Powering Up Dublin

Central Dublin Substation Project

Public Engagement Report

July 2025

EirGrid

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1 Executive Summary

Homes and businesses in Dublin city centre currently receive energy from three electricity substations in Finglas, Ringsend and Inchicore. ESB, the Distribution System Operator (DSO) has projected that this infrastructure will reach its capacity limit in the coming years.

In order to maintain the supply of power to Dublin's city centre, and meet growing demand, EirGrid as part of Powering Up Dublin programme, has proposed to develop a new electricity substation in the East Wall area as part of the best solution.

The new station will address the increased demand on the electricity grid in Dublin, which is being driven by:

- New Residential housing & commercial developments in the City Centre area
- Demand growth due to Electrification of Heat and Transport (EoHT)
- Improve Security of Supply in the City Centre

Reinforcing the grid is a key step to achieving Ireland's renewable energy targets and reducing reliance on fossil fuels, by enabling the grid to transfer increased levels of renewable energy from where it is generated to where it is needed. The project is considered essential to meet the Government of Ireland's Climate Action Plan target of 80% renewable energy generation, onshore and offshore, by 2030.

Following extensive analysis of the sites identified, as well as landowner and stakeholder engagement, EirGrid has identified one site as the most feasible for the new substation. This report provides a summary of the project development and the public and stakeholder engagement that has been carried out so far in line with EirGrid's 6-step approach to developing the grid.

2 Introduction

2.1 About EirGrid

EirGrid is the state-owned operator of Ireland's electricity transmission grid and is responsible for a safe, secure and reliable supply of electricity in Ireland. Since 2006, EirGrid has operated and developed the national high voltage electricity grid and wholesale market in Ireland. The grid moves wholesale power around the country, by bringing energy from where it is generated to heavy industry and high-tech users. The grid also supplies the distribution network operated by ESB Networks that powers every electricity customer in the country.

EirGrid is leading the secure transition of Ireland's electricity grid to a low carbon renewable future. Work carried out now will help create a more sustainable future for the next generation.

EirGrid's Statutory Role

EirGrid is the national electricity Transmission Operator (TSO) for Ireland. The role and responsibilities are set out in Statutory Instrument No. 445 of 2000 (as amended); in particular, Article 8(1)(a) gives EirGrid, the exclusive statutory function: "To operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical, and efficient electricity transmission system, and to explore and develop opportunities for interconnection of its system with other systems, in all cases with a view to ensuring that all reasonable demands for electricity are met and having due regard for the environment."

Furthermore, as TSO, EirGrid are statutorily obliged to offer terms and enter into agreements, where appropriate, and in accordance with regulatory direction, with those using and seeking to use the transmission system. Upon acceptance of connection offers by prospective network generators and demand users, they must develop the electricity transmission network to ensure it is suitable for those connections.

Regulatory Targets

Part of EirGrid's responsibility is to develop the electricity transmission grid in accordance with the future needs of society. Careful analysis of different future energy scenarios specific to the area took place to establish that the transmission system is in compliance with the Transmission System Security Planning Standards (TSSPS).

2.2 About the Central Dublin Substation project

As part of the Powering Up Dublin programme, a new 220kV/110kV Gas Insulated Substation (GIS) has been identified as the best solution to address Dublin City's growing electricity demand. This GIS will be looped into one of the existing 220kV circuits in the North Inner City.

The new station will strengthen the electricity grid in Dublin city and is a key enabler in meeting the growing demand for electricity that has resulted from increased economic activity and population growth. This project will support:

- Residential housing and commercial developments in the City Centre
- Demand growth due to electrification of heat and transport
- Improvement of security of supply in the City Centre
- Bringing renewable energy on to the grid.

Figure 1 Timeline of Central Dublin Substation Project

2.2.1 Engagement in Central Dublin

Prior to the Central Dublin Substation Project, EirGrid has been actively engaging in the Central Dublin area as part of the wider Powering Up Dublin programme. Two of the replacement cables associated with Powering Up Dublin will be routed through the general area. Engagements have included:

- An information event was held in nearby Ringsend in the consultation period for the cable replacement programme in May 2023.
- EirGrid hosted an Energy Citizen's Roadshow event in October 2022.
- An information event was held in the Sean O'Casey Community Centre in East Wall to present the Best Performing Options for the Finglas to North Wall cable and the North Wall to Poolbeg cable in February 2024.

2.3 EirGrid's 6-Step Approach to Developing the Electricity Grid

The Central Dublin Substation development follows EirGrid's established 6-step approach to developing the electricity grid.

Each step has a distinct purpose with defined deliverables and collectively they represent the lifecycle of a grid development project from conception through to energisation. At each step, a series of activities are carried out to inform, engage and consult with stakeholders and to facilitate their participation in the project development process. This approach helps EirGrid to explore options fully and make more

informed decisions. It is driven by EirGrid's commitment to putting the public at the heart of decision-making and to work towards solutions that have better landowner and public support.

3 Steps 1 & 2

3.1 Powering Up Dublin: Programme Background

In 2022, it was determined that there was a requirement to upgrade and reinforce the electricity infrastructure in Dublin and the Leinster Region, as the existing infrastructure is becoming less reliable and is under increasing pressure year on year. To address this, the Powering Up Dublin Programme was established.

Powering Up Dublin requires the installation of five routes for high voltage underground cables to replace older cables across the city. The programme also includes upgrades of existing substations, and the construction of a number of a new substation in Central Dublin.

Powering Up Dublin is a critical programme that will strengthen key electricity infrastructure in Dublin and the surrounding areas, helping to make Ireland 'renewable ready'. This programme will help deliver a consistent and reliable supply of electricity for Dublin.

3.2 Central Dublin Substation Project: Step 1 (2022)

The purpose of Step 1 of EirGrid's 6 step approach is to identify the future needs of the electricity grid by considering future energy scenarios through a process of analysis.

As part of the feedback to EirGrid's Shaping Our Electricity Future public consultation in 2021, it was highlighted to EirGrid the emerging needs for additional transformer capacity and a new transmission substation in the Dublin area. In November 2021, following the consultation period, EirGrid then published the final Shaping Our Electricity Future report which included high level plans to cater for these new developments.

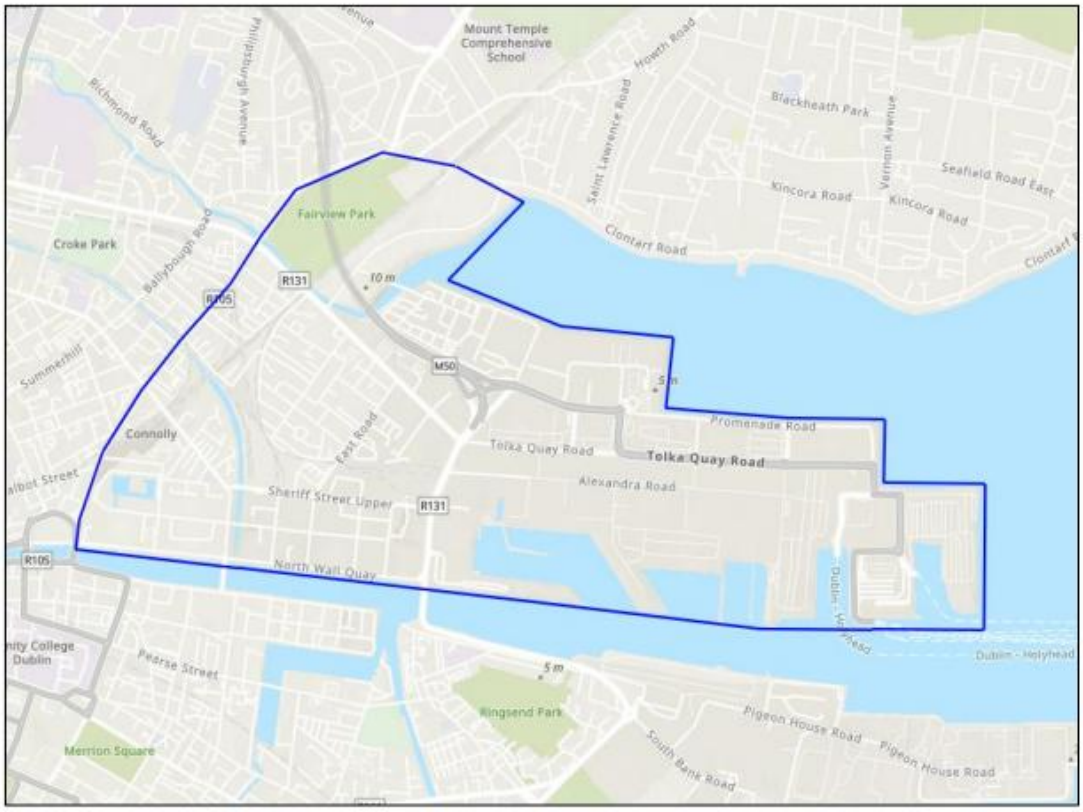
In 2022, the Distribution System Operator (DSO) notified EirGrid that the existing transmission substations feeding Central Dublin will reach their capacity limits in the coming years. This request resulted in the need for this project to be identified and therefore Step 2 commenced.

3.3 Central Dublin Substation Project: Step 2 (2022)

The purpose of Step 2 is to look at the range of technical options that can meet the grid reinforcement need or needs, confirmed in Step 1, and to narrow this down to a short-list of options to bring forward for further investigation and evaluation in Step 3.

Dublin city centre is currently served by transmission substations in Ringsend and Finglas. EirGrid is committed to making best use of existing assets before considering investing in new assets. At the outset, the option of the addition of new transformers at those existing stations was considered, however as both of these stations are approaching their supply limits, this option was deemed unfeasible.

To ensure security of supply, it was determined that the only solution to address the identified need for increased capacity is a new substation in the study area shown below:



This area was chosen as there are two 220kV circuits in the area that could support a new connection. The connection options were assessed based on two criteria namely, technical performance and economic performance. These options are given below:

- Loop-In the existing Finglas – North Wall 220 kV circuit
- Loop-In the existing Belcamp – Shellybanks 220 kV circuit

Step 2 also identified a potential site for the required infrastructure owned by the DSO in the East Wall area. This site was brought forward to Step 3 for consideration.

3.3.1 Stakeholder engagement

The stakeholder engagement in Step 2 is generally intended to engage with national and regional stakeholders. As such, Step 2 of this project focused on engagement with the DSO.

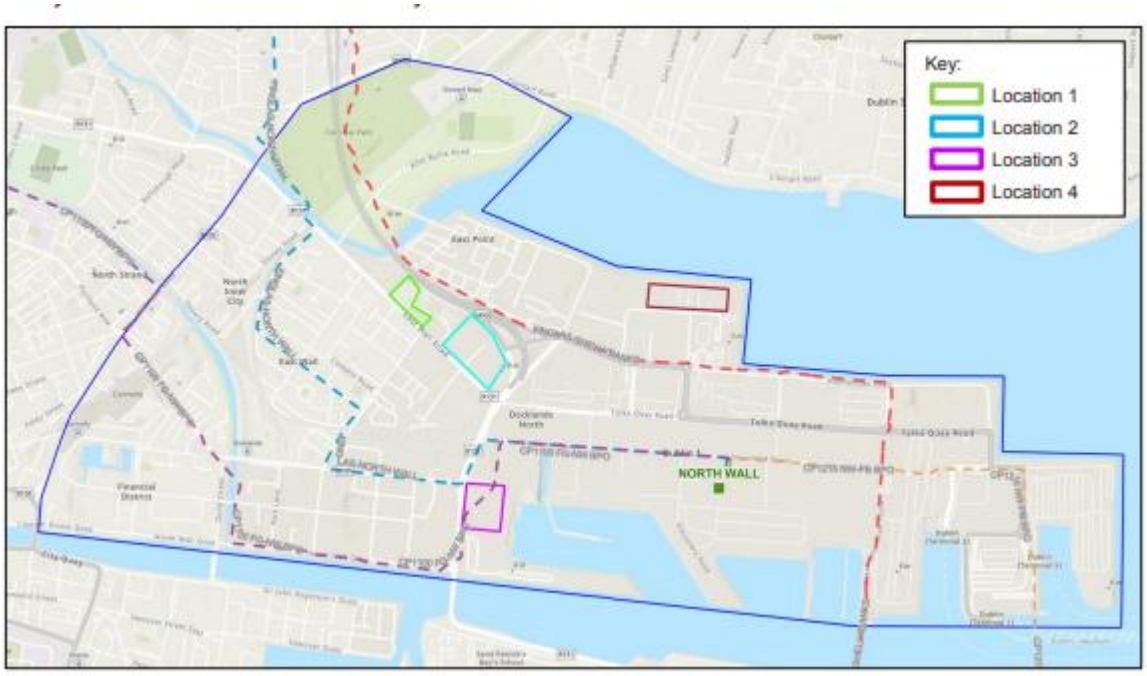
4 Step 3

The purpose of Step 3 is to consider the technology options in more detail, and to look at the broad study areas where possible routes or sites may be located. At the end of Step 3, a preferred option and refined study area is generally identified. Stakeholder engagement and consultation are embedded into this step and extensive engagement took place as detailed in the sections below.

4.1 Multi Criteria Assessment

4.1.1 Potential substation locations

Step 3 identified a number of potential sites for the development of a new transmission substation within the study area. Constraints studies narrowed the number of sites down to four, which were brought forward for a multi-criteria analysis. These locations are shown in the figure below.



The multi-criteria analysis considered the following assessment criteria relating to the Central Dublin Substation Project:

1. **Technical** This criterion assesses the technical performance of an option with reference to the security of supply and efficiency standards including:
    - Technical operating risk
    - Expansion/extensibility
2. **Deliverability**. This criterion assesses the ability to construct and deliver an option within an acceptable period of time. Relevant considerations include:
    - Dependence on other projects
    - Design complexity
    - Implementation timelines

3. **Economic**. This criterion assesses economic performance which considers investment costs and lifecycle costs.
    - Project implementation costs
    - Project benefits
4. **Socio-economic.** This criterion assesses the potential social and economic impact and level of social acceptability of an option. Relevant considerations include:
    - Settlements and communities
    - Amenity
    - Cultural heritage
    - Landscape and visual
5. **Environmental**. This criterion assesses the potential environmental impact of an option on the following:
    - biodiversity;
    - Flora and fauna
    - Water impact.

4.1.2 Stakeholder Engagement

Three of the four locations identified as feasible sites for the development of a new transmission substation under the multi-criteria analysis were located within Dublin Port Company (DPC) lands. As such, prior to embarking on a wider stakeholder engagement and consultation programme, EirGrid approached DPC to discuss the viability of these lands. The strategic nature of the sites to DPC were outlined and it was evident that our proposed project was not compatible with DPC's own proposed plans.

The fourth location identified as feasible was the DSO owned land identified in Step 2, known locally as the Pole Field Site. This location, a carpark and vacant brown field site on East Wall Road and sits approximately 50m from the existing Finglas – Shellybanks 220 kV circuit which runs on the northern side of the M50/Port Tunnel.

4.1.3 Identification of Best Performing Option

Following the evaluation of the sites and incorporation of feedback in relation to viability of the site, the site on ESB lands emerged as the Best Performing Option.

This site is in close proximity to the existing cable, limiting impacts on the local road network and is utilising an existing asset in the ownership of the DSO. The crossing of the M50/Port Tunnel will be carried out by a trenchless technique under the road, also minimising overall disruption in the area and for commuters.

4.2 Stakeholder & Public Engagement

4.2.1 Seeking public feedback

EirGrid launched a programme of public engagement and information sharing on the location shown to be most feasible. An engagement strategy was agreed ahead of the announcement, outlining the planned activities and engagement actions that would be undertaken to ensure all stakeholders, including communities and businesses in the East Wall area. The key aims of the campaign were to:

- Inform the local community, businesses, elected representatives and other stakeholders of the proposal and explain the need for reinforcement of the grid in the central Dublin area.
- Ensure engagement with affected stakeholders and collect any relevant local knowledge that could feed into the proposals.
- Consult and engage with all the affected stakeholders, actively identifying and working with all interested groups to ensure they are aware of how their feedback would feed into the decisions taken by EirGrid regarding this development; and
- Promote and communicate widely and clearly different aspects of the wider Powering Up Dublin Programme including the objectives, outcomes and benefits to mitigate risks around acceptability of future proposals.

Multiple public engagement and information sharing activities were undertaken during the 3 week campaign in the East Wall area. These included:

- Public information events where residents, business owners, public representatives and other interested stakeholders could drop in to learn more about the project and pose questions and concerns to the project team.
- Project brochures delivered to over 5000 homes in the area
- Notification sent to Ministers, TDs and Local Councillors representing the area
- Dublin Infrastructure Forum briefing on the project
- Advertisement in the local newspaper

4.2.2 Project Brochure

A project brochure outlining the proposed station location as well as information on how the location was chosen was delivered to homes in the East Wall Area. This brochure was also be made available at information events, briefings and stakeholder meetings, as well as online to view and download here[1]. As per the requirements of the Official Languages Act 2021, the brochure was also made available in Irish.

4.2.3 Stakeholder meetings

One to one meetings were offered where a stakeholder requested further detailed information. The community liaison officer and the project team met with a number of public representatives, as well as teams within the local authority to brief them on the project where relevant. Engagements are ongoing with utilities providers and state bodies to align activities where possible.

[1] https://cms.eirgrid.ie/sites/default/files/publications/Powering-Up-Dublin-Central-DublinSubstation-Project-Brochure.pdf

4.2.4 Community Forum

EirGrid is committed to putting people and communities at the centre of our decision making.

One of the ways we do this is by establishing community forums in areas where we're delivering critical electricity grid developments. This ensures that communities are involved, and that vital local knowledge informs decisions at every step of the journey, from planning and design through to construction and delivering community benefit funding.

EirGrid established a Powering Up Dublin community forum in November 2022 to engage with local residents impacted by the cable replacement programme. Members of the East Wall community were invited to join this forum upon the introduction of the Central Dublin Substation Project, which falls under the Powering Up Dublin programme.

4.3 Forums & Events

4.3.1 Dublin Infrastructure Forum

EirGrid established the Dublin Infrastructure Forum in 2022, bringing together other state agencies and statutory bodies to identify opportunities for collaboration and to share ideas and information on planned infrastructure works across the city.

The Dublin Infrastructure Forum met the week before the publication of the Step 3 report and the commencement of the Public Engagement campaign. The meeting took place in Dublin City Council Chambers, and the project was presented to members by the programme director.

By coordinating with other state-owned utilities, transport providers and local authorities through the forum, we have established a high level of engagement and open dialogue with key stakeholders across the City. The established relationships during this meeting were further developed during this stage of engagement. The briefing gave EirGrid the opportunity to speak to major local stakeholders about the project in advance of launch, and to address queries and concerns ahead of time.

4.3.2 Engagement Events

Over the course of the campaign, three information events took place in the East Wall Area. The events were well attended, with local groups and public representatives in attendance at each session. These events were scheduled at differing times to ensure that there were multiple times and days available to suit as many interested parties as possible.

The information events were attended by the Community Liaison Officer, Engagement Specialists and Technical experts. This allowed members of the public and other stakeholders to meet with the project team to answer any queries and discuss any issues or concerns.

The event details appeared in media advertising, social media and on the project brochure. Posters with the information were distributed to local businesses and community centres within the engagement zone.

4.4 Summary of Feedback

A wide range of feedback was captured and assessed during the Step 3 process, with several recurring themes arising. This feedback included:

- Concerns about the proximity of the station to homes and schools on East Wall Road
- Frustration over the level of industrial development in the area and lack of green spaces
- Concerns about noise emissions from transformers
- Concerns about EMF levels
- A lack of consultation and general understanding of the project purpose and need; and
- Preference for the station to be located on Dublin Port lands instead
- Visual impact and the need for the site to be suitably screened.

4.5 Outcomes of Step 3

The feedback received during the Step 3 was assessed and relayed to the project team. In response to the concerns from residents, the next phase of design explored options that could reduce both the visual impact of the substation, as well as options for reducing the impact of noise on local homes.

A significant level of frustration was expressed by the local community at the speed at which the project is being progressed and the extent of public consultation associated with it.

Following the Step 3 information campaign, an FAQ update document was developed to address the concerns raised and provide further information to residents. Link to this document is provided here[2]. This document was hand delivered by the EirGrid public engagement team to 2,000 homes and businesses in the East Wall area in October 2024.

[2] https://cms.eirgrid.ie/sites/default/files/publications/Central-Dublin-Substation-Project-FAQ.pdf

5 Step 4b Continued Engagement - Final Design Consultation

5.1 Background

Following the public engagement that took place in 2024, work commenced to update the proposed project to reflect the feedback received from stakeholders and the community.

Measures were taken to address concerns raised with regard to the potential for noise impact, this included changing the site layout, placing the transformers to the back and housing them in concrete enclosures to further mitigate any noise impact. The substation buildings were pushed back slightly from the boundary wall, and greenery was introduced to reduce the visual impact.

EirGrid worked with an architect to design a building and boundary wall treatment that would be more attractive for residents and passers-by. Part of the design for the boundary wall was a proposal to include a community art project, if that is what the local community chose.

Ahead of applying for planning in mid-summer 2025, the final design intent was presented to the local community for a final consultation in June 2025.

5.2 Stakeholder and Public Engagement

EirGrid undertook a further phase of public consultation to present the final design intent of the proposed substation and gather feedback from the local community. This consultation ran from 23 June to 9 July 2025 and marked a key milestone in the project's development.

The purpose of this engagement was to:

- Share the final architectural design intent of the substation and boundary wall.
- Outline how previous community feedback had influenced the design.
- Invite final observations and suggestions from residents and stakeholders.

5.2.1 Project Brochure

To support this consultation, the EirGrid Public Engagement Team hand delivered project brochures to homes and businesses in the East Wall area. These brochures:

- Illustrated the changes made to the substation design following community feedback received in June 2024.
- Provided visual representations of the proposed architectural cladding and landscaping.
- Introduced the concept of a community art project to be featured on the boundary wall.

The brochure was printed in both English and Irish, and included a pull out FreePost feedback form to allow residents to submit their views easily.

5.2.2 Information Events

Three public information events were held at the Sean O'Casey Community Centre in East Wall to provide opportunities for residents to meet the project team, ask questions, and share their views in person. The events were scheduled at varying times to accommodate different availability:

- Thursday 26 June, 4pm–8pm – 34 attendees
- Monday 30 June, 11am–3pm – 22 attendees
- Friday 4 July, 11am–3pm – 18 attendees

Each session was attended by Community Liaison Officers, engagement specialists, and technical experts. Attendees were able to view updated design visuals, discuss the proposed changes, and provide feedback directly to the team.

On 9 July, the Community Liaison Officers hosted a drop-in clinic at the Sean O'Casey Community Centre. This provided a more private and focused setting for residents to discuss the project in detail and raise any specific concerns or suggestions.

5.3 Feedback Summary

A total of 8 feedback forms were submitted during the consultation period. Feedback was also received through the information events and via email to Dublin@EirGrid.ie. Key themes and comments included:

- Preferences for cladding materials: Zinc (4), Perforated Aluminium (3), Stainless Steel (1).
- Desire for greater community involvement.
- Concerns about visual impact and architectural aesthetics.
- Requests for landscaping and tree planting.
- Safety considerations due to the busy urban location.
- Suggestions for sustainable building materials.
- Interest in participating in the community art project.

5.3.1 Thematic Analysis of Consultation Feedback

Theme	Feedback Summary
Health and Safety Concerns	- Concern about high cancer rates in East Wall - Worries about noise impact, especially for individuals with health conditions (e.g. epilepsy) - Concerns about EMF exposure near homes and a primary school
Visual and Acoustic Mitigation	- Strong desire for extensive tree planting to reduce noise and improve aesthetics - Noted increase in noise after mature trees were removed - Concern about graffiti on the perimeter wall - Positive engagement with cladding options; all three were well received
Community Involvement and Benefits	- Residents want to participate in the community art project - Requests for more information on the community benefit fund - Interest in sponsorship opportunities - Suggestion to incorporate the original East Wall into the perimeter wall
Socioeconomic Expectations	- Questions about compensation (e.g. free electricity or solar panels) for living near the substation

	- Frustration over lack of public/green space despite population growth
Infrastructure and Logistics	- Concerns about traffic and parking impacts during and after construction

6 Conclusion

The Central Dublin Substation Project has progressed through a comprehensive engagement process since it was first introduced in 2024. Feedback received throughout each stage has been taken into account and where feasible, has informed the design and delivery of the proposed substation.

Feedback concerning the cladding options was generally positive, and the community's preferences have been taken into account in the final design that will be submitted for planning in summer 2025. Local residents also responded positively to a proposal to include a community art project along the boundary wall of the site. EirGrid will work alongside the local authority, youth projects, artists, and community groups to develop a collaborative and meaningful art project.

EirGrid notes the concerns raised by residents in regard to health and safety concerns. EirGrid operates the electricity grid to stringent safety recommendations set out by the EU as well national and international agencies. To provide further information in relation to some of the topics raised, we have produced the following publication, ***Your guide to understanding electric and magnetic fields (EMFs) in the electricity transmission system***[3], available on the website at the following link here.

As the project moves towards planning and construction, EirGrid will continue to engage with residents through the Powering Up Dublin Community Forum. This will ensure transparency, responsiveness, and collaboration as the project progresses.

Our Community Benefit Policy recognises the importance of the local communities who support our work. A Community Benefit Fund scheme will be in place for the Central Dublin Substation project. For the development of a substation like the one proposed in East Wall, EirGrid will contribute €90,000 to local community, biodiversity and sustainability initiatives.

You can view or download our community benefit policy on our website www.eirgrid.ie/community

EirGrid through its substantive public engagement process, endeavours at all times to keep the community and its stakeholders at the heart of our decision making. Transparency is core to our engagement and stakeholders are assured that their engagement and inputs during this process does not in any way preclude them from making a submission to the planning authority as part of the statutory process.

[3] https://cms.eirgrid.ie/sites/default/files/publications/EMF-Information-Brochure-2024.pdf

7 Appendix

Appendix A – feedback form

Feedback Form

Please return this postcard before 9 July to have your say.

Which of the proposed cladding materials would you most like to see being used for this project?

Would you be in favour of including a community art project on the boundary wall?

- ☐ Yes
- ☐ No
- ☐ Unsure

Do you have any observations on the proposed boundary treatment?

Do you have any general comments or feedback on the Central Dublin Substation Project?

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