



The Grid Link Project



Electricity Transmission Scheme Linking
Leinster & Munster
Spring / Summer 2012





The Grid Link Project Linking Leinster & Munster

What is The Grid Link Project?

To ensure future electrical power needs are met in the south and east of Ireland, EirGrid is investing an estimated €500 million in a new development called The Grid Link Project. The project consists of a new high voltage power line linking Leinster and Munster.

The Grid Link Project is a vital development for the regions that will deliver a wide range of benefits, which include:

- Securing future electricity supply for homes, businesses, farms, factories and communities
- Helping empower growth in the south and east of Ireland
- Helping Ireland to meet its 40% renewable energy targets

EirGrid has established a dedicated project team to develop a route and substation sites for The Grid Link Project. EirGrid does not expect to submit an application to An Bord Pleanála for planning approval before 2015 and public consultation will form an important part of all stages of the project over the coming years.

In pursuing The Grid Link Project EirGrid encourages you to participate in the consultation process and will listen to what you have to say.

Why is the project needed?

The Grid Link Project will help secure Ireland's electricity supply for our future

- Based on EirGrid's assessment to date it has been identified that, if left unchanged, the existing grid in the south and east of Ireland will not be sufficient to meet our future electricity needs, thus jeopardising electricity supply to the area.
- The Grid Link Project will facilitate the integration of renewable energy onto the transmission system, thereby reducing our reliance on imported fossil fuels.
- The Grid Link Project will facilitate further electricity interconnection with the European grid, providing a more secure electricity system.

The Grid Link Project will empower growth in the south and east of Ireland

- A region with a high-quality, secure supply of electricity is better placed to attract inward investment that will bring employment and prosperity. The Grid Link Project will facilitate this for communities in the south and east of Ireland.

What will the development consist of?

The Grid Link Project represents a significant upgrade of the electricity grid and involves the construction of a new power line linking Leinster and Munster. Based on assessments to date, EirGrid has determined that in order to best meet the needs of the south and east, the optimum solution is the construction of a 400 kV Alternating Current (AC) overhead line linking Cork and Kildare via Wexford.

EirGrid will review its technology assumptions at key stages throughout the project to ensure they remain valid.





- The Grid Link Project will help ensure that the most efficient electricity generators in the south and east are utilised in the most effective way, helping Ireland make best use of its resources.
- The Grid Link Project will help enable Ireland to shift from a heavy reliance on imported fossil fuels to more sustainable sources of energy.

The Grid Link Project will help enable Ireland to meet its 40% renewable energy target

Ireland's national goal is to meet 40% of electricity demand from renewable sources by 2020 – these include wind, wave and tidal energy. The Grid Link Project will enable this to happen.

The growth of the wind energy sector represents an opportunity to reduce our dependence on imported fossil fuels and foster a clean, indigenous, and sustainable energy source and reduce our CO₂ emissions.

- Ireland has one of the best wind resources in Europe and The Grid Link Project forms a critical element in helping to maximise the potential use of this natural resource.
- The Grid Link Project will facilitate supply of enough wind energy to power 750,000 homes.



Proposed Study Area

A study area is the search area within which a project will be located. To identify the appropriate study area for The Grid Link Project it is necessary to start where the new link can connect to the existing grid. Based on EirGrid's assessments, to date, the optimum connection points (i.e. transmission substations) on the grid have been identified as Knockraha in County Cork, Great Island in County Wexford, and Dunstown in County Kildare.

Why have these connection points been chosen?

- The points are capable of integrating the electricity carried on the new 400 kV link onto the existing electricity grid.
- They are geographically well-positioned to meet the strategic needs of the network development.

Why has this proposed study area been chosen?

- The proposed study area must be large enough to encompass the strategic objectives and drivers for the project, including the three connecting points of Dunstown, Knockraha, and Great Island.
- The study area broadly follows significant jurisdictional or physical boundaries (e.g. motorways, the coastline, or administrative boundaries).
- The study area is influenced by the technology used to connect the three points.

“...in order to maximise the effectiveness of Foreign Direct Investment... we must make sure that Ireland's energy infrastructure continually delivers world-class networks and energy at a competitive price.”

Horizon 2020: IDA Ireland Strategy (March 2010).



Public Consultation

The public will be consulted extensively through a series of non-statutory and statutory consultations to gather information and feedback from the earliest stages of project development right through to the completion of the project.

Developing The Grid Link Project will involve a number of steps over the coming years. Firstly a study area is identified. This is a search area where the project will be located.

Then constraints are mapped in the study area. Constraints are features or designations, such as protected areas, in the landscape that might make an area unsuitable for the project.

Once constraints are mapped, corridors will be identified and then assessed to determine which is the least constrained. A 'least constrained corridor' is the corridor that achieves the most acceptable balance between competing constraints while meeting the needs of the project. This corridor and an indicative line route and substation locations will be subject to further study. The indicative line is the proposed alignment for the project, based on the information available at the time. These locations are then subject to an Environmental Impact Assessment (EIA), which forms the basis of an application that is submitted to An Bord Pleanála for approval.

At all stages, feedback from the public will be reviewed and considered by the project team. As the project develops, the public, local communities and everyone who is interested in The Grid Link Project will have regular opportunities to review and provide input into the issues and options under consideration.

EirGrid seeks to follow a structured framework of project development that provides a clear and transparent process for all stakeholders, as shown on the project road map. To facilitate this process, EirGrid has established The Grid Link Project information service to inform people about the project and answer any queries they may have.

Visit the project team at The Grid Link Project information centres, as follows:

The EirGrid Midleton Information Centre

Open every Monday from 12 noon to 6pm
Oikoseen House, Castleredmond, Midleton, Co. Cork

The EirGrid Carrick-on-Suir Information Centre

Open every Tuesday from 12 noon to 6pm
Carrick Community Business Centre, Carrick-on-Suir, Co. Tipperary

The EirGrid New Ross Information Centre

Open every Wednesday from 12 noon to 6pm
The Coach House, Marsh Lane, New Ross, Co. Wexford

The EirGrid Carlow Information Centre

Open every Thursday from 12 noon to 6pm
Enterprise House, O'Brien Road, Carlow, Co. Carlow

Telephone: **Lo-call 1890 422 122**

Email: **gridlink@eirgrid.com**

Visit the website: **www.eirgridprojects.com/gridlink**

Write: **The Grid Link Project Manager,
EirGrid, PO Box 12213, Glenageary,
Co. Dublin, Ireland.**

Map of Proposed Study Area





Project Development & Consultation Road Map

You are Here





Road map stages

What's happening?

How can people get involved?



The proposed study area has been identified and the process of identifying constraints has begun

Consultation 1

Stakeholders can:

Comment on the proposed study area map: Has EirGrid considered all relevant criteria when determining the study area? Should anything else have been considered?

Identify constraints that should be considered for further review: Are you aware of any locally or regionally important features that you believe should be considered as the project develops? Constraints can be anything from natural features in the landscape to cultural or archaeological structures. They are mapped in the study area and taken into account when corridors are identified.

Provide feedback on how corridors should be developed: How should constraints or features in the landscape be taken into account when corridors are defined for the project?

Any other issues? If you have any other issues that you think should be taken into account at this stage of the project EirGrid would welcome your input.

How would you like to be involved or communicated with, as the project progresses?

The proposed constraints map will be published and the search for route corridor options will begin

Consultation 2

Stakeholders can:

Comment on the proposed constraints map

Provide feedback on how EirGrid should develop corridors for the project

Provide feedback on what criteria should be used to determine a least constrained corridor. A 'least constrained corridor' is the corridor that achieves the most acceptable balance between competing constraints while meeting the needs of the project.

Route corridor options will be identified and work will begin to identify the least constrained corridor

Consultation 3

Stakeholders can:

Comment on the identified corridors

Provide feedback on the criteria that should be used to determine a least constrained corridor.

About EirGrid

EirGrid, a state-owned company, is the national operator of the electricity grid.

The national grid is an interconnected network of high voltage power lines and cables, comparable to the motorways, dual carriage ways and main roads of the national road network. It is operated at three voltage levels, 400 kV, 220 kV and 110 kV, and is approximately 6,400km in overall length.

It is the backbone of Ireland's power system and is vital to ensuring that all customers, including industrial, commercial and residential, from both rural and urban areas, have a safe, secure, reliable, economic and efficient electricity supply.

What is Grid25?

Grid25 is a major initiative to put in place a safe, secure and affordable electricity supply throughout Ireland, supporting economic growth and utilising our renewable energy resource to its maximum potential.

Development of the grid is essential to provide a platform for renewed economic growth and regional development, and is vital if we are to effectively tap into our abundant renewable energy resources.

Grid25 will involve upgrading the high voltage system and an overall investment of approximately €3.2 billion in the period up to 2025. This new infrastructure is every bit as essential to the future growth of the country as any investment in road, rail and broadband.

Contact Details

EirGrid is committed to ensuring that all members of the public are fully aware of the project and encourage you to participate in public consultation. If you would like to discuss the project or to meet with a member of the project team, please visit our website for regular updates.

Telephone: **Lo-call 1890 422 122**

Email: **gridlink@eirgrid.com**

Visit the website: **www.eirgridprojects.com/gridlink**

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