EIRGRID

North-South 400kV Interconnection Development

Landowner Information Brochure

July 2013

GRID25

DELIVERING IRELAND'S ELECTRICITY FUTURE

Phase 2 of Landowner Consultation is now commencing

EirGrid and Northern Ireland Electricity are jointly planning a major cross-border electricity transmission scheme.

This scheme is a 400kV overhead line linking the existing 400kV substation in Woodland, County Meath with a planned substation in Turleenan, County Tyrone and will provide a second high capacity electricity transmission line between Ireland and Northern Ireland. EirGrid will in due course apply for planning approval for that part of the scheme located in Ireland called the North-South 400kV Interconnection Development.

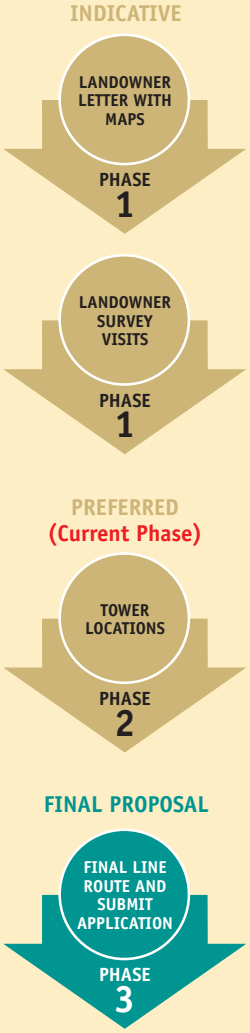
Landowner Engagement

EirGrid is committed to providing an accessible, meaningful and accountable consultation process. The engagement process has three phases:

Phase 1- Indicative Route (Completed)

Phase 1 of the landowner engagement process took place from May to July 2011. In this phase, all landowners were issued with maps showing the **Indicative Route** of the line as then envisaged on their property. EirGrid agents also sought to meet with each landowner to obtain feedback, confirm ownership, discuss the possible positioning of towers and gain access for environmental and/or technical surveys, where applicable.

EirGrid is commencing the second phase of its landowner engagement strategy



Phase 2 - Preferred Line Route (Current Phase)

The second phase of landowner consultation is now commencing on the **Preferred Line Route, proposed tower locations, construction access routes,** and other matters related to the project. All affected landowners, have been issued with updated maps outlining the above information and they will have an opportunity to comment and suggest changes to certain aspects of the proposal.

The consultation period will run for a period of eight weeks, from Tuesday, 16th July 2013 to Monday, 9th September 2013. This is the final formal consultation period prior to the submission of an application for planning approval to An Bord Pleanála.

There are several ways for you to engage with EirGrid:

- Contact your dedicated landowner agent (contact details are provided in your landowner letter).
- A **Change Request Form** is provided with this brochure, see page seven for further details.
- EirGrid is hosting a series of **Open Days** for the general public and landowners to provide their feedback on the project. For details of the Open Days planned in your area, please refer to the Community Update Brochure.
- Our **Navan Information Centre** is open every Tuesday from 12 noon to 7pm, our **Carrickmacross Information Centre** every Wednesday from 12 noon to 7pm and our **Kingscourt Information Centre** every Thursday from 12 noon to 7pm.
- Feedback can also be provided by post to: C/O EirGrid NS Project Manager, West Pier Business Campus, Dún Laoghaire, Co. Dublin, by email to northsouth@eirgrid.com or by phone to **1890 25 26 90** (Mon-Friday 9am to 5pm).

EirGrid will assess all feedback received during Phase 2 and, where possible, incorporate feedback into the proposal to be submitted to An Bord Pleanála for planning approval.

Note: EirGrid will not be seeking permission in its application to move tower positions post-planning (previously referred to as "micro-siting").

Phase 3 - Final Proposal

In Phase 3 landowners will be informed of the final proposal that EirGrid is submitting to An Bord Pleanála for approval. Landowners will receive maps and information confirming the route and tower locations included in the application for approval as well as information on the statutory consultation phase.

Compensation

In the event that the proposed development receives planning approval and proceeds to construction, losses incurred by the owner of lands on which the line is constructed will be compensated by means of a statutory compensation process, where appropriate.

Preferred Project Solution

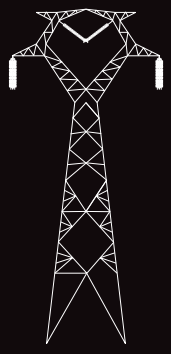
EirGrid has now published the Preferred Project Solution Report for the project. The report is available on the project website: **www.eirgridprojects.com** or alternatively by contacting any member of the project team. Contact details are provided on the back page of this brochure.

Overhead Line Design

As stated in the Preferred Project Solution Report, the new interconnector circuit shall generally take the form of a single circuit 400kV AC (alternating current) overhead line (OHL). An overhead transmission line is made up of a number of elements, including conductors (wires), shieldwires, insulators and supporting structures.
There are three types of towers proposed for this project. The height and footprint of each tower is dependent upon the tower type and the terrain over which the line passes. If you would like additional information on the size of the towers, if any, currently proposed for your land, please contact your dedicated landowner agent.

At 400kV, the conductors are required to be a minimum of 9 metres above ground. The distance between towers is known as the "span", and the length of the span is dependent on the terrain over which the line is to cross. The average span will be about 350 metres.

The preferred line route will also utilise nine existing double circuit towers on the approach to Woodland substation. These towers can carry two separate circuits and one side is currently unused and available for the North-South 400kV Interconnection Development.

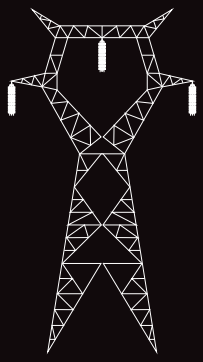


Intermediate or Suspension Tower

These support the conductors (wires) on straight sections of the line route.

Typical Height: **27 - 43m**

Footprint Range: **6.4 x 6.4m to 11 x 11m**

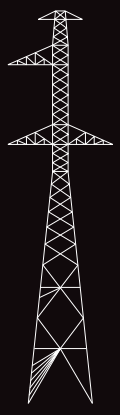


Angle/Tension Tower

These are used where the line route changes direction.

Typical Height: **24 - 37m**

Footprint Range: **7.4 x 7.4m to 12 x 12m**



Transposition Tower

Only two of these are proposed. They are required in order to improve the operating performance of the line.

Typical Height: **37 - 56m**

Footprint Range: **5.5 x 5.5m to 8.5 x 8.5m**

Guidelines for Overhead Line Design and Tower Positioning

The current preferred line route is designed in accordance with national and international standards and best practice.

In designing the preferred line route, landowner considerations, as well as technical and environmental constraints, have been considered. The guiding principles for positioning the towers are explained in detail in the Preferred Project Solution Report. Some of the considerations are outlined below. As part of this phase of landowner consultation, EirGrid is seeking your feedback on the line route and proposed tower locations.

Landowner Considerations

- Minimise disturbance to current land use, farm and land management practices.

Technical Considerations

- Meet the line design requirements and technical limits of the proposed tower, such as span length and clearance height.
- Avoid sharp changes in direction in the line and minimise the number of angle towers required where possible.

Environmental Considerations

- Avoid known ecologically sensitive areas where possible. (e.g. SAC/cSAC/pNHA/NHA/SPAs).
- Cause least disturbance and minimise impacts to natural heritage interests (including watercourses) and cultural heritage interests.
- Avoid sites of potential ecological importance, e.g. hedgerows and wetlands. Only site towers on hedgerows if the impact can be assessed by survey and appropriate mitigation measures identified.
- Integrate the line into the landscape where possible.
- Where possible, achieve a lateral clearance of 50m from the centre line to nearest dwelling and, on the grounds of general amenity, avoid routing close to residential areas.

Construction

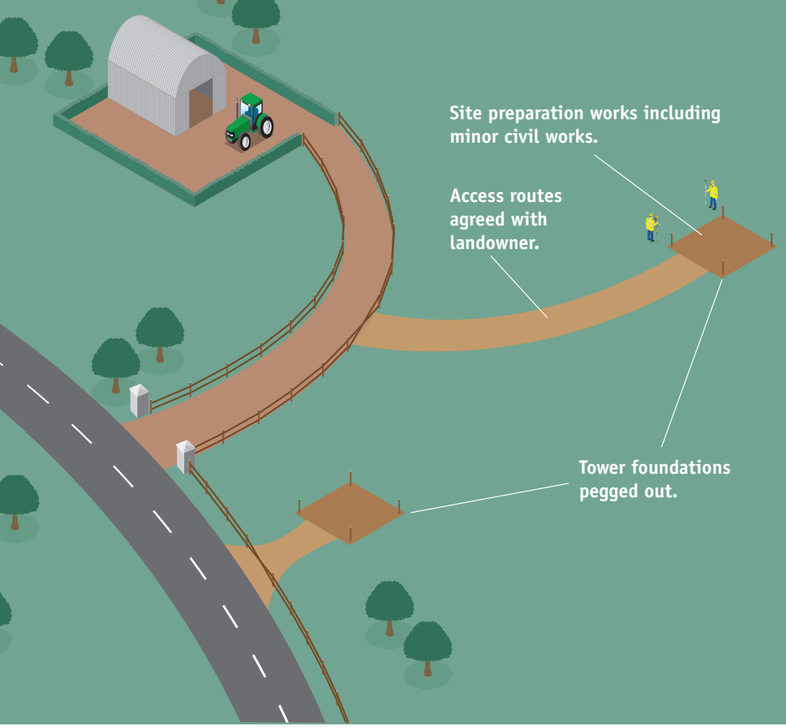
(For illustrative purposes only)

It should be noted that the construction methodology outlined below is indicative only and is based on EirGrid's and ESB Networks' experience of similar transmission line projects. Where there are site specific issues, for example poor ground conditions or unique planning conditions, then alternative methodologies are likely to be required.

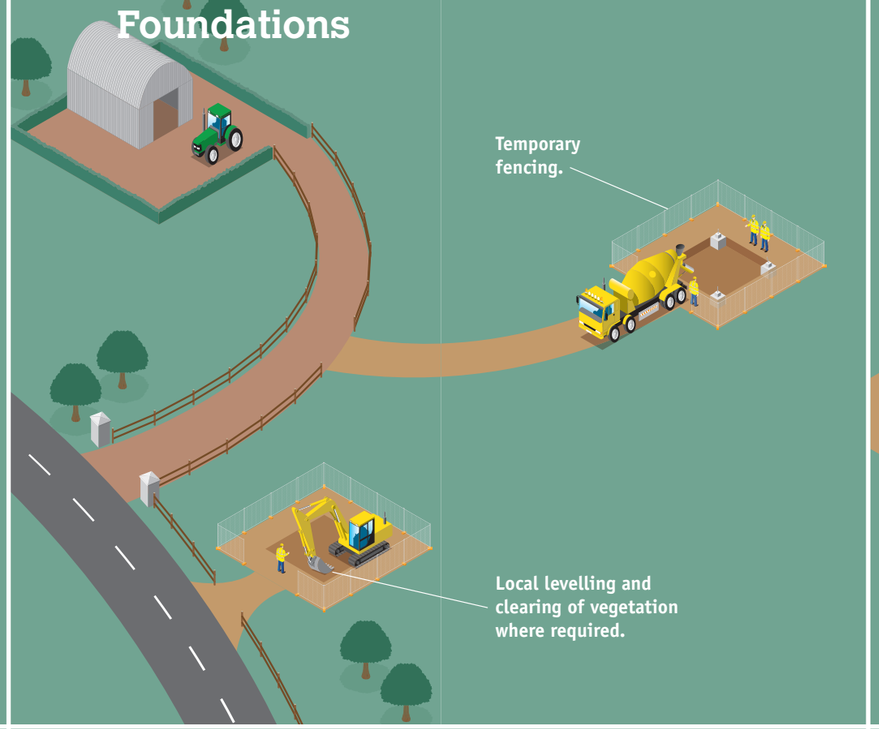
In all cases, EirGrid will work with landowners to agree access routes and to minimise disruption.

Individual tower sites will be separated by an average of 350m and access to the sites will be required for short periods during each phase of construction.

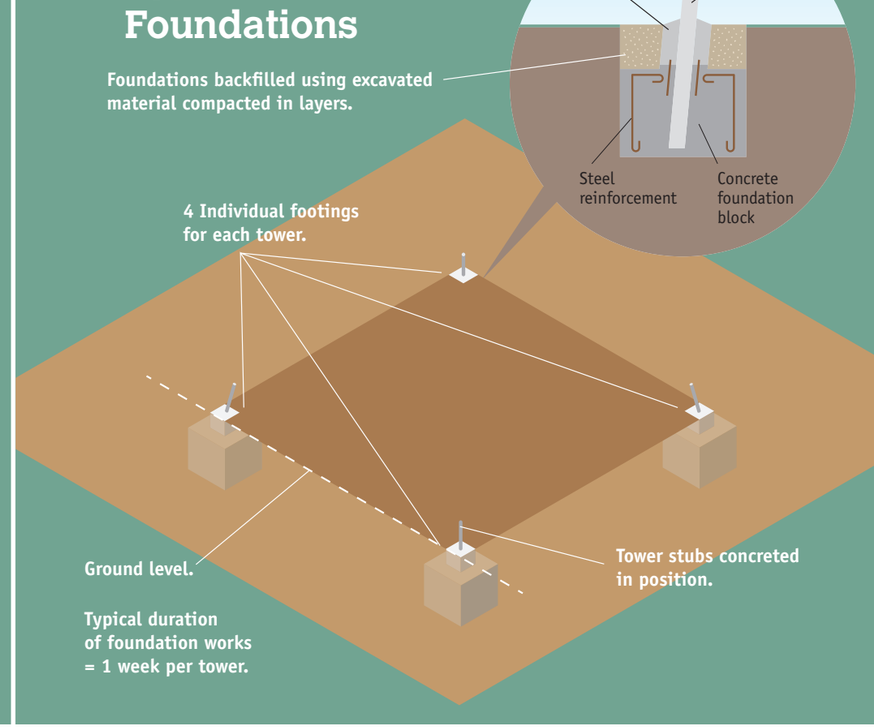
1 Setting Out/Access Routes



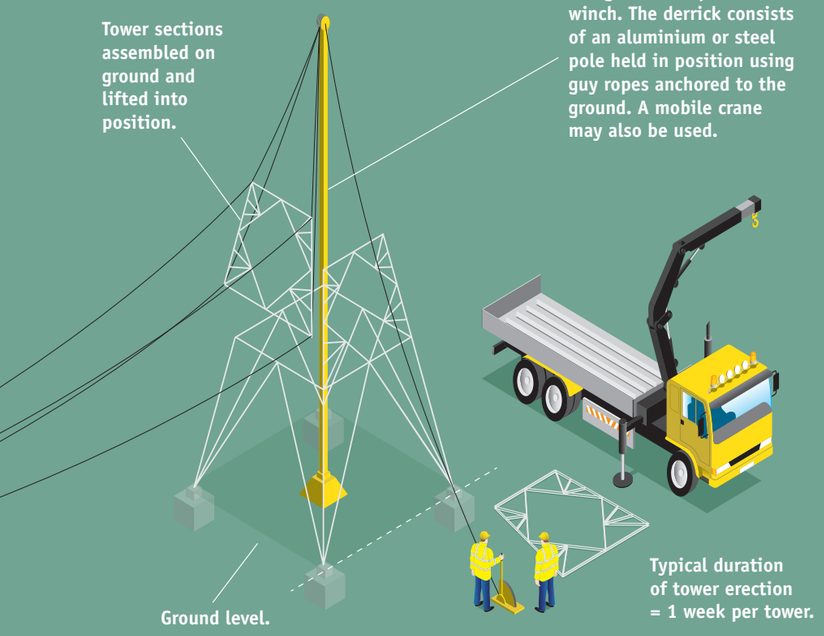
2 Tower Foundations



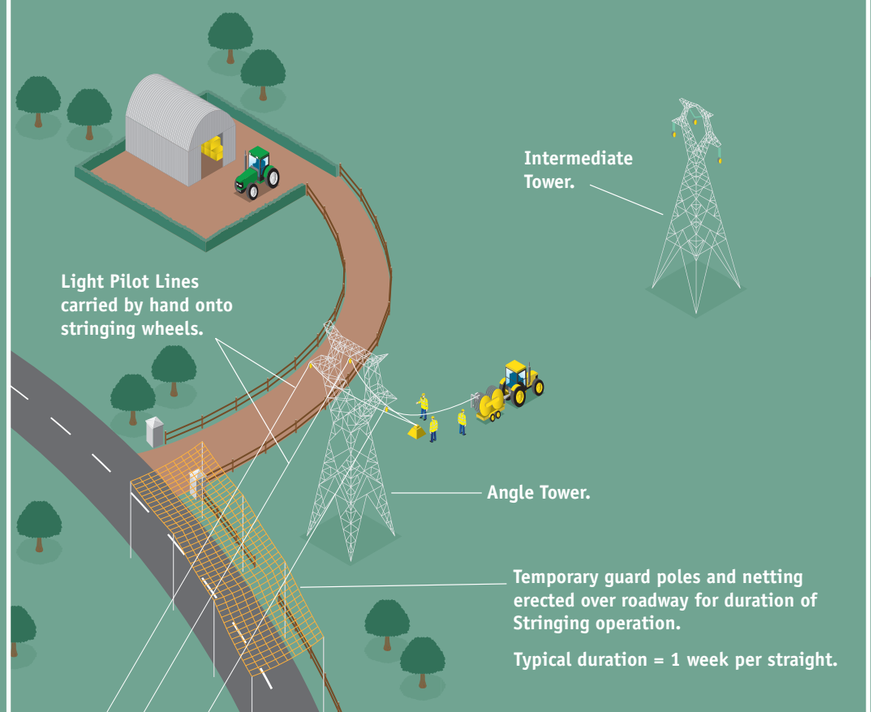
3 Typical Tower Foundations



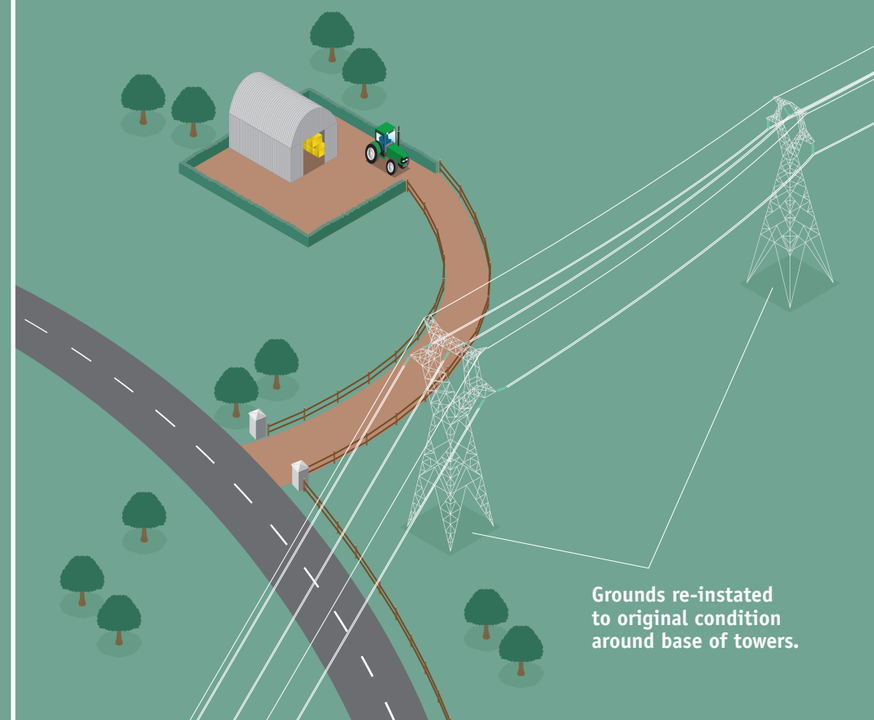
4 Tower Erection



5 Stringing



6 Re-Instatement & Completion



Guidelines for Identifying Construction Access Routes

In identifying indicative construction access routes EirGrid seeks to minimise the environmental impact and the impact on farm and land management practices. These indicative temporary access routes will be approximately 4 metres in width to cater for the construction vehicles. Where possible, landowner preferences will be accommodated and existing access routes will be utilised.

The guiding principles used in the identification of access routes are explained in detail in the **Preferred Project Solution Report** and a summary is provided below.

Landowner Considerations

- Minimise disturbance to current land use and farm and land management practices.
- Take appropriate precautions to protect animal welfare and crop fertility by avoiding the spreading of diseases and noxious and invasive plants between farms.

Technical Considerations

- Maximise use of existing farm entrances, farm tracks/ roads and bridges, where possible.
- The use of private accesses to residential properties should be avoided wherever possible for safety and amenity reasons.

Environmental Considerations

- Avoid sensitive areas where possible (e.g. SAC/cSAC/pNHA/NHA/SPAs).
- Cause least disturbance, and minimise impacts, to natural heritage interests (including watercourses) and cultural heritage interests.
- Minimise the amount of new temporary entrances, and access tracks/roads, where possible.
- Minimise intrusion and disturbance to the surrounding area and local communities.

Where applicable, an aerial map(s) detailing the proposed indicative access routes for construction purposes are included in your landowner pack. As part of this phase of landowner consultation we are seeking your feedback on the suitability of these indicative access routes.

How You Can Influence the Line Design

EirGrid is seeking to minimise disturbance to current land use and farm management practices and is seeking your feedback. You can provide feedback to your designated landowner agent or by contacting our dedicated project information service or in writing using the Change Request Form provided on page seven of this brochure.

In addition, if you would like an agricultural advisor to meet with you in order to carry out an assessment of the impact that the proposal may have on your farm practice, please advise through one of the methods listed above.

In order for your proposed modification to be adopted it must:

- Meet general line design requirements.
- Not create greater impact for adjoining dwellings/ sensitive receptors, and
- Tower and line movements should be confined to the landowner property, where possible unless otherwise agreed with adjoining landowners.

All reasonable line route and tower movement requests will be considered and assessed. A balanced judgement will be made, based on technical and environmental considerations and the results of this assessment will be communicated to you.

Approved change requests will be incorporated into the final proposed development which will be submitted for planning approval to An Bord Pleanála. As indicated previously EirGrid will not be seeking flexibility in the application to move tower positions post-planning.

Please submit your feedback to the Project Team by 9th September 2013.

Landowner Change Request Form

Reference Number: (As Issued by EirGrid)

Name:

Address:

Telephone: Email:

Preferred Method of Contact: a) post b) phone c) email d) visit

1. Is the extent of your land holding (along the preferred line route) correct on the maps you have received?

Yes ☐ No ☐ (If No, please provide details in the space provided for feedback below)

2. Would you like to meet directly with EirGrid?

Yes ☐ No ☐

3. Would you like an agricultural advisor to carry out an assessment of the impact the proposal may have on your farm practices?

Yes ☐ No ☐

4. Would you allow access for an environmental field survey of your property so that EirGrid can assess any change request made?

Yes ☐ No ☐

5. Do you have any feedback on the proposed line route, tower locations or indicative access routes detailed on the map?

Yes ☐ (Please provide details in the space provided below)

No ☐

Feedback/Details of Proposed Change(s):*

Reason(s) for Requested Change(s):

* (Note – If you wish, please return the landowner map included with your pack, marked with your proposed modification. A copy of the map will be reissued to you upon receipt)

Return to : C/O EirGrid NS Project Manager, Block 2, Floor 2, West Pier Business Campus, Dún Laoghaire, Co. Dublin.

About EirGrid

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

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

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

Contact Details

Write: C/O **EirGrid NS Project Manager**, Block 2, Floor 2, West Pier Business Campus, Dún Laoghaire, Co. Dublin, Ireland.

Phone: Lo-call **1890 25 26 90** (9am to 5pm Monday to Friday)

Email: **northsouth@eirgrid.com**

Website: http://www.eirgridprojects.com/projects/northsouth400kvinterconnectiondevelopment

Visitor Information Centres open as follows until 5th September 2013 or by appointment:

Navan
Every Tuesday from 12 noon to 7pm
10a Kennedy House, Kennedy Road, Navan, Co. Meath.

Carrickmacross
Every Wednesday from 12 noon to 7pm
Carrickmacross Workhouse, Shercock Road, Carrickmacross, Co. Monaghan.

Kingscourt
Every Thursday from 12 noon to 7pm
Dun A Ri House Hotel, Station Road, Kingscourt, Co. Cavan.

Part Funded by the EU-TEN-E Initiative

GRID25
DELIVERING IRELAND'S ELECTRICITY FUTURE

www.eirgridprojects.com

Grid25 is EirGrid's ongoing development plan to deliver a sustainable, competitive and secure electricity supply to homes, business and industries. Grid25 will also help us meet our target of 40% of our energy supply coming from sustainable Irish sources.