hw planning

Planning and Environmental Statement

Proposed 110kV Air Insulated Switchgear electricity substation and Loop-in / Loop-out Grid Connection at Aglish and Currahaly (townlands), County Cork

Client: Aglish Solar Farm Limited

February 2026

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Connecting places.

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Introduction

1.1 Introduction

This Planning and Environmental Statement has been prepared by HW Planning on behalf of Aglish Solar Farm Limited. It accompanies a planning application for the development of a proposed 110kV AIS electricity substation and associated loop-in / loop-out grid connection infrastructure to connect into the existing 110kV Inniscarra-Macroom overhead transmission line, at Aglish and Currahaly (townlands), Co. Cork.

1.2 Application Context

The purpose of the proposed development is to transport the electricity generated at the proposed Aglish Solar Farm to the national electricity grid via the existing 110kV overhead lines which cross the development site. The planning application for the solar farm was submitted to Cork County Council on 14th November 2024[1]. A Request for Further Information was issued by the Council on 17th January 2025, and a Clarification of Further Information Response was further issued on the 16th June 2025. The applicant responded to both of these requests from the Council. The applicant was issued a notification of decision to refuse permission on the 23rd of July 2025 and appealed this decision to An Coimisiún Pleanála (ACP) on the 15th of August 2025[2]. The Council's refusal related to a single perceived technical point that geophysical survey and/or testing was necessary to favourably determine the application, which has been addressed in full in the First Party appeal[3]. As part of their assessment of the solar farm application, the Council confirmed their view that the project is supported by significant national, regional and local planning policy, and that there were no landscape, ecology, flood risk, traffic and access, noise or construction management matters which would preclude a grant of planning permission. This appeal is currently ongoing and is stated as being due for decision by ACP before the 5th March 2026.

Early in the project development phase, it was identified that the proposed substation and grid connection may constitute 'strategic infrastructure development' having regard to the provisions of the Planning and Development (Strategic Infrastructure) Act 2006 and established case precedent on such matters. The Act provides that applications for permission/approval for specified private and public strategic infrastructure developments be made directly to An Coimisiún Pleanála. The applicant entered into pre-application consultations with An Coimisiún Pleanála on the 28th August 2025. An Coimisiún confirmed their opinion that the proposed development meets the definition of 'strategic infrastructure development' as defined in the legislation by means of a formal notice dated 28th October 2025. The subject application is made pursuant to this determination.

Notwithstanding the necessary dual consent process, a 'one project' approach has been taken in the preparation of the separate applications made to Cork County Council and the subject application to An Coimisiún Pleanála. The various submitted reports considered the entire development for the purpose of completing a robust assessment. In terms of definition, the use of the term 'proposed development' refers to the subject application before An Coimisiún Pleanála for the substation / grid connection. The use of the term 'wider solar farm project' across this report means the project singular comprising the solar panels and support infrastructure, the substation and grid connection elements, and all associated enabling works.

[1] The application was assigned Cork County Council Reference 246157.
[2] Appeal Reference ACP-323402-25.
[3] As set out in appeal Reference ACP-323402-25, the applicant respectfully submits that the solar farm can and should be permitted having regard to the policy provisions of the Cork County Development Plan 2022-2028 and established precedent on such matters.

1.3 Solar Energy Context

Ireland's electricity supply system is in the process of great change with the critical issues of decarbonisation of energy supply and achieving security of supply foremost issues. Older and traditional forms of electricity are becoming obsolete, and new forms of renewable energy are poised for deployment, which is a necessity as energy demand continues to increase. Large-scale solar projects such as the Aglish Solar Farm will play an increasingly significant role in Ireland's renewable energy mix over the next ten years, having regard to the following:

- In December 2015, the Paris Agreement was adopted by 189 countries, with the key goal to limit the increase in global average temperature to below 1.5 degrees over pre-industrial levels. The Intergovernmental Panel on Climate Change (IPCC) has stated that a "virtually full" decarbonisation of the global power sector is needed by around 2050 to meet this target. Worryingly, Ireland's consumption of natural gas has increased in recent years at a time when consumption growth has been reducing on average across the rest of Europe.

- The Government's Climate Action Plan 2025[4] provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and to reach net-zero emissions by no later than 2050. The proposals include sectoral limits aimed at reducing carbon emissions which includes greater demand for cuts on offending electricity production. This includes an intention to increase the proportion of renewable electricity to up to 80% by 2030, and a significant target of 8 GW from solar by 2030. Further information on Irelands climate targets is provided in section 03, where it is clear based on projections made by the Environmental Protection Agency that the 2030 targets will not be achieved. This is an alarming concern given the criticality of the climate emergency.

- The Government are currently undertaking a review of the security of energy supply of Ireland's electricity and natural gas systems. Completed analysis[5] confirms Ireland is one of the most energy import dependent countries in the EU which carries significant risks, a point underlined by the war in Ukraine. In order to reduce its import dependency, Ireland must increase the level of energy from a diverse number of renewable energy sources.

- The Commission for Regulation of Utilities (CRU) Enduring Connection Policy sets the terms and conditions of electricity generators' access to the electricity system. The policy "has considered evolving European and national energy policy including the prioritisation and timelines in the Government's Climate Action Plan" and "prioritises, in the first instance, large renewable energy projects";

The lands comprising the Aglish Solar Farm were sourced and developed based on a number of key attributes which will allow the proposed development to efficiently contribute to Ireland's renewable energy supply. These attributes include favourable irradiance; access to the transmission grid network; as well as strategic location and scale advantages for progressing with critical 'post-planning' milestones relating to grid connections and route to market processes. There is clear locational, technical and planning justification to support the Aglish Solar Farm, including its associated transmission grid infrastructure which forms part of this SID application to An Coimisiún Pleanála.

Suitable Planning Location:

There are a number of Cork County Council and An Coimisiún Pleanála previously approved solar farms in the general wider area. As part of these applications, it was determined that proposals of the nature proposed would not have any adverse landscape and visual, traffic and access, archaeological heritage, ecological, glint and glare and other impacts. Notwithstanding the need to consider development-specific aspects related to the proposed solar farm, the general suitability of the area to accommodate a project of this nature is recognised in the Cork County Development Plan 2022-2028.

Planning Policy:

Through the National Planning Framework and Regional Spatial and Economic Strategy for the Southern Region, planning policy in the southern region is unequivocal in its support for renewable energy and its associated substations and grid connections. Considering the difficulty in deploying onshore wind in this

[4] As rolled forward under the Climate Action Plan 2025.
[5] Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems, Consultation 19th September 2022

part of Ireland and the high level of solar irradiance which the County enjoys, solar projects of scale are a real and viable means to ensure Cork positively contributes to the renewable energy mix and the decarbonisation of electricity supply away from fossil fuels such as coal, natural gas and oil.

Favourable Irradiance Location:

The location of Aglish Solar Farm benefits from an annual irradiance resource of just under 960 kWh/m2. This is approximately 2.5% - 3.5% above the average level across the country and this means the project will benefit from an improved 'capacity factor' and will output a higher amount of green electricity each year for the same given installed capacity than if it was in a lower irradiance location. This is an important factor for the location of large-scale solar farms as it delivers a higher contribution to carbon emission reduction for the same time and cost. Solar farms should be facilitated in areas that have higher than average irradiance resource. This is a fundamental requirement for developing optimal solar farms and is the first step the Applicant undertakes when identifying study areas for future solar farm development.

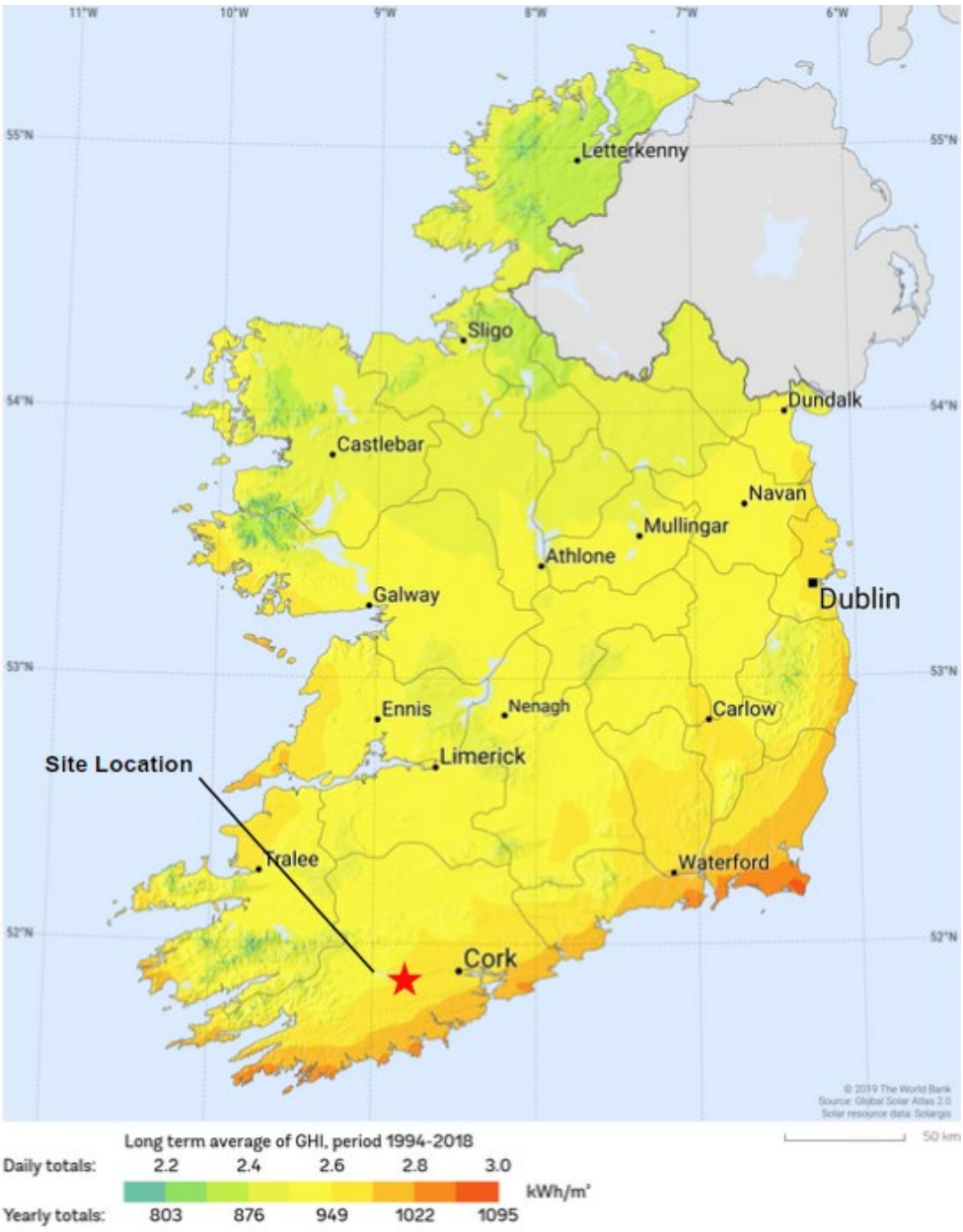

Figure 01: Solar Irradiance Map Ireland

Electrical Grid Capacity:

Without a grid connection, a solar farm has no purpose, and so therefore only locations where there is access to the transmission grid network are considered for development. In this case, the proposed

development is located under the existing Inniscarra- Macroom overhead line, which is the intended connection point to the national transmission network. This will be facilitated by means of an overhead line 'loop-in loop-out' grid connection through a proposed substation.

The feasibility of the grid connection method was informed through the applicant's early engagements with EirGrid. A customer clinic was held between the applicant and EirGrid in June 2025 where EirGrid were supportive in principle of a strategic renewable project in this location. Facilitating volumes of generation at the scale of Aglish Solar Farm through a new substation connection is a preference for EirGrid as it represents an efficient use of their existing network and also limits the outage disturbance/system downtime that would be required during construction compared to a connection into a substation where new bays may be required.

Having established the feasibility of a connection into the existing Inniscarra- Macroom overhead line, the next step for the Applicant was to engage with landowners with a view to leasing land for the expected 40 year lifetime of a solar farm development. Landowners were consulted over a 12 month period with a view to identifying lands which the Applicant was confident provided optimal irradiance levels and could be demonstrated as having favourable planning and environmental characteristics as part of any future planning application.

The Aglish Solar Farm and its associated substation and grid connection are in a key strategic location, with an efficient and effective means of connecting to the national electricity grid. There are only a limited number of overhead lines and substations in existence across the country that have these connection characteristics for large-scale solar generation and therefore they are a finite resource. Given the challenge and urgency of the required climate action, it is imperative that these finite grid resources are allowed to be fully utilized for Ireland to achieve its climate and renewable energy targets.

Route to Market Viability:

As evidenced by the previous sections, the establishment of a renewables project like Aglish Solar Farm and its associated substation and grid connection is a culmination of factors which must all work in tandem. These factors are finite resources in Ireland and they must be utilised effectively. The location of the proposed development was selected because of these factors, i.e. availability of land in a favourable irradiance area with a viable grid connection option. Many Irish renewable projects do not share this combination of factors, and this is evidenced by the high level of renewable generator project attrition. Typically caused by grid connection and project subsidy issues, this project attrition will further exacerbate the shortfall in renewable energy generators and by association, our carbon reduction targets.

- Attrition Rates in Grid Connection Process - A solar farm must have a grid connection agreement in place with either ESB Networks or EirGrid prior to construction. The Enduring Connection Policy (ECP) process for projects applying to connect to the national electricity grid was introduced in 2018. The ECP process controls how renewable generators are connected to the grid, and allows grid connection applications on an annual basis. Since 2018, applications were made for a total of 4.66 GW of solar electricity projects. However, this has only resulted in 2.79 GW of solar capacity being connected on the system, with the remaining capacity declined by participating project developers due to unfavourable grid connection conditions. These unfavourable conditions typically involve higher costs due to expansion requirements in the connecting substation. This represents a historical attrition rate of ca. 40% of projects with planning permission in the ECP grid application process i.e. 4 out of 10 projects do not receive or progress with grid connection offers. This clearly shows the importance of projects such as Aglish Solar Farm that have viable grid connection methods and can be progressed efficiently through the consenting system.

- Attrition in RESS Route to Market Process - Financials support for new onshore wind and solar projects is primarily delivered through auctions under the Renewable Electricity Support Scheme (RESS) where generation technologies compete for electricity subsidies through competitive auctions. In March 2023, the Government published a schedule of future RESS auctions shown below, which included a plan for three onshore RESS auctions to be run across 2023 (RESS-3), 2024 (RESS-4) and 2025 (RESS-5). This followed after the RESS-1 and RESS-2 auctions in 2020 and 2022 respectively. The size of these auctions were developed by the Government in order to enable the requisite amount of solar and wind projects to start construction in time for energisation by 2030.

RESS Future Auction Schedule

Auction Type	Indicative Auction Volume (GWh)	Indicative Auction Dates	Indicative Auction Commercial Operation Dates
Offshore RESS 1	10,500-16,000	Q2 2023	2029
Onshore RESS 3	2,000-3,500	Q3 2023	2026
Offshore RESS 2	12,500-18,000	2024-2025	2030
Onshore RESS 4	2,000-5,500	2024	2027
Onshore RESS 5	2,000-5,500	2025	2028

As an example of further project attrition, RESS-3 only delivered 934GWh of successful capacity (less than 50% of the target range) and RESS-4 only delivered 2,071GWh of successful capacity (just over the lower expected volume of 2,000GWh). RESS-5 provisional results were published in late 2025 and indicated the delivery of 1500GWh of new renewable generation. This is a 25% decrease in deemed energy quantity from RESS 4 and sits well below the 2,000 – 5,500GWh indicative auction volume target range set by the Department of Environment, Climate and Communications (DCEE). RESS 5 will support less renewable energy than the RESS 1, RESS 2, or RESS 4 auctions. The main reasons for this poor capacity delivery are that large numbers of projects cannot secure funding due to high grid connection costs, long connection lead times and projects which are sub-scale for their intended connection method. As a result, DECC have already commenced an EU State Aid engagement process to run further RESS auctions past RESS-5 in 2025 to make up this large shortfall. As previously stated, the Aglish Solar Farm is in a key strategic location, with an efficient and effective means of connecting to the national electricity grid and is well placed to be successful in future RESS processes.

1.4 Conclusions

Given the available grid capacity and comparably higher electricity output due to the Aglish Solar Farms location in an area of high irradiance, the proposed development represents an efficient and optimal location for solar renewable electricity production. This is a characteristic that is limited to an increasingly small number of locations across the country. The chosen location for the solar farm provides strategic grid connection and route to market opportunities which will ensure that the wider project including the subject substation and grid connection can navigate the necessary post-planning milestones, commence operation and make a substantial contribution to Irelands emissions and renewable energy targets.

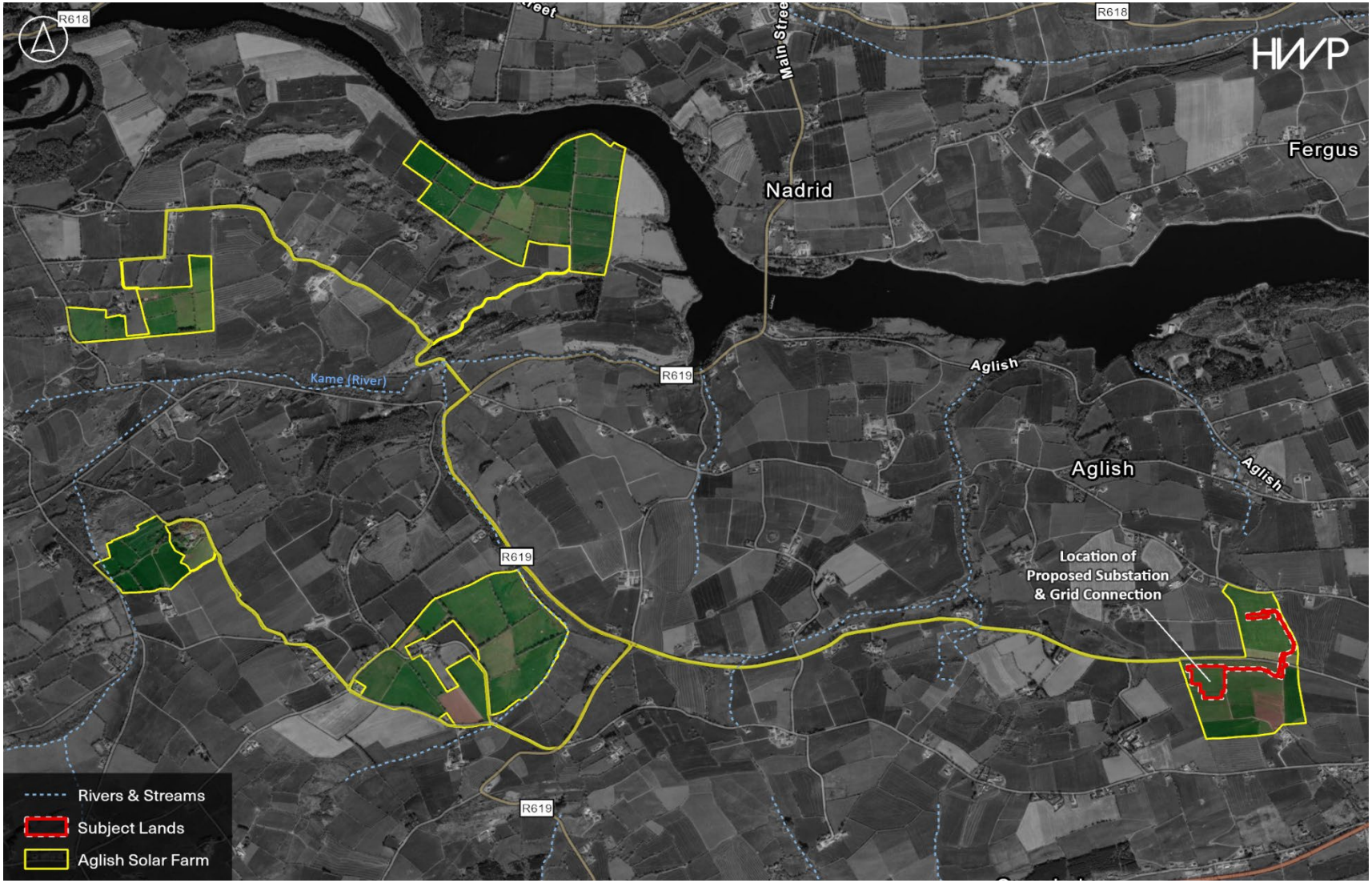

Figure 02: Project Context

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Site and Development Context

2.1 Subject Site

The application site area is 3.36 hectares and comprises of two adjoining agricultural fields, which are separated by the L2204 Currahaly Road. The nearest settlement, Coachford, is located approximately 4km north of the site. The site is located in the townlands of Aglish and Currahaly. The northern portion of the site is crossed by existing transmission network lines. The wider road network in this area includes the N22 to the south of the site. The subject lands comprise of agricultural farmlands that consist of medium sized fields contained by mature tree-lined and well-maintained hedgerow boundaries. The surrounding area consists of some dwelling houses and farm buildings that are characteristic of this rural area.

2.2 Proposed Development

2.2.1 General

The electricity produced from the Aglish Solar Farm will be transported into the proposed substation.

The proposed development comprises of:

1. A 110kV Air Insulated Switchgear (AIS) electricity substation with single-storey substation building, single-storey Independent Power Producer (IPP) control room building, High Voltage (HV) electrical equipment and associated infrastructure (to include transformer, lightning protection masts, back-up diesel generator, fire/blast wall, telecoms pole, perimeter security fencing, security lighting, water and drainage infrastructure, and temporary construction compound) to connect to and serve a solar farm;
2. Associated loop-in / loop out infrastructure to connect into an existing 110kV overhead transmission line (including underground 110kV cabling [lengths of ca.790 and 880m from proposed substation to interface towers, including HDD crossing of L2204 road], 2 No. new interface towers and decommissioning of ca.75m of existing 110kV overhead line);
3. Construction and operational access from the public road L2204;
4. All ancillary site development, landscaping and earthworks. The development subject to this application forms part of grid connection and access arrangements which will facilitate the connection of the proposed Aglish Solar Farm (Cork County Council Reference 24/6157 / An Coimisiún Pleanála ACP-323402-25) to the national grid.

The operational lifetime of the solar farms is assumed to be 40 years. However, following the decommissioning of the solar farm, it is envisaged that the substation (and grid connection) will remain in situ as a valuable functioning and operational part of the electricity transmission network managed by the Transmission Systems Operator, EirGrid.

2.2.2 Substation

The substation will be based on EirGrid design specifications. The substation compound will consist of a two-storey GIS substation building, single-storey IPP Control Room building, HV electrical equipment and associated infrastructure including palisade fences and concrete post and rail fences. The installation of HV electrical equipment will include a transformer with associated equipment along with:

- Cable Sealing End (CSE);
- Surge Arrestor (SA);
- Earth Disconnect (DA, DB, DL, DT);

- Current /Voltage Transformer (CT/VT);
- House Transformer (HoT);
- Circuit Breaker (CB);
- Lightning Masts (LM);
- Back-Up Diesel Generator;
- Harmonic filters if required by EirGrid;
- Capacitor Bank if required by EirGrid;
- Fire/Blast Wall;
- Telecoms Pole;
- 110kV underground cable which will connect into the existing Inniscarra Macroom overhead line via 2 no. new Interface Towers

The substation compound has a total area of 11,996m^2.

Earthworks will be undertaken so the compound is level, with a finish compound level of 123.2m.

2.2.3 Site Access

The site will be accessed for both the construction and operational phases by means of two entrances from the L2204. These entrances will be subject to some upgrades, including removal of existing roadside sod and stone ditch to provide new gate as presented under Cork County Council Reference 24/6157. The entrances will be suitably splayed and have been subject to sight line and autotrack analysis, with the latter including modelling of abnormal load delivery for the transformer. Operational sightlines will be maintained by trimming back hedgerows with all necessary land within ownership.

A 4.5 metre wide compacted access track will extend from the entrance to the substation compound as well as interface towers to north. The track will include a geotextile base and filter membrane and 200 mm of Clause 804 sub-base.

2.2.4 Connection to National Grid

In order to connect to the transmission network, it is proposed to connect the 110kV substation into the national grid via a 'loop-in / loop-out' underground 110kV cable grid connection which will connect into the existing 110kV Inniscarra-Macroom overhead transmission line.

Two new steel lattice interface towers of approximately 16 m in height will form part of the existing overhead line and both towers will connect to the proposed 110kV substation via underground 110kV cables. The interface towers are approximately 75 metres apart, therefore the same length of the existing 110kV Inniscarra-Macroom overhead line will need to be decommissioned. The underground cable is comprised of 3 no. power ducts, 2 no. telecom ducts and 1 no. earth continuity duct. The cables to each interface tower are ca.790 and 880m metres in length. The crossing of the L2204 will be by means of Horizontal Directional Drill (HDD).

This connection method will constitute a new node of the transmission network, connecting the proposed substation and associated solar farm generation to the national electricity grid. The construction method for the interface towers and decommissioning of 110kV overhead lines is set out in the Aglish Substation & Grid Connection Construction Methodology prepared by Aglish Solar Farm Limited.

All works will be carried out in accordance with international best practice and full compliance with health and safety requirements.

2.2.5 Temporary Construction Compound

As outlined in the submitted site layout plans, it is proposed to provide a temporary construction compound south of the proposed substation, accessed from the entrance from the L2204. The temporary compound will include the following facilities at a minimum:

- Adequate canteen space to allow for all workers during the peak period;

- Office space with lighting, heating and internet facilities;
- Toilets and adequate welfare facilities for construction staff in accordance with the relevant statutory Health & Welfare guidelines;
- Parking space for both light and heavy vehicles;

Designated skips and temporary storage areas.

2.2.6 Surface Water Drainage and Water Services

Surface water drainage proposals for the development have been developed to mimic the natural drainage patterns of the site and thereby be in accordance with the best management practices of Sustainable Drainage Systems (SuDS) including those set out in the SuDS Manual (C753) published by CIRIA in 2015. Specifically, this includes the following:

- The compound construction is formed with permeable stone thus mimicking a soakaway scenario. ESB compound stone is single sized for the first 150mm for safety purposes. It then changes to a graded 6F2 material.
- The main areas to be drained include the roofs and the compound road. These equate to approximately 663m². The compound road will be drained via series of road gullies.
- Assuming even the most basic of infiltration rates down through the permeable compound stone, the existing greenfield situation is easily maintained.

The surface water generated in the hardstanding and bunded areas will discharge to the soakaway via a Class 1 Full Retention Oil Separator. The electrical transformer in the substation is oil filled equipment and, as such, is protected with impermeable bunds. Surface water generated in this bund will be pumped out by an oil sensitive pump ensuring that only non-contaminated water enters the site drainage network.

In relation to wastewater, a 5m³ foul holding tank is proposed as part of the operational development. These tanks are normally used in ESB substations. It will be emptied periodically, with the capacity in excess of modelled holding requirements.

It is proposed to provide the required potable water demand of the station with a bored well on site. The potable water demand within the site will be low as the proposed station is to be unmanned. To avoid issues like stagnation in the water supply line and problems resulting from this, there will be a continual water demand of 24 litres per week from automatically flushing WCs within the station.

2.2.7 Site Restoration and Landscaping

This will involve the reinstatement of all other excavated materials and associated landscaping works. It will include the replacement of topsoil in disturbed ground areas such as access tracks and the removal of the construction compound and other temporary work areas.

The submitted Landscape Mitigation Plan identifies that c.31 no. metres of existing hedgerow and 2 no. trees will be removed to facilitate access to the fields that include the proposed substation and grid connection. These removal works are included in the wider solar farm application which provides for removal of a total of 86 no. linear metres of hedgerow and 3 trees, which will be offset by 872 linear metres of new hedgerow planting, as well as the bolstering of an additional 22,296 linear metres, where necessary, to fill any gaps in existing hedgerows.

2.2.8 Other Planned Works

Cork County Council Reference 24/6157 (ACP-323402-25)

It is intended that the proposed 110kV substation and grid connection will service the Aglish Solar Farm, which is currently the subject of a planning application to Cork County Council. At the time of writing, the solar farm application is undetermined.

The solar farm with a total area of circa 161 hectares. The solar farm will consist of solar panels on ground mounted frames, 23 no. single storey electrical inverter/transformer stations, 6 no. single storey spare parts containers, 3 no. Ring Main Units, 7 no. weather stations, underground electrical ducting and cabling within the development site, private lands and within the L62031, L6203, R619, L6207, L22012 and L2204 public roads to connect solar farm field parcels, security fencing, CCTV, access tracks, 4 no. stream/drain

deck crossings, 6 no. horizontal directional drill crossings (under watercourses/drains/public road), temporary construction compounds, landscaping and all associated ancillary development and drainage works. Construction and operational access will be via 7 no. entrances from the L62031, L6203, L22012, L6398 and L2204 local roads. The operational lifespan of the solar farm will be 40 years and planning permission is requested for this duration.

The solar farm will contribute directly to a carbon dioxide emission reduction of 28,657 tonnes per annum or the equivalent of approximately 1,146,298 tonnes of CO2 over the 40 year lifetime of the project.

2.3 Pre-Planning Discussions

A pre-consultation request was made to An Coimisiún Pleanála on the 28th August 2025 under Section 182E of the Planning and Development Act 2000 (as amended). The primary purpose of the pre-application consultation was to address the issue of whether or not the proposed development constitutes strategic infrastructure for the purposes of the 2000 Act. The submitted report by Aglish Solar Farm Limited provided a description of the development, governing planning policy context and strategic infrastructure development considerations. The submission documentation also confirmed the scope of anticipated planning application environmental reporting requirements to include:

- Planning Report/Statement.
- Archaeological Impact Assessment.
- Ecological Impact Assessment.
- Traffic Impact Assessment (including Access Study).
- Flood Risk Assessment.
- Landscape and Visual Impact Assessment.
- Construction Method Statement.
- Appropriate Assessment Screening Report.
- EIA Screening Report.

The inspectors report on the file dated 13th October 2025 expressed their view that the proposed development falls within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should therefore be made directly to the Commission. The formal determination of the Commission was confirmed in a letter dated 29th October 2025.

2.4 Planning History

A review of the Cork County Council and An Coimisiún Pleanála Planning Enquiry Systems indicates the only previous planning history on the subject lands relates to the above referenced application for Aglish Solar Farm, reference 246157 (ACP Ref. 323402-25) refers.

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Planning Policy Context

The proposed substation / grid connection forms part of the wider solar farm development, with the collective project supported by a suite of national, regional and local planning policy objectives, which includes but is not limited to the following:

3.1 Global Context

3.1.1 IPCC Climate Change 2023

In March 2023, the UN's Intergovernmental Panel on Climate Change (IPCC) indicated in its 'Climate Change 2023 – Synthesis Report', that it is likely that global warming will exceed 1.5°C during the 21st century, thus making it a significant challenge to limit warming below 2°C. The IPCC state that the world is on a path to exceed the temperature limits of the Paris Agreement. The report states that without urgent actions, climate change increasingly threatens ecosystems, biodiversity, and the livelihoods, health and well-being of current and future generations. In relation to energy systems, the report states that these actions include urgent decarbonisation through renewable energy development such as wind and solar.

The United Nations Environmental Programme's most recent annual Emissions Gap Report, published in November 2024, states that nations must deliver dramatically stronger ambition and action in the next round of Nationally Determined Contributions (NDCs) or the Paris Agreement's 1.5°C goal will be gone within a few years. The report states:

> *"A failure to increase ambition in these new NDCs and start delivering immediately would put the world on course for a temperature increase of 2.6-3.1°C over the course of this century. This would bring debilitating impacts to people, planet and economies.*
>
> *It remains technically possible to get on a 1.5°C pathway, with solar, wind and forests holding real promise for sweeping and fast emissions cuts. To deliver on this potential, sufficiently strong NDCs would need to be backed urgently by a whole-of-government approach, measures that maximize socioeconomic and environmental co-benefits, enhanced international collaboration that includes reform of the global financial architecture, strong private sector action and a minimum six-fold increase in mitigation investment. G20 nations, particularly the largest-emitting members, would need to do the heavy lifting".*

3.2 European Context

3.2.1 European Green Deal and Fit for 55

In its 2018 Communication A Clean Planet for all, the European Commission set out its vision for a climate-neutral EU and explored pathways that would enable the EU to achieve climate neutrality by mid-century in line with the Paris Agreement.

The European Green Deal, published in December 2019, sets out a low emissions growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource efficient and competitive economy, where there are no net emissions of greenhouse gases by 2050, where economic growth is decoupled from resource use and where no person and no place is left behind.

The European Green Deal is underpinned by the European Climate Law, enacted in July 2020, which sets into legislation the objective of a climate-neutral EU by 2050 and a commitment to negative emissions thereafter. It also sets a binding intermediate Union target of a reduction of net greenhouse gas emissions (emissions after deduction of removals) by at least 55% by 2030 compared to 1990.

In July 2021, the Commission put forward the Fit for 55 package, a wide-ranging set of proposals to revise and update EU climate and energy legislation to ensure that EU policies are in line with the new EU objective established by the Climate Law. Additional Fit for 55 proposals were published in December 2021. Tripartite negotiations between representatives of the European Parliament, Council and Commission commenced in Q3 2022 with a view to reaching timely agreement on this ambitious package. This will help to accelerate Europe's decarbonisation and phase out our dependence on Russian gas, oil and coal imports.

3.2.2 Renewable Energy Directive

In December 2018, the recast Renewable Energy Directive 2018/2001/EU entered into force, as part of the clean energy for all Europeans package, aimed at keeping the EU a global leader in renewables and, more broadly, helping the EU to meet its emissions reduction commitments under the Paris Agreement. Building on the 20% target for 2020, the recast Renewable Energy Directive 2018/2001/EU established a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.

On 21 July 2021, the Commission proposed a revision of the renewable energy directive in July 2021, as part of the package to deliver on the European Green Deal as detailed above. The proposal raises the ambition of the existing legislation to align it with EU's increased climate ambition and sought to increase the current target to at least 40% renewable energy sources in the EU's overall energy mix by 2030. Less than a year later, following Russia's invasion of Ukraine and the need to accelerate the EU's independence from fossil fuels, the Commission proposed to further increase the target to 45% by 2030, together with measures to accelerate permitting for renewables.

The new legislation was published on 31 October 2023 and entered into force 20 days later. It sets an overall renewable energy target of at least 42.5% binding at EU level by 2030 - but aiming for 45%. This will be key to achieving the EU's objective of climate neutrality by 2050 and to strengthen Europe's security of energy supply. In addition to the new headline target to double the existing share of renewable energy sources, a strong policy framework will facilitate electrification in different sectors, with new increased sector-specific targets for renewables in heating and cooling, transport, industry, buildings and district heating/cooling, but also with a framework promoting electric vehicles and smart recharging.

Previously, Ireland had a target for 34.1% renewable energy share in 2030 in order to be able to contribute to the previous EU-wide target of 32%. Ireland now have to set a revised national contribution in accordance with the new EU-wide target of 42.5%.

RED III includes a presumption that renewable energy projects and associated grid infrastructure are '*in the overriding public interest'* until such time as "*climate neutrality is achieved*" and provides a framework for the streamlining of the permit-granting process.

3.2.3 REPowerEU Plan

Published in response to Russia's war against Ukraine, the European Commission published the REPowerEU Plan with the objective of identifying a pathway to make the European Union independent from Russian fossil fuels including oil and gas and ultimately achieve energy security.

"There is a double urgency to reduce Europe's energy dependence: the climate crisis, compounded by Russia's aggression and EU's dependence on fossil fuels, which Russia uses as an economic and political weapon.

The green transformation of Europe's energy system will strengthen economic growth, reinforce its industrial leadership, and put Europe on a path towards climate neutrality by 2050.

The European Commission calls on leaders, Member States, regional and local authorities, and indeed every citizen and business, to reduce Europe's energy dependence from Russia through the implementation of [the] REPowerEU plan"

The key objectives of REPowerEU can be summarised as follows:

- Accelerate the roll-out of renewables.
- Increase the 2030 target for renewables from 40%-45%.
- Tackle slow and complex permitting for major renewable projects.

To give effect to this, the Council of the European Union adopted Regulation (EU) 2022/2577 on 22 December 2022, '*Laying down a framework to accelerate the deployment of renewable energy.*' This regulation, which has immediate and direct effect in Member States, applies to "*all permit-granting processes that have a starting date within the period of its application*" and includes a number of tangible measures aimed at streamlining the permit-granting process and facilitating the accelerated deployment of renewable energy. The initial period of application of the Regulation is the 30 December 2022 to 29 June 2024.

'A fast deployment of renewable energy sources can help to mitigate the effects of the current energy crisis, by forming a defence against Russia's actions. Renewable energy can significantly contribute to counter Russia's weaponisation of energy by strengthening the Union's security of supply, reducing volatility in the market and lowering energy prices.'

Central to the regulation is the presumption that renewable energy development must be considered to be in the overriding public interest when addressing competing interests under the Habitats Directive (92/43/EEC), Birds Directive (2009/147/EEC) and the Water Framework Directive (2006/60/EC) and that renewable energy projects should be given priority when balancing legal interests in a given case – Article 3:

1) *'The planning, construction and operation of plants and installations for the production of energy from renewable sources, and their connection to the grid, the related grid itself and storage assets shall be presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in the individual case, for the purposes of Article 6(4) and Article 16(1)(c) of Council Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC of the European Parliament and of the Council and Article 9(1)(a) of Directive 2009/147/EC of the European Parliament and of the Council….'*

2) *'Member States shall ensure, at least for projects which are recognised as being of overriding public interest, that in the planning and permit-granting process, the construction and operation of plants and installations for the production of energy from renewable sources and the related grid infrastructure development are given priority when balancing legal interests in the individual case…. (emphasis added)'*

The Regulation was introduced as an emergency measure and included provision for the EU Commission to review the application of, and continued need for, the measures included in the Regulation. The Commission completed its review of the Regulation and furnished its report to the Council on the 28 November 2023. In its report the Commission recommended the prolongation of the validity of certain measures in the Regulation, including Article 3(2), and by Regulation 2024/223 of the 22 December 2023 the Council of the European Union, Regulation 2022/2577 was extended and amended, with Article 3 applying to the all permit-granting processes commenced up to the 30 June 2025 and therefore applies to the permitted solar farms associated with this proposed development.

The importance, continued need and effectiveness of Article 3(2) of Regulation 2022/2577 in aiding the accelerated deployment of renewable energy is explained in Recital 14 of Regulation 2024/223:

'…Article 3(2) of Regulation (EU) 2022/2577 requires priority to be given to projects that are recognised as being of overriding public interest whenever the balancing of legal interests is required in individual cases and where those projects introduce additional compensation requirements for species protection… The first sentence of Article 3(2) of Regulation (EU) 2022/2577 has the potential, in the current urgent and still unstable energy situation on the energy market which the Union is facing, to further accelerate renewable energy projects since it requires Member States to promote those renewable energy projects by giving them priority when dealing ***with different conflicting interests beyond environmental matters*** *in the context of Member States' planning and the permit-granting process. The Commission's report demonstrated the value of the first sentence of Article 3(2) of Regulation (EU) 2022/2577 which recognises the relative importance of renewable energy deployment in the current difficult energy context beyond the specific objectives of the derogations foreseen in the Directives referred to in Article 3(1) of Regulation (EU) 2022/2577. Given the particularly severe situation in the supply of energy which the Union is currently facing, it is appropriate to prolong the application of Article 3(2) of Regulation (EU) 2022/2577 in order to appropriately recognise the crucial role played by renewable energy plants to fight climate change and pollution, reduce energy prices, decrease the Union's dependence on fossil fuels and to ensure the Union's security of supply in the context of the balancing of legal interests carried out by permit-granting authorities or national courts. At the same time, it is also appropriate to keep the environmental safeguard*

that, for projects recognised as being of overriding public interest, appropriate species conservation measures, underpinned by sufficient financial resources, are adopted. (emphasis added)'

It is clear from the urgency conveyed by the REPowerEU plan and the provisions set out in the Regulation (2022/2577) that the accelerated deployment of renewable energy is crucial, not least in order to address the climate crisis but also to mitigate the impact of the energy crisis, eliminate the European Union's dependency on imported Russian gas and provide energy security to Member States.

3.2.4 EU Solar Strategy

As part of the REPowerEU plan, the Commission adopted an EU solar energy strategy in May 2022. The solar strategy identifies the remaining barriers and challenges in the solar energy sector and outlines initiatives to overcome them and accelerate the deployment of solar technologies. It states the EU solar energy has a significant potential to rapidly become a mainstream part of our power and heat systems and a main lever to achieve the European Green Deal objectives while phasing out our dependence on Russian fossil fuels. Amid the energy crisis, the implementation of the Strategy and these key solar initiatives proposed for the EU and its Member States is of utmost urgency.

Alongside the REPowerEU plan, the Commission also presented a Recommendation on fast permitting for renewable energy projects and a legislative proposal on permitting that will contribute to the further acceleration of solar energy deployment in the EU. It acknowledged that slow and complex permitting processes are a key obstacle to unleashing the renewables revolution and for the competitiveness of the renewable energy industry.

3.3 National Context

3.3.1 Climate Action and Low Carbon Development (Amendment) Act 2021

The Climate Action and Low Carbon Development 2015 (as amended) ("the Climate Act") establishes a legislative precedent to reduce Ireland's carbon emissions. The Climate Act legally binds Ireland to achieve net-zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade.

Under Section 15 of the Climate Act, a planning authority, and the Commission is obliged to perform its decision-making function (in so far as practicable) in a manner consistent with:

- the most recent approved climate action plan,
- the most recent approved national long term climate action strategy,
- the most recent approved national adaptation framework and approved sectoral adaptation plans,
- the furtherance of the national climate objective, and
- the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

The implications of the obligations placed on planning authorities and the Board under Section 15 were recently the subject of a High Court Judgment, *Coolglass Wind Farm Limited v An Bord Pleanála* [2025] IEHC 1. The case highlights the imperative nature of the obligation placed on public bodies to exercise their discretionary powers in "*such a way as to support the outcome favouring climate goals*".

Delivering judgement in the case, Mr Justice Humphreys undertook a detailed consideration of the interpretation of Section 15 of the Climate Act and concluded that, when determining a planning application relevant to the achievement of climate plans and objectives under S.15 of the 2015 Act, a planning authority or an Bord Pleanála is required to:

i. Consider if granting permission would contribute to achieving our climate goals, and the Court concluded that in the case of renewable energy projects the answer is invariably yes.

ii. Where the answer to the first question is yes, consider whether granting permission is precluded by a *"mandatory and non-flexible legal requirement that confers no discretion or evaluative judgment on the [board]"*

iii. *"If the answer to that is No, the board should then ask if its discretion or evaluative judgment can be exercised in such a way as to support the outcome favouring climate goals."*

An appeal against this judgment was dismissed by the Supreme Court in *Coolglass Wind Farm Limited v An Bord Pleanála [2026]* IESC 5. The Climate Act provides for a 51% reduction in greenhouse gases by 2030 compared to 2018 levels, and puts in place a rigorous governance structure, including a system of carbon budgeting, sectoral emissions ceilings, a national adaptation framework, sectoral adaptation plans, and annually updated Climate Action Plans, to ensure that Ireland achieves its national, EU and international climate commitments in the near- and long-term.

However, in the near term those targets will not be achieved. In May 2025, the Environmental Protection Agency (EPA) published its emissions projections for 2030 which indicated that planned climate policies and measures, if fully implemented, could deliver up to 29 per cent emissions reduction by 2030 compared to 2018. This is insufficient to meet the 51 per cent emissions reduction target in Ireland's Climate Act.

3.3.2 Climate Action Plan 2025

The Department of the Environment, Climate and Communications published the Climate Action Plan 2025 in April 2025 which sets out a roadmap of actions which will ultimately lead us to meeting our national climate objective of pursuing and achieving, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. The plan stresses that "*renewables-led system is at the core of Ireland's plan to radically reduce emissions in the electricity sector, protect our energy security, and ensure our economic competitiveness. This requires the accelerated and increased deployment of new renewable electricity generation capacity and related infrastructure*". It is planned to increase the proportion of renewable electricity to up to 80% by 2030, and a target of 8 GW from solar by 2030. Noting that the programme for large-scale offshore wind deployment is not expected to be to be realised towards end decade, the Climate Action Plan 2025 stresses that deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets.

3.3.3 Project Ireland 2040 – National Planning Framework

The Government published the National Framework (NPF) in 2018, which was revised in 2025. The plan will guide national, regional and local planning policies and investment decisions for the next two decades. It identifies the transition to a low carbon and climate resilient society as one of the key pillars (shared goals) of the Plan. Section 3.4 of the NPF states that

> *"Harnessing the potential of the region in renewable energy terms in accordance with the capacity allocation targets set out in Chapter 9: Climate Transition and Our Environment, across the technological spectrum from wind and solar, in addition to biomass and wave energy".*

is a key policy priority for the Southern Region.

National Policy Objective 30:

> *"Facilitate the development of the rural economy, in a manner consistent with the national climate objective, through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off farm activities, while at the same time noting the importance of maintaining and protecting biodiversity and the natural landscape and built heritage which are vital to rural tourism.".*

National Policy Objective 70:

> *"Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050".*

National Policy Objective 71:

> *"Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development".*

The NPF also recognises that increases in population and economic growth in areas should be married with a transition to a more sustainable energy market and the achievement of conservation goals.

3.3.4 Programme for Government 2020 – Our Shared Future

The Programme for Government 2020 (PFG) establishes the strategic goals of the Irish Government over the next 5 years. The PFG supports the European Green Deal, which provides a roadmap for Europe to take advantage of the opportunities presented by moving to a low-carbon future. It states that the measures adopted in supporting the European Green Deal will be an important element of the National Economic Plan.

The PFG states that the Government are committed to an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050. The implementation of the Climate Action Bill and the establishment of the Climate Action Council will ensure these targets are met with renewable energies seen as a critical component in meeting these ambitious targets.

The PFG calls for a 'Revolution in Renewables' whereby a commitment is made to the rapid decarbonisation of the energy sector. To deliver on the stated target of at least 70% renewable electricity by 2030, the programme states it will:

- Develop a solar energy strategy for rooftop and ground-based photovoltaics to ensure that a greater share of our electricity needs are met through solar power.
- Strengthen the policy framework to incentivise electricity storage and interconnection.

3.3.5 Ireland's Transition to a Low Carbon Energy Future 2015-2030 – White Paper

The Government strategy calls for a radical transformation of Ireland's energy system to meet committed targets and achieve a low carbon energy system by 2050. These commitments included a then EU target to source 20 per cent of its energy needs from renewables such as wind, solar and biomass. Within this, Ireland committed to generating 16 per cent of its overall energy requirements from renewables by 2020 under the EU's plan. At the time of White Paper, about 8 per cent comes from renewables[6].

The strategy includes an objective to "accelerate the development and diversification of renewable energy generation" and increase the country's output of electricity from renewable sources of which we have a plentiful indigenous supply. It is stated that this will be achieved through a number of means including wind, solar PV and ocean energy. Specifically, Section 137 of the White Paper accentuates the role of solar PV as follows:

> *"Solar photovoltaic (PV) technology is rapidly becoming cost competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options".*

3.3.6 Policy Statement on Energy Security in Ireland to 2030

In November 2023, the Government published a Policy Statement on Energy Security in Ireland to 2030 which outlined the key challenges to ensuring security of electricity supply such as having adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services to meet both average and peak demand. It identifies the critical need to maintain security of supply throughout the transition to the target of up-to 80% of electricity consumption from renewable sources. It highlights the need for significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply. It states also that the "majority of renewable energy generated by 2030 will be from wind and solar."

3.3.7 EirGrid All-Island Resource Adequacy Assessment 2025 – 2034

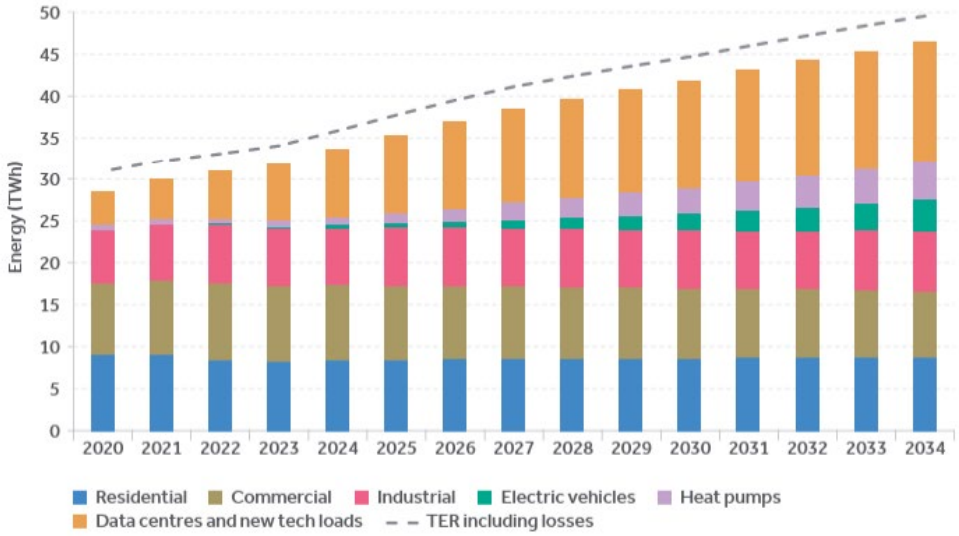
EirGrid is leading the secure transition of the electricity grid to a sustainable low-carbon future. Its publication, All-Island Resource Adequacy Assessment, looks at the balance between electricity demand

[6] As identified above, The Climate Action Plan 2024 includes an objective to generate up to 80% from renewables by 2030.

and supply on the island of Ireland for the next 10 years. It is an evolution of the Generation Capacity Statement (GCS) published in previous years.

Throughout the 10-year study horizon, from 2025 to 2034, the demand for electricity is forecast to increase in line with government targets as set out in CAP 24. The closure of some older conventional fossil fuel burning generators, and the declining performance of other generators on the system mean that this assessment forecasts a challenging outlook for Ireland with capacity deficits identified in some years across the study horizon. The deficits are expected to reduce as new capacity comes forward through the Single Energy Market (SEM) capacity auctions, however the delivery of new capacity (i.e. more renewable electricity) remains challenging.

EirGrid's analysis takes into account the targets from CAP 2024, including increased electrification in the heat and transport sectors. The median demand scenario assumes that 100% of the CAP 2024 targets will be met. Over the next ten years, demand is forecasted to grow considerably. In the median scenario, electricity demand is forecasted to increase 45% by 2034 from 2023 levels. The largest growth comes from data centres and new technology loads which will form 31% of all electricity demand by 2030.



Total Electricity Requirement for Ireland sector breakdown

Over the longer term, EirGrid state that it remains crucial that the capacity market delivers new capacity in a timely fashion, and the type and volume of capacity needed to underpin the energy transition. It is clear that additional renewable, and solar energy in particular, is required to be consented, constructed and operational in a timely manner to support this objective. Regional Spatial and Economic Strategy for the Southern Region.

The Regional Spatial and Economic Strategy (RSES) provides the framework through which the aspirations of the National Planning Framework will be implemented in the Southern Region. It reaffirms the objective to proactively work towards and achieve a low carbon economy. It includes a commitment to promote change across business, public and residential sectors to achieve reduced Green House Gas (GHG) emissions, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture. The strategy recognizes that local authorities must demonstrate leadership on related matters:

> *"Leadership is key to transition to renewable energy and the RSES supports the initiative by many local authorities to sign the Covenant of Mayors – a European cooperation movement involving local and regional authorities aimed at increasing energy efficiency and the use of renewable energy".*

RPO 87 Low Carbon Energy Future:

> *"The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-30 and Climate Action Plan*

2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture".

RPO 89 Sustainable Renewable Energy Generation:

"It is an objective to support measures to build resilience to climate change throughout the Region to address impact reduction, adaptive capacity, awareness raising, providing for nature-based solutions and emergency planning".

RPO 90 Regional Decarbonisation:

"It is an objective to develop a Regional Decarbonisation Plan to provide a framework for action on de-carbonisation across all sectors. The Plan shall include existing and future targets for each sector…'

Electricity: 'To achieve national and EU targets will require investment in measures to develop alternative renewable energies with greater interconnection to energy resources…".

RPO 95 Sustainable Renewable Energy Generation:

"It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation".

RPO 97 Power Stations & Renewable Energy:

"It is an objective to support the sustainable technology upgrading and conversion of power stations in the Southern Region to use energy efficient and renewable energy sources".

RPO 98 Regional Renewable Energy Strategy:

"It is an objective to support the development of a Regional Renewable Energy Strategy with relevant stakeholders".

RPO 100 Indigenous Renewable Energy Production and Grid Injection:

"It is an objective to support the integration of indigenous renewable energy production and grid injection".

3.4 Cork County Development Plan 2022-2028

The Cork County Development Plan 2022-2028 (CDP) outlines the vision and overall strategy for the proper planning and sustainable development of the County. Climate Action is identified as an important 'Development Plan Principle', which permeates throughout the development strategy for the County. The CDP contains several policies and objectives which will ensure that Cork transitions to a low-carbon and climate resilient place. The importance of creating clean forms of renewable energy is enshrined in a number of policy objectives within the CDP.

Chapter 13 of the CDP relates to 'Energy and Telecommunications' with an overarching aim to

"Facilitate and support investment in sustainable energy production and infrastructure in Cork to meet the future local, regional and national needs, while transitioning to a low carbon economy, addressing the climate change challenge with greenhouse gas emissions and protection of the environmental, cultural and heritage assets of the county".

The Chapter recognises that "*reliable energy services are essential to the daily functioning of society and the economy*" and provides a summary of key national energy targets to be delivered by 2030. Section 13.4 recognises that Cork plays a significant role in security of energy supply and electricity production in Ireland being home to Aghada and Whitegate Power Stations, as well as Whitegate Oil Refinery which

supplies about 40% of national petroleum needs. Within this, it recognizes that energy generation in Cork will evolve significantly over the next few years due to the need to move towards a low carbon economy and produce more energy from renewable sources. It notes that "*Cork is well placed to become self-sufficient in renewable energy and contribute to the achievement of national energy targets…*".

The overarching approach is reflected in policy objective ET 13-1 as follows:

a) *Ensure that County Cork fulfils its potential in contributing to the sustainable delivery of a diverse and secure energy supply and to harness the potential of the county to assist in meeting renewable energy targets and managing overall energy demand.*

b) *During the life of this plan, the Planning Authority will prepare a renewable energy strategy for the county.*

Under Section 13.5, solar energy is identified as one of the main renewable energy resources in the county. Policy ET 13-2 Renewable Energy provides policy support for attainment of international and national renewable energy targets:

a) *Support Ireland's renewable energy commitments as outlined in Government Energy and Climate Change policies by facilitating the development of renewable energy sources such as wind, solar, geothermal, hydro and bio-energy and energy storage at suitable locations within the county where such development has satisfactorily demonstrated that it will not have adverse impacts on the surrounding environment, landscape, biodiversity or amenities.*

Chapter 13 also recognises the importance of the transmission network and states:

> *The provision of a secure and reliable electricity transmission infrastructure and transmission grid is essential to meet the growth in demand and ensure that a reliable electricity supply is available. Cork has a very strong electrical grid and substation network and this network will be instrumental in supporting the development of the renewable energy industry in the county.*

Policy ET 13-21 Electricity Network provides policy support for the development and upgrade of the existing transmission network:

> *a) Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage, and distribution network infrastructure.*
>
> *b) Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards.*
>
> *c) Facilitate where practical and feasible, infrastructure connections to wind farms, solar farms, and other renewable energy sources subject to normal proper planning considerations.*
>
> *d) Proposals for development which would be likely to have a significant effect on nature conservation-sites and/or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected*

3.5 Cork County Council Climate Action Plan

The Cork County Council Climate Action Plan 2024-2029 has been prepared to facilitate the transition of Cork County to one that is low carbon and climate resilient. This will be achieved by delivering and promoting best practice in climate action at a local level. This aim is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. The plan emphasizes that addressing climate change has become a global priority and establishes that *"Cork County Council maintains a strong commitment to mainstreaming climate action*

across its own operations and functions, whilst also pursuing a leadership role on climate action, at the local level."

04 //

Assessment of Planning Considerations

4.1 Principle of Development

4.1.1 Progress on Climate and Renewable Targets

Global Progress:

It is widely acknowledged that climate change is the greatest challenge facing humanity and that urgent action is needed to stem rapidly rising global temperatures to protect our planet and its inhabitants.

Global climate targets aim to limit global temperature increase and reduce greenhouse gas emissions to mitigate the effects of climate change. The Paris Agreement, a global agreement, sets a target of limiting global warming to below 2°C and pursuing efforts to limit it to 1.5°C. Countries have also pledged to align their national climate pledges with the 1.5°C goal. To limit global warming to 1.5°C, greenhouse gas emissions must peak before 2025 at the latest and decline 43% by 2030.

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing scientific climate change data. The IPCC publishes clear, evidence-based reports which synthesise the latest climate science. Its objective is to provide national governments with scientific information that they can use to develop climate policies.

In October 2018, the IPCC published the "Global Warming Above 1.5º C" report, which states;

> *"Climate-related risks to health, livelihoods, food security, water supply, human security and economic growth are projected to increase with global warming of 1.5ºC and increase further with 2ºC."*

In March 2023, the IPCC published its 'Climate Change 2023 – Synthesis Report', which states;

> *"Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe."*
>
> *"Continued greenhouse gas emissions will lead to increasing global warming, with the best estimate of reaching 1.5°C in the near term in considered scenarios and modelled pathways. Every increment of global warming will intensify multiple and concurrent hazards (high confidence)".*

The report warns that it is likely that global warming will exceed 1.5ºC during the 21st Century, thus making it a significant challenge to limit warming below 2ºC. Without urgent actions to limit the global rise in temperature, climate change increasingly threatens ecosystems, biodiversity, livelihoods and the health and well-being of current and future generations. The report continues that a key mitigation to this climate threat is deployment of new energy systems, and that decarbonization through renewable energy development such as wind energy and solar energy is urgently required.

The United Nations Environmental Programme's most recent annual Emissions Gap Report, published in November 2024, states that nations must deliver dramatically stronger ambition and action in the next round of Nationally Determined Contributions (NDCs) or the Paris Agreement's 1.5°C goal will be gone within a few years. The report states:

> *"A failure to increase ambition in these new NDCs and start delivering immediately would put the world on course for a temperature increase of 2.6-3.1°C over the course of this century. This would bring debilitating impacts to people, planet and economies.*
>
> *It remains technically possible to get on a 1.5°C pathway, with solar, wind and forests holding real promise for sweeping and fast emissions cuts. To deliver on this potential,*

sufficiently strong NDCs would need to be backed urgently by a whole-of-government approach, measures that maximize socioeconomic and environmental co-benefits, enhanced international collaboration that includes reform of the global financial architecture, strong private sector action and a minimum six-fold increase in mitigation investment. G20 nations, particularly the largest-emitting members, would need to do the heavy lifting".

European Union Progress:

The European Commissions 'Climate Act 2024 – Progress Report' states Greenhouse gas emissions in the EU fell by 8% in 2023 compared to 2022. This is the largest annual fall in several decades excluding the year of pandemic, with emissions now 37% below their 1990 level. The emissions reduction in 2023 is linked to the acceleration of the energy transition, and it is mostly driven by the increase of renewable energy production. This increases the confidence that the EU can meet its climate targets in a fair and competitive manner. Notwithstanding, the report warns that global warming continues to accelerate with increasingly devastating effects, climate action needs to be sustained.

Ireland's Progress:

In Ireland, we are already experiencing weather and climate extremes. Met Eireann's Annual Climate Statement for 2024 states that seven of the top ten warmest years in this country have occurred since 2005; that Ireland is getting warmer, wetter and more prone to storm surges and coastal flooding; and that our country's warming trend continues in line with the wider global warming trend.

The Irish government knows that we urgently need to slow and eventually reverse the continuing impact of climate change. The country's next policy target is a total reduction of greenhouse gas emissions of 51% by 2030. A key feature of this policy is the decarbonization of Ireland's electricity system, with a target to increase the share of electricity generated from renewable sources to 80% by 2030.

It is now clear across Irish government and industry that neither of these targets will be met. The Environmental Protection Agency (EPA) published a report in May 2025 forecasting that Ireland would only achieve a 23% reduction in total greenhouse gas emissions by 2030 - a 28% shortfall on Ireland's target of 51%. The EPA has advised that the planned climate policies and measures, if fully implemented, could deliver up to 23per cent emissions reduction by 2030 compared to 2018. This is insufficient to meet the 51 per cent emissions reduction target in Ireland's Climate Act. In addition, the EPA has reported the following:

- To achieve a reduction of 23 per cent would require full implementation of a wide range of policies and plans across all sectors and for these to deliver the anticipated carbon savings.
- The first carbon budget and second carbon budget are projected to be exceeded with almost all sectors on a trajectory to exceed their national sectoral emissions ceilings for 2030.
- Ireland will not meet its EU Effort Sharing Regulation target of 42 per cent reduction by 2030, instead a maximum reduction of 22% is projected.
- Total emissions from the Land Sector are projected to increase by up to 95% and Ireland is unlikely to meet our European commitments in this area.

Laura Burke, Director General of the EPA stated:

"As we get closer to 2030 and receive more information on the impact of agreed policies and measures, it is concerning to see projected reductions and lack of progress in the delivery of actions to reduce emissions including in the electrification of our transport sector and the expansion of renewable electricity powering our homes and businesses and the implementation of carbon reduction measures in agriculture. Momentum is building for Ireland's low carbon society, but we need to accelerate it and scale up the transition."

In its Energy in Ireland 2024 Report, the Sustainable Energy Authority of Ireland (SEAI) has stated that fossil fuel generation accounted for 48.9% of the electricity supply in Ireland in 2023 with renewables accounting for 40.7%. This is substantially short of the Climate Action Plan target to increase the share of renewable

electricity to 80% by 2030. More recently in January 2025, the SEAI published the Decarbonised Electricity System Study (DESS) to forecast plausible rates of generation technology deployment in Ireland between 2024 – 2040. The report focuses on delivery of renewable electricity generators and features the opinion of thirty highly regarded industry experts. The report states:

> *"Expert pooled opinion deems 2030 target attainment for renewables either very unlikely (for onshore wind and solar PV) or unimaginable (for offshore wind)".*

The widely acknowledged shortfall in new renewable energy generators is even more alarming when mapped to Ireland's national electricity demand, which is expected to significantly increase. Published in March 2025, EirGrids "All Island Resource Adequacy Statement 2025 – 2034" assesses the balance of electricity demand and supply on the island of Ireland for the next ten years. The median demand forecast outlined in the report is EirGrids' best estimate of what might happen in the future. The report states that:

> *"In the median scenario, the peak demand is forecast to increase 24% by 2034 from 2023 levels….driven by the growth in the data centre and new tech load along with the electrification of heat and transport."*

It is clear that Ireland's position in relation to climate action is very unstable. Scientific data shows that Irish temperatures are increasing and weather systems are changing. Ireland needs to decarbonise our electricity system to reduce CO2 emissions and stem the onset of climate change. Industry experts state that it is very unlikely that we will meet our targets in relation to renewable generation. Concurrently, Irish electricity demand is rapidly increasing. The development and renewal of the energy network in tandem with this is of critical importance as enshrined in current national and regional policy. The Regional Spatial and Economic Strategy recognises the pronounced need to decarbonise the southern region, and specifically in respect of electricity "to achieve national and EU targets will require investment in measures to develop alternative renewable energies with greater interconnection to energy resources…". Alongside commitments to improve energy efficiency and an increase in the use of renewable energy sources, it is an explicit objective under Regional Policy Objective (RPO) 100 "to support the integration of indigenous renewable energy production and grid injection". The proposed development will deliver directly on this, contributing to the security of energy supply.

4.1.2 Cork County Development Plan 2022-2028

The preceding chapter of this statement provides a detailed summary of existing policies which underpin the need for the subject project. The CDP acknowledges that County Cork needs to contribute to national renewable energy targets. It recognizes that natural resources in Cork can be harnessed in a sustainable manner and that solar energy projects provide real potential to realise this. The proposed Aglish Solar Farm project including the subject substation and grid connection will reinforce the transmission network and increase the penetration of solar energy developments consistent with stated objectives contained within the CDP, including ET 13-1 and ET 13-21.

There are no land use zoning considerations which would preclude a grant of planning permission in the subject case. The approach to land use objectives and zoning is set out in Chapter 18 of the Cork County Development Plan 2022-2028. The overall "Approach to Land Use Zoning" is settlement-based in nature: - "The zoning objectives and maps for all the settlements in the County are set out in the relevant County Development Plan Volumes Three, Four and Five and in Volume 6 Maps CDP Map Browser and the objectives and general principles that should be followed in these plans…". Based on a review of these volumes and the CDP Map Browser, the subject lands are located outside any defined settlement and not formally zoned for any specific land use. The proposed development falls to be considered against the general policies and objectives of the CDP, including those set out in Section 3.4 above, which greatly support the proposed development. It will enable an agricultural diversification project in full compliance with the policies of the Cork County Development Plan 2022-2028.

4.2 Landscape and Visual

The design of the proposed substation has been informed by relevant industry standards for the layout and management of such facilities, as well as detailed site analysis, which identified potential constraints and opportunities. This has shaped the final design response in relation to the local landscape and environment.

Macro Works Ltd, a chartered landscape architectural practice, were engaged to carry out a landscape and visual impact assessment (LVIA) of the entire proposed solar farm, which is submitted in support of this application. The assessment incorporates best practice methodologies prescribed in the Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (2015), and Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013).

4.2.1 Site Context

Based on a review of the Draft Cork County Landscape Strategy, the proposed substation / grid connection development is located within the Landscape Character Area (LCA) '*LCT6a – Broad Fertile Lowland Valleys'*. The '*Broad Fertile Lowland Valleys*' LCA is described as:

> *"stretches west and east from the environs of Cork City but also includes a smaller area east of Rathcormac. The valleys in these areas are created by the rivers flowing east to west and are surrounded by low well spaced ridges. These shallow and flat valleys wind as they follow the course of the river, rising to the north and south with gentle slopes where the valley is wide but with steeper faced slopes where the valley narrows. Further upstream to the west the broad flatness narrows and winds between low hills. Landcover comprises highly fertile, regularly shaped fields typically of medium size and with mature broadleaf hedgerows. Agricultural use primarily involves intensive dairying as well as tillage, with farmsteads relatively well screened by the hedgerows."*

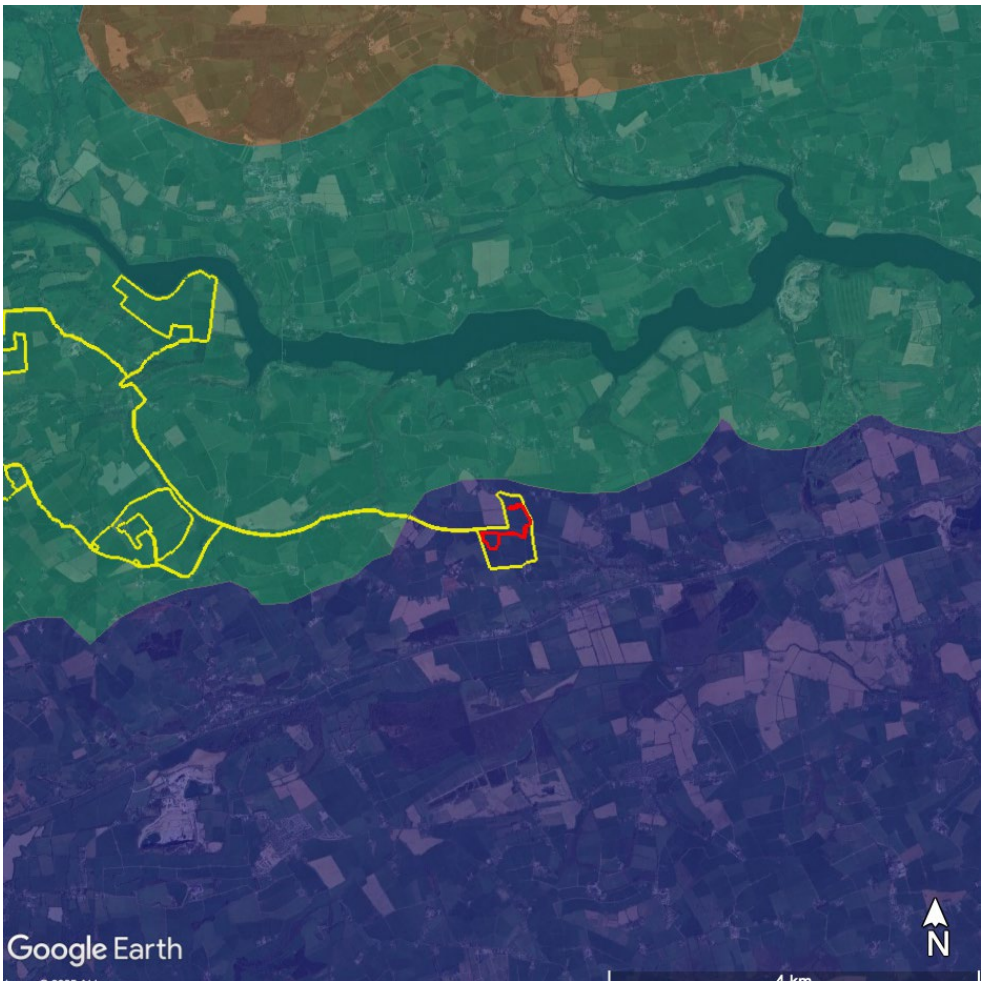


Figure 03: Site Landscape Sensitivities Context, extract from LVIA document prepared by Macroworks

The LVIA includes detailed zone of theoretical visibility (ZTV) mapping. The digital surface model (DSM) ZTV analysis illustrates that despite the relatively large height of the proposed development, mainly the proposed interface towers, there is limited theoretical visibility of the overall project, confined mostly to the immediate surroundings and centres on the lighting masts. It is noted that in the immediate surrounds of the River Lee corridor, the subject development will be afforded a high degree of screening in the form of existing mature vegetation.

4.2.2 Assessment

The LVIA process included a thorough review of the site, surrounding environs within a 5 km radius, and statutory documents for sensitive locations. All nearby scenic routes, protected structures, public facilities, walking routes, public roads and cultural, environmental and heritage areas were considered. This resulted in the selection of 4 no. viewpoint locations for detailed assessment[7], representing a variety of distances, angles and viewing contexts. The assessment confirms that none of the selected viewpoints were considered to have a visual impact significance greater than 'Slight' in the post mitigation scenario, which applies to 2 no. viewpoints. The remaining viewpoints are deemed 'Imperceptible', reflecting the partial visibility within the study area and the landscape context itself, which is a robust working rural landscape that is not highly rare or distinctive in any sense.

Overall, it is considered that the slight to imperceptible level findings of residual impacts in the LVIA represent an acceptable impact on the receiving landscape. The substation / grid development is located in a well contained part of the surrounding local landscape, which limits its potential to alter the surrounding landscape character beyond its immediate surrounding context. The substation development is also located along the alignment of an existing overhead cable corridor, and thus, is likely to be perceived as an intensification of electrical infrastructure in this context as opposed to the introduction of a new and unfamiliar form of built development. It is considered that the proposed SID development and wider solar development is a suitably sited and scaled development that is well-screened by the surrounding layers of dense vegetation. Furthermore, in terms of the surrounding landscape and visual policy, it is not considered that the proposed solar development will conflict with landscape and visual-related policy in the Cork County Development Plan 2022-2028.

4.3 Traffic Assessment

4.3.1 Traffic Volumes

This application is supported by a detailed Site Access Report by CSEA Engineering Advisors. The solar farm will be an unmanned facility once operational, with trips confined to maintenance staff accessing the site by light goods vans. These movements will be limited to 2-4 trips per month on average. As such, the operational development will give rise to a significant decrease in both the volume and scale of vehicles accessing the site comparable to existing agri-generated traffic[8].

Based on the low levels of operational visits, the potential for traffic impacts to occur will be limited to the temporary construction period for the subject lands. It is envisaged that the construction phase for the subject solar farm, substation and associated works will take 24 months. Subject to obtaining planning permission, the proposed 110kV substation and grid connection will be constructed alongside the proposed Aglish solar farm. As outlined in Table 4.2 of the Site Access Report, the volume of vehicular movements will vary across this period with an average of c. 10 no. trips per day (equivalent of 1 trips per hour). This number includes 10% contingency in traffic volumes as part of a precautionary approach. These traffic numbers relate to the overall Aglish Solar Farm project including the proposed substation and grid connection which is considered a worst case approach to traffic assessment. With specific reference to the subject substation / grid connection, the submitted construction programme confirms that HGV trips will be highest during the initial enabling works for the substation, but this will equate to a relatively modest average estimate of 12-13 no. HGVs per day. This figure will drop to an estimated average of 1-2 HGV per day related to the substation / grid connection civil works during months 3 to 9. The civil and electrical works on the substation will be completed by the end of month 16.

[7] This represents a subset of a larger number of views assessed as part of the solar farm application.
[8] Refer to Table 4.2 of Site Access Report.

4.3.2 Site Access/Sightlines

It is proposed to access the site via a single entrance from the L2204. This existing entrance will be subject to some upgrades, including removal of existing roadside sod and stone ditch to provide new gate as presented under Cork County Council Reference 24/6157. The entrance will be suitably splayed and has been subject to sight line and autotrack analysis, with the latter including modelling of abnormal load delivery for the transformer. Operational sightlines will be maintained by trimming back hedgerows with all necessary land within ownership.

The autotrack analysis conducted for the subject SID application included modelling of abnormal load delivery for the transformer, demonstrating that the delivery of this component can be safely accommodated. The access track the substation compound will include a geotextile base and filter membrane and 200 mm of Clause 804 sub-base.

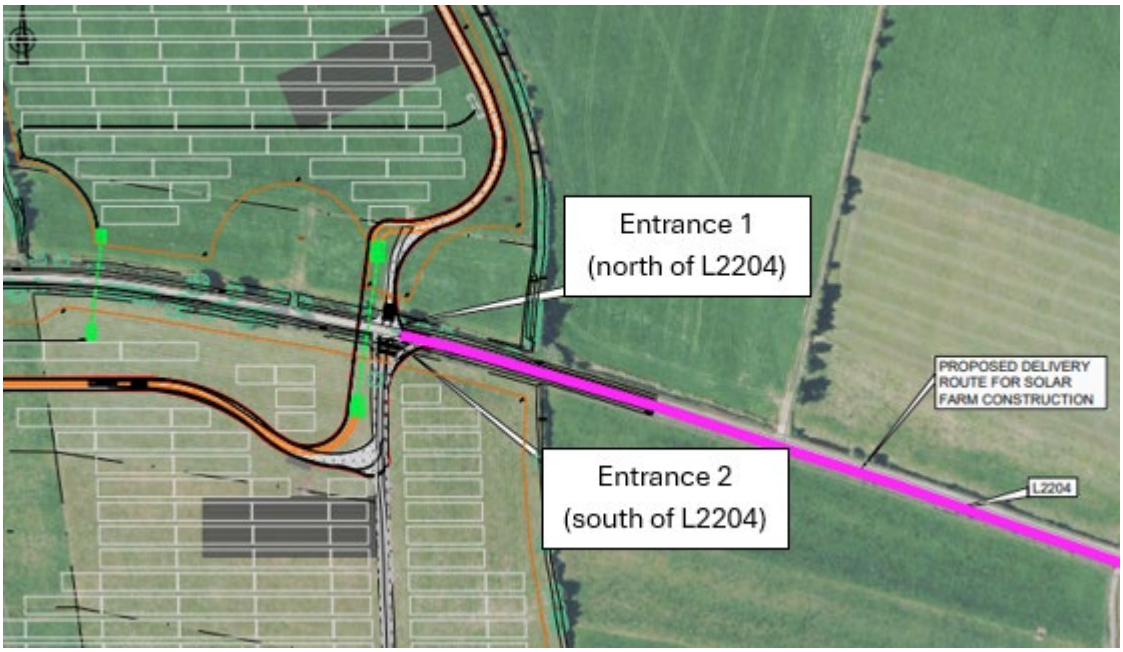


Figure 04: Access to Subject Lands

The delivery route for the proposed development will be via the M40, N22 Cork to Killarney National Primary Route and the L2204 Local Road from Port of Cork (at Ringaskiddy). It is intended to import substation components, including the transformer via Port of Cork (at Ringaskiddy). The route has been inspected and been subject to swept path analysis which confirms no difficulties for delivery vehicles proposed for the construction phase. Based on previous experiences of similar substation / grid connection projects, TII has provided details of construction stage considerations for the implementation of any permission related to the national road network. These relate to the content of a future Construction Traffic Management Plan (CTMP) and will include:

- A requirement to consult with PPP Companies, MMaRC Contractors and road authorities in respect of the construction haul route.
- Any proposed works to the national road network including signage shall comply with TII publications and shall be subject to road safety audits. All necessary licenses or agreements shall be secured from TII, PPP Concession, Motorway Maintenance, MMaRC Companies, local road authorities, as necessary.
- Any proposals or agreements referred to above will be shared with TII;
- Any damage caused to the pavement of the existing national road shall be rectified in accordance with TII Pavement Standards.

The Applicant is happy to confirm that it will reference the above requirements in the final CTMP and will consult with TII, and other parties where necessary, prior to the commencement of development. Section 9 of the Site Access Report includes a number of focused mitigation measures to minimise the impact on existing road users arising from the temporary construction phase. These include a temporary manual-

controlled stop/go system, advance warning signage and a booking system for site deliveries to avoid potential access conflicts. Thes commitments will be further developed with key stakeholders as part of the final CTMP.

An abnormal load delivery will be made to the substation site as part of the construction phase. The Applicant is familiar with the requirements for Exceptional Abnormal Loads (EAL) introduced in 2024, which will be met in full. A prescriptive process exists under the EAL permit granting process which will be navigated with all prescribed agencies / stakeholders to include route definition/agreement, a review of structural requirements, agreed monitoring proposals, and execution. The Applicant notes the detailed requirements for extensive consultation with TII with regard to the use of the M40 and N22 for the abnormal load deliveries. The Applicant will comply with TII's requirement that any damage caused to the pavement of the existing national road due to the turning movement of abnormal 'length' loads (e.g. tearing of the surface course) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

We note that under a similar SID application (Reg. Ref. ABP-319422) involving delivery of electrical infrastructure by means of EAL, TII stipulated that a condition could be applied for full agreement of EAL requirements. A copy of this condition is included in Appendix B of this report. The Applicant is happy for an equivalent condition to be applied in the subject case.

In summary, the existing road network can adequately cater for the proposed development. Once operational, the wider solar farm project will give rise to a decrease in vehicular movements to/from the subject lands which are currently accessed frequently for agricultural purposes. The construction phase will be short in duration and it has been demonstrated that HGVs can access the site in a safe manner.

4.4 Archaeology and Heritage

4.4.1 Archaeology

A detailed Archaeological, Architectural and Cultural Heritage Impact Assessment of the proposal has been prepared by Rubicon Archaeology and is enclosed with this application. The assessment included a study of the archaeological and historical background of the proposed development site and the surrounding environs. This included information from the Record of Monuments and Places of County Cork, the topographical files within the National Museum, and all available cartographic and documentary sources for the area. A number of site and field inspections were also conducted with the aim of identifying any previously unrecorded features of archaeological or historical interest.

The proposal has been designed having regard to site inspections and analysis undertaken. A strategy of mitigation by avoidance has been adopted. It has been demonstrated that the proposed development will not have any direct effect on any known archaeological sites. No significant impacts have been identified. The area is already characterised by the presence of existing transmission network infrastructure.

As per the report findings, and pursuant to any grant of permission, it is recommended that a programme of geo-physical survey and/or testing take place post planning decision and in advance of the commencement of any construction works on the substation compound site. A suitably qualified archaeological consultant will monitor subsurface groundworks. The applicant is fully committed to completing the archaeological geophysical survey and testing after permission is granted. The rationale for this is set out in Section 6.3 of the submitted archaeological report, as supplemented in planning policy term as follows:

- Under government policy, there is a need for decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and retain security of energy supply. In terms of this energy supply, Ireland is highly dependent on imports when compared to other EU countries. This dependence on energy imports carries significant risks to national electricity supply which can be offset by domestic generation. The need for greater domestic generation is underlined by recent adverse weather conditions and electricity outages in Ireland. To deliver on government policy and to safeguard against supply shortages, projects such as the proposed solar farm must be supported by positive decision making. This point is not made in any way to downplay the importance of archaeological heritage – the applicant is fully committed to their obligations in this regard– rather, there is a need for flexibility and balance on issues. In this case, positive steps can be taken to deliver an important renewable energy project without compromising archaeological heritage by means of

an appropriately worded planning condition which can alleviate any archaeological concerns on the site whilst simultaneously facilitating participation in the next available ECP process.

- This proposed approach aligns with the National Monuments Service (NMS) Solar Farm Developments – Internal Guidance Document (2016)[9] which acknowledges that once a detailed assessment is complete "it should be possible to avoid a 'Further Information' request and…proceed to deal with the application through the recommendation of planning conditions.". The assessment completed by Rubicon Archaeology is detailed in nature, supported by desktop research, site survey and drone analysis. The findings and recommendations provide for certainty in approach that all archaeology matters will be resolved in full and in consultation with the Department of Housing, Local Government and Heritage Development prior to the construction of the proposed development.

    - The NMS have recently confirmed that the above referred Guidance Document is under review and being revised in close consultation with Solar Ireland (formerly the Irish Solar Energy Association). It is evident that the amended guideline will continue to be utilised into the future and the NMS has indicated to Solar Ireland that the undertaking of geophysical survey and archaeological testing on site in the 'post-planning' and 'pre-construction' phase of development will continue to be an acceptable approach.

      Planning is just one of several necessary milestones in the development lifecycle for a solar farm. There are wider non-planning programme requirements relating to grid, route to market, construction etc which must be met in order for Ireland to achieve its climate targets. A lengthy planning process carries a high risk of subsequential delays with the obvious conclusion that climate targets are at risk. The Applicant provided detailed information on solar development milestones as part of the solar farm planning application to Cork County Council response but this does not appear to have been considered by the planning authority in its decision making process. The NMS, however, has indicated an understanding of the various program and development constraints experienced by solar developers and has shown a willingness to consider same in the future amended guidelines. For the benefit of the Commission, a graphic indicting the timeline constraints and where in the process archaeological geophysical survey and further assessment can be undertaken is included in Appendix C.

- The approach is consistent with precedent established on other solar farm sites nationally, including substation / grid connections at Ballysallagh, Co. Cork (reference 321518-24), Rathcoursey, Co. Cork (reference 318685-23), Delamain, Co. Kildare (reference 319252-24), Garreenleen, Co. Carlow (reference 313193-22), and Tullabeg, Co. Wexford (reference 305803-19), among others. Based on the adopted mitigation by design avoidance strategy, and the findings of the Rubicon Heritage Report, we submit the requirement for geo-physical survey and/or testing can take place post planning decision which is consistent with established precedent. In the case of the above referenced Ballysallagh and Rathcoursey Solar Farm substations / grid connections, both of these applications were granted under the auspices of the current Cork County Development Plan 2022-2028.

  In the most recent case at Ballysallagh, the inspector confirmed their reasoned view that "Overall having regard to the fact that no RMP's are located within the substation site….I am satisfied that the proposed advance geophysical survey and advance archaeological test trenching is an acceptable approach. I concur with the Applicant that in light of the AIA conclusions and having regard to the National Monuments Service – Internal Guidance Document in relation to Solar Farms, I consider it reasonable that targeted test trenching be undertaken post permission. I note that the Board have adopted similar approaches in relation to other solar projects for example ABP-311760-21, ABP-312712-22 and ABP-318001-23".

- The Commission for Regulation of Utilities (CRU) Enduring Connection Policy sets the terms and conditions for electrical generators access to the electricity systems. The policy "has considered evolving European and national energy policy including the prioritisation and timelines in the Government's Climate Action Plan" and "prioritises, in the first instance, large renewable energy projects". Streamlining planning process for both solar farms and substations and grid connections is critical to defined timeline windows for accepting grid connection offers. Delays with planning

[9] A copy of these guidelines is enclosed in Appendix D for reference.

permissions can result in consequential delays in ECP (and RESS) processes as demonstrated in Appendix C.

- We also submit that the approach is compliant with Cork County Development Plan Objectives HE 16-9 and HE 16- 13. HE 16-9 requires the preparation of an archaeological assessment on sites of 0.5 ha or more in the county. This obligation has been fulfilled in the context of the prepared Archaeological, Architectural and Cultural Heritage Impact Assessment Report by Rubicon Archaeology. The assessment completed for the Aglish Solar Farm complies with the Department's requirements. Specifically, the Mitigation Strategy of the Rubicon Archaeology report confirms that specified measures have been compiled with direct reference to the 'Framework and Principles for the Protection of the Archaeological Heritage (1999)'. The mitigation commitments made will protect and preserve previously unrecorded archaeological sites, and will require preservation in situ to protect any heretofore unidentified archaeological monuments discovered. This approach achieves all requirements under Objective HE 16-13.

Having regard to the above, we respectfully request that a suitably worded condition be applied which will provide for the positive conclusion and resolution of all archaeological considerations in respect of the subject application. This approach will ensure that there will be no significant archaeological impacts and provides the National Monuments Service and Cork County Council with the necessary safeguards to ensure this is the case. As outlined, this approach is also fully in accordance with the National Monuments Services own Solar Farm Developments – Internal Guidance Document (2016).

4.5 Water and Drainage Considerations

4.5.1 Flood Risk

All matters relating to potential flood risk and drainage have been investigated in detail as part of the subject proposal, with available resources from the Office of Public Works (OPW) consulted to establish the potential for any impacts.

The development as proposed will not result in an adverse impact to the existing hydrological regime of the area or increase flood risk elsewhere and is therefore considered to be appropriate from a flood risk perspective.

4.5.2 Drainage

Surface water drainage proposals for the proposed development have been developed to mimic the natural drainage patterns of the site and thereby be in accordance with the best management practices of Sustainable Drainage Systems (SuDS). Specifically, this includes the following:

- The proposed access track to the substation compound will be permeable allowing rainwater to infiltrate through the stone structure to the subsoil below;
- The compound construction is formed with permeable stone thus mimicking a soakaway scenario. ESB compound stone is single sized for the first 150mm for safety purposes. It then changes to a graded 6F2 material;
- The area to be drained includes the roofs and the bunded plinths. These equate to 663m² which is relatively minor in comparison to the overall compound area;
- Assuming even the most basic of infiltration rates down through the permeable compound stone, it is clear that the existing greenfield situation will be easily maintained;

The surface water generated in the hardstanding and bunded areas will be discharged to the soakaway via a Class 1 Full Retention Oil Separator. The electrical transformer in the substation is oil filled equipment and, as such, is protected with impermeable bunds. Surface water generated in this bund will be pumped out by an oil sensitive pump ensuring that only non-contaminated water enters the site drainage network.

All storm water management measures will be subject to periodic testing, review and maintenance.

4.6 Ecology

The application is supported by an Ecological Impact Assessment Report (EcIA) prepared by Greenleaf Ecology which provides a detailed overview of ecology within the proposed development site and the

planned substation/interconnector cables, as well as identifying, quantifying and evaluating the potential effects arising from the construction and operation of the development on habitats, species and ecosystems in the surrounding area. The investigation of associated matters has been subject to extensive survey work.

4.6.1 EcIA Findings

Field surveys of the proposed development site were carried out to inform the submitted Ecological Impact Assessment (EcIA). The proposed development site is currently considered to be of local importance, with habitats on site ranging from lower to higher value. The location of the proposed substation / grid connection dominated by improved agricultural grassland habitat (GA1). The site is made up of two no. agricultural fields bounded by hedgerow (WL1) and separated by L2204 Road. No Annex I habitats or rare, protected or invasive plant species are present within the application site. The habitats present are considered of local importance (lower value). The habitats present are considered of local importance (lower value).

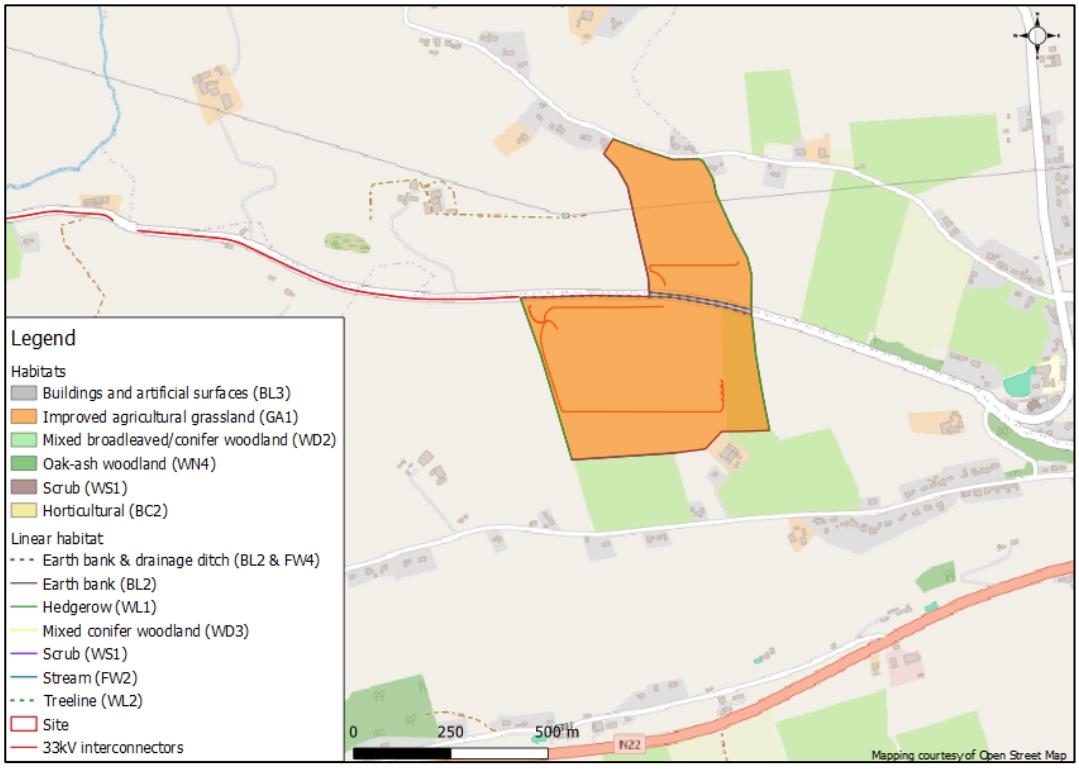


Figure 05: Habitats within subject site.

No significant effects on designated sites, habitats, flora, or fauna have been identified as a result of the proposed development. Overall, it is deemed that the proposed development will result in a positive residual effect on local ecology and biodiversity.

4.6.2 Appropriate Assessment

An Appropriate Assessment Screening Report also accompanies this application. There is a total of 3 European sites located within 15km of the proposed substation development site. The closest of these sites to the substation site are The Gearagh SAC (000108; 13.5km) and The Gearagh SPA (004109; 14.8km).

The proposed development does not have any likelihood of significant effects on European designated sites. The site is remote from the European sites and the site is not known to be used by any of the mobile QI/SCI species of designated sites in the wider area with any regularity. In addition, there is no watercourse within or adjacent to the proposed development site which could convey water quality mediated impacts on hydrologically connected Natura 2000 sites.

The proposed Aglish 110 kV Substation and Grid Connection, Co. Cork, either alone or in-combination with other plans and/or projects, does not have the potential to significantly affect any European Site, in light of their conservation objectives. Therefore, a Stage 2 Appropriate Assessment is deemed not to be required.

The report objectively concludes that the proposed development will not adversely affect the integrity of a Natura 2000 sites, and there is no reasonable scientific doubt in relation to this conclusion.

4.6.3 Biodiversity and Green Infrastructure Development

A Green and Blue Infrastructure Statement was prepared by the project landscape, ecology and planning personnel for the wider solar farm project and submitted under the Section 34 application to Cork County Council. A copy of this statement is enclosed again with the subject application for information. It has been demonstrated that the design of the solar farm project is low intervention in the context of the existing green and blue infrastructure in the area. Once operational, it will contribute towards improved biodiversity benefits, alongside the production of a clean form of green renewable energy. There will be a significant net gain in hedgerow and tree planting on the site arising from the solar farm development, contributing positively to biodiversity enhancement.

4.7 EIA Screening

Under the Planning and Development Regulations 2001, current government and EU guidance, An Coimisiún Pleanála must screen the proposed development for Environmental Impact Assessment (EIA) and decide if the planning application for the proposed development does or does not require the preparation of an Environmental Impact Assessment Report (EIAR). This application includes an EIA Screening Statement made in support of the screening process. The proposed development has been screened for EIA having regard to relevant thresholds and it has been objectively concluded that the preparation of an Environmental Impact Assessment Report is not required.

4.8 Noise

The application is accompanied by a Noise Impact Assessment Report by Wave Dynamics which has been prepared having regard to Statutory Instrument No. 549/2018 of the European Noise Regulations; BS 8233:2014; World Health Organisation noise guidelines, and the EPA guidance note for noise: NG4 Guidelines. The noise impact assessment included attended noise measurements on the proposed development lands. This included measurements of background noise at the noise sensitive locations.

The noise generating plant associated with the solar farm project are the inverters and the substation. As illustrated on the site layout plans, this plant is located centrally, away from local receptors. This is reflected in the findings of the noise assessment with the modelled noise levels (free field façade noise levels) are well below the recommended EPA/WHO/BS8233 guidelines of 55dB during day time and 45dB at night time.

The construction phase of development due to its nature is temporary and therefore any potential noise impacts will be short term. All construction works will be carried out during the day-time period between the 8.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on Saturday. No construction activities will occur outside these hours unless agreed in writing 24 hours prior by Cork County Council. Potential noise impact will be controlled in accordance with all relevant British Standards Codes of practices such as: BS 5228-1: 1997 “Noise Control on Construction and Open Sites -Part 1”; BS 5228:2009 and Al:2014 “Code of practice for noise and vibration control on construction and open sites”. The applicant is happy to accept a condition limiting construction phase noise to 70dB for construction as per BS5228.

4.9 Lighting and CCTV

As detailed in the substation drawings by Aglish Solar Farm Limited, a number of external lights are proposed for safety purposes in the electrical compound to meet EirGrid requirements. This lighting will be operated manually from the substation building and used infrequently as needed for inspections during periods when natural light is unavailable. The lights will be designed to restrict any potential light scatter.

4.10 Health and Safety

There is no credible evidence to suggest that solar farms pose any health and safety concerns. Related matters were discussed, where relevant, as part of community engagement with local residents. There will be no electromagnetic health impacts from the project. Magnetic fields are produced through both natural and man-made means, with electromagnetic fields a by-product of electricity. Exposure to this is an everyday occurrence with typical household electromagnetic field levels summarised in. The key

underlying principle is that the strength of a magnetic field reduces greatly as you move away from its source.

Solar farm projects, inclusive of substations / grid connections, can emit low levels EMF from transformers and underground cabling; however, the levels of EMF emitted are substantially lower than the basic restriction level which is the level at which radiation is potentially harmful to humans. The figure below shows a comparison of AC electric fields from common sources.

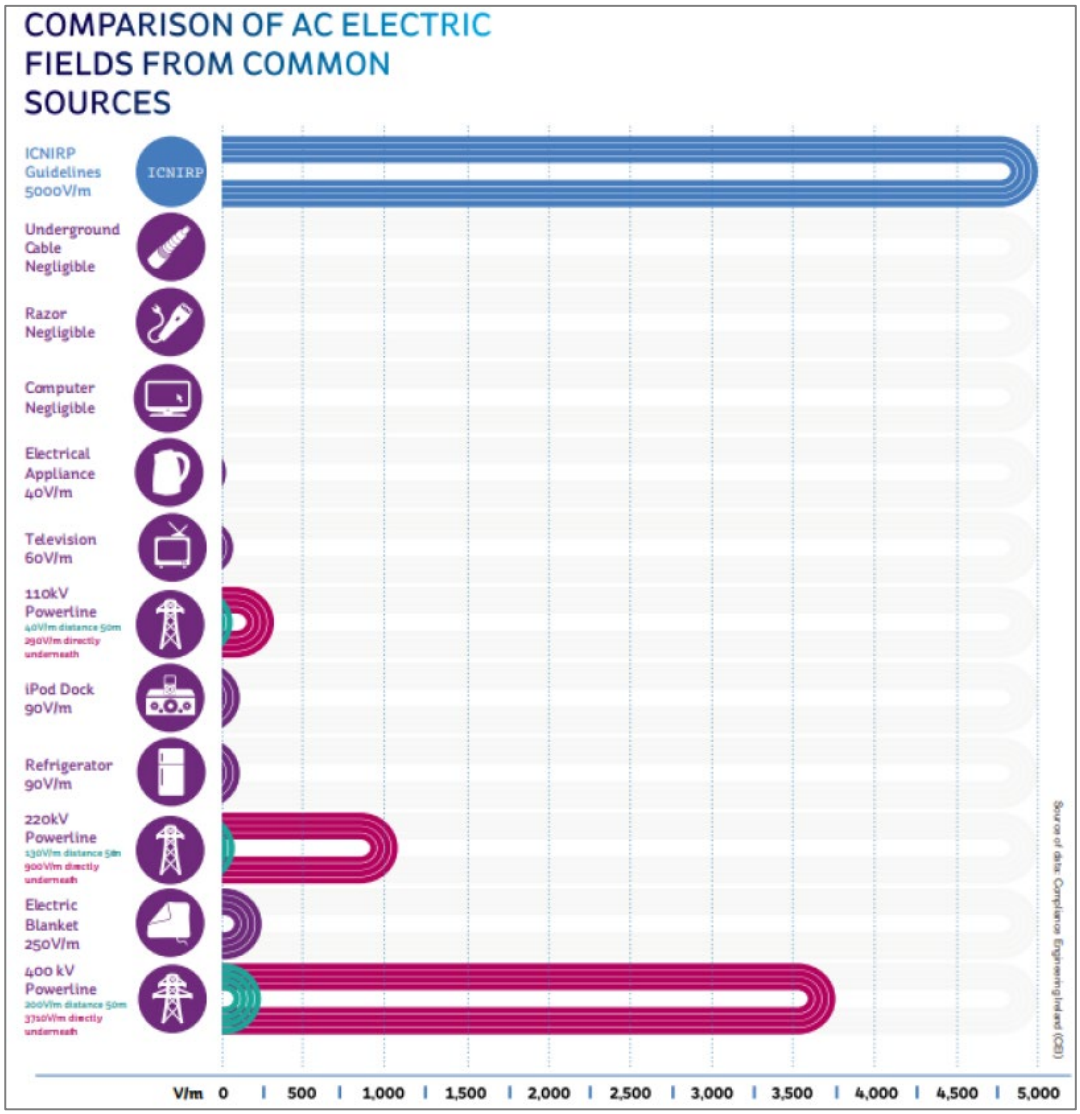


Figure 06: Comparison of AC electric fields from common sources

There are established guidelines for the control of electromagnetic fields:

- International Commission on Non-Ionising Radiation Protection (ICNIRP) Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300GHz). Health Physics 74 (4): 494-522; 1998
- EU Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0Hz to 300GHz) 1999/519/EC
- ICNIRP Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz–100kHz) Health Physics 99(6):818-836; 2010
- Directive of the European Parliament and of the Council on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) 2013/35/EU

Irish government policy is to comply with the 1998 ICNIRP guidelines. Electromagnetic fields are measured using units of microtesla (µT) and the public limit advised by the EU EMF Recommendation and ICNIRP 1998 guidelines is 100 microtesla.

EMF strength decreases with distance relatively quickly. This is illustrated below which shows how exposure to EMF decreases with distance. As shown, when directly on top of a 110 kV cable the magnetic field is 2.32 µT, which is well below the 100 µT public limit. The EMF levels from the proposed development will be considerably lower than the ICNIRP recommendation of 100 µT. As the highest cable voltages at the proposed solar farm project are 110kV, the EMF levels will be considerably lower than the ICNIRP recommendation of 100 µT. At the 110kV transformer the expected level of EMF is less than 5 µT, which is also considerably lower than the ICNIRP recommendation of 100 µT.

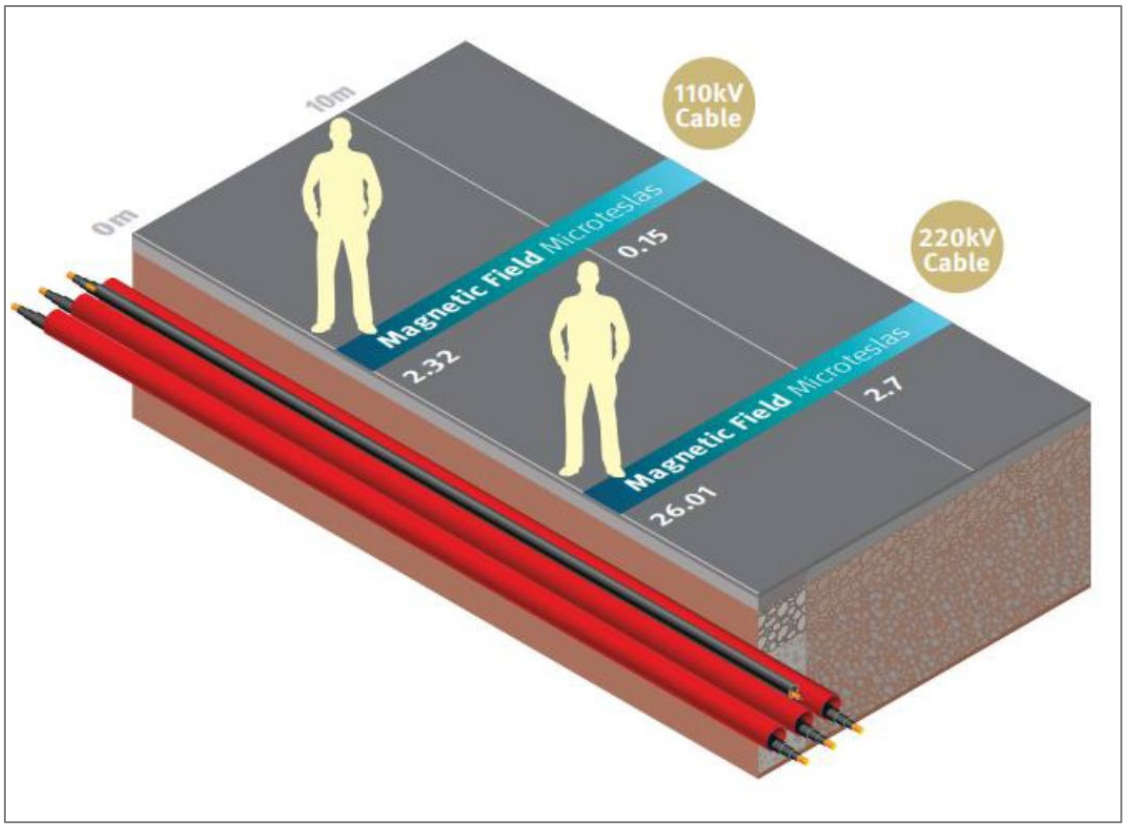


Figure 07: Illustration of decreasing scale of EMF exposure

Elsewhere, An Coimisiún Pleanála precedent demonstrates that fire risk is not deemed to be a significant issue in the assessment of solar farm development. We note the comments contained within the Inspectors report for a solar farm development at Knockglass and Kilberrihert, Coachford, Co. Cork, whereby it was stated "*there are no reasons to believe that there are fire risks associated with the proposed solar panels*". This opinion is repeated within the Inspectors Report for a solar development in Coolroe, Tintern, Co. Wexford whereby the inspector states:

> *"There is no information available to suggest that a fire at the subject site would be a significant risk. The proposed arrays are comprised largely of glass and metal, and as such could not reasonably be considered as potential fuel for a fire, in my opinion."*

The collective issue of potential health and safety issues arising from solar farm developments was explored in detail as part of the Oral Hearing held for the Coolroe solar development. The Wexford County Council Planning Official who dealt with the file gave evidence that he engaged a number of local planning authorities in England to scope the extent of planning issues, including health and safety considerations. He advised that the potential for related issues was limited. In dealing with the file, the inspector's report corroborated this view:

> *"The planning officer discounts the issue of impacts on public health on the basis of UK documentation available. I concur with this position".*

In addition, in relation to the inverters, it should be noted that the correct design, construction and commissioning by suitably competent and experienced personnel, in accordance with cross disciplinary technical standards and best practice guidance will ensure the potential for fire is minimised. The following mitigations are standard measures for reducing fire risk for such infrastructure:

- Avoid negative earthing unless unavoidable
- Install DC (direct current) insulation monitors in inverters with connection through solar park monitoring system and a default setting to disconnect supplies if operator intervention is not forthcoming.
- Design of HV areas to IEC 62271-202.
- With regard to the inverter and transformer system, install both AC and DC insulation monitors with connection through solar park monitoring system and a default setting to disconnect supplies if there is no operator intervention after a set time period.

4.10.1 Communications

Both international academic and industry practitioner research confirms that Electromagnetic interference (EMI) from solar PV installations are very low risk, with appropriate siting of proposals and use of certified equipment rendering the potential for impacts on radio/television and mobile phone networks as negligible.

Within the European Union, all technical devices, including inverters for PV systems must comply with the requirements of the EMC Directive 89/336/EEC in terms of electromagnetic properties. As such, these components are certified to industrial standards where interference-free stability is a pre-condition for television, radio and mobile receptors.

Alongside the use of certified equipment and best-practice electrical design measures, the incorporation of suitable setback distances from communications equipment itself is recognised to negate residual potential for EMI. In April 2015, the National Laboratory of the U.S. Department of Energy (NREL) published a white paper on the deployment of solar PV near naval airfields and its potential for electromagnetic interference on communications infrastructure. It confirmed that emissions are typically low strength from such developments with “little to no EMI impact on communications or telemetry (transmission) equipment”. In the UK, solar farms have been permitted immediately adjacent to mobile phone base stations/antennae without any quantifiable impacts on commercial operations. An independent assessment of Sudbrook Solar Farm, Severn Estuary, Monmouthshire, included a recommendation that a 15 m separation distance be maintained between the solar farm and an onsite mobile base station, with no further mitigation required. Based on technical tests, the proposal will not give rise to any impacts on telecommunications infrastructure in the local area.

The submitted Aglish Solar Farm Impact Assessment Report by AiBridges confirms that there will be no adverse EMF or EMC impacts in the local environment.

4.11 Project Implementation

4.11.1 Duration of Planning Permission

The solar farm associated with this 110kV substation and grid connection is expected to have an operational lifetime of up to 40 years. In the event that the solar farm is decommissioned at the end of this period, it is envisaged that the substation will remain in situ as valuable functioning infrastructure on the national electricity transmission network. As such, and in the event of a grant of planning permission, it is requested that the operational life of the substation not be time limited by means of an imposed planning condition.

4.11.2 Construction Management

As outlined, it is envisaged that the proposed 110kV substation and grid connection will be constructed as part of the proposed Aglish solar farm. The construction stage will last for 24 months, and the process will be governed by strict environmental controls, as well as health and safety procedures. The civil works themselves are non-invasive, reflecting the temporary nature of the proposed development. A Construction Method Statement (CMS) for the substation / grid connection accompanies this application.

It sets out a detailed suite of environmental protection measures to be implemented on site during the construction phase. The CMS identifies all the potential issues which are relevant to the project, such as construction safety; traffic management; environmental risk assessment and management; waste management; and environmental management. The CMS specifically outlines how to address these and provides solutions which are satisfactory to all concerned. The final Construction and Environmental Management Plan, including CMS, will be further developed by the appointed contractor and will include a detailed traffic management plan and risk assessed method statements. The document will be agreed, where relevant, with the Council prior to the commencement of any development.

4.11.3 Operational Maintenance

Once operational, the collective solar farm project will be run in accordance with a management plan prepared to ensure the development site is maintained in a manner which allows for its optimal technical operation and the meeting of any commitments made during the planning stage of the project. Alongside system performance, this will include routine inspection and monitoring in relation to ongoing planning compliance requirements. This will include implementation of landscape and habitat/biodiversity management plans and monitoring of ecology enhancements installed on the site to ensure their maintenance and improvement. The drainage regime for the substation will be subject to regular inspection and cleaning/clearing as necessary.

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Community Consultation Report

5.1 Introduction

There is no formal obligation under statutory planning provisions to undertake community engagement in advance of lodging a planning application of this nature, however, the applicants have a proactive and strong track record of engaging with local communities.

In advance of submitting the local authority planning application and the subject SID application Aglish Solar Farm Limited sought to inform and engage with interested parties in the local community. A community engagement programme was developed to inform this process of disseminating information on the Aglish solar farm project and to gain an insight into local issues. A robust and inclusive community engagement process has been undertaken, providing valuable key insights to local concerns. This has informed the project design process.

5.2 Consultation Objectives

The main objectives of the programme of consultation were to:

- Encourage people who live locally, to have a say in the development of the proposals;
- Ensure that local people have access to accurate and factual information on all aspects of the proposals which may be of particular interest or concern to them;
- Provide the local community with the opportunity to shape the proposals, ensuring that any pertinent outcomes of community engagement have been reflected in the proposals as far as is possible;
- Ensure people have access to information detailing why the site was identified as suitable for solar PV development;
- Enable Aglish Solar Farm Limited to gauge public opinion regarding the proposals.

5.3 Consultation Undertaken

The process of identifying landowners and establishing the commercial and technical feasibility of a solar farm is critical to understanding the layout options and corresponding planning and environmental assessments which need to be completed. Early environmental surveys were ongoing on available lands in parallel with landowner discussions.

Once the planning boundary was agreed, the next stage considered the types of engagement that would be most effective to provide an opportunity for local households and businesses to air views on the proposed solar farm and discuss any issues or concerns they may have. To meet these objectives, it was resolved that the best means of engagement was to undertake door-to-door calls to individual properties immediately in the environs of the subject site to discuss the proposed solar farm development. While this would be more time consuming that holding an open forum 'town-hall' type meeting, it was considered that it would enable more meaningful discussion where everyone would get the opportunity to comment freely on proposals.

A Community Information Leaflet was produced to inform this process and distributed by hand to local residents. The leaflet, which is included at the end of this report, included summary information on the following:

- Overview of the proposed Aglish Solar Farm;

- Energy in Ireland;
- Benefits of solar farms;
- Why this location was chosen for a solar farm;
- What the solar farm will look like;
- Planning application details;
- Client contact details.

The clear intent of this information was to generate an increased awareness of the project within the local community and encourage positive and meaningful engagement and we can report that this was well received by the local community.

The consultation was undertaken between the 14th October 2024 and 11th November 2024. It consisted of a personal visit from the applicants experienced Community Liaison Officer (CLO) to 62 no. households in the vicinity of the proposed solar farm site who were identified as being potentially impacted primarily on the basis of proximity, visual impact, construction traffic and other environmental issues. Each household was given the solar farm brochure and the CLO provided an overview of the solar farm, answered any queries households had and agreed to provide additional information where this was requested. The location of the households was spread across 5 no. zones as shown overleaf, with the substation / grid connection in Zone 4.

During the consultations the "feedback" was very positive however visual impact was raised at some properties. No specific concerns were raised in relation to the proposed substation / grid connection. People were also aware that there would be an opportunity through the planning application process to make a submission to the Council should there be any additional concerns identified through inspection of the planning application documentation.

In summary, the community consultation could be considered positive, with a strong understanding of the need for renewable energy, the need to decarbonise energy away from fossil fuels and also for Ireland to be as energy self-sufficient as possible.

5.4 Residential Amenity

The layout of the proposed substation / grid connection has considered proximity to existing residential properties in full. The proposed substation and grid connection have principal receptors that are local community receptors influenced by the typical rural landscape surrounding the development. The nearest third party dwelling to the proposed interface towers to the north is located c.96 m away, with the next nearest property located c.125m away.

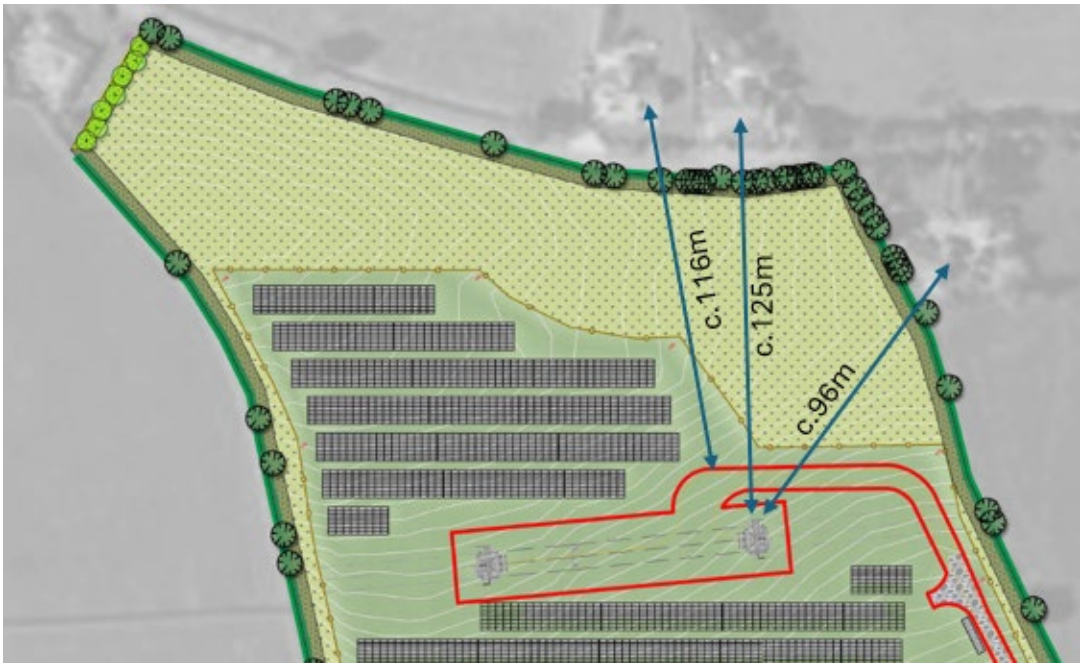


Figure 08: Sample separation distances from nearest properties to proposed interface towers / red line

As set out in the submitted LVIA, the new interface towers will be substantially screened once landscape mitigation planting for the solar farm matures.

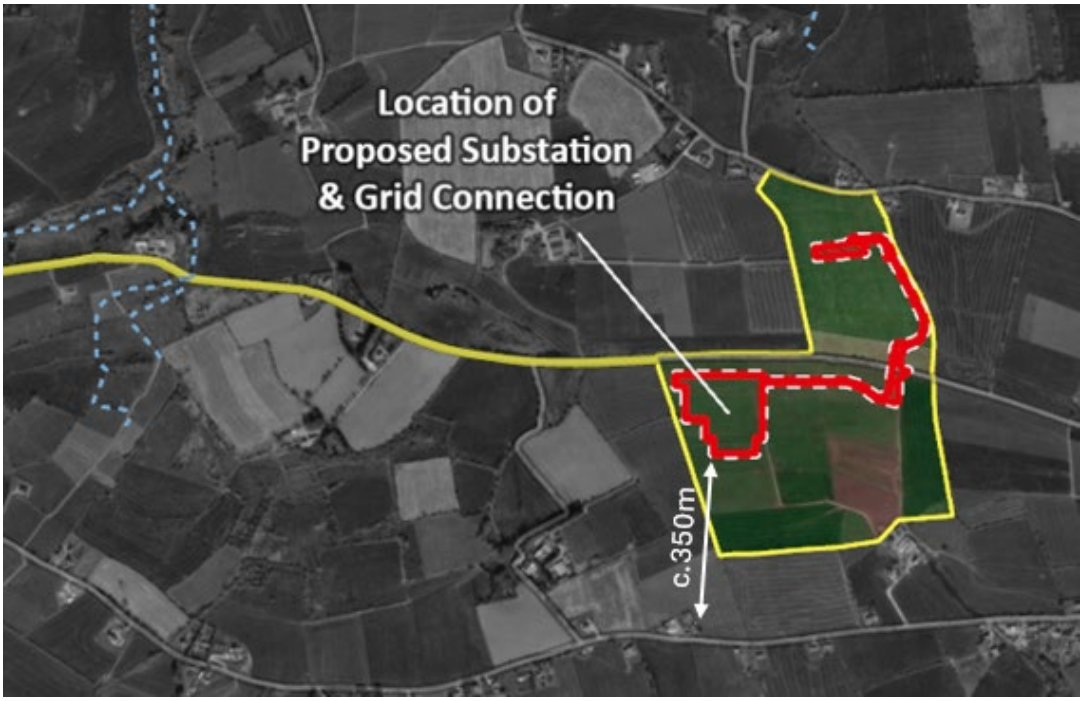


Figure 09: Sample separation distances from nearest property to proposed substation compound

The nearest residential property to the proposed substation compound area is approximately 350 metres to the south. The substation has been located specially to ensure a large offset to nearby homes. The design includes focused landscaping measures which will provide screening and aid assimilation of the project into the local environment. The effectiveness of the overall approach is illustrated in the photomontages submitted.

06 //

Conclusions

6.1 Summary

6.1.1 International and National Policy

Having regard to the commentary set out in this Planning and Environmental Statement, we consider the proposed development to be wholly acceptable in planning terms.

European policy is unequivocal that we are in the midst of climate and energy crises as reflected in the significant scaling up of renewable energy targets in recent years under REPowerEU. In addition to the need for decisive action to address key environmental challenges such as reduction in carbon emissions, there is a pronounced requirement to rapidly reduce the EU's dependence on Russian fossil fuels well before 2030 by accelerating the clean energy transition.

Critically, Ireland is one of the most energy import dependent countries in the EU which carries significant risks in relation to security of energy supply. To reduce its dependency, Ireland must increase the level of energy from renewable energy sources. This is one of the core strategies of the National Planning Framework, the Climate Action Plan and other national climate and energy policies.

Ireland has challenging climate and renewable electricity targets for 2030 including achieving a 51% reduction in overall greenhouse gas emissions by 2030 and to reach net-zero emissions by no later than 2050.

It is now clear across Irish government and industry that these targets will be met. The Environmental Protection Agency (EPA) published a report in May 2025 forecasting that Ireland would only achieve a 23% reduction in total greenhouse gas emissions by 2030 - a 28% shortfall on Ireland's target of 51%. The EPA has advised that the planned climate policies and measures, if fully implemented, could deliver up to 23per cent emissions reduction by 2030 compared to 2018. This is insufficient to meet the 51 per cent emissions reduction target in Ireland's Climate Act.

At the same time that our emissions are increasing, so too is demand for electricity. Demand for electricity is forecast to increase by between 19% and 50% above existing capacity in the next decade in line with economic forecasts. As EirGrid has warned in its All-Island Resource Adequacy Assessment (2025-2034) there is a challenging outlook for Ireland with capacity deficits identified during the 10 years to 2032. The deficits will increase up to 2025 due to the deteriorating availability of power plants, resulting in their unavailability ahead of intended retirement dates as well as increasing electricity demand. In later years, the deficits are expected to reduce as new capacity comes forward through the SEM capacity auctions. Ensuring we build renewable, rather than fossil fuel generation capacity to help meet this demand is essential. It is planned to increase the proportion of renewable electricity to up to 80% by 2030, and a target of 8 GW from solar by 2030.

The CRUs Enduring Connection Policy sets the terms and conditions of electricity generators' access to the electricity system and "prioritises, in the first instance, large renewable energy projects" in locations with viable grid connectivity. The proposed 110kV substation will deliver a viable grid connection for the proposed Aglish solar farm. The proposed substation and grid connection is at a point where the grid system is not constrained and can accommodate a national strategic generation project which will transmit large volumes of electricity to the south and east of the country. There are only a limited number of overhead lines and substations in existence across the country that have these connection characteristics for large-scale solar generation and therefore they are a finite resource. Given the challenge and urgency of the required climate action, it is imperative that these finite grid resources are allowed to be fully utilized for Ireland to achieve its climate and renewable energy targets.

The proposed development responds directly to all aforementioned policies as well as regional and local policy as set out in this report and other supporting reports prepared as part of the planning application. The transition to a low carbon economy, which includes decarbonisation as one its key pillars, is a national

challenge. As we transition to a climate neutral future, we must ensure the pathway to decarbonisation is underpinned by affordability and security in how we access and use energy in our everyday lives. Having a reliable source of energy is vital for consumers to have confidence in the transition.

The proposed development is a REDIII project, the consenting of which will contribute positively to mitigating climate change, which is fast approaching a po int of no return. The critical extent of the issues for the planet are reflected in the 'overriding public interest' European policy status afforded to REDIII projects. The direction to competent authorities is to make decisions insofar as possible which support the outcome of favouring climate goals.

6.1.2 Environmental Impact

The proposed substation and 'loop-in' grid connection have been designed in accordance with best practice industry standards to achieve optimum environmental conditions. It will contribute positively to the achievement of renewable energy targets in an area of significant energy demand. Based on a review of the Cork County Development Plan 2022-2028, there are no land use or policy-based designations which preclude favourable consideration of the proposed substation at this location.

The prepared landscape and visual impact assessment has confirmed that the substation will not give rise to any significant impacts. Traffic access during the construction phase will be managed in close consultation with the TII, the Area Engineer's Office and local residents. The Ecological Impact Assessment and Appropriate Assessment Screening report objectively concludes that the proposal will not result in any significant effects in relation to designated Natura 2000 sites, rather the collective solar farm project will result in significant biodiversity gains to the receiving environment.

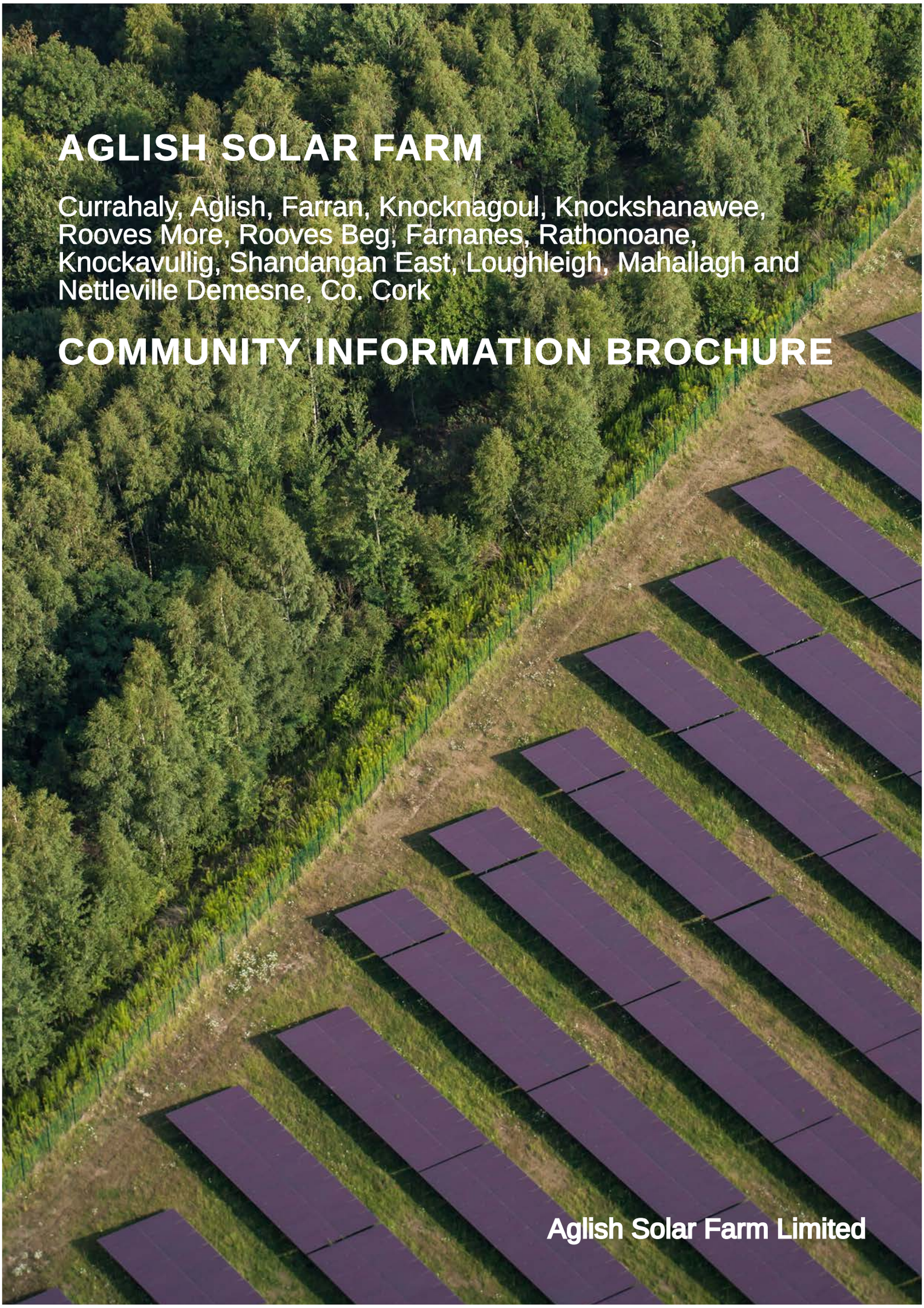
Elsewhere, a review of historical records and detailed site investigations have confirmed that there are no issues with respect to flooding and site drainage. It has been objectively determined that the proposal will not have any adverse impacts with respect to noise, and a precautionary approach has been exercised in the design with generous buffers to existing residences in the local area. It has been demonstrated that the project will not have an adverse impact on archaeological heritage and a programme of survey investigations and/or testing will be completed prior to commencement of development in full consultation with the Department of Housing, Local Government and Heritage.

Overall, we consider that the subject proposal will not detract from the residential or visual amenities in the area or impact on the local environment, and instead, that it will contribute positively to the realisation of policy objectives in full accordance with the proper planning and sustainable development of the area.

07 //

Appendices

Appendix A – Community Consultation Leaflet



AGLISH SOLAR FARM

Currahaly, Aglish, Farran, Knocknagoul, Knockshanawee, Rooves More, Rooves Beg, Farnanes, Rathonoane, Knockavullig, Shandangan East, Loughleigh, Mahallagh and Nettleville Demesne, Co. Cork

COMMUNITY INFORMATION BROCHURE

Aglish Solar Farm Limited

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Introduction

Aglish Solar Farm Limited is preparing a planning application for a proposed solar farm in the townlands of Currahaly, Aglish, Farran, Knocknagoul, Knockshanawee, Rooves More, Rooves Beg, Farnanes, Rathonoane, Knockavullig, Shandangan East, Loughleigh, Mahallagh and Nettleville Demesne Co. Cork. The site is circa 165 hectares and is located on five separate land parcels approximately 1.2 kilometres southwest of Coachford, 1.2 kilometres east of Carrigadrohid and 1 kilometre west of Farran in County Cork. This brochure is intended to provide information about the proposed development and a way to contact us with any queries you may have.

What is proposed as part of Aglish Solar Farm?

The Aglish Solar Farm will use solar panels to convert sunlight into electrical energy and can be characterised as follows:

- The panels will be placed onto support structures that are positioned south facing towards the sun.
- The structures are fixed and have no moving parts.
- Other equipment and works proposed as part of the solar farm includes modular containers which will include equipment such as inverters / transformers stations and spare parts, weather stations and new and refurbished access tracks.
- A new substation is proposed which will be located within the solar farm. This substation will have a loop in grid connection into an existing overhead electricity line which is also located within the solar farm site'.
- The solar farm does not include any battery storage and all electrical cables will be located underground.

The solar farm is proposed to have an electrical export capacity of up to approximately 100 MW to the national electricity grid network. This is the equivalent of enough electricity to power almost 49,000 homes which may otherwise be powered by electricity from power stations using fossil fuels like coal, gas and oil.

Energy in Ireland

Ireland has very ambitious climate and energy targets. The 'Climate Action Plan 2024' sets out a major programme of change to achieve its primary target of net zero emissions by 2050.

The Plan aims to increase the proportion of renewable electricity up to 80% by 2030 and sets out a target of 8,000 MW from solar farms by 2030. Renewables currently account for 38.6% of the electricity mix in Ireland. Aglish Solar Farm will generate up to approximately 100 MW for export to the national electricity grid network and will make a valuable contribution to our national targets as well as providing part of the solution to our growing electricity demand.

The Irish government is now providing subsidy support to solar farms in Ireland as a means of replacing fossil fuels and imported energy for use in electricity generation. Construction of the first wave of solar farms has already begun, with many expected to open in the coming months. Millvale Solar Farm (pictured below) in Ashford, Co. Wicklow opened in May 2022 and is the country's first large-scale solar farm to supply electricity to Irish homes.

Millvale Solar Farm in Co. Wicklow

According to EirGrid, demand for electricity is forecast to increase by approximately 43% within the next decade. The demand will be led by increasing population, the growth of data centres, electrification of heating and transport as well as the electrification of industrial demand processes. However, there remains substantial risks to achieving Ireland's energy targets. EirGrid has forecasted that there will be a deficit in electricity generation in the mid 2020s up to and potentially beyond 2030 unless ambitious climate targets in the Climate Action Plan are achieved. Managing the deficit also relies on short term emergency measures proposed by the Commission for the Regulation of Utilities including the extended operation of power plants which rely on fossil fuels for operations. EirGrid has advised there is a real risk of electricity supply disruption to homes and industry, stating there is a tightness between electricity supply and demand and an increased risk of system alerts in the coming years.

The Environmental Protection Agency's (EPA) current emissions modelling shows that Ireland is not on target to achieve its key climate targets for 2030. These are worrying trends. We are now facing a global crisis that means our environment is under threat and can no longer be taken for granted. Climate change is the greatest challenge of our times and urgent action is required to prevent irreversible damage to our planet. Aglish Solar Farm is part of a global shift towards sustainable electricity production and lower emissions aimed at combatting this challenge.

What are the benefits of the solar farms?

Solar farms have a number of advantages that make it particularly suitable to meet today's energy challenges.

- Solar energy is derived from light from the sun which is a free natural resource. Ireland is ideally suited to solar energy as we have sunlight up to 10pm during the summer months.
- Solar farms, when constructed, are benign, unobtrusive, non-invasive, silent and allow agricultural activities to continue on the lands.
- Solar is one of the cheapest sources of electricity available.
- The sector not only creates renewable electricity; it also creates jobs, new business models and start-ups.
- Solar farms can be constructed and operational very quickly and have very low maintenance requirements.
- In Europe there has been heavy reliance on gas imports from Russia for electricity generation. The European Union strategy is to replace this gas with renewables including solar energy.
- In Ireland, our energy system is dependent on fossil fuel imports such as gas, oil and coal which are used for generating electricity in power stations. Energy markets have proven volatile in recent years and in Ireland there is a real and urgent need to secure energy self-sufficiency and not be dependent on other countries. Solar farms are key for achieving this objective.

Why choose this location for a solar farm?

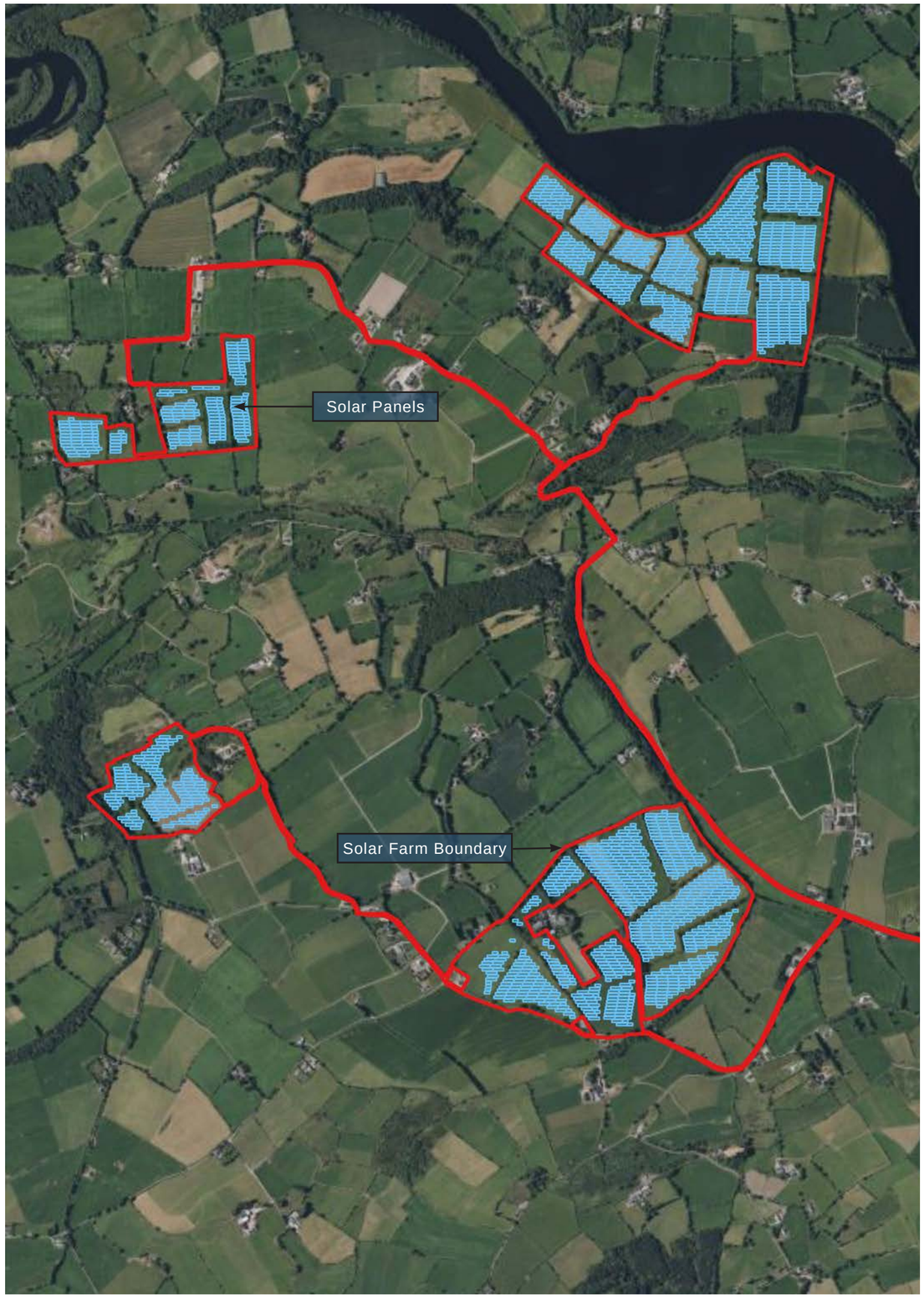
The process of identifying a solar farm site is influenced by a number of factors including:

- **Land:** available and suitable lands are the starting point for any solar farm. We are partnering with multiple landowners who are supportive of renewables and solar development.
- **Solar irradiance:** a site with good irradiance or sunlight energy has higher capacity to generate electricity than sites with poor irradiance.
- **Planning policy:** local planning policy in relation to climate, renewables and solar is one of the key factors which can influence the decision to progress with a solar farm development. In this case, the planning policies in the Cork County Development Plan 2022-2028 contain substantial support in these areas.
- **Grid connection:** a connection to the national grid to export electricity from the solar farm is also of crucial importance. An existing overhead 110kV electricity line runs within the solar farm lands and has available capacity to accept renewable electricity from this development.

What will the solar farm look like?

- The panels will reach a maximum height of 3.25 metres so would rarely be glimpsed beyond the site's surrounding hedgerows and trees. Each solar panel will be placed onto a pre-erected frame, tilted up to 30 degrees and will face south towards the sun. The frames are arranged into a series of rows with up to 4 metres of clear space between the panel rows.
- There will be minimal ground disturbance during the construction of the project. The land can continue to be used for agricultural activity such as sheep grazing.
- The solar farm layout has been designed to minimise impact on local plants and animals. Mammal friendly fencing will allow local fauna to move freely across the site undisturbed. The wide field margins and areas of open grassland will be managed to create and enhance habitats for local birds and other wildlife.
- The existing field boundaries will be maintained, and the existing hedgerows will be supplemented with new planting to aid in panel screening. Hedgerows will be maintained to ensure a minimal effect on current views.
- The operation of the solar farm will be of minimal disturbance to local residents, walkers or motorists. The solar panels are specifically designed to absorb daylight so any reflection of light is dull and minimal.
- Security fencing up to 2.4m height and CCTV cameras directed internally within the solar farm only (i.e. there will be no camera directed on other properties). These will ensure no unauthorised access is possible.

Example of Solar Arrays on Solar Farm



Aglish Solar Farm: Site Layout (Sheet 1)

Aglish Solar Farm: Site Layout (Sheet 2)

Is planning permission required?

Yes, a planning application for the solar farm will be submitted to Cork County Council and there will be an opportunity to make a submission on the application if you wish. The planning application will be available to view on the Council's planning website http://planning.corkcoco.ie/ePlan/searchexact. Several site notices will be erected in the community to advise of the application. The substation and its loop in grid connection will require a separate application to An Bord Pleanála at a later date and again, notices will be erected in line with statutory requirements. It should be noted that the potential impacts of the entire development will be considered in both planning applications.

In support of the solar farm planning application, we appointed an experienced team of independent consultants to prepare reports relating to different environmental and engineering aspects of the development. These reports included landscape and visual, noise, glint and glare, archaeology, ecology etc. All reports will be included in the planning application to Cork County Council.

The operational lifetime of the solar farm will be 40 years. At the end of 40 years the solar farm will be removed in consultation with Cork County Council and the land reinstated where it can continue to be used for agricultural purposes. The planning permission will specify the operational lifetime of the solar farm.

About Aglish Solar Farm Limited

Aglish Solar Farm Limited is a company set up by Terra Solar. Terra Solar was established in 2015 to develop, finance, construct and operate solar farms in Ireland. To date we have consented approximately 35 solar farms in Ireland. We are committed to developing well designed solar farms which will contribute towards Ireland's ambitious renewable and climate targets for 2030 and beyond.

How do we get in touch?

For further information on Aglish Solar Farm, please contact Community Liaison Officer Paul Stack on his mobile at 087 275 1612 or by email: paulstack@terrasolar.ie

Appendix B – Sample Exceptional Abnormal Load (EAL) Condition

The following condition was recommended by TII on reference ABP-319422:

Full details of the transportation of all Abnormal Loads and all 'Exceptional Abnormal Loads' associated with the subject development shall be agreed with all planning and road authorities along all proposed haul routes prior to the commencement of any development. In particular, such agreement shall include and address the following requirements;

a) *The Exceptional Abnormal Load Vehicle diagram shall be provided to include Gross Vehicle Weight; Individual Axle Weights; Axle Spacing; and total vehicle length, width and height. Exceptional Abnormal Load Vehicles shall comply with the standard configuration of a trailer with two bogies and two tractors; one pulling and one pushing as detailed within TII Publications AM-STR-06048.*
b) *All bridges to be crossed will need a full structural assessment by the developer in accordance with TII Publications AM-STR-06048 to verify that they can sustain the load safely and without any damage.*
c) *A Chartered Engineer with appropriate experience of assessing bridges for such Exceptional Abnormal Loads shall be required to certify that each structure to be crossed can sustain the loading regime safely and without damage. Appropriate Professional Indemnity Insurance shall also be in place.*
d) *Each local authority (who own the bridge assets and issue the load permits) shall be provided with an appropriate level of indemnity proportionate to the risk and the value of the bridge structures to be crossed.*
e) *Each local authority (who own the bridge assets and issue the load permits) shall be provided with insurance cover appropriate to the Risk and the value of the bridge structures to be crossed.*
f) *Each PPP Company will also need to be consulted as they will have their own Risk / Indemnity requirements, e.g. EuroLink (M3) PPP Concession, M50 PPP Concession.*
g) *Pre-structural surveys and post-structural surveys will be required.*

Reason; *In the interests of safeguarding levels of safety and the strategic function of the national road network in accordance with National Strategic Outcome Number 2 of the National Planning Framework.*

Appendix C – Solar Farm Key Milestones & Programme Risks

Solar Farm Development - Key Milestones & Programme Risks

Land

•Securing available lands for solar farm development with viable grid connection options can take considerable time, numbering months/years before land is available for consideration as part of planning application.

Planning

•The planning application process is long with high risk of objection, appeal to An Bord Pleanála and in certain cases Judicial Review. It is not unreasonable to assume the planning process (excl. JR) can take up to 24 months.

Planning is an important milestone however the grid connection offer and route to market are other essential milestones which must be unlocked before construction can commence.

Grid Connection

•A solar farm must have a grid connection agreement in place prior to construction. The Enduring Connection Policy (ECP) application process controls how renewable generators are connected to the national electricity grid, and allows grid connection applications on a bi-annual basis. It typically takes up to 12 months to secure a grid connection offer. The offer only remains valid for 2 months after receipt and the Developer must have planning permission in order to accept the offer. Therefore, securing planning as quickly as possible is critical to unlocking this next development milestone.

Route to Market

•There are two route to market options for electricity generated at a solar farm. One is a government subsidy through the Renewable Electricity Support Scheme (RESS). The other is through a Power Purchase Agreement (PPA). These options are reliant on a grid connection offer. It may take an additional 12 months from the grid offer to secure a route to market.

Applicant wishes to streamline planning timelines as much as possible. Our preference is that where geophys and archaeological testing is required, this is carried out post planning and pre construction . This can streamline and improve the entire solar farm development programme, creating efficiencies for all key milestones.

Construction

•Tender, procurement and construction of the solar farm, substation and grid connection may take up to another 24 months depending on scale.

Operation

There are overlapping processes and timelines from planning up to commencing operations. This could take 3-6 years depending on the characteristics of the project. Delays in planning can result in consequential delays in other process. Streamlining planning is critical in order to contribute to Irelands 2030 climate and renewables targets, and beyond.

Appendix D – National Monuments Service (NMS) Solar Farm Developments – Internal Guidance Document (2016)

An Roinn Ealaíon, Oidhreachta,
Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta

Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

NATIONAL MONUMENTS SERVICE

Solar Farm Developments – Internal Guidance Document

Introduction

Given that solar farm development is (a) a new category of development but one which appears likely to increase in terms of numbers of planning applications in the coming months, and (b) a form of development which is in significant ways different in its characteristics to older categories of development, it has been decided to provide NMS staff with specific guidance as to how to approach such cases. This guidance should be seen as supplementing rather than replacing the *Framework and Principles for the Protection of the Archaeological Heritage* (1999); indeed the approach it takes draws on what is set out in that document in terms of when archaeological assessment may be appropriate and the general approach to dealing with the archaeological impact of development: note that the Framework document clearly envisages in sections 3.6.2 to 3.6.3 that requests for archaeological assessment must be tailored to the circumstances of the case.

Solar farms present a combination of extensive area with, in comparison to (for example) quarries or housing estates, potentially low levels of ground impact over much (though not all) of the development, at least in relative terms, and potential flexibility to avoid impacts. The approaches set out below are intended to reflect this, while at the same time ensuring appropriate protection for the archaeological heritage.

What NMS considers should be included in a planning application for a solar farm development and requests for further information on archaeological grounds

A planning application for a solar farm development should be accompanied by an archaeological impact statement which includes the following:

(a) Examination of the relevant documentary sources (SMR, RMP etc.).

(b) Report on field inspection of the **entire** site;

(c) Quantification of the ground-disturbance impact on the 'site' identifying in particular areas of serious ground disturbance (e.g., trenching, sub-stations) but also quantifying the cumulative level of ground disturbance from piles to support solar arrays and assessing possible impact from driving machinery over land while inserting piles or subsequently removing them and ways in which such machine disturbance will be reduced or eliminated;

(d) Visual impact assessment. It is especially important that such an assessment address any visual impacts on national monuments of which the Minister is owner or guardian or on World Heritage Sites or candidate World Heritage Sites.

If the above is provided it should be possible to avoid a 'Further Information' (FI) request and to proceed to deal with the application through the recommendation of planning conditions or, where appropriate, a recommendation for refusal. FI requests should not take the form of blanket requests for geo-physical survey across the whole development area or requests for archaeological testing across the whole development area on the sole grounds that the development is large-scale. Any requests for FI by way of geo-physical survey or archaeological testing should be based on specific and verifiable indicators of archaeological potential (e.g. close proximity to known archaeological monuments, presence in the area proposed to be development of potential archaeological features identified from aerial photographs or potential features identified in the course of field walking).

The developer should be given the option of submitting revised plans and proposals which avoid the need for any such geo-physical survey or testing by way of FI, e.g., by excluding areas in proximity to known archaeological monuments or excluding potential archaeological features. In addition, it may not be necessary to seek to insist on all such matters being addressed by way of FI before the grant of planning permission – it may be acceptable to deal with areas of unclear archaeological potential by way of condition of grant of planning permission requiring geo-physical survey and/or testing followed by avoidance or appropriate mitigation. This will be a matter for judgment in particular cases and can be discussed with the Senior Archaeologist for Licensing and Planning Unit as necessary.

Approach of NMS in considering a planning application for solar farm development

Archaeological monuments identified in the archaeological impact statement as referred to above or in FI (where it proves necessary – see above) should be avoided. If the developer is not willing to submit revised plans and proposals to achieve this, then this may be considered grounds on which to base a recommendation for refusal of planning permission.

Where the development would result in serious negative impact on visual amenity (including views from or of) archaeological sites which are prominent in the landscape or publicly accessible, and most especially in relation to national monuments in State care or World Heritage Sites or candidate World Heritage Sites, then this may be considered grounds on which to base a recommendation for refusal of planning permission.

Matters to be provided for by way of conditions on a grant of planning permission will, depending on the case and the particular circumstances, include:

1. Geo-physical survey and/or archaeological testing of areas of archaeological potential (e.g. areas in proximity to known archaeological monuments or of potential archaeological features) and avoidance of any areas confirmed by such survey or testing to be of archaeological importance (in general, solar farms should avoid all direct impact on known archaeological monuments and preservation by record of such monuments should be an option of last resort);
2. Geo-physical survey of any other areas where there would be extensive ground disturbance with likely serious negative impact on unidentified archaeological features, with appropriate provision for archaeological testing and avoidance, as necessary, of features identified in such geo-physical survey. This could extend to a geo-physical survey of the whole development area if a case can be made for this in the particular circumstances applying, but this should be discussed with the Senior Archaeologist for Licensing and Planning Unit;
3. Measures to minimise impacts from the driving of machinery over land;
4. Measures to reduce or eliminate any adverse visual impacts.

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Accreditations
ISO 9001:2015
ISO 14001:2015
ISO 45001:2018