Celtic Interconnector

Project Update 2018

EIRGRID

The current. The future.

Co-financed by the European Union
Connecting Europe Facility

Who are EirGrid - and what do we do?

EirGrid is responsible for a safe, secure and reliable supply of electricity – now and in the future.

We develop, manage and operate the electricity transmission grid. This brings power from where it is generated to where it is needed throughout Ireland. We use the grid to supply power to industry and businesses that use large amounts of electricity. The grid also powers the distribution network. This supplies the electricity you use every day in your homes, businesses, schools, hospitals and farms.

As part of our role we are also mandated to explore and develop opportunities to interconnect the transmission grid with the transmission grids in other countries.

What is the Celtic Interconnector?

The Celtic Interconnector is a proposed electrical link which will enable the movement of electricity between Ireland and France. We have been working with our counterpart in France, Réseau de Transport d'Électricité, to investigate the feasibility of an interconnector between our two countries. At this stage, no decision has been made to build the Celtic Interconnector. Should the project proceed, a final decision to commence construction would happen in around 2021. The interconnector would then go live in 2025/26.

Project of Common Interest

The European Commission views interconnection as key to a more integrated European electricity system. It has designated the Celtic Interconnector as a Project of Common Interest (PCI). The Commission has invested €3.9 million to date and up to €4 million has been approved for ongoing and future studies.

Project Benefits

Competition
Apply downward pressure on the cost of electricity to consumers in Ireland and France

Sustainability
Help facilitate Ireland's transition to a low carbon energy future

Security of Supply
Enhanced security of supply for Irish electricity consumers

Fibre Optics
Provide a direct telecommunications link between Ireland and France (and continental Europe)

Key Facts

575km
length of the interconnection (500km subsea)

EIRGRID
Rte Le réseau de transport d'électricité

2
project promoters (working in partnership)

700 MW
capacity (450,000 homes)

Connection Point (Existing)

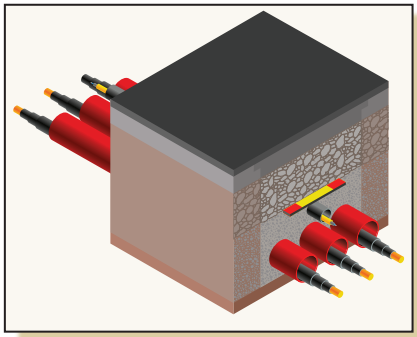
The interconnector will connect into an existing substation on the national transmission grid.

Image not to scale

Converter Station

The interconnector will use High Voltage Direct Current (DC) technology, the global standard for the transfer of electricity over long distances using subsea cables. The electricity systems in Ireland and France both use Alternating Current (AC) technology, so converter stations are required at either end. The converter station is an industrial type building and outdoor compound with typical dimensions of 300 m x 150 m and a height of up to 25 m.

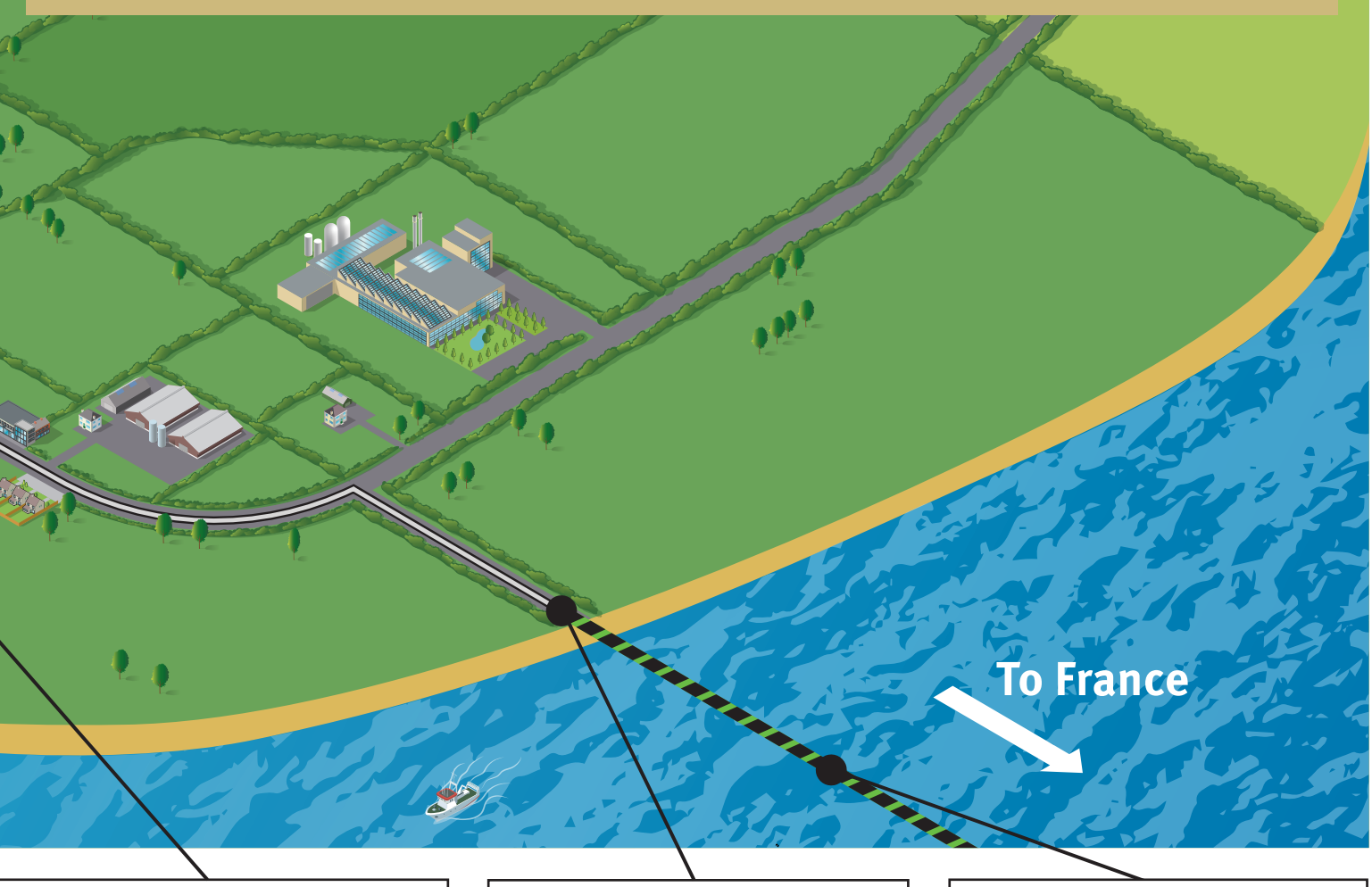
AC Land Circuit



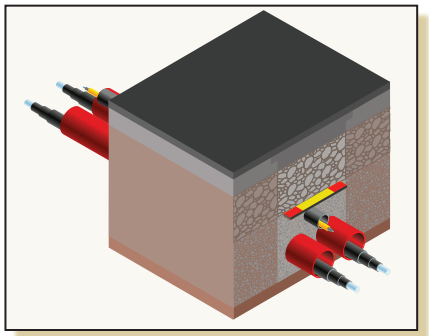
The circuit between the connection point and the converter station can be an underground cable, if they are located within a number of kilometres of each other. Otherwise, the circuit will be an overhead line. As an underground cable, the circuit would be installed in ducts under the road network, which would be fully re-instated.

What does the Celtic Interconnector consist of?

The Celtic Interconnector will enable the transfer of electricity between Ireland and France. A fibre optic cable will also be installed, facilitating enhanced telecommunications capacity with continental Europe. The main elements of the proposed infrastructure in Ireland are illustrated in this graphic and described in further detail below.

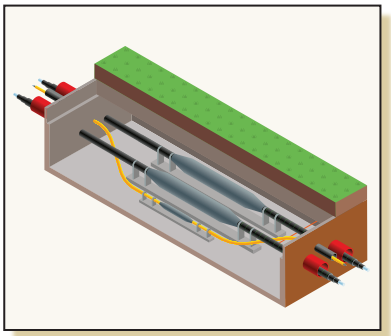


DC Land Circuit



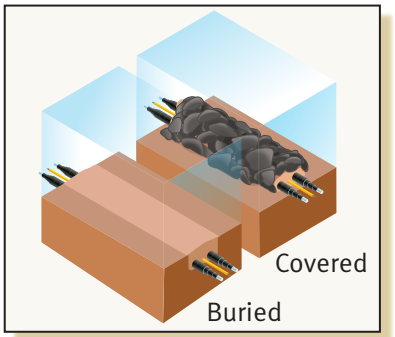
The circuit between the converter station and the landfall point will be by underground cable installed in ducts under the road network, which will be fully re-instated. The total length of this circuit is expected to be between 30 – 40 km.

Landfall Point



This is where the land circuit will connect to the submarine circuit by way of an underground transition joint. This will be installed behind the beach where the submarine circuit comes ashore. The landfall point will be fully re-instated following completion of the works.

Submarine Circuit



The submarine circuit between Ireland and France will be approximately 500 km. It will be either buried beneath the seabed or laid on the seabed and covered for protection.

What is happening now?

We follow a step by step approach to planning the grid. This approach facilitates engagement and consultation with our stakeholders and the public which helps us to explore options fully and make more informed decisions.

The Celtic Interconnector project is currently at Step 3 of our six step approach.

Step 1 How do we identify the future needs of the electricity grid?

Step 2 What technologies can meet these needs?

Step 3 What's the best option and what area may be affected?

Step 4 Where exactly should we build?

Step 5 The planning process

Step 6 Construction, energisation and benefit sharing

Step 3 At a glance

What happened previously?

A feasibility study of the project has been undertaken with the findings communicated in our *Project Update 2017*[1] brochure. This study concluded that there are feasible options for the various elements of the project in East Cork and West Wexford, including landfall locations, converter station location zones and land circuit routes.

We completed Step 2 of the project in early 2018 by confirming that the most suitable location in Ireland for the Celtic Interconnector is in East Cork. As part of this we confirmed a connection point at the existing Knockraha substation and a short list of five landfall locations in East Cork, as shown on Page 7.

What's happening now?

We are currently seeking to narrow down the short list of five landfall locations. As part of this we intend to carry out further studies of the marine environment approaching the East Cork coast. These studies are planned to be carried out in May and June 2018 and you may notice some survey activity on beaches and offshore during this time.

We are also seeking to confirm a short list of converter station location zones and to confirm the technology type (underground cable or overhead line) for the AC land circuit, as outlined on Page 4.

In order to do this we plan to study the feasible zones identified in Step 2 in further detail, as shown on Page 7, along with any additional zones that may be identified during our studies and/or based on input we may receive.

How long will this take?

We plan to complete these activities before the end of 2018.

What can you influence?

We are seeking your input in order to:

- **Narrow down the short list of landfall locations**
- **Confirm a short list of converter station location zones and the technology type for the AC land circuit**

We will consider all input received. We will provide a further update and carry out additional engagement towards the end of 2018 prior to completing Step 3.

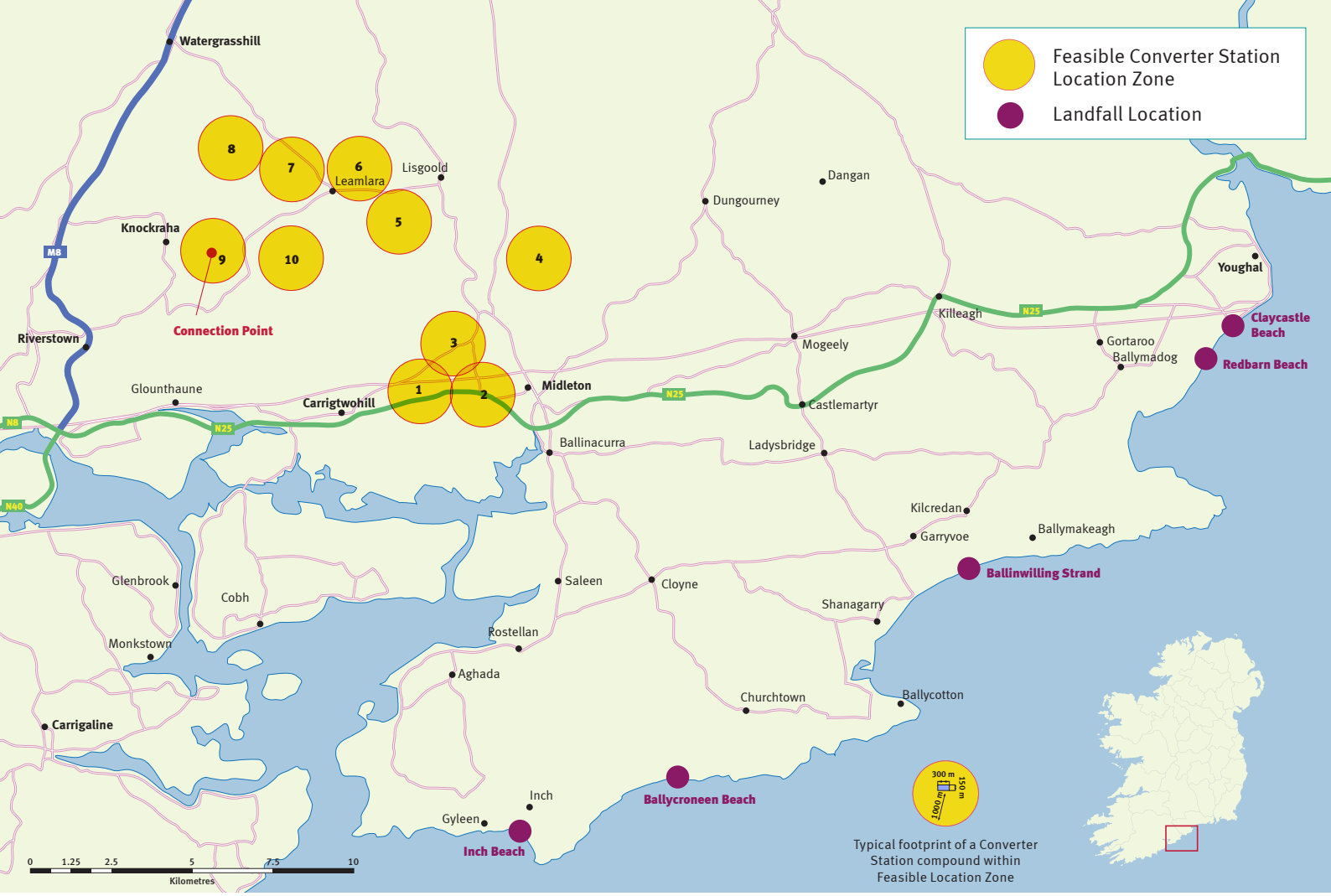
How can I get involved?

At this stage we will talk to elected representatives, regional and community groups, farming and fishing organisations amongst others. It is important for us to hear your views and consider your input as part of our decision making process.

If you wish to provide input on this project or find out more information, please contact Customer Relations on +353 (0)1 237 0472 or email celticinterconnector@eirgrid.com.

You also can contact our Community Liaison Officers, Michelle Walsh on +353 (0) 85 870 4999 or Eoghan O'Sullivan on +353 (0)87 247 7732.

[1] http://www.eirgrid.com/site-files/library/EirGrid/Celtic-Interconnector-Project-Update-Brochure.pdf



Feasible Converter Station Location Zones and Short List of Landfall Locations in East Cork

A full set of supporting documentation can be accessed on our website under the Related Documents section at:

http://www.eirgrid.com/the-grid/projects/celtic-interconnector/the-project/

In particular, the report titled *Celtic Interconnector Feasibility Study – Converter Station Site & Route Identification in Ireland* provides a description of each location identified along with more detailed maps.

Project Timeline

Once Step 3 has been completed, the project will progress into Step 4 where we will continue to carry out consultation and engagement in order to determine where exactly we should build the Celtic Interconnector.

The current project timeline is outlined below.

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