FEHILY TIMONEY

DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

BALLYNAHONE LONG DURATION ENERGY STORAGE

Planning Statement

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FuturEnergy Ireland Development DAC

FuturEnergy Ireland

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PLANNING STATEMENT

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Abstract: Fehily Timoney and Company is pleased to submit this Planning Statement to Donegal County Council for the proposed Long Duration Energy Storage Facility in the Townland of Ballynahone. This Planning Statement outlines the Applicant's responses to specific relevant policy, showing how the proposals are consistent with same.

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1. EXECUTIVE SUMMARY

1.1 Overview of the Project

The Ballynahone Long Duration Energy Storage (LDES) project, proposed by FuturEnergy Ireland Development DAC (the Applicant), aims to provide long-term energy storage to support the increased penetration of renewable energy into the national grid.

The project is located in Ballynahone, Co. Donegal, adjacent to the Trillick 110 kV substation. Donegal is currently suffering from some of the highest levels of transmission grid congestion of any region in Ireland. This storage facility will play a pivotal role in managing surplus renewable energy that cannot currently be accommodated on the grid at times of high renewable energy output and store this energy to discharge during times of low renewable output.

The Iron-Air technology proposed for this site has the potential to be a gamechanger for Irelands power sector decarbonisation ambitions. The use of earth abundant materials in the manufacturing of this technology enables large amounts of energy to be stored at very low cost. This first small scale commercial demonstration project will have an energy discharge capacity of 1GWh when fully charged, more than 50% the energy capacity of Turlough Hill, Ireland's only built (storage) pumped hydro project. The technology is also inherently safe with no pathway for thermal runaway even in the event of a short circuit within the cells.

The project is the subject of a live EU Innovfund grant application and this application has been supported by significant stakeholders in Ireland, including the CEO of EirGrid, the Chairperson of the Commission for Regulation of Utilities (CRU), a Principle Officer in the Department of Environment, Climate and Communications (DECC) and the North Western Regional Assembly.

1.2 Importance for EU and Irish Policy Objectives

The Ballynahone LDES project aligns closely with several critical EU and Irish energy and climate policies. At the EU level, the project is consistent with the European Union's Renewable Energy Directive (RED III), which sets ambitious targets for reducing greenhouse gas emissions and increasing the share of renewable energy. By contributing to the integration of renewable energy into the grid, the project supports the EU's climate neutrality goal by 2050 and aids the achievement of the target of at least 42.5% of energy consumption from renewable sources by 2030.

At the national level, Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021 commits the country to a climate-neutral economy by 2050. The Ballynahone project is instrumental in this vision, addressing the country's renewable energy goals as outlined in the Climate Action Plan. It supports the National Energy Security Framework and the National Energy and Climate Plan, both of which emphasize the need for secure and resilient renewable energy infrastructure, particularly in the context of recent geopolitical events and rising energy security concerns.

The project is also closely aligned with DECC's recently published "Storage Policy Framework".

1.3 Thorough Process of Technology and Site Selection

FuturEnergy Ireland applied a rigorous selection process for both the site and technology of the LDES project. In 2022, the company undertook a detailed geographical information system (GIS)-based screening exercise to identify the most suitable locations for energy storage in the region. Multiple data sets were considered, including proximity to substations, environmental constraints, and local land use. Key considerations in the site selection included proximity to110 kV substations, minimizing cable length and environmental impact, and the presence of commercial forestry, which provides natural screening while minimizing the loss of potential valuable habitats. It is important to note that this is just one of a number of suitable sites identified around the Country. Development work is underway on a pipeline of projects that are designed to meet emerging system needs in the period 2028 to 2035.

The technology selected, iron-air batteries, was chosen for its proven safety, scalability, and low cost. This system, developed by Form Energy, can store up to 100 hours of energy, allowing it to manage surplus renewable energy effectively and avoid fossil fuel use during renewable energy shortfalls. The iron-air technology offers significant benefits, such as the absence of thermal runaway risks common to lithium-ion batteries and the potential for end-of-life recycling, supporting Ireland's circular economy objectives.

1.4 Alignment with Local Regulations and Objectives

The proposed development aligns with Donegal County's local policies and planning frameworks. Specifically, the County Donegal Development Plan 2024-2030 supports the enhancement of energy storage and grid infrastructure to promote renewable energy development. The Ballynahone project contributes to the local objective of improving energy resilience, particularly in rural areas, and supports Donegal's Climate Adaptation Strategy 2019-2024, which emphasizes the need for resilient energy networks in the face of climate change. The project site, located within an area of Moderate Scenic Amenity, has been chosen with careful consideration to minimize visual and environmental impacts while aligning with local development guidelines.

Additionally, the project complies with national and regional policies under Ireland's Local Authority Climate Action Plan (LACAP) and the National Energy Security Framework, highlighting the project's role in aiding Ireland's transition to a low-carbon economy. Extensive consultations with Donegal County Council have addressed concerns about the industrial nature of the project, with clear conclusions drawn that the LDES facility is a strategic renewable energy storage project of significant public interest.

1.5 Conclusion

The Ballynahone Long Duration Energy Storage project represents a critical development in Ireland's renewable energy landscape, providing necessary infrastructure to support the national grid's transition to renewable energy. Its selection process reflects a commitment to sustainability, technical rigor, and alignment with both European and Irish policy objectives. As Ireland seeks to meet its 2030 and 2050 climate goals, the Ballynahone LDES facility will play a pivotal role in achieving energy security and reducing reliance on fossil fuels.

2. INTRODUCTION

This Planning Statement has been prepared to support the proposed Long Duration Energy Storage (LDES) development in the townland of Ballynahone, near Buncrana, County Donegal.

This report addresses five key planning issues and has been prepared in direct response to pre-planning consultations undertaken with Donegal County Council.

1. **Clarification of the type of development** - in this section we outline the background to the technology that is incorporated with the proposed LDES.
2. **Need for the development** - in this section we outline why there is a need for this type of development, and how development of this type is required by Global, European and National policies.
3. **National Support Mechanisms** - here we outline how the development is supported nationally and go into detail on the various support mechanisms which are being made available for development of this type.
4. **Direct Response to Queries on Site Selection Process** - here we outline the macro and micro rationale for the siting of the proposed development, and how the proposed development site was chosen, as well as potential alternative sites which were considered.
5. **Consistency with the Development Plan Policy** - in this section we outline how we consider the proposed development to be consistent with all relevant development plan policies and objectives. It is clearly set out how the proposed development is consistent with these. A particular focus is made to refer to specific points raised in the Local Authority pre-planning meeting comments.

This document should be read in conjunction with the plans and particulars submitted as part of this planning application. Particular attention should be given to the Planning and Environmental report which is cross referenced throughout this Planning Statement, as well as the Appropriate Assessment Screening Report and Ecological Impact Assessment.

3. TECHNOLOGY DESCRIPTION - IRON-AIR BATTERIES

The battery technology deployed on the site will be iron-air, provided by *FORM Energy.* Deep grid decarbonization requires new cost-effective technologies capable of storing electricity for multiple days and providing this power back during renewable energy lulls, thermal power plant or transmission outages, fuel shortages, and extreme weather events. This project will utilize FORM's rechargeable iron-air battery, which when fully charged, can continuously dispatch electricity for 100 hours at system costs competitive with legacy power plants. By providing the capability to deliver 100 hours of continuous discharge, when paired with the abundant renewable energy of Ireland's North-West, Form's iron-air system provides critically needed clean, firm capacity to reduce power system emissions while maintaining the highest levels of system reliability.

Iron-air batteries, which were first explored by NASA in the 1970s, are based on the principle of reversable rusting. While discharging, the battery breathes in oxygen from the air and converts iron metal to rust. While charging, the application of an electrical current converts the rust back to iron and the battery breathes out oxygen. FORM has chosen this technology for many of the same reasons as those that make it an attractive choice for Ballynahone:

- **Safety:** There is no risk of the thermal runaway mechanism common to lithium-ion batteries. The cells consist of electrodes and iron anodes submerged in a water-based, non-flammable electrolyte. There is no path for uncontrolled chain reactions that could lead to fire risk. The batteries also contain no heavy metals.
- **Proven:** Iron-air battery technology was proven viable as early as the 1970s, but the need for grid-scale electricity storage was not required in the 1970s. FORM Energy has advanced this technology through extensive subscale and full-scale testing, along with a field deployment that has been operational since Q2 2023. By the time of construction of Ballynahone LDES (if consented), FORM expects to have delivered 5.5GWh of battery capacity to more than half a dozen customers, which include some of the largest utilities in the United States.
- **Circularity:** Iron forms the bulk of the battery by weight and can be recycled indefinitely. As such, iron-air technology offers significant end-of-life advantages, and can support Ireland's transition to a circular economy.

A separate technical report on the proposed technology prepared by FORM Energy is enclosed as Appendix 1 of the Planning and Environmental Report.

4. NEED FOR DEVELOPMENT

4.1 Introduction

Over recent times, efforts to decarbonise our electrical gird has led to the uptake of renewable energy sources such as onshore wind energy and more recently solar energy. This successful uptake has given significant benefits to Ireland, not only decarbonisation but also security of energy supply. In 2023, 38.9% of our electrical energy came from renewable sources[1], 85.7% of which came from wind, thereby avoiding the release of 5.5MtCO_2 of Carbon into the atmosphere. The Irish government has set out through each revision of the Climate Action Plan a target of 80% electrical energy to come from renewable resources by 2030. This target will be mostly met by both new onshore and offshore wind along with solar.

4.2 The Challenge

Moving from 38.9% to 80% renewable electricity penetration comes with significant challenges for Ireland, as outlined below:

- Firstly, much of the remaining onshore wind energy potential is located in the western and northwestern regions of the country which does not have adequate electrical infrastructure to handle increases in power capacity. This will inevitably result in wind farms being asked to reduce or stop (known as Dispatch Down) their output, thereby renewable energy which could have been produced and used by the Irish people will be lost. Therefore, extra renewable capacity in these regions will contribute less and less to the Climate Action Plan if measures are not taken.
- Secondly, by its very nature, renewable sources such as wind and solar are intermittent. Lull periods can last hours or even days. Traditionally, fossil fuel electrical generators such as natural gas are scheduled/dispatched during these lull periods so that the electricity demand can be met. However, the use of fossil fuels contravenes the Climate Action Plan and can therefore no longer be relied on for this purpose as we move out to 2030.

The highlighted challenges for renewable energy show that by simply increasing renewable generation capacity alone will not get Ireland to a target of 80% renewable electricity. Therefore, to address these significant issues a form of energy storage technology is required that can store large quantities of renewable energy is needed.

The opportunity loss with regard to "Dispatch Down" can be illustrated in the following example. A 50MW wind farm operating at maximum output is ordered to reduce its output by 30% for 5 hours. In this scenario, the lost energy would equate to 175MWh. This lost electrical energy is enough to supply approximately 15,000 homes for one day based on average household consumption of 4,200KWh per year provided by The Commission for Regulation of Utilities (CRU).

[1] https://www.seai.ie/publications/Energy-in-Ireland-2023.pdf

The Irish government also recognises the importance of energy storage to meet its 2030 renewable electricity targets. The Climate Action Plan includes an objective that by 2030, "Dispatch Down" of renewables must be below 7% so as to support the higher penetration of renewables. A recent energy storage 'Game Changer' report completed by Energy Storage Ireland and Baringa on the benefits of energy storage outlined that County Donegal is facing Dispatch Down levels of 30%[2], well in excess of the Government's 2030 target of 7%.

As mentioned above. a technology which can perform long duration energy storage (greater than 4 hours of storage time) is required. To date, 730MW of energy storage technologies such as Lithium-ion batteries have been deployed in Ireland. However, these deployments are mostly smaller energy capacity batteries (<4hours) which are not of the appropriate scale to tackle the problems faced as outlined above.

4.3 Addressing Dispatch Down.

To address the issues, the applicant is seeking to bring Iron-Air long duration battery technology to Ireland. Iron-Air battery technology has the unique advantage of being able to store up to 100hr of energy. The proposed development located at Ballynahone is 10MW/1000MWh in size, giving 100hr of energy storage capacity. Based on Commission of Regulation for Utilities (CRU) household energy consumption data, a full discharge of the Ballynahone Iron-Air battery has enough energy to supply approximately 20,000 households for up to 4 days.

The benefits of 100hr energy storage for Donegal has been studied extensively in the 'Game Changer' report[3]. Figure 4-1 from the Game Changer report, outlines that storage technologies which are between 24hr and 100hr, such as Iron-Air, could reduce the level of constraint to 3%. This is in keeping with the government's target of 7% nationally by 2030.

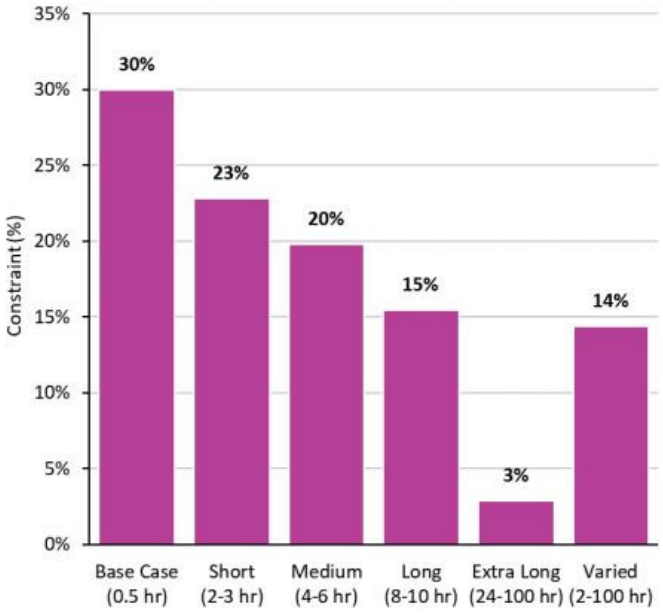


Figure 4-1: Renewable Constraint Volumes in Donegal (Figure 3 of the Game Changer Report, prepared by Baringa and commissioned by Energy Storage Ireland)

[2] https://www.energystorageireland.com/wp-content/uploads/2022/05/GameChanger-ESI-Report-May2022-Web-1.pdf
[3] https://www.energystorageireland.com/wp-content/uploads/2022/05/GameChanger-ESI-Report-May2022-Web-1.pdf

Dispatch Down is a significant concern for new renewable energy projects which seek to connect to the national grid. New projects are termed as 'non-priority dispatch'. EirGrid, the transmission system operator, has modelled the likely Dispatch Down levels out to 2030 for 'non-priority renewable dispatch' under a variety of different scenarios[4]. In addition, and as part of its reporting, EirGrid has also provided the likely dispatch down levels for each electrical transmission system substation, subdivided by study areas of Ireland. The proposed development at Ballynahone is situated in study Area A (mostly Donegal) which shows high levels of Dispatch Down[5]. The average dispatch down values for non-priority wind in Area A, under a variant of different scenarios modelled by EirGrid, is 49% in 2026, 48% in 2028 and 28% in 2030. This can be seen graphically in Figure 4-2 below.

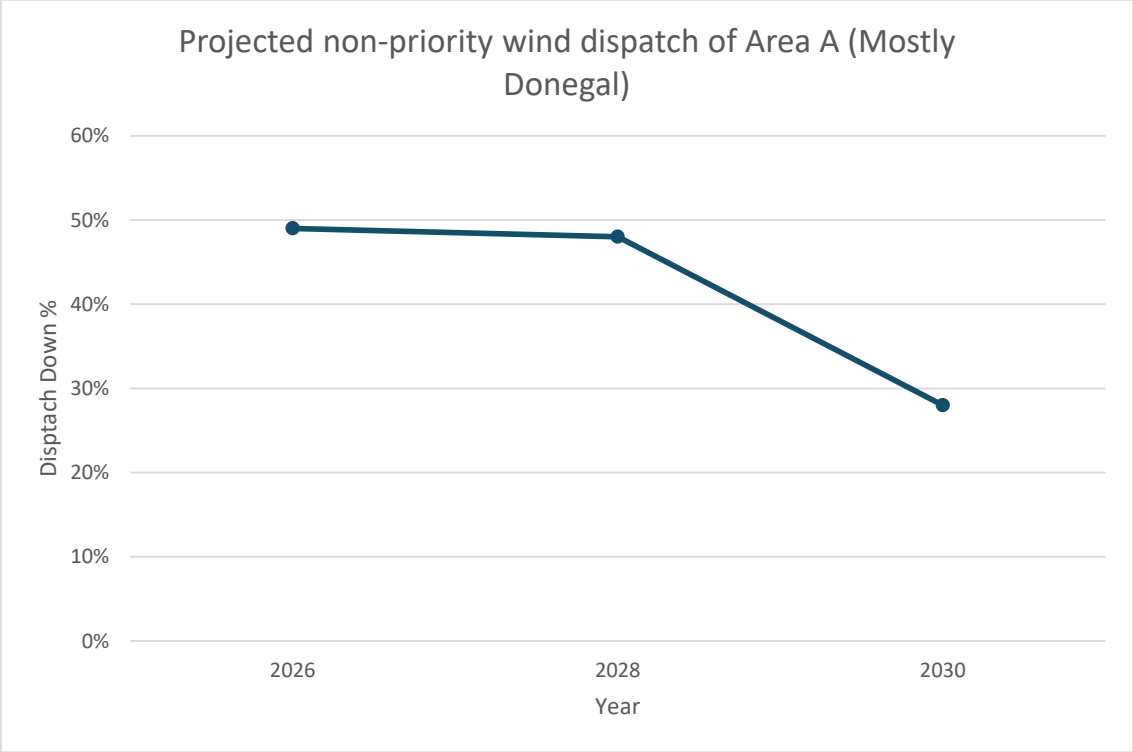


Figure 4-2: Projected Dispatch Down Levels for Area A (Mostly Donegal)

As the key challenges are large in scale, multiple long duration energy storage sites located throughout the country such as the proposed development are required to overcome these key challenges and to deliver 80% renewable electricity by 2030.

[4] https://cms.eirgrid.ie/sites/default/files/publications/ECP-2.3-Solar-and-Wind-Constraints-Report-Assumptions-and-Methodology-v1.1.pdf
[5] https://cms.eirgrid.ie/sites/default/files/publications/ECP-2.3-Solar-and-Wind-Constraints-Report-Results-for-Area-A-v1.0.pdf

4.3.1 Why 100hr Iron-Air Technology

There is a considerable body of evidence that points to the need for ultra-low cost long duration energy storage technologies to be able to manage the significant surplus renewable energy volumes noted above, as Ireland transitions to a decarbonised power system. Members of the FuturEnergy Ireland team (the Applicant) were involved in an SEAI funded study[6] in 2019 that examined the effectiveness of different renewable curtailment mitigation strategies which included a specific work package examining the effectiveness of storage with different energy capacities (MW / MWh ratios). In this study the problem was defined by first adding wind to a 2020 system without implementing any integration or curtailment mitigation solutions until a 70% Renewable Electricity Target (RES-E) level was achieved. This is the starting point of all curves in Figure 4-4 below (top left corner of the graph), and every point on every line represents a 70% RES-E system. In the absence of any curtailment mitigation solution, the levels of renewable curtailment are extremely high meaning that approximately 43% of the available renewable energy cannot be utilized.

In this work package a multi scenario analysis was conducted examining the impact of gradually increasing the "idealised" interconnector capacity and "idealised" storage capacity with varying energy limitations. In this context idealised interconnectors means that the model was always able to export up to the full available capacity to mitigate curtailment. In the context of storage, it means that the model tried every other means of mitigating curtailment before charging a storage technology (due to its energy limitation), and then once a curtailment event was over, it sought to discharge the storage technology as quickly as possible to maximise its availability for the next event. The results should be considered as the theoretical maximum curtailment benefit that can be provided by each technology. The idealised interconnector could also be considered to closely represent the curtailment benefits of an energy unlimited storage technology, and in turn, 100-hour storage would have very similar benefits to an energy unlimited storage solution.

These results clearly illustrate the importance of energy capacity when seeking to use storage technologies to directly absorb surplus renewables on systems with very high levels of RES-E at either a system or local network level.

[6] https://www.seai.ie/documents/research-projects/RDD-000326.pdf

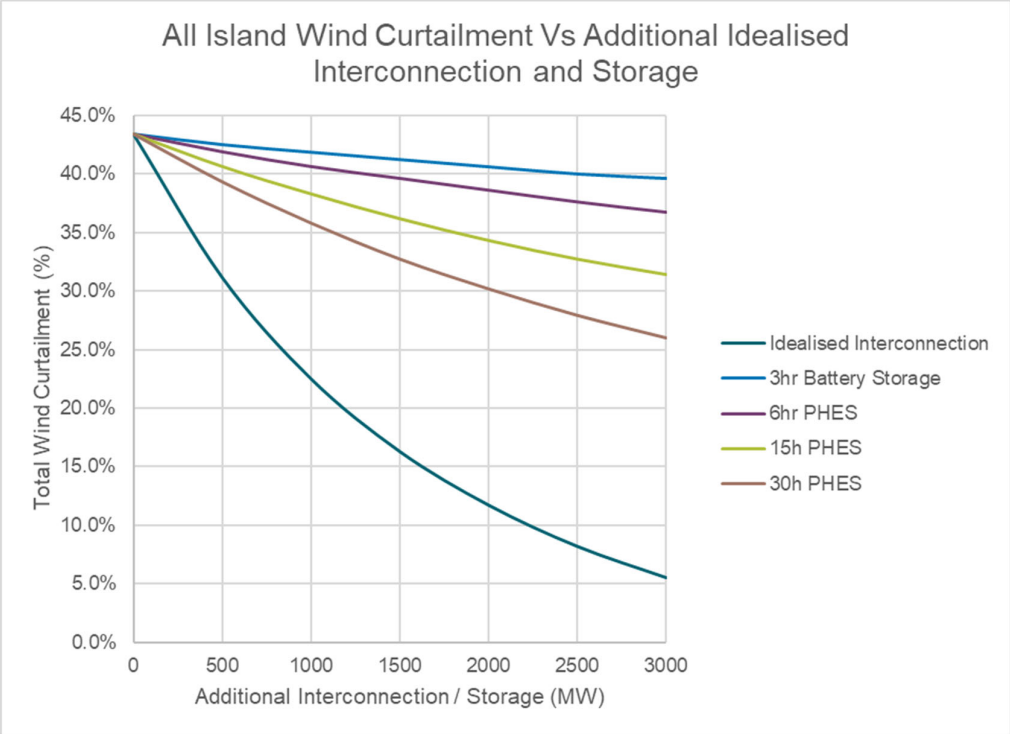


Figure 4-3: Wind Curtailment vs Additional storage capacity of varying durations and idealised interconnection

In May 2022, Energy Storage Ireland and Baringa published 'Game Changer'[7] a report showing the benefits that various durations of energy storage can bring to the system and to end consumers on the island of Ireland by 2030. The key findings from this study are as follows:

By participating in the Irish day-ahead energy market, energy storage can reduce day-ahead carbon emissions by 50% by using long-duration storage technologies. This makes a material contribution to meeting ambitious 2030 power sector decarbonisation goals.

Strategic deployment of energy storage in transmission constrained regions of the network reduces the dispatch-down of renewable generation from constraints without the need for network reinforcement, unlocking additional carbon savings.

By contributing to security of supply, helping to support renewable capacity, and displacing fossil fuels in the balancing market, energy storage can deliver a net saving to end consumers in Ireland of up to €85m per year.

These benefits are additional to the carbon, renewable curtailment, and end consumer savings offered by energy storage through the provision of zero-carbon system services.

Energy storage helps the integration of renewables at all stages by ensuring that generation is not wasted; reducing oversupply by up to 60%, constraint volumes by up to 90%, and curtailment by 100%.

[7] https://www.energystorageireland.com/wp-content/uploads/2022/05/GameChanger-ESI-Report-May2022-Web-1.pdf

Figure 4-1 in section 4.1 above illustrates the network congestion benefits of 24 to 100-hour storage in Co. Donegal in Ireland, the location of this proposed pilot project. This shows the reductions in network congestion (% of renewable energy lost due to lack of transmission grid capacity) associated with deployments of storage with varying durations / energy capacities in Co. Donegal, Ireland (the location of this pilot project) Of particular relevance, is the significant system and transmission grid benefits seen with 100hr storage as is proposed for this project.

It is important to put the energy capacities noted above into perspective. Turlough Hill in County Wicklow, is Ireland's only operating pumped hydro storage project, and the largest operational storage project in Ireland. Today, Turlough Hill has an energy capacity of approximately 1.8GWh when fully charged. The 3000MW of 30hr storage modelled in the SEAI study above equates to 90GWh, the equivalent of approximately 50 times the energy capacity of Turlough Hill. This enormous requirement for storage cannot be met solely by established technologies and requires a breakthrough technology with low capital costs per MWh. In this context, the 100hr Iron air technology provides key attributes:

- **Scalability:** Iron is one of the most globally abundant resources on earth and is mined on every continent. With Form bringing to the fold world-class collaborators such as Luxembourg based manufacturing company ArcelorMittal, Multi Day Storage (100Hr) production can catalyse the significant scale-up of low-carbon direct reduced iron, a key component of the FORM battery. For context, of the 2.8 billion tonnes of metals mined globally in 2022, 2.6 billion tonnes were iron.
- **Modularity / Locational Flexibility:** MDS can be sited anywhere on the grid and at the highest value interconnection positions. FORM's system design applies the same principles of low-cost, modular architecture used today in solar and lithium-ion deployments, making it easy to design the right sized solutions in the grid locations with greatest need.
- **Safety:** There is no risk of the thermal runaway mechanism common to lithium-ion batteries. The cells consist of electrodes and iron anodes submerged in a water-based, non-flammable electrolyte. There is no path for uncontrolled chain reactions that could lead to fire risk. The batteries also contain no heavy metals.
- **Circularity:** Iron forms the bulk of the battery by weight and can be recycled indefinitely. As such, iron-air technology offers significant end-of-life advantages, and can support Ireland's transition to a circular economy.
- **Low-Cost Potential:** The active components of Form's battery are some of the safest, cheapest, and most abundant materials on the planet — iron, water, and air. Iron-air is the lowest energy storage cost medium, with a chemistry entitlement cost of <$1/kWh. On a global scale, the turnkey installed system capital costs will be one-tenth that of lithium ion (<$20/kWh).

4.3.2 Response to Global Policies

Ireland ratified the Paris Agreement in 2016 and is bound by the Agreement to increase the ability to adapt to the adverse impacts of climate change, foster climate resilience and encourage the development of low greenhouse gas (GHG) emissions. The Paris Agreement further sets out actions, known as Nationally Determined Contributions, which include commitments to reduce GHG emissions, enhance adaptation actions, finance and capacity building. Ireland's contribution comes under the European Union NDCs targets and is based on the European Union's 2030 emissions reduction targets. Under this framework, Ireland has committed to reducing emissions from sectors outside the EU Emissions Trading System by at least 30% relative to 2005 levels. This target is governed at the EU level by the Governance Regulation, the Effort Sharing Regulation; and the Land Use, Land Use Change and Forestry Regulation among others.

Ireland is also bound by the United Nations Framework Convention on Climate Change, which reaffirms the Paris Agreement goal of limiting the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5 °C. The Convention also stressed the urgency of action "in this critical decade" when carbon dioxide emissions must be reduced by 45 per cent to reach net zero around mid-century.

In response to this, the Government enacted the Climate Action and Low Carbon Development Act 2015 and the Climate Action and Low Carbon Development (Amendment) Act 2021 which provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.

The Proposed Development directly supports the above global policies through the provision of increased energy security within the area. Acting as a support for existing and future renewable energy projects in the area, the Project will encourage the development of such as an integral part of fulfilling Ireland's commitment to an environmentally sustainable and low carbon future.

4.3.3 Response to EU Directives and Policies

The amending Directive EU/2023/2413 on the 'Promotion of the use of Energy from Renewable Sources', the so-called RED III Directive, includes a binding renewable energy target for the European Union for 2030 of 42.5%. As part of this Directive, Ireland's overall national target for the share of renewable energy sources (RES-E), forms the backbone of Ireland's strategy to achieve the overall renewable energy target for 2030. The latest National Energy and Climate Plan, published in July 2024, sets a RES-E target of 68.9% for 2030. This target, in combination with the all-economy renewable target, means that Ireland's proposed trajectory will not be in line with the desired trajectory set out in the Governance Regulation.

In 2016, the EU tackled the transition towards clean energy and a carbon-neutral economy by rewriting the EU's energy policy framework to facilitate a clean and fair energy transition. Member States will continue to choose their own energy mix but must meet new commitments to improve energy efficiency and the take-up of renewables in that mix by 2030. The new rules on the electricity market, which have been adopted as a result, will make it easier for renewable energy to be integrated into the grid, encourage more inter-connections and cross-border trade, and ensure that the market provides reliable signals for future investment.

The 2030 Climate and Energy Framework, adopted first in October 2014 and subsequently updated in 2018, and 2022 sets out three key targets for the year 2030:

- At least 55% cuts in greenhouse gas emissions (from 1990 levels).
- At least 42.5% share of renewable energy.
- At least 11.7% improvement in energy efficiency.

In this context, Ireland must rapidly advance the deployment of renewable resources. This marks a significant escalation in ambition and will heavily rely on a fundamental transformation of the energy sector. The Green Deal outlines specific objectives to curtail carbon emissions and improve practices related to forestry, agriculture, sustainable transportation, recycling, and renewable energy sources. Moreover, the action plan entails the potential implementation of carbon tariffs for nations that fail to restrain their greenhouse gas emissions.

Ireland is further bound by the European Climate Law, which entered into force on 9th July 2021, to work towards the goal of climate neutrality by 2050. As an intermediate target, the European Climate Law sets out to reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

The RePower EU Plan, published on 18th May 2022 sets out a response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine and the need for the role of renewable energy to slow down climate change and to phase out Russian fossil fuels by 2027. The RePower EU Plan specifically requires that Member States should speed up the green transition and spur massive investment in renewable energy. We will need to enable industry and transport to substitute fossil fuels faster to bring down emissions and dependencies. It is important to note the importance of this project for the rollout of renewable energy on the national grid, as well as the advancement of the energy security objectives of RePower EU.

There have been two critical pieces of European legislation which have a significant impact on how the planning authority should have regard to National Climate and Energy Policy in the context of assessing this project pursuant to Section 34(2) of the Planning & Development Act 2000 (as amended).

Council Regulation 2022/2577[8] represents an obligation on EU Member States to accelerate renewable energy projects such as this one as a matter of urgency, the deployment of which is viewed as vitally important to the achievement of the EU's strategic objectives. As per Article 10 of the Regulations, the Regulation is "binding in its entirety and directly applicable in all Member States".

Significantly, the Regulation incorporates and makes clear that renewable energy projects enjoy a rebuttable presumption that they are of overriding public interest and serving public health and safety, in particular, for the purposes of the relevant Union environmental legislation, except where there is clear evidence that these projects have major adverse effects on the environment which cannot be mitigated or compensated for.

The Regulation is of critical importance to the planning authority's decision. It makes clear that the planning authority must take as its starting assumption that the proposed LDES is of overriding public interest and contributes to public health and safety. Although the planning authority retains discretion, the threshold for refusal of a grant of planning permission is, therefore extremely high.

Permission can only be refused if the planning authority is satisfied that there are significant counter-vailing factors that are sufficient to rebut the presumption.

RED II[9] set a binding overall Union target to reach a share of at least 32% of energy from renewable sources in the Union's gross final consumption of energy by 2030. The text that has been adopted by the European Parliament and endorsed by COREPER increases this target to 42.5%. This target is now captured in RED III.

Additionally, the Directive obliges EU Member States to "collectively endeavour to increase the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 to 45%"[10].

The RED III directive also includes specific observations and measures related to the accelerated deployment of renewable energy, storage and grid infrastructure projects across EU member states these include:

- Specific areas, suitable for developing renewable energy projects should be designated as 'renewables acceleration areas'.
- The process of designation of these renewables acceleration areas should be streamlined.
- Projects in renewables acceleration areas should benefit from streamlined administrative permit-granting procedures.

[8] https://eur-lex.europa.eu/eli/reg/2022/2577/oj
[9] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001
[10] Article 3, paragraph 1.

- The designation of renewables acceleration areas should not prevent the installation of renewable energy projects in all available areas.

The Directive came into force in November 2023 and Member States have a period of 18 months to implement it. While time for implementation has not expired, this chapter provides further clear policy support at European level, and it is appropriate the planning authority should apply and/or have regard to the same. The Directive is highly relevant for three reasons.

Firstly, it envisages and requires a step-change in terms of the immediacy and ambition for renewable energy development across the Member States, without which the Union's climate neutrality objective simply cannot be achieved.

Secondly, it identifies the social and environmental benefits of renewable energy development as noted in Recital 2:

> *"By reducing those greenhouse gas emissions, renewable energy can also contribute to tackling challenges related to the environment, such as the loss of biodiversity, and to reducing pollution" and which will help to achieve the aim to "protect, restore and improve the state of the environment by, inter alia, halting and reversing biodiversity loss" while bringing "broad socioeconomic benefits, creating new jobs and fostering local industries"*

Thirdly, and significantly, the Directive identifies the imperative necessity for the designation of suitable sites by Member States for the development of renewable energy. While the Directive does not displace the County Development Plan, that imperative strongly supports the submission that the planning authority can and should grant permission if it is satisfied that the Proposed Development accords with proper planning and sustainable development, notwithstanding the County Development Plan. Quite clearly the Directive has adopted the policy position that local or regional objections to renewable energy development are incompatible with the achievement of climate neutrality by 2050 as local policies are not delivering on the EU objectives with regard to renewable energy.

4.3.4 Response to National Policies

The Climate Action and Low Carbon Development (Amendment) Act 2021, signed into law on the 23rd of July 2021, includes the following key elements:

- Places on a statutory basis a 'national climate objective', which commits Ireland to pursue and achieve no later than 2050, the transition to a climate resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy;
- Embeds the process of carbon budgeting into law, Government is required to adopt a series of economy-wide five-year carbon budgets, including sectoral targets for each relevant sector, on a rolling 15-year basis, starting in 2021;
- Actions for each sector will be detailed in the Climate Action Plan, updated annually;
- A National Long Term Climate Action Strategy will be prepared every five years.

The Climate Action and Low Carbon Development (Amendment) Act 2021 establishes a framework with clear, legally binding targets and commitments, and ensures the necessary structures and processes are embedded on a statutory basis to achieve our national, EU and international climate goals and obligations in the near and long term. The project aligns with the Act through the contribution to the emissions reduction objective and supporting the national electricity grid in the increase of renewable energy sources.

Last updated in July 2024, Ireland's integrated National Energy and Climate Plan 2021-2030 (NECP) establishes key measures to address the five dimensions of the EU Energy Union:

- Decarbonisation: GHG emissions and removals and Renewable Energy;
- Energy efficiency;
- Energy security;
- Internal energy market;
- Research, innovation and competitiveness.

The Proposed Development is supported by the NECP 2021-2030 in particular by improving energy efficiency, with less energy loss in periods of reduced demand or renewable oversupply.

Project Ireland 2040: The National Planning Framework (NPF) published in February 2018, identifies the role of renewable energy sources in our transition to a low-carbon energy future throughout the document. National Policy Objective 55 sets out to:

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

The NPF identifies that The National Climate Policy Position establishes the national objective of achieving a transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050. This objective will require investment in new energy systems and transmission grids to ensure a well-distributed energy system, harnessing both on-shore and off-shore potential from sources including wind, wave and solar.

The Proposed Development aligns with National Policy Objective 55 by aiding the national grid and promoting renewable energy use.

The National Planning Framework (NPF) further recognises the economic contribution and potential of Donegal and highlights the need to strengthen rural economies within the county by improving connectivity and addressing infrastructural deficits. The Proposed Development aims to address infrastructural deficits by improving the existing electrical infrastructure and ensure its reliability and sustainability.

On 10 July 2024, the Draft First Revision to the National Planning Framework was published. The Draft update includes NPO 71 which seeks to "support the development and upgrading of national electricity grid infrastructure, including to support the delivery of renewable electricity generating development". and NPO 75 seeks to distribute the renewable energy targets as set out in the Climate Action Plan 2024 to each Region.

The National Development Plan 2021-2030 (NDP), published in October 2021 in tandem with the NPF, identifies how the anticipated level of investment will further the economy's growth potential and allow for the construction sector to provide the capacity and capability required to deliver infrastructural projects.

The NDP outlines several key energy initiatives, that set out to diversify our energy resources, and to assist in the transition towards a decarbonised society, noting that:

"Climate action is another major driver, given Ireland's goal of an average 7 percent reduction per annum in greenhouse gas emissions from 2021 to 2030 which will require major increases in investment in areas such as energy efficiency".

If constructed, the Proposed Development will form part of the national grid infrastructure necessary to transition towards this decarbonised society, sought in the NDP. The proposed development will serve to assist the maintenance of stability in the electrical supply in the region by ensuring that there is a ready supply of electricity available when required to meet variable demands for electricity and strengthen energy security.

Ireland's Climate Action Plan 2024 (CAP24), published in December 2023, provides a framework for delivering the Government's target of a 51% reduction (relative to 2018) in greenhouse gas (GHG) emissions by 2030. CAP24 follows the Climate Action and Low Carbon Development (Amendment) Act 2021, which commits Ireland to a legally binding target of net zero greenhouse gas emissions no later than 2050, and a reduction of 51% by 2030.

CAP24 outlines five vital sectors, of which one is "Electricity" where it intends to issue a recommendation paper on market options to incentivise Long Duration Energy Storage. Key messages outlined in this sector include the following:

- *Increasing renewable generation to supply 80% of demand by 2030 through the accelerated expansion of onshore wind and solar energy generation, developing offshore renewable generation, and delivering additional grid infrastructure.*
- *Transforming the flexibility of the electricity system by improving system services and increasing storage capacity.*

The proposed development seeks to contribute to the ambitious renewable energy targets as set out in CAP 24 and help toward achieving the target of net-zero emissions by 2050.

The National Energy Security Framework, adopted in April 2022 as a response to the European Commission's RePower EU action statement, underlines the importance of new renewable energy generation projects in order to address Ireland's energy security needs in the context of the war in Ukraine. Considering this, the Proposed Development will assist in securing Ireland's energy supply in light of the ongoing conflict in Ukraine and associated energy supply chain issues leading to shortages and energy price increases.

4.3.4.1 Energy Storage Policy Framework

As a direct requirement of European and National Energy Policy. Ireland adopted its first 'Electricity Storage Policy Framework' (ESPF) in July 2024. The policy framework is a first of kind policy, which clarifies the key role of electricity storage in Ireland's transition to an electricity-led system, supporting Irelands 2030 climate targets, it may be considered as a steppingstone on Ireland's path to net zero carbon emissions.

The Electricity Storage Policy Framework refers, in the main, to front of meter electricity storage, outlining its present roles, technical processes, market positions and regulatory structures in Ireland. The framework addresses the grids immediate and near-term needs by supporting the incorporation of electricity storage from the immediate up until 2040 and presents 10 government actions to support the role of electricity storage systems in Ireland's energy transition, identifying the key stakeholders and timelines for these actions. The key Government Actions include the following;

Policy Action 6: *"Support the immediate Procurement of Demand Flexibility products and of (long duration) electricity storage to meet specific network needs, in the Distribution and Transmission systems respectively."*

Policy Action 10: *"To ensure a route to market for the identified optimum (long duration) electricity storage requirements for 2030-2040 is in place before end of 2028".*

It is important to note that the procurement processes for both Demand Flexibility Products and for (long duration*) electricity storage are separate and additional to the electricity storage systems procured through the Capacity Renumeration Mechanism, the Renewable Electricity Support Scheme and the DS3 programme.

In October 2023 EirGrid published *'A Call for Evidence on the Market Procurements Option for Long Duration Energy Storage (LDES)'*. In the Call for Evidence (CfE) EirGrid define LDES as electricity storage systems with a capacity of 8+hours duration or above. This call for evidence stemmed from EirGrid's findings in *the Shaping Our Electricity Future* (SOEF) roadmap.

The SOEF findings identified electricity storage as a critical technology for the 2030 transition targets through its roles in reserve provision, increasing renewable penetration and congestion management.

The basis of the CfE was to develop a business case for LDES on the transmission system as well as identify the barriers to its incorporation, the service it may provide and explore potential options to provide revenue streams. The CfE analysed the needs case for storage as considered by EirGrid and presented various procurement plans to incorporate LDES onto the grid. The ESPF Action No. 6 fully supports Eirgrids plans in this area through seeking the procurement of up to 500MW of (long duration) electricity storage on to the transmission grid system.

The Framework is keen to point out that;

> *"The development process of an electricity storage system begins with an application for planning permission, at present a pre-requisite for the procurement of an electrical storage system contract for any of the System Operators' products. The Government is conscious that planning permission as a pre-requisite is a major hurdle in regard to the financial planning of projects and may delay a service provider's inclusion in a System Operator's product auctions and associated incentive schemes"*

Given the clear objectives and goals set out in the ESPF in particular its objective to be in a position to achieve a route to market by 2028, it is imperative that this planning application is submitted to Donegal County Council immediately so to give it every opportunity to meet the objectives of the ESPE.

4.4 Conclusion

As there is an identified need for improved energy security and increased renewable electricity production as outlined above, the Proposed Development supports those targets aiding the national grid and promoting renewable energy development.

As the nature of renewable energy technology is dependent on fluctuating climate and weather conditions, electricity providers are forced to resort to non-renewable energy sources at times of unfavourable conditions for renewable energy production. There is a clear need for developments such as that proposed. The provision of sustainable LDES facilities allows for increased usage of renewable energy sources in these contexts, as renewable energy through this technology can be stored for usage at times of decreased renewable energy production.

As more renewable energy sources are brought online in the move towards meeting the 2030 targets, there will be an increasing need for supporting grid infrastructure such as that proposed in this application. The proposed development allows for the storage of excess renewable energy when it is not required and then releasing it onto the grid when it is required. As such the proposed development is considered to be in line with global, EU and national policies to increase the provision of renewable energy and aiding the overall energy security. Projects like the proposed LDES are not only indispensable for attaining renewable energy objectives and contributing to a reduction in the EU's greenhouse gas emissions but also for realising the broader objective of decarbonising the economy in Ireland.

5. GOVERNMENT AND ENERGY SECTOR SUPPORT

In order to meet the technical requirements of facilitating renewable energy onto the national grid and in order to meet our binding 2030 renewable electricity targets of 80% a number of Sector specific studies have been prepared. Key stakeholders in the energy sector understand the need for this development and are putting its full support behind this project which is currently the subject of a live EU Innovfund[11] Application.

5.1.1 EirGrid: Irelands Transmission System Operator

Eirgrid's "Shaping our Electricity Future"[12] program has been developed to support the delivery of Irelands power system decarbonisation ambitions. Within their latest technical roadmap[13], Eirgrid note that the scale of the challenge facing Ireland in meeting its emissions targets is "without precedent". Long duration energy storage was among the key enabling solutions identified in this report, with preliminary estimates indicating that Ireland & Northern Ireland would need up to 2.75GW of LDES to support an 80% renewable electricity system. The roadmap also notes that markets "must evolve to support investment in a high renewables environment and need locational signals, congestion products and long duration storage".

In November 2023, EirGrid published a consultation on their "Tomorrow's Energy Scenarios"[14]. In this document EirGrid set out their latest thinking on long term energy scenarios for Ireland and Northern Ireland. The scenarios consider how electricity demand and generation might evolve from 2035 to 2050. The report explains what this could mean for electricity demand, generation, storage and interconnection supported by different technologies. Iron-Air batteries were the only non-lithium battery technology modelled in this study. Extract states: "Batteries – all batteries are assumed to be lithium-ion units with the exception of 100-hour batteries in Self-Sustaining, which for modelling purposes are assumed to be iron-air type batteries." This was re-affirmed in the final report which included significant projected volumes of 100hr Iron-Air storage[15].

The project team have had extensive engagements with EirGrid over the last several years in relation to:

- The need for long duration energy storage on the system to be able to absorb large volumes of excess renewable energy and use it to replace the most expensive thermal generation.
- The need for new sophisticated market frameworks to incentivise investment in the most cost effective "bulk energy time shifting" technologies.
- The specific potential of Iron-Air battery chemistry to cost effectively provide this bulk energy time shifting service due to its low entitlement cost, and use of earth abundant materials.

Following these engagements, a letter of support for the project grant application was provided by EirGrid and signed by their Chief Executive Officer and Chief Innovation Officer. In this letter, EirGrid noted their strong support, calling out that:

- "The proposal has the potential to help address the challenges posed by the increasing penetration of renewable energy sources into the electricity grid".
- "The project and technology are innovative and have the potential to be a valuable addition to electricity systems; "

[11] https://cinea.ec.europa.eu/funding-opportunities/calls-proposals/innovation-fund-2023-call_en
[12] https://www.eirgrid.ie/shaping-our-electricity-future
[13] https://www.eirgrid.ie/site-files/library/EirGrid/Shaping-Our-Electricity-Future-Roadmap_Version-1.1_07.23.pdf
[14] https://www.eirgrid.ie/industry/tomorrows-energy-scenarios-tes#TES%202023
[15] https://cms.eirgrid.ie/sites/default/files/publications/TES-2023-Final-Full-Report.pdf Section 7.2.5

5.1.2 Department of Environment, Climate and Communications

A letter of support for this project, in the context of the grant application referenced above, have also been provided by the Department of Environment, Climate and Communications (DECC) and signed by their Principal Officer with responsibility for Electricity Networks and Systems. In this letter DECC notes that "Government considers that electricity storage has a pivotal role in ensuring Ireland meets its national and EU-mandated climate and energy targets by 2030, and the longer-term objective of achieving carbon neutrality by 2050." They also note that,

"FuturEnergy Ireland's project and Form Energy's Iron-Air technology, has the potential to help address these specific challenges[16] *by increasing penetration of renewable energy sources into the electricity grid and agree that:*

- *The project and technology are innovative and have the potential to be a valuable addition to the Irish electricity system.*
- *The integration of an innovative procurement mechanism to the project further strengthens its learning potential."*

DECC[17] have also consulted on a storage policy framework for Ireland[18] in which they have noted that "the energy crisis following the Russian invasion of Ukraine has made the transition to renewables more urgent. It has also highlighted the importance of security of supply. Electricity storage can potentially play an increasingly significant role in the overall electricity system: providing system services, balancing supply and demand, and ultimately consolidating an electricity system with increased renewable penetration." The final published Storage Policy Framework document[19], includes a glidepath to the creation of an auction scheme for multi-day (>24hr) storage by 2028 at the latest, in recognition of its emerging importance on the Irish power system. Extracts from this policy document are included below.

In particular Action #7 to #10 inclusive

> *"are to maintain service provider certainty and ensure continued investment in electricity storage systems capable of bulk electricity time shifting to meet the needs of both intra-day and beyond demand, throughout the near-term (2030-2040) horizon."*

It also notes:

[16] Challenges of extended periods of over and under supply of renewable energy
[17] https://www.gov.ie/en/organisation/department-of-the-environment-climate-and-communications/
[18] https://www.gov.ie/en/consultation/c65b6-consultation-on-developing-an-electricity-storage-policy-framework-for-ireland/
[19] https://www.gov.ie/en/publication/90a72-electricity-storage-policy-framework/

> *"…with the third Carbon budget in 2031-2035 in mind this Government believes that business cases for service providers to develop the necessary electricity storage systems must not only be clear but that there must be sufficient incentives to ensure the procurement of the optimum amount of electricity storage systems required to meet the grid's needs., and It is expected that this 'route to market' mechanism will enable electricity storage systems to bulk electricity time shift* **beyond the intra-day** *by purchasing in-expensive electricity energy and subsequently reselling at a later date and time. This large scale 'Arbitrage' is expected to be designed around societal values as well as technical characteristics such as suitable locational signals, CO2 reduction profiles, marginal cost abatement and the cross comparison of different technologies in a neutral manner.*

5.1.3 Commission for Regulation of Utilities (CRU)

A strong letter of support for this project grant application was also provided by the Commission for the Regulation of Utilities and signed by the Chairperson & Commissioner and their Director for Security of Supply and Wholesale. In this letter CRU note that their *"current consultation on developing a National Energy Demand Strategy for Ireland notes: long duration energy storage is expected to play a role in the future energy system as increasing generation capacity and demand places further constraints on the system. As the benefits of the short duration battery market are realised, there is scope for incentivising investment and procurement of other storage technologies, such as long duration batteries, which can shift larger amounts of energy".*

5.1.4 Northern and Western Regional Assembly

A letter of support for this grant application was also provided by the Northern and Western Regional Assembly. The NWRA noted in particular:

> *"By enhancing electricity demand flexibility, this initiative aligns with our regional renewable electricity objectives, as articulated in CAP23's Regional Renewable Electricity Strategy. The Regional Spatial Economic Strategy for the NWRA Region (2020 – 2032), and it is orientated around a number of key themes, which aim to give effect to the National Planning Framework (Ireland 2040), including the transition of the NWRA Region to a Low carbon, Green and Renewable Energy themed region " .*

All letters of support for the EU Innovfund grant application for the project can be made available on request.

6. SITE SELECTION PROCESS

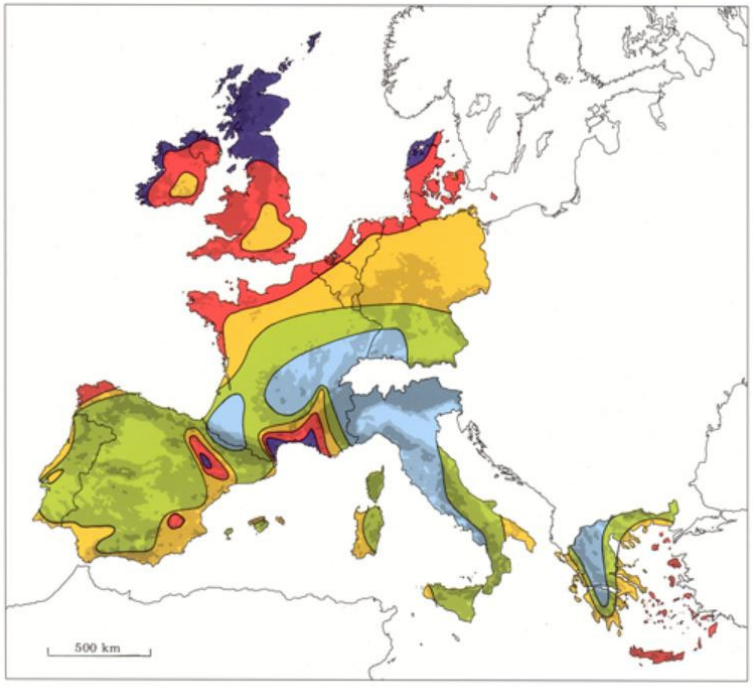
In this Section we outline the rationale and site selection process to inform why the particular subject site was chosen for the development proposed, and why this is the most appropriate site for this type of development.

The site selection process is broken down into macro and micro level site selection.

6.1 Macro Level Selection

At Macro level, the project is located in the north-west region of Ireland. This region has some of the best wind resources in Europe – see Figure 6-1: European Wind Atlas.

below, but has relatively limited transmission grid capacity and is currently suffering from some of the worst transmission grid congestion issues of any location in Ireland.



Wind resources[1] at 50 metres above ground level for five different topographic conditions

	Sheltered terrain[2]		Open plain[3]		At a sea coast[4]		Open sea[5]		Hills and ridges[6]	
	$m\,s^{-1}$	Wm^{-2}	$m\,s^{-1}$	Wm^{-2}	$m\,s^{-1}$	Wm^{-2}	$m\,s^{-1}$	Wm^{-2}	$m\,s^{-1}$	Wm^{-2}
	> 6.0	> 250	> 7.5	> 500	> 8.5	> 700	> 9.0	> 800	> 11.5	> 1800
	5.0-6.0	150-250	6.5-7.5	300-500	7.0-8.5	400-700	8.0-9.0	600-800	10.0-11.5	1200-1800
	4.5-5.0	100-150	5.5-6.5	200-300	6.0-7.0	250-400	7.0-8.0	400-600	8.5-10.0	700-1200
	3.5-4.5	50-100	4.5-5.5	100-200	5.0-6.0	150-250	5.5-7.0	200-400	7.0- 8.5	400- 700
	< 3.5	< 50	< 4.5	< 100	< 5.0	< 150	< 5.5	< 200	< 7.0	< 400

Source: Risø DTU National Laboratory, Denmark

Figure 6-1: European Wind Atlas.

Figure 6-2 below shows a map of the Irish electrical transmission grid and grid study areas used by Eirgrid. The location of the proposed pilot project is shown in green. As can be seen, the pilot project is located in grid study area A. As set out in Section 4.3 above, Area A has one of the highest forecast levels of network congestion of any area in Ireland, with projected dispatch down of new renewables energy projects[20] projected to exceed 50% for non-priority dispatch wind in all scenarios studied by EirGrid in their Enduring Connection Policy (ECP) 2.3 constraint report studies (all new build wind farms contracted after July 2019 will be non-priority).

Headline results from this analysis[21] [22] are illustrated in Figure 6-3. This analysis only considers projects that have either received a grid connection offer or are in the ECP2.3[23] offer process. Planning permission is required for onshore renewable energy projects to be eligible to apply for a grid connection offer. As such this analysis does not include future onshore projects that have not yet received a building permit, of which there are many. It is extremely challenging to develop traditional network re-enforcement solutions in this region due to its remoteness and public acceptance challenges with new overhead power line infrastructure. Strategic deployment of long duration energy storage projects in these grid constrained areas has the potential to simultaneously create additional transmission capacity for renewable generation while also sculpting the profile of this renewable energy to offset the most expensive and emissions intensive existing fossil fuel generation.

Such projects will ideally be located immediately adjacent to existing substations in these areas in order to minimise cable runs and minimising system losses. In order to effectively mitigate network constraints, while simultaneously supporting system wide integration of renewables, a large volume of MW / MWh capacities will need to be distributed around the grid system adjacent to existing grid substations and potentially also co-located with new and existing renewable energy projects, in particular across the north west region of Ireland.

Distributing these projects around the grid at relatively smaller scales, (10-100MW, 1-10GWh) has the effect of maximising their network benefits, while also minimising / managing the impact on any single location. Specific sites can then be selected based on minimising local environmental impacts. More information in relation to the selection of this specific site is included in Section 6.2 below.

[20] All new projects will be non-priority dispatch under EU Market Regulation 2019/943
[21] https://cms.eirgrid.ie/sites/default/files/publications/ECP-2.3-Solar-and-Wind-Constraints-Report-Assumptions-and-Methodology-v1.0.pdf
[22] https://cms.eirgrid.ie/sites/default/files/publications/ECP-2.3-Solar-and-Wind-Constraints-Report-Results-for-Area-A-v1.0.pdf
[23] https://www.eirgrid.ie/site-files/library/EirGrid/2022-Batch-(ECP-2.3)-Results-Joint-SO-Publication_June-2023_Final.pdf

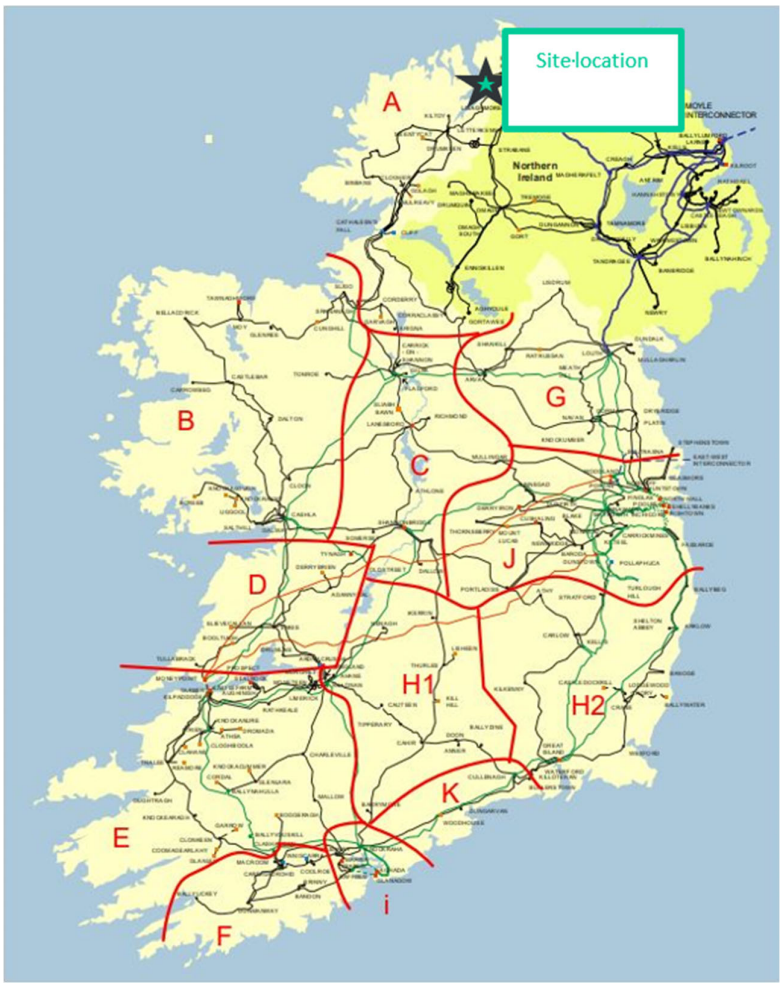


Figure 6-2: Areas Designated for Preparing Wind Energy Profiles, Generation Scenarios and Reporting Results.[24]

[24] Source: Eirgrid. 110kV network shown in black, 220kV network shown in green, two circuits in light brown running from east to west are 400kV lines

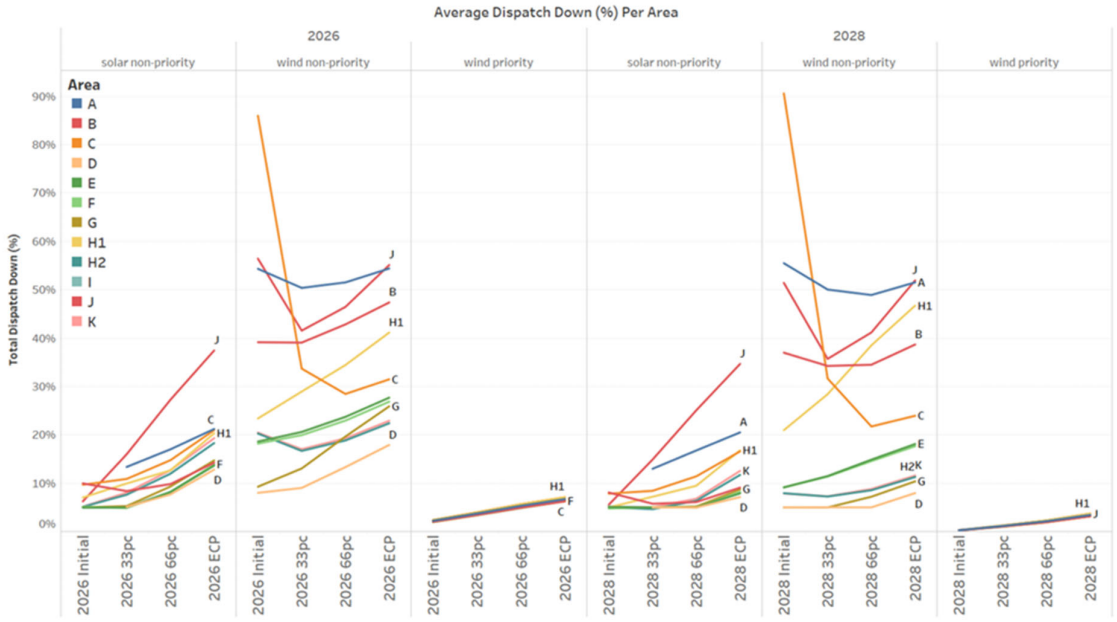


Figure 6-3: Most recent studies following the processing of the latest batch of grid connection offers [25].

Given the analysis carried out above the site selection process at a Macro level has been dictated by the grid capacity in the north west of Ireland, in particular Co. Donegal.

6.2 Micro level selection

FuturEnergy Ireland underwent a detailed screening process in 2022 using Geographic Information Spatial (GIS) software to identify and assess optimal locations for long duration energy storage sites in the north west of Ireland, in particular in Co. Donegal. A variety of different data sets were utilised including (but not limited to) house EirCode data, grid infrastructure data, landownership data and environmental data.

When selecting a location for this type of development, several important factors are considered to ensure that the chosen location is the most optimum location from the receiving environment's perspective while also meeting requirements of the development. Below is a summary of the site selection criteria utilised as part of identifying potential locations for this development.

- **Proximity to existing substations** - Prospective sites are sought adjacent to existing 110kV substation. Locating the development beside an existing 110kV substation allows for an under the fence grid connection type arrangement. Furthermore, locating adjacent to existing substations minimises impact of the development by reducing the need to cable grid connections under large stretches of national roads or sensitive landscapes.
- **Designated Sites** - Areas designated as National Heritage Areas, Special Areas of Conservation and Special Protection Areas are marked as ***non-developable and were therefore avoided***

[25] https://cms.eirgrid.ie/sites/default/files/publications/ECP-2.3-Solar-and-Wind-Constraints-Report-Assumptions-and-Methodology-v1.0.pdf Page 42

- **Commercial Forestry** - Sites which are covered in full or in part with commercial conifer forestry are sought as ideal locations for siting energy storage projects. Firstly, forestry provides an already established screening capability. Secondly, clear-felling of commercial conifer forestry does not result in the loss of valuable biodiverse habitat.
- **Distance from residential dwellings** - when searching for prospective sites, an initial setback buffer of 200m is applied to each dwelling within close vicinity of a prospective location. The proposed development has achieved set back distances of approximately 330m to the north and approximately 310m to the south in the final layout. This reduces the potential impact of noise on residential dwellings. Once completed, the maximum developable area available remains. After a site has been selected for development, the actual setback distance is then further refined as part of site investigation work.
- Watercourse - A standard best practice setback of 20m is applied to all watercourses.

6.2.1 Alternative Sites

After conducting the screening exercise in 2022, FuturEnergy identified the proposed site situated at Ballynahone, which is the subject of this planning application. As part of this screening exercise, other areas were also identified within Co Donegal and other counties.

Some sites were deemed unsuitable for a variety of reasons including; (1) the existing substation to connect into was technically unsuitable, (2) the gradient of surrounding lands was unsuitable leading to potential landscape and visual concerns.

The applicant is continuing to explore other sites and should these emerge as suitable sites the Developer will commence community consultation and engagement with the planning authority in a timely manner .

The subject site is considered an appropriate site for the following reasons;

a) 1. Trillick Substation will facilitate the connection from the subject technology.
b) 2. The site is relatively flat
c) 3. The site is located in close proximity to Trillick substation.
d) 4. The site is currently under conifer forestry which will facilitate the screening of the site.
e) 5. The site is of low ecological value.
f) 6. The site is suitably separated from sensitive residential receptors.

In this regard we encourage the Planning Authority to review and support the Planning & Environmental Report submitted with the planning application which clearly demonstrates that there will not be a significant environmental effect from the proposed development and that the proposed development by reason of its location is in accordance with the proper planning and sustainable development of the area.

7. CONSISTENCY WITH DONEGAL COUNTY DEVELOPMENT PLAN

7.1 Concerns Raised in Pre-Planning Meeting

Donegal County Council outlined in their pre-planning notes following the pre-planning meeting for the Proposed Development the following key points and concerns:

- The Proposed Development is of industrial nature, and therefore must follow policy relating to industrial development;
- Particular attention to be given to Policy ED-P-11 of the County Donegal Development Plan 2018-2024, and clear setting out how the proposed development does not contravene this;
- In line with Policy ED-P-14 of the County Donegal Development Plan 2018-2024 the Proposed Development must not have significant negative environmental impact, and must be compatible with surrounding land uses;
- Consideration that the overall size, scale and type of development is industrial/commercial in character and would have a detrimental impact on the rural character of the area;
- That the Proposed Development is premature.

The following sections address the key points raised by Donegal County Council.

7.1.1 The Proposed Development is not an Industrial Development

In the first instance it is important to establish the nature of the proposed development. In their comments on the proposals, Donegal County Council ascertain that the proposed development is industrial in nature.

We respectfully submit that this is not the accurate description of the nature of this project. The Planning and Development Regulations 2001 (S.I. No. 600 of 2001) outlines the following interpretations for developments for industrial purposes:

‘‘industrial building’’ means a structure (not being a shop, or a structure in or adjacent to and belonging to a quarry or mine) used for the carrying on of any industrial process;

‘‘light industrial building’’ means an industrial building in which the processes carried on or the plant or machinery installed are such as could be carried on or installed in any residential area without detriment to the amenity of that area by reason of noise, vibration, smell, fumes, smoke, soot, ash, dust or grit;

''industrial process'' means any process which is carried on in the course of trade or business, other than agriculture, and which is

g) for or incidental to the making of any article or part of an article, or

h) for or incidental to the altering, repairing, ornamenting, finishing, cleaning, washing, packing, canning, adapting for sale, breaking up or demolition of any article, including the getting, dressing or treatment of minerals,

and for the purposes of this paragraph, "article" includes-

i. a vehicle, aircraft, ship or vessel, or

ii. a sound recording, film, broadcast, cable programme, publication and computer program or other original database;

''industrial undertaker'' means a person by whom an industrial process is carried on and "industrial undertaking" shall be construed accordingly;

The Proposed Development therefore does not constitute industrial development. No industrial processes as defined by the Planning Regulations are carried out in the proposed development, no articles or part thereof are made by the proposed development.

The proposed development does not alter, repair, ornament, finish, clean, wash, pack, can, adapt for sale, break up or demolish, get, dress or treat any minerals.

As such, the proposed development cannot be deemed industrial in nature. The use of the proposed LDES would be considered to fall under a Sui Generis use, i.e. that is its own kind of use. It is considered an ancillary grid infrastructure project which will assist the national grid in meeting the renewable energy demand.

7.1.2 Response to Policy ED-P-11

It is further noted that Policy ED-P-11 in County Donegal Development Plan 2018-2024 was referred to in the Donegal County Council comments on the proposed development at pre-planning stage. There is no correlating policy in the newly adopted County Donegal Development Plan 2024-2030.

Policy ED-P-11 states the following;

> *It is a policy of the Council to consider proposals for a major industry/enterprise in the countryside which makes a significant contribution to the economy of the County where it is demonstrated that the proposal, due to its site specific requirements or size, requires a countryside location. An application for a development proposed under this policy must be accompanied by evidence to support the case of economic benefit to the economy of the County and in the case of rural location on the grounds of size, detailed information on the search conducted to secure a suitable site within the boundary of a settlement. The provisions of Policy ED-P-14 will also be taken into account and a Travel Plan must be prepared to address the issue of accessibility by various modes of transport. Developer-led infrastructural improvements will be conditioned in appropriate cases. Development proposals will be assessed in the light of all relevant material planning considerations, relevant policies of the County Development Plan and other regional and national guidance/policy, relevant environmental designations including demonstration of compliance with Article 6 of the Habitats Directive.*

As set out in Section 7.2 above, this project is not a major industry/ enterprise project and therefore former Policy Objective ED P-11 is not directly relevant to this project.

However applying the spirit of Policy ED P -11 to the project, the Planning & Environmental Report submitted as part of this planning application clearly demonstrates that the project is located in an area where no significant negative environmental impacts will occur as a result of the project and that the project is compatible with the surrounding land uses i.e. it proximity to Trillick substation. Furthermore Section 6 above of this Planning Statement clearly sets out the Site Selection process for this project and demonstrates that the selected site is the optimum site for the development proposed.

7.1.3 Response to Policy ED-P-14

It is noted that Policy ED-P-14 in County Donegal Development Plan 2018-2024 was referred to in the Donegal County Council comments on the proposed development at pre-planning stage. This policy correlates with **Policy ED-P-9** in the now current County Development Plan 2024-2030, this states:

> *It is a policy of the Council that any proposal for economic development use, in addition to other policy provisions of this Plan, will be required to meet all the following criteria;*
>
> a) *It is compatible with surrounding land uses existing or approved;*
> b) *It would not be detrimental to the character of any area designated as being of Especially High Scenic Amenity (EHSA);*
> c) *It does not harm the amenities of nearby residents*
> d) *There is existing or programmed capacity in the water infrastructure (supply and/or effluent disposal) or suitable developer-led improvements can be identified and delivered;*
> e) *The existing road network can safely handle any extra vehicular traffic generated by the proposed development or suitable developer-led improvements are identified and delivered to overcome any road problems;*
> f) *Adequate access arrangements, parking, manoeuvring and servicing areas are provided in line with the development and technical standards set out in this plan or as otherwise agreed in writing with the planning authority;*
> g) *It does not create a noise nuisance;*
> h) *It is capable of dealing satisfactorily with any emission(s);*
> i) *It does not adversely affect important features of the built heritage or natural heritage including natura 2000 sites;*
> j) *It is not located in an area at flood risk and/or will not cause or exacerbate flooding;*
> k) *The site layout, building design, associated infrastructure and landscaping arrangements are of high quality and assist the promotion of sustainability and biodiversity;*
> l) *Appropriate boundary treatment and means of enclosure are provided and any areas of outside storage proposed are adequately screened from public view;*
> m) *In the case of proposals in the countryside, there are satisfactory measures to assist integration into the landscape;*
> n) *It does not compromise water quality nor conflict with the programme of measures contained within the current north western river basin management plan.*

Notwithstanding that the proposed development is not considered to be a purely economic development, it is considered that all criteria of Policy ED-P-9 can be appropriately responded to and that the proposed development accords with same.

We respond to each of the individual criteria noted above in the following paragraph:

a) It is respectfully submitted that the proposed development is entirely compatible with the surrounding land uses, in particular the existing adjacent substation which it will connect into. Once the proposed screening matures the proposed development will be assimilated into the surrounding area.

b) The proposed development would not be incongruous to the locality, nor would it be detrimental to any high scenic amenity areas. In this regard we refer to Chapter 13 of the Planning and Environmental Report as well as the appended Photomontages, prepared by Macro Works, which concludes that, "Overall, it is considered that the proposed development is a suitably sited and scaled development that is well assimilated into the existing landscape context as a result of the surrounding retained existing conifer forest and the proposed landscape planting."

The site for the Proposed Development is within the Landscape Character Area 'Buncrana Coast', which is an area of 'Moderate Scenic Amenity'. The CDDP 2024-2030 states:

"Areas of Moderate Scenic Amenity (MSA): These are primarily landscapes outside Local Area Plan Boundaries and Settlement framework boundaries, that have a unique, rural and generally agricultural quality. These areas have the capacity to absorb additional development that is suitably located, sited and designed subject to compliance with all other objectives and policies of the Plan."

The site for the Proposed Development is further located within an area listed in the County Donegal Development Plan 2024 - 2030 as an Area Under Strong Urban Influence. On such areas the CDDP states Objective RH-O-2 CC:

"To protect rural 'Areas Under Strong Urban Influence', rural 'Areas Under Strong Holiday Home Influence', and rural areas immediately outside towns from intensive levels of unsustainable urban/suburban residential development."

The Proposed Development is in line with the objectives and policies of the County Donegal Development Plan 2024-2030 by proposing the enhancement of the electricity grid and electrical security. The Proposed Development aims to aid the Council's objectives towards a zero emissions target by securing the electricity grid and furthering the electrical independence and the efficiency of renewable energy sources.

The Proposed Development would contribute towards the Council's commitment to enabling strategic infrastructure to support the recent growth of the region. Policy E-P-8 outlines the Council's support for proposals for secure energy storage systems and infrastructure to aid the national transmission grid.

The site-specific designations within the DCCP for the subject site support the Proposed Development, as the site is described as having a capacity to absorb "additional development that is suitably located, sited and designated", as well as not being earmarked for significant residential development.

c) The proposed development has been carefully designed and positioned so as to not result in negative impacts on the amenity of nearby residential properties. In this regard, we refer to Chapter 11 (Noise and Vibration) of the Planning and Environmental Report for further information on how the proposed development would not result in any detrimental noise impact on nearby residential receptors.

d) Uisce Eireann have confirmed that there is capacity to facilitate the proposed development, and provided a Confirmation of Feasibility. A copy of this is enclosed with this application.

e) We refer to Chapter 9 'Traffic and Transportation' of the Planning and Environmental Report, as well as the Construction Environmental Management Plan which show the impacts of the proposed development on the surrounding road network, and how these will be managed to ensure that construction traffic is appropriately managed.

f) Appropriate sight lines have been provided for the proposed accesses, and sufficient service and manoeuvring spaces are provided in the development.

g) We refer to Chapter 11 'Noise and Vibration' of the enclosed Planning and Environmental Report which shows how the proposed development will be within the relevant noise limits and will not cause noise nuisance.

h) This proposed development does not release greenhouse gas emissions, including carbon dioxide, methane, and nitrous oxide. When the battery is charged during normal operation, a minimal amount of hydrogen gas may be produced. This is similar to other aqueous batteries such as lead-acid. Hydrogen is not toxic.

i) The proposed development will not negatively impact on any Natura 2000 sites or on the natural or built heritage of the area. Please refer to the enclosed Archaeological Impact Assessment and Appropriate Assessment Screening Report for further information.

j) The proposed development is not located in an area susceptible to flooding.

k) The proposed development has been designed to have minimal impact on biodiversity, please refer to Chapter 8 'Biodiversity' of the Planning and Environmental Report as well as the enclosed Ecological Impact Assessment and Appropriate Assessment Screening Report for further information.

l) Please refer to the enclosed landscape plan, prepared by Macro Works which shows the proposed screening for the development. Additionally, the enclosed Photomontages show how the proposed development will be assimilated into the surrounding area.

m) Please refer to the enclosed landscape plan, prepared by Macro Works which shows the proposed screening for the development. Additionally, the enclosed Photomontages show how the proposed development will be assimilated into the surrounding area.

n) Please refer to Chapter 7 ' Hydrology, Water Quality and Drainage' of the Planning and Environmental Report for information on how the proposed development will not negatively impact on water quality.

As highlighted in the above responses and in the plans and particulars submitted with this Planning Application, the proposed development would be in accordance with the proper planning and sustainable development of the area.

7.2 Local policy

Section 7.1 clearly sets out why the development is consistent with the County Development Plan in direct response to concerns raised by Donegal County Council .

This section of the Planning Statement outlines the policies and objectives contained in the County Development Plan 2024 - 2030 (which came in to effect on the 26th June 2024), which supported the type of energy development proposed.

7.2.1 County Donegal Development Plan 2024 - 2030

The County Donegal Development Plan (CDDP) 2024-2030 has climate as a core component. Chapter 4 of the County Donegal Development Plan 2024-2030 sets out the County's approach to climate change. The effects of climate change can be seen in the local context, through events such as the Letterkenny University Hospital flood (2013) and the Inishowen Peninsula Floods (2017). The Development Plan supports the achievement of national and international objectives for a net zero carbon emissions by 2050, by supporting developments that help mitigate climate change.

Chapter 9 of the County Donegal Development Plan on Natural Resource Development highlights that the Government has identified increased renewable energy generation as a key measure in the strategy to reduce greenhouse gas emissions and meet international obligations. Notably, one of the measures outlined in the 'Climate Action Plan, 2021' (DCCAE) is that 80% of the Country's electricity shall be generated from renewable sources. Furthermore, there are a number of policies and objectives that support diversifying the county's energy portfolio.

Relevant key objectives within the County Donegal Development Plan 2024-2030 to facilitate this listed in Table 7-1, below:

Table 7-1: Key Objectives from County Donegal Development Plan (2024-2030)

Objective	Description
E-O-1	To sustainably develop a diverse and secure renewable energy supply to meet demands and capitalize on the County's competitive locational advantage.
Applicant's Response	*The Proposed Development aims to improve the renewable energy supply by aiding the grid network.*
E-O-2	To secure the maximum potential from the wind energy resources of the County commensurate with the receiving environment and local developments patterns consistent with the proper planning and sustainable development, thereby contributing to the national drive towards ensuring the security of energy supply
Applicant's Response	*The Proposed Development will serve to maximise the potential from wind energy resources through the absorption of surplus power generated by these renewable energy sources when the grid can't transfer the power, the project can absorb the surplus and then at times of low wind output when the grid is less congested, the power is released back into the grid.*
E-O-3	To facilitate the strengthening of the electricity grid to a minimum rating of 220KV to enable the harnessing and distribution of energy.
Applicant's Response	*The Proposed Development will facilitate the strengthening of the electricity grid and support the penetration of renewable energy generation onto the national grid.*
E-O-4	To facilitate the sustainable development of Donegal as a Centre of Excellence for renewable technology, and Killybegs as an offshore service centre and renewable energy hub.
Applicant's Response	*The Proposed Development will contribute to the development of Donegal as a Centre of Excellence for Renewable Technology by introducing cutting edge sustainable technology and demonstrating how it can enhance the capacity of the existing transmission grid.*
S-O-4	To support the development and implementation of a sustainable economic model for County Donegal embracing growth in areas such as innovation, research and development, rural diversification, tourism initiatives, energy advances and the promotion of sustainable start up enterprises as an integral component of accelerating socio-economic growth throughout the County and in a Regional, Cross Border and National context.

Applicant's Response	*The Proposed Development will aid the growth of County Donegal through advancing the local energy system. Ensuring electricity security and stability is essential in facilitating further socio-economic development within the County and the region.*
ETN-O-1	To secure the strengthening of the electricity grid to include the provision of 220kv transmission networks to enable the harnessing and distribution of energy.
Applicant's Response	*The Proposed Development serves to strengthen the electricity grid.*
CS-O-5	To pursue opportunities for further investment in essential infrastructure.
Applicant's Response	*The Proposed Development falls under the category of essential infrastructure as it will aid the securing and stabilising of the electricity grid.*
ED-O-20	To progress the delivery of key strategic enabling infrastructure including roads, rail, broadband, gas, electricity, water and wastewater as identified in this plan in close collaboration with government departments, agencies and utilities operators in order to align the Core Strategy and the economic development objectives of this plan with the development and roll out of their respective investment programmes.
Applicant's Response	*The Proposed Development will deliver enabling electricity infrastructure.*

Further policies relevant to the Proposed Development are contained throughout the CDDP 2024-2030. Table 7-2 below lists the policies which support climate change targets and associated energy grid connection developments within County Donegal.

Table 7-2: Key Policies from County Donegal Development Plan (2024-2030)

Policy	Description
E-P-1	It is policy of the Council to facilitate the development of grid reinforcements including grid connections and transboundary energy network (electricity and gas) into and through the County, within the Region, and to support the development of cross border grid connections, subject to other objectives and policies of this Plan.
Applicant's Response	*The Proposed Development will serve as a grid reinforcement.*
E-P-2	It is a policy of the Council: I. to facilitate the appropriate development of renewable energy and energy storage projects arising from a variety of sources, including hydro power, ocean energy, hydrogen, bioenergy, biomass, solar, wind, district heating systems and geo-thermal and the storage of water as a renewable kinetic energy resource, in accordance with all relevant material considerations and the proper planning and sustainable development of the area; II. not to support the process of Hydraulic Fracturing (or fracking).
Applicant's Response	*The Proposed Development is a sustainable energy storage project.*

E-P-8	It is a policy of the Council to support and facilitate proposals for secure, appropriately scaled energy storage systems and infrastructure, including green hydrogen gas storage which supports energy efficiency and reusable energy systems, subject to other objectives and policies of this plan.
Applicant's Response	*The principle of the Proposed Development is directly supported under this policy as it supports energy efficiency and reusable energy systems through the energy storage system.*

Particularly noteworthy is General Policy E-P-8 in Chapter 9 - Natural Resource Development of the County Donegal Development Plan 2024-2030. This policy outlines the county's support for proposals for **secure, appropriately scaled** energy storage systems such as the Proposed Development.

As significant growth has taken place within the county, the lack of key enabling infrastructure including electricity, gas, rural broadband, water and wastewater is posing a challenge for the county. This is outlined in Chapter 7 - Economic Development of the CDDP 2024-2030, which states that Donegal County Council is committed to supporting the delivery of this critical infrastructure as a part of the Development Plan and beyond.

Chapter 7 of the Development Plan further outlines the Council's approach to renewable energy and cites a Dublin Offshore Report[26] in a call for investment in high-capacity grid connection of at least 220kV in order to ensure that there is certainty of route to market for the energy produced.

> *"The last number of years has seen an unprecedented period of change not just locally but globally and this includes Brexit, the Covid pandemic, the acceleration of the climate change agenda, the war in Ukraine and the ongoing energy crisis. While these challenges have created high levels of economic uncertainty, a unique set of opportunities for Donegal and the wider region has emerged."*

The DCCP 2024-2030 also acknowledges EirGrid's Strategy 2020-2025 'Transform the Power System for Future Generations', which sets out plans for an estimated 25% growth in electricity demand by 2025, along with a target of net zero carbon emissions by 2050.

Noting that the above responses show how the proposed development is consistent with the plans and objectives of the Development Plan. The proposed development has been carefully sited and designed so as to assimilate into the surrounding landscape. There is a clear requirement for the proposed development and it is noted that there is support at a national level for same.

7.2.2 Local Authority Climate Action Plan (LACAP) 2024 - 2029

The recently released Climate Action Plan for County Donegal (2024-2029) contains an outline for how Donegal County Council (DCC) will take responsibility for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions within the County jurisdiction. This is necessary to ensure that the environmental, social, and economic benefits that come with climate action, can be fully realised.

The LACAP provides strategic direction for the DCC to:

[26] Dublin Offshore, The Growth of Onshore to Offshore Wind in the Atlantic Region, Wind Energy and Supply Chain Feasibility, November 2021

- *actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures*
- *assist in the delivery of the climate neutrality objective at local and community levels; and*
- *identify and deliver Decarbonising Zone(s) (DZs) within the local authority area to act as test bed(s) for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area, through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective*

Within the LACAP 2024-2029, Strategic Goal 3 deals with the built environment, and outlines the pathway to increase resilience to climate change; reduce greenhouse gas emissions; increase the use of renewable energy and improve energy efficiency throughout all buildings and infrastructure. Objective BE4 of the LACAP is to "*Support the delivery of renewable electricity generation and transmission infrastructure within the County*".

A set of Actions have further been ascribed to each Objectives within the LACAP, with Action Ref. BE 4.5 relating to Objective BE4 being: "*Advocate for the ongoing expansion and improvements to the electricity grid infrastructure within the County to support renewable generation and supply*". This action is set with a 5-year timeframe, and the Council's role is to advocate for the action.

Applicant's Response:

The Proposed Development is aligned with Objective BE4 of the DCC LACAP 2024-2029, particularly furthering Action Ref. BE 4.5 to "*Advocate for the ongoing expansion and improvements to the electricity grid infrastructure within the County to support renewable generation and supply*".

7.2.3 Donegal County Council Climate Adaption Strategy 2019 - 2024

The Donegal County Council Climate Adaption Strategy 2019-2024 outlines a five-step process for the adoption of climate-conscious strategy and infrastructure for the county. The five-step process is provided for within the Local Authority Adaption Strategy Development Guidelines. Within the Climate Adaption Strategy a few goals are of particular importance for the Proposed Development:

Action plan: Goal 1 - Critical Infrastructure and Buildings: No. 9: Planning for Resilient Energy Networks: 1. *Encourage and enhance cooperation and communication with energy and service providers to ensure that energy infrastructure and services are resilient to the impacts of climate change*

BE 4.5 *Advocate for the ongoing expansion and improvements to the electricity grid infrastructure within the County to support renewable generation and supply.*

The Climate Adaption Strategy also recognises the increasing issue of power outages due to weather related damage to the electricity network. The Strategy further outlines the opportunities for innovative and sustainable solutions to issues of this kind. The Proposed Development aims to increase the electricity security in the area through supporting the electricity network with the addition of the LDES.

7.3 Conclusion

It has been clearly set out that the proposed development is not industrial in nature, and that it is not in material contravention of the relevant policies and objectives of the Development Plan. The proposed development is not considered to be premature, particularly given the need for significant amounts of supporting infrastructure to facilitate renewable energy developments, which are needed to combat climate change and aid in meeting 2030 targets for same.

The proposed development represents development in accordance with the proper planning and sustainable development of the area.

Please also refer to Section 4.1.3 of the Planning and Environmental Report for a full response to items requiring a response from pre-planning consultation with Donegal County Council.

8. CONCLUSION

The policies, objectives and legislation as described throughout this report set out all significant international, European, national and local policy support for a move to sustainable energy technologies and a reduction in greenhouse gas emissions. Ireland is committed to meeting International and European targets and if these targets are not met the government must purchase Carbon Credits to meet compliance with both emissions and renewable energy targets or face fines from the EU.

National and regional energy policies have been reinforced by the Donegal County Development plan 2024-2030 which applies a plan-lead approach to renewable energy development and strengthening the grid connection, and the outlined energy and planning policies have established a need for the proposed development. It is clear that the proposed development will contribute positively to achieving the outlined policies and objectives, and will assist in fulfilling national energy targets.

Energy storage has gained significant traction in Ireland due to the advancements in technology, which now provide a competitive renewable technology for the Irish market. This advancement is demonstrated in national and local strategies, plans and guidelines which are widely supportive of renewable development.

The introduction of the proposed development into agricultural settings is considered to provide a suitable technology in diversifying the rural economy.

In setting out the development proposal, due consideration of the policies and objectives of the national planning policy framework and County Donegal Development Plan have been considered in regard to the location, design and layout of the proposed energy storage system, including the overall scale of development.

A detailed appraisal of the potential impacts associated with the construction, operation and decommissioning phases of the proposed development has been carried out, and interventions have been included to eliminate, reduce or mitigate potential adverse impacts. The Planning and Environmental Report and accompanying documentation outlines these and demonstrates that the Proposed Development is unlikely to have significant environmental impact. The Planning and Environmental Report further outlines that the Proposed Development can be considered in accordance with the proper planning and sustainable development of the area.

In conclusion, Fehily Timoney and Company consider the policy context for the site and surrounding area favourable for the Proposed Development, both from a national policy perspective with regard to enhanced grid connection, and at a local level with respect to designations and the ability for the site to accommodate the Proposed Development.

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