to visit you at home. You can contact me at any time at tina.raleigh@greenlink.ie.

Update on the project

The Greenlink project, which is privately financed, comprises a subsea and underground cable stretching approximately 200km under the Irish Sea between County Wexford and Pembrokeshire in Wales. Key features of Greenlink in Ireland include:

- A new converter station next to the Great Island substation.
- An underground cable predominantly installed within the road network between the landfall and converter station.
- The use of a Horizontal Directional Drill (HDD) to take the cable under the beach at Baginbun and out to sea, thus minimising impacts on beach users and the local environment.

Work to date has centred on environmental and technical surveys to determine the most suitable landfall, converter station site and cable route. We have been consulting with organisations like Wexford County Council and the National Parks and Wildlife Service (NPWS) and have held two rounds of public exhibitions in Fethard and Duncannon in June and August last year and in January this year, which you may have attended. For your information, I enclose a map showing the preferred underground cable route.

Consulting to minimise impact

We are keen to ensure that we incorporate feedback from residents along the route into our final proposal. We intend to submit the application later this year and want to ensure it looks to minimise any impacts on residents, provides answers to concerns raised and fully considers ways to deliver the project to the benefit of the local community.

I look forward to seeing you at the exhibition or hearing from you with your comments. In the meantime, you can also find out more by visiting the project website: www.greenlink.ie.

Yours sincerely

Tina Raleigh

Planning and Permitting Manager Ireland

2nd December 2019

Dear Sir or Madam

Greenlink Interconnector Ltd

c/o Mason Hayes & Curran Ltd
South Bank House
Barrow Street
Dublin 4
D04 TR29
Ireland

**Greenlink Interconnector:
Public exhibitions 10th, 11th & 12th December 2019 and inviting your comments**

T +353 (1) 571 0773

www.greenlink.ie

I am writing to you as a resident along the proposed route for the underground cable for the Greenlink interconnector.

As you will be aware from previous correspondence, we are currently working to develop the Greenlink electricity interconnector between Ireland and Wales. The aim of the project is to connect the power markets of Ireland and Great Britain, to bring a number of benefits, including strengthening security of supply for energy consumers; creating downward pressure on electricity bills; and delivering jobs and knock-on benefits to the local economy during construction.

As part of the continuing local consultation on the project, we would like to invite you to attend another round of local public exhibitions, on the dates and at the locations below:

Tuesday 10/12/19 – Ramsgrange 4.00 pm to 8.00 pm.
Wednesday 11/12/19 – Duncannon 4.00 pm to 8.00 pm.
Thursday 12/11/19 – Fethard on Sea 2.30 pm to 6.30 pm.

To date we have received a lot of valuable feedback from residents and the wider local community which we have worked to incorporate into our planning work. At these events, we would like to present our latest plans and seek further input from local residents and other organisations before we submit the formal planning application to An Bord Pleanála early in 2020.

In particular, we would like to ensure that you and other residents living along the proposed underground cable route have had an opportunity to ask questions and raise any concerns you might have on our latest proposals, so that we can ensure that any outstanding issues are addressed in the final application. I and other members of the team will be on hand at these consultation events to discuss the proposal with you at length and to hear your views. For example, you might want to discuss with us such issues as:

- Construction traffic and potential disruption during the cable-laying
- Safety and environmental impacts and how we are addressing them
- Local infrastructure improvements that we might be able to design into the project

We will then take your views and ideas into account in finalising the application.

If you are unable to make any of the above dates, and have points to raise with us, I would welcome the opportunity to discuss them with you in person - by phone, email or by arranging a convenient time for me to visit you at home. You can contact me at any time by emailing ronan.ohogartaigh@greenlink.ie.

I look forward to seeing you at the exhibitions or hearing from you with your comments. We will be providing an update to the project information brochure at the above exhibitions and will also mail a copy to your home, but in the meantime, you can find out the latest on the project by visiting our website: www.greenlink.ie.

Yours sincerely

Rónán Ógartaigh
Development Manager (Ireland)