Paddock 110 kV Substation Development

Kilbride Road, Co. Meath

energia Renewables

Dear Householder,

Energia Renewables are developing plans for a 110 kV transmission substation in the townland of Paddock, Kilbride Road, Co. Meath.

The proposed Paddock 110 kV Substation will facilitate the export of renewable energy from Energia solar developments in the local area into the national grid. This will help Ireland to reach its 80% renewable electricity target by 2030, reducing our reliance on fossil fuels and increasing security of energy supply.

This brochure provides an overview of the proposed substation development and project timeline. A planning application for the proposed Paddock 110 kV Substation is due to be submitted in the coming months.

Please don't hesitate to contact the project team with any questions you may have.

Yours sincerely,

Éanna Farrell
Solar Project Manager
Energia Renewables

Rosy Billingham
Community Liaison Officer
Energia Renewables

Contents

1. Meet the team

Energia Renewables

Energia Renewables are part of the wider Energia Group - a modern, customer-centric utility provider, focusing on renewable technology. We are committed to our customers and trusted by thousands of homes and businesses throughout Ireland to meet their needs in an evolving energy environment.

We are a leading developer and operator of 15 onshore wind farm sites across the island of Ireland, generating over 300MW of green electricity.

The Group's ongoing €3bn 'Positive Energy' investment programme is developing onshore and offshore wind, solar, battery storage, bioenergy and green hydrogen production.

It is anticipated that this renewable energy programme will add 1.5 GW of additional renewable capacity to the system by 2030, facilitating the achievement of government Climate Action targets.

AECOM

AECOM is a leading provider of integrated design consultancy services across the Republic of Ireland and Northern Ireland. They have partnered with public and private sector clients, applying creative vision, technical excellence, interdisciplinary insight, and local expertise to solve their most complex challenges in new and better ways. Their agile teams provide multidisciplinary services and offer specialist expertise to every scale or project: from large regeneration schemes to local community-led initiatives. They connect across services, markets and geographies to deliver transformative outcomes, combining global expertise with local knowledge. From feasibility studies and detailed design, through to site supervision and construction, they support every stage of the development lifecycle, integrating sustainability and innovation in everything they do.

The Team

Éanna Farrell
Solar Project Manager
Energia Renewables

Richard Green
Corporate Development Manager
Energia Group

Sara Tinsley
Planning and Environmental Consents Manager
Energia Renewables

Rosy Billingham
Community Liaison Officer
Energia Renewables

2. Proposed substation location and project overview

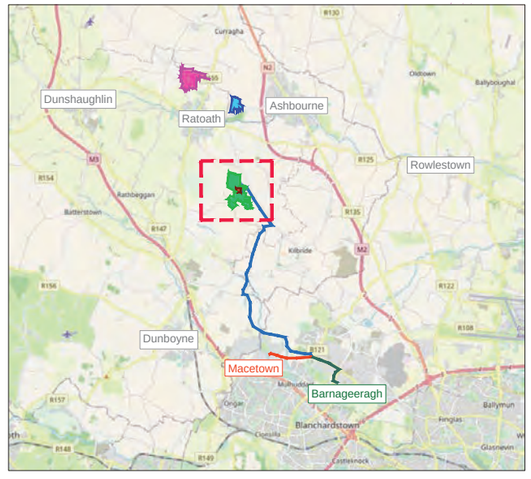
Paddock 110 kV Substation

Energia Renewables plan to construct a new 110 kV transmission substation in the townland of Paddock, Co. Meath, to facilitate the export of renewable energy from our solar developments in the local area into the national grid. A 12.5 km underground cable will be installed to connect Paddock 110 kV Substation to the national electricity grid.

The proposed Paddock 110 kV Substation will help Ireland to achieve its 2030 Climate Action targets.

Key

- Paddock 110kV Substation
- Darthogue Solar Development (Planning Granted)
- Ballybin Solar Development (Planning Submitted)
- Paddock Solar Development (Planning Granted)
- Underground Cables
- Option A: Macetown
- Option B: Barnageeragh
- Motorway
- Regional Roads
- Local Roads



0 250 500 750 Meters

* Project details are correct at time of publication and are subject to further development and alternation prior to lodgement of the planning application

3. About the site

The proposed substation site is located within an agricultural field and was identified based on a number of key considerations:

- The site is in a good location for connection to the existing national grid infrastructure.
- The site does not include any environmental designations, including Natural Heritage Areas, Special Areas of Conservation, Candidate Special Areas of Conservation or Special Protection Area.
- The site is accessible and close to main transport routes for the delivery of large components.
- The site has been subject to a comprehensive landscape and visual impact study to assess potential impacts on the landscape and sensitive receptors.

4. Planning process

The proposed Paddock 110 kV Substation development has been designated a Strategic Infrastructure Development (SID).

As this is an SID planning application, it means that it must be submitted directly to An Bord Pleanála (ABP).

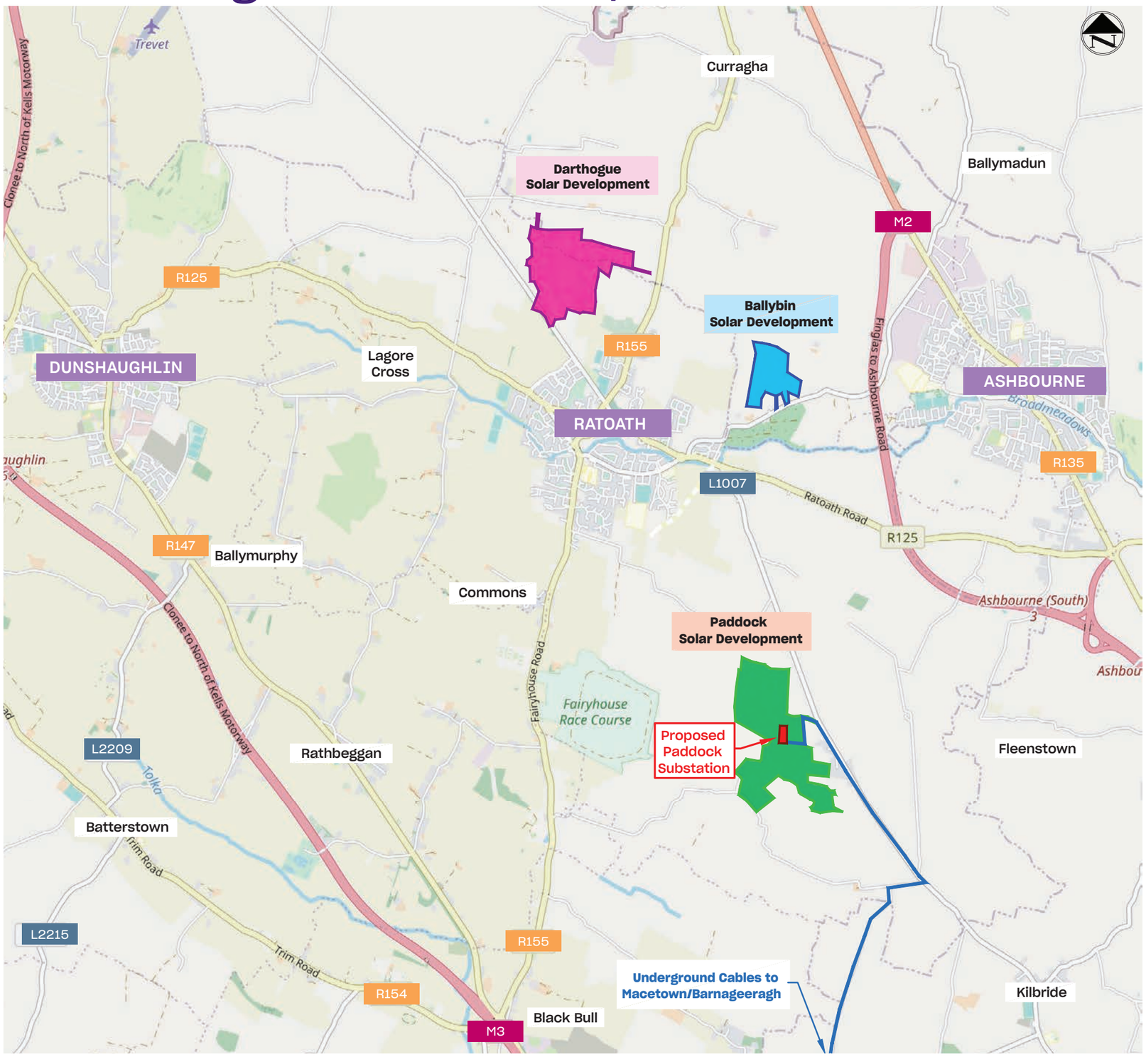
Meath County Council will submit a report to ABP as a statutory consultee.

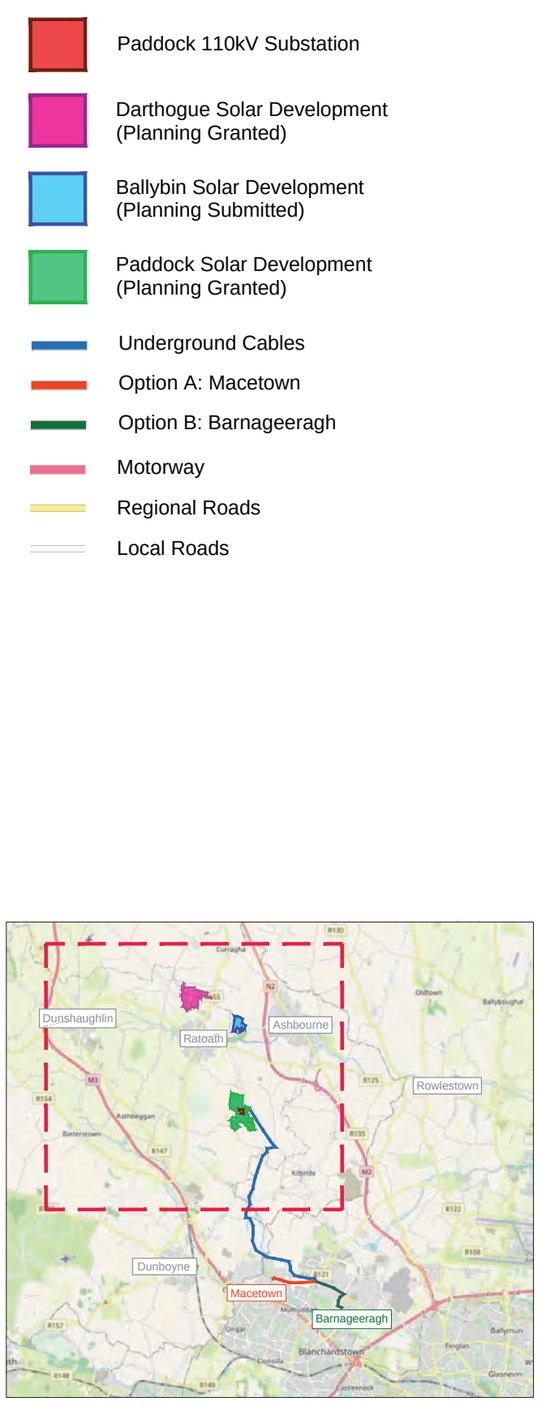
Planning application documents will be available to view at the following locations:

- Meath County Council offices
- The Offices of An Bord Pleanála
- An Board Pleanála's Online Planning Portal
- Project website: www.paddocksubstation.ie

View of existing landscape

5. Map of proposed Paddock 110 kV Substation and Energia solar developments





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6. Project website

We have created a project website where you can view photomontages or visual representations of what the proposed Paddock 110 kV Substation will look like from key viewing points around the site.

These photomontages can be viewed online at **www.paddocksubstation.ie**

View of existing landscape

Visualisation of proposed infrastructure with further additional landscaping screening to be installed

7. What happens next

- A planning application for the proposed Paddock 110 kV Substation is due to be submitted to An Board Pleanála in the coming months.
- Once the application is lodged, all planning documentation associated with the proposed substation development will be made available on our website at **www.paddocksubstation.ie**
- Construction of the substation will take approximately 18 months. This will start with the initial site preparation works for access, followed by the construction of the substation compound and installation of the associated electrical equipment before the final commissioning and energisation stage.
- A traffic management plan will be put in place, setting out how we will manage construction traffic during the construction of the project.
- Our construction and community engagement team will liaise with local residents and businesses to minimise disruption.

8. Working with communities

The proposed Paddock 110 kV Substation development will serve Energia's solar developments in the local area, which will operate substantial community benefit funds to support community groups, voluntary organisations and environmental projects.

Energia already operates a number of renewable energy benefit funds, which are all administered on our behalf by independent charitable trusts.

Our funds are set up in conjunction with local communities to ensure that our funding has a positive and lasting impact.

We begin allocating community project grants one year after the commencement of commercial operation and energy generation. When it's time for community groups to apply for funding, we will advertise extensively through local media, local authorities and mailing list contacts.


Scout group


Community garden

Martial arts classes


Community playgroup

9. Working with schools

Once up and running, Energia will be happy to facilitate school and college visits to our local solar developments. In the meantime, the Energia Renewables and Operations team are keen to arrange school workshops and classroom talks on renewable energy.

- *Learn...* about solar energy
- *Discover...*how wind turbines generate electricity
- *Explore...* the need for climate action and energy transition

10. FAQs

Why is this substation necessary?
Once operational, the proposed Paddock 110 kV Substation site will facilitate the export of renewable energy from three local Energia solar farms, which are still in development, onto the national grid. The substation will help Ireland to reach its Climate Action targets and reduce our dependence on fossil fuels, while increasing security of energy supply.

How big is the site?
Paddock 110 kV Substation will cover an area of approximately 1 hectare, with an approximate 12.5 km underground cable connecting the substation to the national electricity grid near Barnageeragh, Co. Dublin.

What about visual impact?
The retention of existing hedgerows will support the screening of potential residential views of the proposed substation. The site will also benefit from additional landscape planting post construction, which will increase existing hedgerow boundaries with appropriate native species.

Will new overhead lines be created?
No additional overhead lines will be installed. All grid connection cables installed for this development will be underground.

How close to properties will the substation and new infrastructure be?
The nearest property is approximately 300 m from the main substation site.

Does a substation pose health risks to humans or animals?
Some people have concerns about the electric and magnetic fields (EMFs) found near electricity lines and cables. When electric current flows, EMFs are produced but register in the extremely low frequency end of the electro-magnetic spectrum. They occur in the home, in the workplace, or anywhere we use electricity. Natural sources of EMFs include the earth's geomagnetic field and electric fields from storm clouds. The consensus from health and regulatory authorities is that extremely low frequency EMFs do not present a health risk.

Is there audible sound from a substation?
The main noise heard from a substation is a low frequency 'hum' produced by the transformer. A typical new substation transformer will have a similar noise level of an outdoor air conditioning unit at approximately 1 metre distance. The sound level diminishes at a greater distance. For example, the sound will be barely perceptible at the substation perimeter fence. Noise surveys and reports are completed as part of the planning application and are available for review.

Will the substation be lit up at night?
Construction is planned to take place during daylight hours so that wildlife is not disturbed. If artificial lighting is required at any point during construction, it will be both temporary and directional and will only illuminate the section of the site where work is continuing.

Once energised and operational, the substation will not be lit up at night. However, emergency lighting will be installed to facilitate non-daylight hour access for emergency or non-routine repairs.

Will there be a fence around the substation?
A 2.6m palisade fence will be installed around the substation compound with an additional 1.4m post and rail fence positioned 3m along the outer perimeter boundary in line with EirGrid policy.

What safety measures will be in place?
The substation will be built to EirGrid and ESB Networks standards and will be subject to a rigorous design review process prior to the commencement of construction. The purpose of these design specifications and reviews is to ensure the safety of both the public and operational staff working in the substation. Safety is at the core of the development and construction of all our projects.

How often will maintenance be carried out?
Scheduled maintenance is generally completed on a monthly basis, with more intensive maintenance scheduled annually.

What about construction traffic?
A traffic management plan will be put in place, setting out how we will manage construction traffic during the construction of the project. Our construction and community engagement team will liaise with local residents and businesses to minimise disruption.

What are the next steps?
We are engaging with the local community to provide residents living near the proposed Paddock 110 kV Substation site with project information and an opportunity to ask questions and have their say. Our Community Liaison team will be visiting homes and delivering information in the immediate area. We will also be holding a public information evening so that members of the public can drop in to meet the project team and find out more. Residents can also contact our Community Liaison Officer by email or by telephone.

Once submitted, planning application documents will be available to view at the following locations:

- Meath County Council offices
- The Offices of An Board Pleanála
- An Board Pleanála's Online Planning Portal
- Project website: **www.paddocksubstation.ie**

11. Contact us

We want to hear from you

If you have any questions, please contact us:

Telephone our Community Liaison Officer on
+353 (0) 87 994 4952

You can also email us at **clo@energia.ie**

And don't forget to check the website for updates:
www.paddocksubstation.ie

energia Renewables