Barnesmore Windfarm Repowering

Planning Statement

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SCOTTISHPOWER RENEWABLES

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Executive Summary

In May 2019 the Irish Parliament declared a "climate emergency". As a response to combat this emergency the Government published The Climate Action Plan 2019 on 17 June 2019. The plan states that decisive and urgent action is required to arrest the acceleration of greenhouse gas emissions within the limited window of opportunity that remains. The Plan is ambitious, affecting almost every sector of the economy. The key focus of the Plan is to identify how the Government will reduce Ireland's, still growing, greenhouse gas emissions. The Development, as one of the first windfarm repowers in Ireland, will be a momentous positive contribution toward reversing this situation allowing the potential benefits to be maximised, while the environmental impacts are minimized, on an existing site where the eminent suitability for the purpose of the Development has been demonstrated through over twenty years of operation as an existing windfarm.

The oldest windfarms in Ireland are starting to approach the end of their consented life. Based on sites making end-of-life decisions at 20 years old, 79 sites are expected to make an end-of-life decision within the next 10 years with 26 of these decisions expected within the next 5 years[1]. In the context of EU targets for renewable generation it will be important that existing sites are not removed at the end of their consented life. Given the ambitious renewable energy targets it will be important that repowering projects significantly increase their output.

Planning permission was granted by An Bord Pleanála on the 16th August 1996 under planning reference PL.05.098236 [LPA Ref 95/914] for the erection of up to 26 no. wind turbines, transformer compound with associated single storey switch room building and service roads at Barnesmore Windfarm. The current permission is for a windfarm in 'perpetuity' which means there is no expiry of the planning permission for the existing Site and it can therefore continue to operate with the existing turbines indefinitely. The Operational Barnesmore Windfarm commenced operations in 1997 and currently consists of 25 x 600 kW wind turbines with a 61m tip height.

The repowering of the Site (removal of existing turbines and installation of new turbines) allows an existing wind resource to continue operating and contributing towards renewable energy targets albeit with more modern and more efficient turbines. The benefit of this is an increased overall generating capacity and output, as well as a reduction in the number of turbines within the site. The repowering of the windfarm will secure the on-going use a renewables asset, which will be vital to Ireland maintaining and building upon progress towards its renewable energy and climate change targets.

This Planning Statement accompanies a Planning Application submitted under the provisions of Planning and Development Act 2000 (as amended) Section37E for the decommissioning on the Operational Barnesmore Windfarm (the Site) (consisting of 25 turbines) and the construction of 13 new turbines (180 m to tip height). The Development includes the installation of new 15 MW Energy Storage Unit (ESU) and the reuse and upgrading of the existing site infrastructure.

The Barnesmore Windfarm Repowering (the Development) is subject to the EIA process as it falls under 'Category 3(i) of the Fifth Schedule Part II of the Planning and Development Regulation, 2001 (SI NO. 600 of 2001)', which sets out a comprehensive list of projects types and development thresholds where relevant, which are subject to Environmental Impact Assessment (EIA) for the purposes of the Regulations. The Development is subject to the EIA process as the Regulations stipulate that 'Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts', requires an EIAR. This Statement has also taken cognisance of the new EIA Directive 2014/52/EU.

In addition, the application meets the Strategic Infrastructure Development (SID) threshold for wind energy set out in the Seventh Schedule (Class 1) of the Planning and Development Act 2000, as amended i.e. the project will consist of a windfarm with an expected total output greater than 50 Megawatts (an output of approximately 96 Megawatts is anticipated inclusive of battery capacity). Therefore, the Planning Application is being submitted directly to An Bord Pleanála as an SID project in accordance with Section 37E of the Planning and Development Act 2000, as amended. An Bord Pleanála determined that this approach is required, as detailed in correspondence dated xx/xx/xx, included in Appendix 1.1.

The Development contributes to supplying the demand for renewable energy, which in the context of the ongoing climate emergency is an urgent Irish national priority that must be given significant weight given the wealth of supporting national and international policy. As a repower, the Development maximises the benefits of the existing windfarm site while minimising the environmental effects that would be manifest from development of a comparable greenfield site. The number of turbines reduces by almost 50%, yet the site could produce five times the power as well as strengthening the local grid network with the inclusion of the energy storage unit. It is also shown that the Development is likely to provide a multi-million euro benefit to both the Irish and local economies.

Overall, it is considered that the development is in accordance with national policy, the local development plan and all relevant material considerations.

[1] Whitaker Institute Policy Brief Series = Policy Brief No: 46 January 2019

Barnesmore Windfarm Repowering

Planning Statement

1 Introduction

1.1 Proposed Development

Jennings O'Donovan Consulting Engineers have prepared this Planning Statement ("the Statement") on behalf of ScottishPower Renewables Ltd. ("SPR") to accompany the application ("the Application") for the proposed decommissioning and repowering of the Operational Barnesmore Windfarm ("the Development") submitted to An Bord Pleanála ("the Board") under Section 37E of the Planning and Development Act 2000, as amended.

SPR are applying for a ten year planning permission for the Development which will comprise:

(i) Decommissioning and removal of 25 no. existing wind turbines and reinstatement of the retired site infrastructure;
(ii) Construction and erection of up to 13 no. wind turbines each with maximum overall ground to blade tip heights of up to 180 metres and associated crane hardstandings and wind turbine foundations;
(iii) Upgrade of the existing site access roads and provision of new site access roads;
(iv) Upgrade of the existing public road network including the L-2095-6 / L-2051-1 junction and the L-2051-1 local road;
(v) Upgrade of the existing 110 kV electrical substation and compound to include for an expansion of the footprint to accommodate a TSO control building, a new IPP control building, car parking, grid transformer, 110kV cable chair, outdoor electrical plant and equipment, retirement of the existing overhead line connection, security boundary and perimeter fencing and wastewater holding tanks.
(vi) Upgrade works associated with the existing 110kV grid connection including the construction of a new Cable Interface Tower under the existing Golagh Tee 110kV overhead line, underground cable connection from the new interface tower to Clogher 110kV GIS Substation, removal of the hard tee-connection between Cathaleen's Fall-Letterkenny 110kV overhead line and Cathaleen's Fall-Golagh Tee 110kV OHL, retirement of existing structure 130T and termination of the existing conductor to the new proposed cable interface tower;
(vii) 1 no. permanent meteorological mast up to 30 m in height, including a foundation and underground power and communication cabling;
(viii) Temporary Contractor's Construction Compound;
(ix) Site drainage network;
(x) Internal wind farm underground power and communications cabling;
(xi) Undergrounding of a 1.15 km section of the existing 110 kV overhead power line into the existing site access track;
(xii) A 15 MW Energy Storage Facility and associated electrical plant, equipment and security fencing; and
(xiii) All associated site development and ancillary works.

The Board has determined by Decision Ref. ABP-304023-19 that the proposed development constitutes strategic infrastructure development as defined by section 2(1) of the Planning and Development Act 2000, as amended by section 6 of the Planning and Development (Strategic Infrastructure) Act 2006, and that a planning application should be made directly to the Board under Section 37E.

As a Strategic Infrastructure Development, the Development is anticipated to be a significant regional construction project providing a sizable economic benefit through local investment, employment, local authority rates, and contribution to local community benefit funds in accordance with Government, regional and local planning policies.

The Development requires an Environmental Impact Assessment (EIA) as it comes within class 3(i) of Annex II to the EIA

Directive 2011/92/EU as amended by Directive 2014/52/EU and is above the threshold set for this class of project by Schedule 5, Part 2 of the Planning and Development Regulations 2001, as amended. An Environmental Impact Assessment Report (EIA R) is submitted with this application.

An Appropriate Assessment of the implications of the proposed development for European Sites forming part of the Natura 2000 Network is required, in accordance with the Habitats Directive 1992/43/EEC) and the Birds Directive 2009/147/EU, as transposed by Part XAB of the Planning and Development Act 2000, as amended. A Natura Impact Statement (NIS) is submitted with this application.

The permission for the existing windfarm is in 'perpetuity' meaning that there is no expiry of the planning permission for the Site and it could therefore continue to be operated indefinitely. It is noted that the existing windfarm has operated for over 20 years without causing nuisance or provoking complaint. Experience from operating the applicant's turbine fleet demonstrates that turbines can operate safely, and productively, significantly beyond arbitrary temporally limited consent periods. The policy and social pressures that underpin the needs case for the development are likely to be enduring, and modelling project economics over longer operational periods provides a downward influence on the costs of installing renewable energy and subsequent costs to the consumer. In light of the existing consent at the Site and lack of material cause to limit any consent, the applicant is seeking a ten-year permission and an operational period that is not time limited, or no less than 40 years.

1.2 The Applicant

ScottishPower Renewables (SPR) is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world's largest integrated utility companies and a world leader in wind energy. ScottishPower now only produces 100% green electricity – focusing on wind energy, smart grids and driving the change to a cleaner, electric future. The company is investing over £4m every working day in 2019 to make this happen and is committed to speeding up the transition to cleaner electric transport, improving air quality and over time, driving down bills to deliver a better future, quicker for everyone.

SPR is at the forefront of the development of the renewables industry through pioneering ideas, forward thinking and outstanding innovation. Its ambitious growth plans include expansion of its existing onshore wind portfolio, investment in new large-scale solar deployment and innovative grid storage systems including batteries. The company is also delivering the Iberdrola Group's offshore windfarms in the Southern North Sea off East Anglia as part of an international pipeline of projects across Europe and the USA.

With over 40 operational windfarms, SPR manages all of its sites through its world leading Control Centre at Whitelee Windfarm, near Glasgow. SPR has been present on the island of Ireland for over 20 years operating six onshore windfarms and has made major investments in key projects such as the bespoke turbine facility at Belfast Harbour in support of SPR's offshore developments that have led to significant job creation[2].

SPR's experience of developing, constructing and operating repowered onshore windfarm projects includes Carland Cross Windfarm in Cornwall, England, Coal Clough Windfarm near Burnley, England and Llandinam Windfarm in Wales.

A package of community benefits is voluntarily provided on all SPR onshore wind energy projects to enable local communities hosting our windfarms to share in the benefits. SPR's operational windfarms have to date contributed more than €34 million of support towards community initiatives close to our windfarms[3].

SPR is also hugely committed to habitat restoration and conservation within and surrounding our windfarms, with over 200 ecological activities across our onshore portfolio. These include restoration of degraded habitats, creation of native woodlands and species monitoring. SPR has invested the equivalent of over €5.2 million since 2008 into such ecological commitments.[4]

At the forefront of research and innovation into habitat restoration; SPR strives to maximise opportunities to deliver high quality environmental outcomes and create an overall net gain for species, habitats and biodiversity as a whole. Much of our habitat management work involves the restoration of blanket bog which has been degraded through a legacy of drainage for agriculture and commercial forestry plantations. SPR is currently committed to the management and restoration of 8,500 hectares of degraded bog through various plans developed in consultation with conservation stakeholders. The importance of this work to the wider conservation community was recognised by RSPB at the 2015 Nature of Scotland awards, where SPR were awarded the Sustainable Development Award for their innovative bog restoration methods.

Purpose and Structure of the Planning Statement

This Planning Statement considers the Development's accordance with the principle of Proper Planning and Sustainable

[2] https://www.scottishpowerrenewables.com/news/pages/scottishpower_renewables_comment.aspx
[3] https://www.scottishpowerrenewables.com/pages/powering_communities.aspx
[4] https://www.scottishpowerrenewables.com/pages/audio_transcript_ecological_activity_at_scottishpower_renewables_onshore_windfarms.aspx

Development, having regard to Government, Regional and County-level planning policies and plans including the County Development Plan, together with relevant statutory guidelines. In this context it is noted that there are a number of variables including the draft new wind energy development guidelines published for public consultation in December 2019, and the proposed review of the Donegal Renewable Energy Strategy which is anticipated to commence in 2020.

The Statement is set out as follows:

- Section 1: Introduction
- Section 2: Need for Development
- Section 3: The Application Site and Development Description
- Section 4: Community Consultation
- Section 5: Development Plan Policy Appraisal
- Section 6: Material Considerations
- Section 7: Other Material Considerations
- Section 8: Conclusion

2 Need for the Development

This section outlines the need for the Development based on an assessment of the need to implement legally binding national climate change targets by encouraging appropriate renewable energy development throughout Ireland.

2.1 Renewable Energy Targets

On 29 November 2019 the European Parliament declared a climate emergency ahead of the UN COP 25 in Madrid in December 20195. In May 2019 the Oireachtas declared a "climate emergency" in an amendment to the report 'Climate Action: A cross-party consensus for action'6 which followed the recommendations of the Citizens Assembly on Climate Action. There then followed the publication of the Cross-Departmental Climate Action Plan 2019 on 17 June 2019. The Plan reflects the accepted wisdom that decisive and urgent action is required to arrest the acceleration of greenhouse gas emissions within the limited window of opportunity that remains. The Plan is ambitious, affecting almost every sector of the economy. The key focus of the Plan is to identify how the Government will reduce Ireland's, still growing, greenhouse gas emissions.

The Plan includes a new commitment to make Ireland 100% carbon neutral by 2050, and contains 183 action points designed to achieve our national climate change targets. The scale of the challenge is huge, and the Plan identifies the need for everyone to contribute in tackling the challenges posed by climate change. It includes increased renewable electricity targets, the end of single use non-recyclable plastics and new building regulations. It will impact how our homes and businesses are heated, how we generate and consume electricity, how we travel and how food is produced. This includes supporting the growth of Electric Vehicles to at least 800,000, and implementing policies to attain the installation of 600,000 heat pumps to decarbonise heating demand and meeting 70%, of this increased electricity demand, from renewable sources, all by 2030. This is more than double the current level of renewable energy penetration.

The Climate Action Plan Action 18 is to facilitate additional hybrid connections (e.g. solar/wind/batteries) operating in the electricity market to increase RES-E penetration. The proposed development incorporates a Battery Storage Unit to meet this objective.

Under the 2009 Renewable Energy Directive, Ireland is committed to produce at least 16% of all energy consumed by 2020 from renewable sources. This is to be met by the following proportion of sector demands being met by renewable sources: 40% of electricity, 12% of heating and 10% of transport. The Government target to have 40% of all electricity consumed to come from renewable sources by 2020 has been superseded by a further pledge to generate 70% of the country's electricity supply from renewable sources by 2030.

The Renewable Energy Directive (recast) 2018/2001/EU entered into force in December 2018 and must be transposed by June 2021 ('RED II'). The ambition for increased electricity from renewable sources will be significantly ramped up under RED II. Repowering projects are subject to special provisions under RED II, reflective of the cost and environmental efficiencies achieved by these projects. Member states will be required to facilitate the repowering of existing projects by providing a simplified and swift permitting and grid connection process, subject to compliance with environmental and health and safety law7.

Ireland is facing significant challenges in efforts to meet these targets, alongside its commitment to transition to a low carbon economy by 2050. Ireland is already falling behind meeting its 2020 target for renewable energy as well as the longer-term movement away from fossil fuels. Therefore, there is a clear necessity of urgent national importance to increase the amount of energy from renewable sources, and it is shown that this will continue beyond the initial 2020 target.

2.2 Windfarm Repowering

Repowering a windfarm involves removing the existing wind turbines and replacing them with, more efficient new turbines incorporating up-to-date technologies. This process typically increases the site generating capacity and output while reducing the number of turbines within the Site.

Repowering a windfarm site supports an ongoing use of the land at the Site by a renewable energy asset, which is vital to

5 https://www.europarl.europa.eu/news/en/press-room/20191121IPR67110/the-european-parliament-declares-climate-emergency

6 https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf

7 Article 16

Ireland maintaining and building upon its renewable energy and climate change targets, as detailed below. Repowering also presents an opportunity to sustain and create additional jobs and to encourage continued investment in the renewable energy industry in Ireland. The repowering of a windfarm differs from that of developing a greenfield site as the area has previously been developed, has demonstrated its suitability for use as a windfarm site and will continue to be used for the same activity. As a result, the consenting and EIA process can draw on any information already available for the site to assess effects.

As well as the inherent benefits of creating and expanding upon the existing mix of renewables in Irelands electricity system, repowering offices a number of major opportunities:

- Increased site generation;
- Reduced dependency on fossil fuels resulting in lower carbon dioxide (CO2) emissions and output;
- Reduced number of turbines, utilising the latest turbine technology, sustaining and growing the level of renewable energy in Ireland;
- Sustains existing development and construction jobs, and creates opportunities for new supply chain jobs;
- With a supportive planning framework, it can help create a long-term, stable investment platform for a clear pipeline of repowering projects, easing pressure on consenting authorities; and
- Utilises over two decades of industry knowledge to inform and improve the siting, design and construction techniques to create more efficient projects.

The Operational Barnesmore Windfarm is consented in perpetuity, and the repowering of the windfarm with more efficient machines will maximise the benefits of re-using an existing site whilst minimising new environmental effects. Operating for a longer period enables the Applicant to continue to drive down the overall cost of energy with benefits to the Irish consumer and provides opportunities to incorporate emerging technologies such as energy storage.

The Development has the potential to result in an increase in the installed capacity of the Site from 15 MW up to around 75 MW, c. 5 times the existing installed capacity, it should be noted that the final wind turbine installed capacity will be determined as part of a turbine tender exercise, held nearer to the time of construction which will allow the Applicant to avail of the latest turbine technology, within any envelope specified within the ES and/or planning consent given. The proposed larger generator size, coupled with greater wind yields from the use of taller turbines with bigger rotors, and the improved efficiency of the latest turbine models will result in a major increase to total power generated at the Site.

2.3 International Energy Policy

International energy policy is based on the demand to battle climate change and reduce carbon dioxide (CO2) emissions and, therefore, is relevant to renewable energy development.

The United Nations Framework Convention on Climate Change (UNFCC)8 implemented by the United Nations in May 1992, determined a long-term objective to lessen greenhouse gases in the atmosphere, with the purpose of preventing anthropogenic interference with the climatic system. Subsequently, the Kyoto Protocol was implemented in 19973. National governments who signed up to the Kyoto Protocol are committed to reducing their greenhouse gas emissions. The UNFCCC recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The convention enjoys near universal membership, with 197 countries listed as being Parties to the Convention.9

The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention. The Kyoto Protocol came into effect in 2005, as a result of which, emissions reduction targets agreed by developed countries, including Ireland, are now binding. Under the Kyoto Protocol, the EU agreed to achieve a significant reduction in total greenhouse gas emissions of 8% below 1990 levels in the period 2008 to 2012. Ireland's contribution to the EU commitment for the period 2008 – 2012 was to limit its greenhouse gas emissions to no more than 13% above 1990 levels.

In Doha, Qatar, on 8 December 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020;
- A revised list of greenhouse gases ("GHG") to be reported on by Parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

[8] The United Nations Framework Convention on Climate Change (UNFCCC) (1992). Available online at: http://unfccc.int/resource/docs/convkp/conveng.pdf [Accessed 02/10/2019]
[9] http://unfccc.int/essential_background/items/6031.php

Under the protocol, countries must meet their targets primarily through national measures, although market-based mechanisms (such as international emissions trading) can also be utilised.

The Paris Agreement seeks to accelerate and intensify the actions and investment needed for a sustainable low carbon future. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The Agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

On 5 October 2016, the threshold for entry into force of the Paris Agreement was achieved. The Paris Agreement entered into force on 4 November 2016. Ireland is legally bound by Article 7 of the United Nations COP21 Paris Agreement[10], signed in December 2015, to prepare and submit periodic updates on its national adaptation and mitigation plans in the global effort to keep global warming below 1.5 °C.

2.4 European Energy Targets

The European Union's (EU) energy policies are set out and powered by three main objectives:

- To ensure energy providers operate in a competitive environment, ensuring affordable prices for homes and businesses;
- To secure energy supplies to ensure reliable energy delivery whenever and wherever it is needed; and
- To have sustainable energy consumption, through lowering dependence on fossil fuels and decreasing greenhouse gas emissions and pollution.

The EU produced the Renewable Energy Directive 2009/28/EC[6], revised in 2018[11], to make the EU a global leader in renewable energy and ensure that the target of the final energy consumption being at least 16% renewables by 2020 and 27% renewables are met by 2030. Subsequently, in 2015, the EU set itself a long-term goal of reducing greenhouse gas emissions by 80-95%, when compared to 1990 levels, by 2050. The Energy Roadmap 2050[7] sets out the transition and cost-effective pathways for key economic sectors for achieving an 80-95% reduction in EU emissions by 2050. To achieve this goal, significant investment is needed in new low-carbon technologies and infrastructure, energy efficiency and renewable energy.

The 2050 target will not be shifted into national targets via EU legislation, but allows more flexibility for Member Countries to meet their greenhouse gas emission reduction targets in the most cost-effective method in regard to their own specific circumstances.

2.5 National Energy Policy

The EU Governance of the Energy Union and Climate Action Regulation 2018/1999 came into force when it was published in the Official Journal of the EU 11 December 2018. It requires Member States to develop integrated national energy and climate plans to cover:

1. Security, Solidarity and Trust – Working closely with Member States to diversify Europe's sources of energy and ensure energy security
2. A fully-integrated internal energy market – Energy should flow freely across the EU, without technical or regulatory barriers. This would enable energy providers to compete freely and promote renewable energy while providing the best energy prices
3. Energy Efficiency – Improving energy efficiency to reduce the EU's dependence on energy imports, cut emissions and drive jobs and growth
4. Climate Action – Putting in place policies and legislation to cut emissions, moving towards a low-carbon economy and fulfilling the EU's commitments to the Paris Agreement on climate change
5. Research, Innovation and Competitiveness – Supporting research and innovation in low-carbon and clean energy technologies which can boost the EU's competitiveness

Ireland's draft National Energy and Climate Plan is due to be finalised and submitted to the EC by 31.12.2019.

Whilst things have moved on considerably, the groundwork for Ireland's current energy policies was laid out in the 2015 Energy White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030.12 This set out a framework to guide Irish energy policy in the period up to 2030 and a vision for a profound transformation of Ireland's energy systems; moving

[10] United Nations Framework Convention on Climate Change (2015) *Adoption of the Paris Agreement*. Available at https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf

[11] The Renewable Energy Directive (recast) 2018/2001/EU entered into force in December 2018 and must be transposed by June 2021 ('RED II').

[12] https://www.dccae.gov.ie/documents/Energy%20White%20Paper%20-%20Dec%202015.pdf

to lower emissions fuels and ultimately towards a lower reliance on fossil fuels; significantly increasing renewable generation; achieving a step change in energy efficiency performance; implementing smart and interconnected energy systems; strong regulatory structures and markets to underpin these changes; and repositioning energy consumers to have a more active role within the energy sector. The key actions to give effect to this energy policy were set out in the 2017 National Mitigation Plan.13 This is a whole-of-Government plan, which reflects on the central roles of electricity generation, the built environment, transport, and agriculture. The measures to be implemented through the National Mitigation Plan will lay the foundations for transitioning Ireland to a low carbon, climate resilient, and environmentally sustainable economy by 2050. The National Mitigation Plan does not provide a complete roadmap to achieve the 2050 objective, but begins the process of development of medium- to long-term mitigation choices for the next and future generations. This ongoing process will involve the preparation of successive National Mitigation Plans at least every five years. Notably, the National Mitigation Plan is the subject of legal challenge by Friends of the Irish Environment against the Irish Government on the basis that it lacks the necessary ambition and binding targets to achieve the cuts in carbon emissions that are necessary.

Ireland's long-term national vision for environmental policy is underpinned by a broader sustainable development policy framework, "Our Sustainable Future".14 The focus being on promoting good air quality, maintaining public confidence in relation to nuclear safety and radiation protection, ensuring a sustainable waste policy, promoting access to information on the environment, and supporting the Environmental Protection Agency (EPA) in the performance of its legislative mandate to protect and improve the environment.

In line with Ireland's commitment under the Paris Agreement, Ireland has put in place a comprehensive new framework of policies and targets to guide climate policy to 2030, and to advance the long-term vision of becoming a low-carbon economy by 2050, as set out in the 2014 National Policy Position on Climate Action and Low Carbon Development. The legislative framework is set by the "Climate Action and Low Carbon Development Act, 2015" and builds on the 2014 "National Policy Position on Climate Action and Low Carbon Development". The National Policy Position towards 2050 aims for an aggregate reduction in carbon dioxide (CO2) emissions of at least 80% (compared to 1990 levels) across electricity generation, built environment and transport, and to become carbon neutral in the agricultural and land use sectors, including forestry, by 2050.

A summary of other relevant national polices are summarised in Table 2.1 below.

Table 2.1 – Relevant National Policies

	Climate Policy Framework	Target/Objective
2014	National Policy Position on Climate Action and Low Carbon Development	Minus at least 80% by 2050 (compared to 1990 level) in energy-related emissions and carbon neutrality in agriculture and land use sectors
2015	Climate Action and Low Carbon Development Act 2015	Provides the statutory basis for the national transition objective laid out in the National Policy Position.
	The Energy Policy Framework - Ireland's Transition to a Low Carbon Energy Future, 2015-2030 (The White Paper)	Includes a complete energy policy update, which sets out a framework to guide policy until 2030.
2017	National Mitigation Plan (NMP)	Closes the gap to 2020 target and prepares for the 2030 target. Emphasises the important role wind energy development plays in its contribution to renewable energy deployment in the state and in the progress towards renewable energy targets.
	Annual Transition Statements	Contains an overview of climate change policies and 'annual sectoral mitigation transition statement'
2018	National Adaptation Framework	Provides sectoral adaptation plans to reduce the vulnerability of the negative effects of climate change.
	Project Ireland 2040: including National Planning Framework (NPF) & National Development Plan (NDP)*	Project 2040 comprises two plans: The National Planning Framework [NPF] and the ten-year National Development Plan [NDP], which will guide strategic

[13] https://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf
[14] 5 https://www.dccae.gov.ie/documents/Our%20Sustainable%20Future%20-%202012.pdf

	Climate Policy Framework	Target/Objective
		development and infrastructure investment at the national level. The NPF sets a number of goals – strengthening rural economics and communities and a transition to a low carbon and climate resilient community as well as National Policy Objectives 54 and 55 which promote renewable energy generation and the carbon reduction. Project 2040 seeks to achieve the ten strategic outcomes of the National Planning Framework.
	Developing National Energy and Climate Plan 2021-2030	Set out contributions, targets and objectives in emissions and energy to 2030 and the planned policies and measures to achieve these
2019	Climate Change Action Plan	Sets out the goal that Ireland will achieve its EU emission reduction targets for the year 2030 and includes a new commitment to make Ireland 100% carbon neutral by 2050. The Plan contains 183 action points designed to achieve our national climate change targets
2020	EU Effort Sharing Decision	20% emission reduction in non-ETS sector compared to 2005
2030	EU Effort Sharing Regulation	30% emission reduction in non-ETS sector compared to 2005

2.6 Regional Energy Policy

A 'Draft Regional Spatial and Economic Strategy (RSES) for the Northern and Western Regional Assembly (NWRA) is currently in the process of being completed, ready for adoption. The objective of the draft RSES is to support the implementation of the National Planning Framework – Ireland 2040 and the economic policies and objectives of the Government by providing a long-term planning and economic framework which shall be consistent with the NPF and the economic policies or objectives of the Government.

One of the regional growth ambitions that the draft RSES has identified, is that more strategic actions are required to prepare the region for what is to come. The draft RSES highlights the need to:

"create a combined long-term vision for the future of both energy supply and our ability to generate renewable energy. In order to address our energy requirements our RSES emphasises the need for co-ordination, new thinking, investment and skills to implement change."

The Regional Policy Objectives relating to renewable energy in the Draft NWRA include the following:

39."The NWRA shall coordinate the identification of the potential renewable energy sites of scale in collaboration with Local Authorities and other Stakeholders within three years of the adoption of the RSES."

40. To position the region to avail of the emerging global market in renewable energy by (edited for relevance):
- stimulating the development and deployment of the most advantageous renewable energy systems
- raise awareness and public understanding of renewable energy encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses.

41. Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilization of energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.

42."Support the development of secure, reliable and safe supplies of renewable energy, in order to maximise their value, maintain inward investment, support indigenous industry and create jobs."

2.7 Summary

Ireland is facing significant challenges in efforts to meet the targets established in the above policies, alongside its commitment to transition to a low carbon economy by 2050. Ireland is falling behind meeting its 2020 target for renewable energy as well as the longer-term movement away from fossil fuels. Therefore, there is a clear requirement of urgent national importance to increase the amount of energy from renewable sources, and that this will continue beyond the initial 2020 target.

In coming years there will be a risk that progress towards the targets for renewables penetration could be undermined by the loss of generation due to older windfarms reaching the end of their (planning) life (more than a quarter of the current wind energy fleet is over ten years old). Repowering of existing sites offers the opportunity to prevent potential backsliding and also help make further progress towards achieving the 2030 targets. The co-location of battery with wind is one of the objectives of the Climate Action Plan to achieve increased penetration of wind energy on the national grid. Repowering projects is wholly in accordance with proper planning and sustainable development policies.

3 The Application Site and Development Description

3.1 Introduction

This section of the Statement sets out a description of the Development, the site where it is proposed ("the Site") and its surroundings, including relevant planning history.

3.2 The Site

The existing operational Barnesmore Windfarm is located within Donegal County, approximately 10 km Northwest of Donegal Town. The Site is located on elevated moorland adjacent to Barnesmore Gap between the N15 and the Irish national border, although the Site boundary is wholly contained within the Republic of Ireland. The site elevation is between 300 m and 398 m AOD and comprises a total landholding of 997 hectares (ha) of which the existing Windfarm covers approximately 7 ha, shown in EIAR Figure 1.1.

The Operational Barnesmore Windfarm is located on the Croaghakeadew Mountain and extends eastwards to Loughnaweelagh, northwards to Lough Namaddy and southwards to the north of Lough Naleaghany. The area surrounding the site is rural and sparsely populated. The nearest inhabited residential dwelling is located 1.8 km from the nearest turbine to the north of the site. There are 19 houses within 2.5 km of the Development infrastructure To the east of the Site boundary is commercial forestry and there is another windfarm development to the south.

The land immediately around the operational Windfarm infrastructure, which is wholly owned by the Applicant, was designated as an NHA in 2005 owing to the peatland habitat (Barnesmore Bog NHA 002375). This designation was subsequent to the construction of the Operational Barnesmore Windfarm and the designated boundary sought to exclude a 21 Ha area around the existing windfarm infrastructure from the NHA. However, the map contained within the NHA site synopsis is inaccurate; although.

The text of the NHA Site Synopsis confirms that exclusion of the windfarm was the intention when the boundary was drawn. In addition, the original site notes for this NHA were obtained from NPWS Designations Unit on 26 November 2019. These stated: *"N53* EXCLUSION/BOUNDARY Excludes windfarm including turbines and tracks. Boundary is 3m from the windfarm tracks."* The environmental assessment of the Development has used the map drawing notes to identify the intended boundary for the purposes of impact assessment.

3.3 Description of the Operational Barnesmore Windfarm

Planning permission was granted by An Bord Pleanála on the 16th August 1996 under planning reference PL.05.098236 [LPA Ref 95/914] for the erection of up to 26 no. wind turbines, transformer compound with associated single storey switch room building and service roads. The current permission is for a windfarm in 'perpetuity' which means there is no expiry of the planning permission for the existing Site and it can therefore continue to operate with the existing turbines indefinitely. The Operational Barnesmore Windfarm commenced operations in 1997 and currently consists of 25 x 600 kW wind turbines with a 61m tip height.

3.4 The Development Description

A summary of the key development characteristics is summarised below (a full description of the Development is contained in Chapter 2 of The Barnesmore Windfarm Repowering EIAR). The Development will consist of the following phases:

- Initial Phase - Decommissioning of the Operational Barnesmore Windfarm and construction of the Development;
- Operational phase – Operation of the Development; and
- Final Phase - Decommissioning of the Development.

The EIA of, and application for, the Development are not time limited. In line with the Operational Barnesmore Windfarm consent, it is proposed that the existing land use of the Site as a windfarm should be maintained in perpetuity. The EIA has considered the decommissioning of the Development and found that any effects arising from this are likely to be similar in nature but to a lesser magnitude than the combined effects of the initial phase (decommissioning and construction).

The Development will comprise of the following main components:

- Decommissioning/Removal of 25 existing 600 kW turbines
- Construction and Erection of 13 new circa 5 MW wind turbine generators with a rotor diameter not exceeding 158 m, and a blade tip height not exceeding 180 m
- Construction of new crane hardstand areas (using as much of existing hardstands as possible)
- Construction of new turbine foundations
- Upgrade of the existing onsite (Golagh) 110 kV substation, connecting to the national grid via the existing 110 kV overhead transmission line
- Upgrade of existing Site Access Tracks
- Upgrade of the existing public road network including the L-2095-6 / L-2051-1 junction and the L-2051-1 local road;
- Erection of new meteorological mast (30 m)
- Reinstatement of areas of existing infrastructure not being used for the Development
- Cabling onsite between the turbines and the 110kV substation
- Undergrounding of a section of the existing 110 kV lines to allow the construction of T10 and T12
- Upgrade 110kV grid connection including a new Cable Interface Tower, underground cable connection to Clogher 110kV GIS Substation, removal of the hard tee-connection between Cathaleen's Fall-Letterkenny 110kV overhead line
- Site drainage network;
- Construction of a new temporary site compound for use the decommissioning during construction
- Construction of a new 15 MW Energy Storage Unit
- All ancillary works

Where sections of redundant track and hardstanding areas are removed, materials will be reused within construction wherever possible, they will be re-instated in accordance with reinstatement principals outlined within the EIAR, the Outline CEMP and the Draft Habitat Management Plan.

The layout of the proposed development is shown in EIAR Figure 1.2 and a comparison with the Operational Barnesmore Windfarm is shown in Figures 1.4a and 1.4b). The proposal would result in the existing windfarm site of 7.26 ha increasing to c14.36 ha.

3.5 Micrositing

The Development infrastructure is designed around considerations of technical, economic and environmental constraints. While the site layout was optimised as far as practical, A micrositing allowance of 20m deviation (in all directions) from the indicative design footprint has also been requested. Being able to move some elements of infrastructure following detailed ground investigations nearer to the time of construction, allows unfavourable ground conditions or unforeseen environmental constraints to be further avoided. This would be undertaken in consultation with the on-site ecologist or archaeologist and only implemented where strictly necessary and could be controlled via a suitably worded planning condition.

3.6 The Development Components

3.6.1 Wind Turbines

The Development will involve the erection of 13 wind turbines with a maximum height from base to tip that will not exceed 180 m. The proposed turbines will be a typical modern three-bladed design, with rotor up wind of the tower, variable speed, pitched blade machine. The turbine appearance will be a matt-non-reflective finish in a white, off-white or grey colour and all of the rotors will spin in the same direction. Each turbine will have a small external transformer cabinet located next to it.

It is industry standard practice to consider a range of turbine physical parameters and then to assess the potential 'worst-case' turbine models of that parameter range. This assessment incorporates the worst-case scenario, for example, an overall tip height, rotor blade diameter and turbine noise output. This approach is supported by nationally accepted windfarm guidance such as the 'Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise' ("Good Practice Guide for the Assessment & Rating of Wind Turbine Noise").

Table 3.1 sets out dimensions of 'up to' the sizes as detailed in the submitted planning drawings.

Table 3.1: Turbine Physical Parameters

Turbine Parameter	Assessment Envelope
Turbine tip height	Up to 180m
Rotor diameter	Up to 158m
Tower height	Up to 113.5m

Turbine tip height will not exceed 180 m, where the largest larger rotor is used, a correspondingly shorter tower would be selected to ensure the overall tip height is not exceeded. The assessment of the candidate turbine has been based upon a maximum rotor diameter of 158 m.

3.6.2 Turbines Foundations and Crane Hardstands

The site has been designed to reuse as much of the existing infrastructure as possible. Each new crane hardstanding is an upgrade of an existing hardstand area, and where this is not possible they have been located adjacent to existing tracks, incorporating the track footprint to reduce land take where possible. The existing foundations cannot be used for the new larger turbines; however, these are being integrated into the new hardstanding areas where possible.

3.6.3 Transformers, Switchgear and Cabling

The onsite cabling will be laid in the verge of the existing Site roads and bedded in surplus excavated soil material. Danger tape, incorporating a metallic strip, will be laid during backfilling. Permanent posts up to approximately 0.5 m in height will mark cable routes at regular intervals and at all changes in direction.

Transformers will be located adjacent to each turbine at the Site. It will be located next to the tower in a small steel or glass reinforced plastic (GRP) cabinet on a concrete foundation pad.

3.6.4 Onsite Substation and associated Compound

The existing 110-kV electrical substation compound and control building will be upgraded at the location shown on EIAR Figure 1.2

The 110 kV Substation compound will be approximately 65 m x 33 m and will be enclosed by an approximate 2.8 m high fence and will contain a control building, a substation building and ancillary equipment, including the transformers, switch gear, fault protection, metering, component storage, car parking and other ancillary elements necessary for the operation of the Development.

The substation building will be approximately 14 m x 13 m x 5 m (to peak of roof) with a suitably sized footpath around it and an adjacent parking area. The appearance and finish of the substation building will be similar to an agricultural building. The final appearance would be agreed with Donegal County Council via the use of an appropriately worded planning condition.

The control building will typically contain a meter room, control rooms, an office, PPE room, SCADA control room and toilets. There will be 2 no. lightning monopole protection masts which will be up to approximately 17 m in height and 1 no. 18 m high Supervisory Control and Data Acquisition ("SCADA") System telecommunications pole. Warning / health & safety signage will be displayed as is normal practice for such installations. Motion sensitive lighting only will be used.

The control building will be a single story pitched roof structure, approx. 18 x 6.5 m, with traditional rendered finishes. The telecommunication antenna will be fixed externally to the substation control building for communication and control purposes (e.g. for the SCADA System) for the Developer, turbine suppliers and ESB networks. The final finish of the control building will be an off-white or grey colour, and the final details will be agreed in writing with the planning authority prior to the commencement of Development. There will be a small area outside the compound and adjacent to the access track that will be a hard-surfaced area for operational and maintenance for approximately 4 parking spaces.

Electricity transmitted between the turbines and the windfarm substation will be at either 20 kV or 33 kV.

3.6.5 Energy Storage Unit

The Development includes an ESU with a capacity for up to 15 MW. The facility will contain 10 no. 12 m containers mounted on concrete plinths with a maximum height of 5 m. The compound will be approximately 30 x 25 m and be located next to the existing (to be upgraded)110 kV substation.

The current energy storage technology favoured today is Li-ion batteries. These batteries are used widely due to their fast response time, which makes them preferable for grid-scale deployment. The Li-ion batteries vary in cell chemistries (e.g., Lithium Iron Phosphate, Lithium Nickel Manganese Cobalt Oxide, Lithium Cobalt Oxide, Lithium-Titanate) and cell arrangement (e.g., cylindrical, pouch, prismatic). Chemistry and arrangement will dictate the batteries' performance characteristics. The final selection of energy storage technology used will be based on the latest technology available at the time of construction, and it is requested that final details of this ancillary element be secured via the use of an appropriately worded planning condition.

The compound will be surrounded by a 2.6 m high paladin type fence. Access to the fenced off compound shall be through similar styled paladin double gates.

3.6.6 Grid Connection

The Development shall connect the electricity grid via the existing 110 kV overhead line (OHL) from the onsite Golagh substation to Clogher substation. The first 1.4 km of the existing OHL shall be rerouted to within the existing site road, to allow location of T10 & T12. This results in a reduction of the amount of OHL at the site compared to the operational site.

It is proposed to reconfigure the OHL to connect directly into the 110 kV Clogher Substation, removing the existing tee-connection with the Cathaleen's Fall – Letterkenny line. This represents minor works involving laying a short section of cable in existing cable ducts to connect to an existing spare bay in the substation.

Letters outlining land owner permission from all interested parties have been supplied with the application for the areas where works are proposed outside of the main windfarm Site.

3.6.7 Meteorological Mast

A meteorological mast up to 30 m in height located on an existing hard standing is proposed to fulfil grid code requirements. The meteorological mast will be a galvanised steel lattice construction. It will have a concrete foundation. A typical meteorological mast is shown in EIAR Figure 2.4. An existing access track serves the mast location.

3.6.8 Temporary Decommissioning and Construction Compounds and Laydown Areas

In order to minimise environmental effects, the temporary construction compound will be located on the ground that will later be used for the ESU, significantly reducing land take of the development. The proposed construction compound will be approximately 35 m by 25 m. The compound will be used as a secure storage area for construction materials and to contain temporary site accommodation units for sealed type staff welfare facilities. The compound will contain cabins for office space, meeting rooms, canteen area, a drying room, parking facilities, and similar personnel type facilities including first aid.

An area within the compound will be used for the storage of fuel and oils and this will be suitably bunded and the bund will be lined with an impermeable membrane in order to prevent any contamination of the surrounding soils, vegetation and water table. Alternatively, double protection containers / equipment will be used along with drip trays etc., and such details will be included in the final CEMP.

During the construction phase, water will be supplied by water bowser. The maximum wastewater production is estimated to be the same as the maximum water consumption (of approximately 2,000 litres per day). The project will include an enclosed wastewater management system at the temporary compound capable of handling the demand during the construction phase when as many as up to 50 people will be working on site at peak. A holding tank is proposed for wastewater. Wastewater will be taken off-site and disposed of at an appropriate licenced facility.

3.6.9 Access to the Development

The Development will be accessed via the access track for the Operational Barnesmore Windfarm. The existing access tracks on site will be reused for the Development where possible.

3.6.10 Onsite Access Tracks

The existing Site Access Tracks at the Operational Barnesmore Windfarm will be reused for the Development where possible. These will be upgraded and widened as necessary to provide a minimum width of 5 m. Approximately 10,320 m of the existing Site Access Track length will be reused for the Development. Proposed Site Access Tracks are shown on Figure 1.2 Site Layout. Upgraded Site Access Tracks will be approximately 1 m wider than the existing and will require approximately 5,160 m³ of additional stone material.

Where there are sections of existing Site Access Track that become redundant following the repower works, it is proposed remove and reinstate a proportion of this area.

3.6.11 Offsite Access

Road widening is proposed at the junction onto the L2015 from the L2095 to allow abnormal loads vehicles to turn. An ESB pole will also need to be relocated. Further road widening of the L2015 local road to the Site is also proposed. Letters of permission from the landowner have been supplied with the application.

3.6.12 Site Signage

During the decommissioning and construction phase, the Site will have suitable signage to protect the health and safety of workers, contractors and the general public.

During the operational phase, there will be a sign giving the operator's name, the name of the Development and an emergency contact telephone number. On the turbines and the substation, there will be further signs giving information about the component, potential hazards, the operator's name, the location grid reference and the emergency telephone number. The final location and design of the signage will be defined prior to the Development becoming operational.

3.7 Retired infrastructure

The first phase of the Development will comprise the decommissioning and removal of the existing turbines, which will involve the removal of the existing 25 turbines on the Operational Barnesmore Windfarm and the reinstatement of the lengths of access track and hardstands which are not proposed to be used for the Development.

Following the initial track construction and upgrade, cranes will be used to split the turbines into suitable sections, which will then be transported from the Site by heavy goods vehicles (HGV's). Following removal of the blades, power cables will be disconnected and lowered with control cables left in place, before the tower sections are lowered.

Reinstatement works will involve restoration of the areas of the Site to peatland habitat following the removal of the unrequired sections of access track and turbine hardstand areas. Further details on the approach to restoration can be found in Chapter 6 and in the Draft HMP.

Table 3.2: Indicative Decommissioning / Construction programme

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Site Establishment												
Decommissioning existing turbines												
Access road upgrade, removal & construction												
Substation & Energy Storage construction												
Excavation & construction of turbine foundations & hardstands												
Cable installation												

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Turbine erection												
Commissioning												
Site restoration												

3.8 Working Hours

In general, working hours for decommissioning / construction will be from 07:00 to 19:00 throughout the week, with reduced working hours at weekends. It should be noted that during the turbine erection phase, operations may proceed around the clock to ensure that lifting operations are completed safely. Hours of working will be agreed with the Council prior to the commencement of construction; any extensions to working hours would be agreed in advance.

3.9 Site Restoration

Following completion of the construction phase, all plant and machinery will be removed from Site. All rubbish and waste/excess materials will be removed from Site to an appropriate licenced facility from where it will be reused/recycled, where possible, or disposed of accordingly.

3.10 Decommissioning

This application is seeking a ten-year permission and an operational period that is not time limited, or no less than 40 years, and in the event that the Development is required to be decommissioned, the process would be similar to the decommissioning of the Operational Barnesmore Windfarm. Given the fewer number of turbines, the potential effects arising from such decommissioning will be less than the effects arising as a result of the combined initial decommissioning and construction phases described above. These phases combined therefore represent the worst-case parameters for assessment purposes.

The towers, blades and all components will then be removed from Site and reused, recycled, or disposed of in a suitably licenced facility. The turbine transformers will also be removed from Site. There is potential to reuse turbine components, while others can be recycled.

Prior to the decommissioning work, a comprehensive plan will be drawn up that takes account of the findings of this EIAR and the contemporary best practice at that time, to manage and control the component removal and ground reinstatement. This will determine the extent to which the foundations and cables are removed. This assessment will be carried out prior to decommissioning to take into account environmental changes over the project life.

3.11 Operational Phase and Maintenance

During the operation of the Development, the turbine manufacturer, the Transmission System Operator (EirGrid), the operator or a service company will carry out regular maintenance at the site.

Operational site inspections will be undertaken by the Applicant's staff, on a weekly basis and the servicing of turbines will be undertaken as per the turbine manufacturers requirements, usually once per year, but with monthly visits by the manufacturer's inspection team. Ongoing track maintenance will be undertaken to ensure safe access is maintained to all parts of the Development all year round.

In common with the wind turbines, the ESU will be designed to operate remotely, and only rare maintenance or servicing visits would be required once operational. It is expected that the Development will continue to employ up to 3 full time staff on a permanent basis, for regular operational and maintenance activities.

4 Community Consultation

4.1 Overview of Pre-Application Community Consultation Process

A Pre-Application Community Consultation (PACC) Report is submitted alongside the Application. Although not a mandatory required for the application, SPR, considers Community Consultation to be an important element of all projects and consistent with current and proposed planning policies.

4.2 Pre-Application Community Consultation

Two rounds of Public Information Days (PIDs) were undertaken for the Development, each round consisting of two events. The first was on 1st May 2019 in Leghowney Community Hall and the second on 2nd May 2019 at the Mill Park Hotel between the hours of 14:00 and 20:30. Representatives from SPR (including the Community Liaison Officer), JOD and the landscape architect were in attendance to present the proposals and answer any questions.

The second round of PIDs were held on the 16th and 17th October 2019 in Barnesmore Community Centre and Leghowney Community Hall. The aim of the second round was to enable the local community to view the final design of the Development prior to submission to the Board, and see any changes made following the environmental assessments and consultee and local community feedback.

The Development proposal was generally very positively received by the local community, who were knowledgeable about the Site and readily understood the benefits of repowering the Operational Barnesmore Windfarm, as opposed to starting again at a new greenfield site.

Whilst some reassurance was sought, mainly around the local road network, many residents expressed their support for the Development, providing positive comments regarding the repowering of the Site and strongly welcomed the opportunity for community benefit and local investment in the area.

Full information on the PIDs, including feedback from attendees is provided in the PACC Report. The PACC Report has been submitted to the Board as a standalone document as part of the planning application. The PACC Report summarises the consultation that has been undertaken with the local community, detailing how comments received were responded to.

5 Development Plan Policy Appraisal

5.1 Introduction

This section provides an assessment of the Development against the relevant planning policies of the Donegal County Development Plan 2018-2024 (DCDP). This section of the Planning Statement considers the relevant policies having regard to the conclusions set out in the EIAR.

5.1.1 The County Development Plan

In November 2018, in proceedings between Planree Limited and Donegal County Council ("the Council"), certain provisions of the County Donegal Development Plan 2018-2024 (Section 6.5(c) and (f) of the Wind Energy standards at Part B: Appendix 3), Development Guidelines and Technical Standards and Map 8.2.1 as contained in the DCDP as published were deleted and/or removed.

The Council is seeking to initiate a variation to the DCDP under Section 13 of the Planning & Development Act 2000-2018 with a view to substituting the previously deleted sections of the plan, including wind energy maps and planning policies. Until this is done, the application falls to be determined on its merits having regard to the existing provisions of the DCDP and in accordance with the principles of proper planning and sustainable development.

The Development site design and EIA have been prepared taking cognisance of the previously published but now deleted wind energy strategy, and any emerging local policy relating to renewable or wind energy development. There is still a significant body of adopted policy content within the DCDP under which the Application can be determined. The Development will also have regard to National and Regional Planning Guidance where there is a lacuna in local development plan policy.

5.2 County Development Plan Assessment

The DCDP policies relevant to the Development are set out in Table 5.1. The Development has been assessed against these in order to illustrate compliance with the relevant policies set out in the DCDP.

Planning policy considerations are presented under key environmental topics which correspond to the chapter headings of the EIAR. Material considerations comprising regional and national planning policy and guidance, including emerging policy, are considered in Section 6 & 7 below.

There is a positive presumption in favour of renewable energy projects at National, Regional and Local Level. One of the key objectives of the DCDP is to facilitate the development of a diverse energy portfolio and to promote the development of Donegal as a Centre of Excellence for Renewable Energy. In particular policy E-O-1 which seeks to sustainably develop a diverse renewable energy portfolio.

Table 5.1: Relevant Planning Policies from The County Donegal Development Plan [CDP] 2018-2024

Policy Topic	Policy Details	Development Policy Accordance
Strategic Policies	**Key Strategic Objectives of the County Development Plan** **S-O-2:** To support growth of the County through an 'All of County Strategy' in order to ensure effective development and to harness particular strengths and opportunities that exist within the different areas of the County. **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 and as an integral component of accelerating the socio-economic growth in the north-west. **S-O-6:** To protect, enhance and appropriately harness the unique quality and diversity of the environment in the County, through a wide range of measures, supported by proper planning and sustainable development. **S-O-7:** To prioritise key infrastructural investment required throughout the County, such as in transportation networks, water services, waste disposal, energy and communications networks, the provision of education, healthcare, retail, and a wide range of community based facilities and to collaborate on delivery, including in the regional context. **S-O-8:** To facilitate appropriate, sustainable development, innovation, research and technological advances in business, communications and energy development throughout the County and in a Regional, Cross Border and National context**.** **S-O-9:** To implement the policies of the Development Plan**.** **S-O-10:** To provide the strategic spatial framework to guide collaboration, investment, community development and sustainable growth	The Development will build upon the already effective renewable energy development of the site granted in perpetuity under planning reference PL.05.098236; harnessing the proven local wind resource. It is an inherently sustainable development that helps to diversify the rural economy and bringing notable socio-economic benefits. The draft HMP for the Development offers the opportunity for Barnesmore NHA to be restored, protected and conserved for the long term and ensure that the Development will achieve a biodiversity net gain. It is considered that the Development therefore accords with policies **S-O-2, S-O-4, S-O-6, S-O-7, S-O-8, S-O-9, & S-O-10**
Renewable Energy	**Core Strategy Objectives** **CS-O-17:** It is an objective of the Council to promote sustainable development and transportation strategies in urban and rural areas including the promotion of measures to: (i) Reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources; (ii) Reduce anthropogenic greenhouse gas emissions; and (iii) Address the necessity of adaptation to climate change.	The Development is inherently sustainable The EIAR demonstrates that it will contribute to reduced GHG emissions, is a positive step towards climate change adaptation, and is considered climate change resilient. The extensive reuse of existing infrastructure, from grid networks, site tracks and hardstandings to the use of the existing recognised port facility and Haul Route demonstrate the Development is in line with the DCDP Strategy Objective **CS-O17**

Policy Topic	Policy Details	Development Policy Accordance
Economic Development	**General Economic Development** **ED-O-5**: To promote appropriate rural economic development by encouraging diversification that supports the growth of emerging rural enterprises functionally related to the countryside. **ED-O-9:** To maximise the appropriate development of the county's renewable energy resources and to support and facilitate the creation of a sustainable local renewable energy market place in Donegal from where energy operators can transport, store, trade and export their "*local renewable energy product"* to domestic and non-domestic markets subject to environmental designations and amenity considerations.	The Operational Barnesmore Windfarm demonstrates that the Development, and its associated rural economic development, is appropriate at this location and will help to support new and existing employment in the key construction and renewables industries. Environmental and amenity considerations have been assessed in the EIAR and the findings confirm the Development supports plan objectives **ED-O-5** and **ED-O-9**
Infrastructure	**Infrastructure** **T-P-15:** It is a policy of the Council to require that all development proposals comply with the Development and Technical Standards set out in Appendix 3 to promote road safety.	The Development will not require any changes to the existing local trunk road network, and any improvements are confirmed as being widening works on the minor road leading into the Site, which shall conform to the design guidance. The existing site entrance will be retained and will result in no perceptible change in traffic flows during operation. The Development will conform to policy **T-P-15**
Natural and Built Heritage	**Natural & Built Heritage Policies** Chapter 7 of the CDP relates to the natural and built heritage. The aim of the Plan is "To conserve, protect and enhance the County's natural, built and cultural heritage for future generations and encourage appreciation, access and enjoyment of these resources."	Natural and Built heritage have been extensively considered by the EIAR in Chapters; 6 - Biodiversity 7 - Ornithology 8 - Soils & Geology 9 - Hydrology & Hydrogeology 11 - Landscape and Visual Amenity 13 - Archaeology & Cultural Heritage
	The DCDP recognises that the Donegal landscape is a valuable national and local asset that requires sustainable management to facilitate development and growth whist also retaining, conserving and protecting the character, quality and resultant value of our landscapes and sets out the following three distinct Landscape Character Classifications that have been identified within the county: • Areas of Especially High Scenic Amenity (EHSA) deemed to have 'extremely limited capacity to assimilate additional development': • Areas of High Scenic Amenity (HSA) deemed to have 'capacity to absorb sensitively located development of scale, design and use that will enable assimilation into the receiving landscape and which does not detract from the quality of the landscape, subject to compliance with all other objectives and policies of the plan'; and	In Chapter 11 of the EIAR for the Development, the Landscape and Visual assessment concluded that the Development would not give rise to any significant landscape or visual amenity effects (including residential amenity). This is a reflection of the existing baseline of the Site being an operational windfarm located in an appropriate landscape setting and the increase in turbine height being balanced by the reduction in the number of turbines by 12, moderating the magnitude of change in effects. The Development continues to avoid areas of EHSA. The EIAR L&V chapter also considered effects upon

Policy Topic	Policy Details	Development Policy Accordance
Landscape	• Areas of Moderate Scenic Amenity (MSA) deemed to have capacity to absorb suitable development. **Objectives** **NH-O-4:** To ensure the protection and management of the landscape in accordance with current legislation, ministerial and regional guidelines and having regard to the European Landscape Convention 2000. **NH-O-5:** To protect, manage and conserve the character, quality and value of the landscape having regard to the proper planning and development of the area, including consideration of the scenic amenity designations of this plan, the preservation of views and prospects and the amenities of places and features of natural, cultural, social or historic interest. **Policies** **NH-P-6:** It is a policy of the Council to protect areas identified as Especially High Scenic Amenity on Map 7.1.1: 'Scenic Amenity'. Within these areas, only developments assessed to be of strategic importance or developments that are provided for by policy elsewhere in this Plan shall be considered. **NH-P-7**: Within areas of 'High Scenic Amenity' (HSA) and 'Moderate Scenic Amenity' (MSC) as identified on Map 7.1.1: 'Scenic Amenity', and subject to the other objectives and policies of this Plan, it is the policy of the Council to facilitate development of a nature, location and scale that allows the development to integrate within and reflect the character and amenity designation of the landscape. **NH-P-13**: It is a policy of the Council to protect, conserve and manage landscapes having regard to the nature of the proposed development and the degree to which it can be accommodated into the receiving landscape. In this regard the proposal must be considered in the context of the landscape classifications, and views and prospects contained within this Plan and as illustrated on Map 7.1.1: 'Scenic Amenity'. **NH-P-17:** It is a policy of the Council to seek to preserve the views and prospects of special amenity value and interest, in particular, views between public roads and the sea, lakes and rivers. In this regard, development proposals situated on lands between the road and the sea, lakes or rivers shall be considered on the basis of the following criteria: • Importance value of the view in question. • Whether the integrity of the view has been affected to date by existing • development. • Whether the development would intrude significantly on the view. • Whether the development would materially alter the view.	"views and prospects" included in the DCDP. The findings demonstrate that the landscape can accommodate the Nature location and scale of the Development without giving rise to significant effects, Therefore, the Development is shown to accord with Natural Heritage objectives **NH-O-4, NH-O-5 and Policies NH-P-6, NH-P-7, NH-P-13, & NH-P-17 of the DCDP.**

Policy Topic	Policy Details	Development Policy Accordance
	• In operating the policy, a reasonable and balanced approach shall be implemented so as to ensure that the policy does not act as a blanket ban on developments between the road and the sea, lakes and rivers.	
Biodiversity	**Objectives** **NH-O-1:** To protect, sustainably manage and enhance the rich biodiversity of County Donegal for present and future generations. **NH-O-2:** To comply with Article 6 of the Habitats Directive (92/43/EEC) and have regard to the relevant conservation objectives, management plans, qualifying interests and threats to the integrity of Natura 2000 sites. **NH-O-3:** To maintain the conservation value of all existing and/or proposed SACs, SPAs, NHAs and RAMSAR sites including those plant and animal species that have been identified for protection under the EU Habitats Directive (92/43/EEC), EU Birds Directive (79/409/EEC as amended by 2009/147/EC), the Wildlife Acts (1976-2014) and the Flora Protection Order (2015). **NH-O-6:** To protect and improve the integrity and quality of Designated Shellfish Waters, and Freshwater Pearl Mussel Basins and to take account of any relevant Shellfish Reduction Program or Fresh Water Pearl Mussel Sub-basin Plan. **NH-O-10:** To maintain and restore ecosystems and to conserve valuable or threatened habitats and species in order to prevent further loss of biodiversity and to meet the EU's target to halt biodiversity loss by 2020 through the implementation of the EU Biodiversity Strategy (2011) or as updated. **NH-O-11:** To ensure the conservation and management of Peatlands in the County. **Policies** **NH-P-1**: It is a policy of the Council to ensure that development proposals do not damage or destroy any sites of international or national importance, designated for their wildlife/habitat significance in accordance with European and National legislation including: SACs, Special SPAs, NHAs, Ramsar Sites and Statutory Nature Reserves. **NH-P-4:** It is a policy of the Council to require the consideration of Freshwater Pearl Mussel and any relevant Freshwater Pearl Mussel Sub-basin Plans in all development proposals that fall within their basin of catchment. **NH-P-5:** It is a policy of the Council to require consideration of the impact of potential development on habitats of natural value that are key features of the County's ecological network and to incorporate appropriate mitigating biodiversity measures into development proposals.	The land around the Operational Barnesmore Windfarm was designated as an NHA almost a decade after the windfarm was constructed. This highlights the sensitivity of the surrounding peatland habitats, and also that the construction of the existing windfarm did not undermine the wider conservation value of the bog. The design of the Development recognises the surrounding habitat sensitivity and has sought to minimise effects upon biodiversity throughout by proposing the reuse of existing infrastructure, removal and reinstatement of redundant infrastructure and only increasing the net land take where it is absolutely unavoidable. While some potentially significant effects remain, the risk of these is substantially reduced through the application of a best practice construction and environmental management approach. A draft HMP has been developed that will provide ecological conservation of the Site for the long term. It will manage implementation of a range of steps positively influencing biodiversity of the Site. These include; reinstatement of damaged areas of peatland, improved drainage including re-wetting of areas, steps to repair and prevent erosion of the peat resource and plans to stop illegal peat extraction from the Site. Chapter 6 Biodiversity found that the Development is not likely to have a significant effect upon freshwater pearl mussels and the NIS prepared for the Development found that it would also not be likely to have significant effects on any sites that hold a European designation (Natura, SAC, SPA)

Policy Topic	Policy Details	Development Policy Accordance
		Through the pre-application consultation with NPWS it was noted that the purpose of the NHA is not to prevent development, but to control it in such a way as to ensure that it does not undermine the integrity of a designated site and that NPWS are stakeholders in the process to ensure that such development is carried out sensitively and in an appropriate fashion. The conclusions of Chapter 6 are that the mitigation and compensation measures proposed are sufficient to address and offset the potential significant effects of the Development resulting in a biodiversity net gain, ensuring that the conservation value of Barnesmore Bog NHA will be maintained and protected. Through the detail of the EIAR, NIS, CEMP and HMP it is shown that the Development accords with DCDP objectives **NH-O-1**, **NH-O-2**, **NH-O-3**, **NH-O-6**, **NH-O-10 &, NH-O-11,** and that it also conforms to policies **NH-P-1, NH-P-4 &, NH-P-5.**
Cultural Heritage	**Built Heritage** **Objectives** **BH-O-1:** To preserve, protect, enhance and record the architectural heritage of the County**.** **Policies** **BH-P-1:** It is a Policy of the Council to conserve and protect all structures (or parts of structures) and sites contained in the Record of Protected Structures that are of special architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest. **Archaeological Heritage** **Policies** **AH-P-1:** It is a policy of the Council to protect and enhance the integrity of Archaeological Monuments and their settings and to secure the preservation in- situ of all archaeological monuments included on the Record of Monuments and Places. Preservation by record shall only be considered in exceptional circumstances where the principles of the Department of Arts, Heritage, Gaeltacht and the Islands publication entitled, 'Framework and Principles for the Protection of Archaeological Heritage' can be satisfied. **AH-P-4:** It is the policy of the Council to protect where appropriate, the character and setting of any unrecorded archaeological object or site.	Chapter 13 considers the potential of the Development to give rise to effects in relation to archaeological and cultural heritage resources. It was found that there are no recorded monuments within the site boundary and therefore direct effects are considered unlikely. It is also the case that no significant indirect effects have been predicted. Standard construction mitigation has been proposed to further reduce any potential effects that could arise due to the discovery of any new items of archaeological value. In this regard the Development accords with objective **BH-O-1 & Policies BH-P-1, AH-P-1 & AH-P-4**

Policy Topic	Policy Details	Development Policy Accordance
Renewable Energy Policies	**Natural Resource Development** Section 8.2 (Energy) was prepared having regard to the Wind Energy Development Guidelines (2006), and the Interim Guidelines for Planning Authorities on Statutory Plans Renewable Energy and Climate Change (2017). The Plan retains a policy categorising (i) areas '**Open to Consideration', (ii) areas identified as 'Not Acceptable' and (iii) areas identified as 'Acceptable for Augmentation to Existing Windfarms.'** **(the accompanying map has been deleted from the Plan)** **(1) 'Open to Consideration':** Within these locations, windfarm developments are open to consideration, subject to compliance with other objectives and policies of the Plan. These areas are open to consideration for appropriate wind energy proposals. They have been identified having regard to a range of factors, including wind energy potential (through the wind speed atlas www.seai.ie), existing grid connections, proposed grid connections, natural heritage designations and landscape sensitivity, road infrastructure and where potential conflict with natural heritage designations may be managed effectively. **(2) 'Acceptable for augmentation of/improvements to existing windfarms':** Within these locations, windfarm development would be unacceptable save as augmentation of, or improvements to, existing windfarm development subject to compliance with all other objectives and policies of the Plan. The Council recognises the opportunities arising from the use of more efficient turbines on established windfarms, as they generate much higher energy yields per turbine, thereby reducing the need for additional turbines. In most cases the infrastructure, roads, hardstand, turbines, substation and fences have already been established, so there should be limited additional impact. Wind energy developments within these areas will be considered subject to compliance with all other objectives and policies of the Plan. **(3) 'Not acceptable':** Locations where Windfarm Development would be unacceptable. Areas where wind energy proposals would be unacceptable have been identified having regard to their significant environmental, heritage and landscape constraints. These include; Special Areas of Conservation (SAC's) and Special Protection Areas (Natura 2000) sites, Natural Heritage Areas, areas identified as high and medium landscape sensitivity, areas of Fresh Water Pearl Mussel including the catchments identified in the Sub-Basin Management Plans for Clady, Eske, Glaskeelin, Leannan, Owencarrow and Owenea (as listed in S.I. 296 of 2009), important views and prospects, among others. It is considered that these areas have no capacity for wind energy development. **Objectives** **E-O-1:** To develop sustainably a diverse renewable energy portfolio to meet demands and capitalize on the County's competitive locational advantage. **E-O-2:** To facilitate the strengthening of the electricity grid to enable the harnessing and distribution of energy. The Council will support transboundary and trans-national interconnectors to enable the exporting of energy outside of the County. **E-O-3:** To facilitate the sustainable development of Donegal as a Centre of Excellence for renewable technology, and Killybegs as an offshore service centre and wind energy	The Development has been designed to broadly sit within the footprint of the existing Operational Barnesmore Windfarm, which fits the criteria for areas **"Acceptable for Augmentation to Existing Windfarms"** a policy which outlines the Council's support in principle for the repowering potential of existing sites where more efficient technology can be deployed, infrastructure reused and turbine numbers reduced. The Policy wording recognises the opportunity to benefit from increased renewable energy generation with limited additional environmental impacts from a repowered windfarm and this is consistent with the findings of EIAR. By taking cognisance of the DCDP wind energy policy, DEHLG Wind Energy Development Guidelines 2006 and also the emerging guidance signalled by Circular PL5/2017 Wind Energy Development Guidelines 2006 – Update on Review. The design and environmental assessment of the Development has been undertaken to meet all extant, defunct and emerging policy and guidance on wind energy development. The Development will add to Donegal's renewable energy portfolio, taking advantage of and re-affirming Killybegs as a renewables hub, and contribute to climate change adaptation. It has been found not to have any (visual/noise/shadowing) significant adverse effect upon the amenity of any inhabited residential dwellings. The Development will utilise existing grid infrastructure, while also supporting the needs case for reinforcement of the wider Donegal grid network helping to support other renewable energy projects (including diversification). It is therefore asserted that the Development supports DCDP objectives **E-O-1, E-O-2, E-O-3, E-O-4, E-O-5 &, E-O-5** and also accords with policies **E-P-1, E-P-2, E-P-10 &, E-P-12**

Policy Topic	Policy Details	Development Policy Accordance
	centre. **E-O-4:** To facilitate a sustainable and diverse mix of developments which limit the net adverse impacts associated with global warming such as promoting renewable energy, the growth of local farm produce and the promotion of sustainable modes of public transport. **E-O-5:** To ensure that wind energy developments meet the requirements and standards set out in the DEHLG Wind Energy Development Guidelines 2006, or any subsequent related Guidelines (or as may be amended). **E-O-6:** To ensure that wind energy developments do not adversely impact upon the existing residential amenities of residential properties, and other centres of human habitation (as defined at Para. 6.6, 'Wind Energy', Appendix 3, Development Guidelines and Technical Standards, Part B, Objectives and Policies of the Plan). **Policies** **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 and between all adjacent counties and to support the development of cross border grid connections, subject to other objectives and policies of this Plan. **E-P-2**: It is a policy of the Council to facilitate the appropriate development of renewable energy from a variety of sources, including, hydro power, ocean energy, bioenergy, solar, wind 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. **E-P-10:** It is a policy of the Council that development proposals for wind energy shall be in accordance with the requirements of the Wind Energy Development Guidelines: Guidelines for Planning Authorities, 2006 (or as may be amended). **E-P-12:** It is the policy of the Council to: Consider the development of appropriate new wind energy developments within the areas identified as 'Open to Consideration' on the Wind Energy Map 8.2.1, subject to compliance with all other relevant objectives and policies contained within this Plan. Consider the augmentation, upgrade and improvements of existing windfarm developments within areas identified as 'Acceptable for augmentation of/improvements to existing windfarms' on the Wind Energy Map 8.2.1 on a case by case basis subject to compliance with other relevant objectives and policies contained within this plan and the following: **(a) Repowering** Repowering is the process of replacing older turbines with newer ones that either have a greater capacity or more efficiency which results in a net increase of power generated. Repowering may also seek to extend the overall lifespan of the development. Proposals for repowering, shall not result in a net increase in turbines, and it shall be demonstrated that there is no adverse impact on the receiving environment; or	

Table 5.2a: Deleted Wind Energy Policies from The County Donegal Development Plan [CDP] 2018-2024

Policy Topic	Policy Details	Development Policy Accordance
Renewable Energy Policies	**Natural Resource Development** **Section 6.5(c) and (f) of the Wind Energy standards at Part B: Appendix 3, Development Guidelines and Technical Standards and Map 8.2.1 as contained in the County Donegal Development Plan 2018-2024 as published were ordered to be deleted and/or removed from the County Donegal Development Plan 2018-2024.** **These sections of the DCDP Wind Energy Policies have been deleted until such time as a variation is made to the Donegal County Development Plan.**	While no longer valid planning policy and therefore immaterial to the application the SPR note that the Development accords with the deleted policies contained Wind Energy standards at Part B: Appendix 3, Development Guidelines and Technical Standards and Map 8.2.1 by virtue of location in an area Acceptable for augmentation of/improvements to existing and also retaining sufficient separation to nearest residential properties.

6 Material Planning Considerations

6.1 Introduction

The Development SID planning application should be considered on the basis of the proper planning and sustainable development of the area and on the likely effects of the Development on the environment. In reaching its decision, the Board will have regard to the criteria set out below:

6.1.1 The application and EIAR,

The Development proposal has been conceived and designed to align within the planning and sustainable development objectives of the local area. The success of this is documented in comprehensive detail through the EIAR and illustrated in Table 5.1 which shows accordance with the provisions of the local County Development Plan.

The application documents and EIAR show that the Development provides an excellent opportunity to significantly increase the productivity of an existing renewable energy asset, stimulate continued and additional investment and utilise a circular economic approach to maximise beneficial impact towards national targets, while also minimising the resulting environmental effects. This will be achieved by sensitive design and pragmatic reuse of existing infrastructure at the Operational Barnesmore Windfarm.

The Development will be a leading demonstration of how older first-generation windfarm sites can be redeveloped; to further contribute to climate change adaptation and be vehicles for securing environmental management and conservation as well as local investment and community benefits. By deploying modern technology and techniques learned by the industry over 20 years, output can be maximised and any historic shortcomings in their original execution addressed.

6.1.2 Implication for European sites or NHA designations

Due to the subsequent designation of the land surrounding the Operational Barnesmore Windfarm it is not possible to construct the Development without impacting land within the designation. However, every care has been taken to minimise effects upon Barnesmore Bog NHA while retaining a commercially viable project in the Development.

The EIAR has shown that the impacts of the Development will be contained and that they will not undermine the conservation value of the Barnesmore Bog designation, the existing windfarm demonstrates the fundamental compatibility of the designation, conservation of the sensitive habitats and the wind energy project.

A Habitat Management Plan has been drafted encompassing a range of measures including drain damming, peat cutting remediation, removal of self-seeded conifers, riparian planting, turbary and grazing management as well as restoration of retired existing infrastructure to be applied to mitigate any ecological effects. These measures will be applied within a Habitat Management Area within the NHA and covering 152.85 Ha of predominantly peatland habitat which is considered adequate to compensate for the 4.37 ha of Annex 1 habitats (Blanket Bog, Alpine and Boreal Heath and Wet Heath) predicted to be lost as part of the project

The mitigation and compensation measures proposed shall help to secure and maintain the conservation value of the NHA designation for many years to come and ensure that the Development will result in a biodiversity net gain.

The Natura Impact Statement (NIS) prepared for the Application has shown that the Development is not likely to have a significant adverse effect upon any European Site.

6.1.3 Any transboundary effects,

A short section of the Site boundary follows the line of the Irish National border, which is also the boundary between Donegal County and Derry City & Strabane District Council (DCSDC) areas. Due to the scale and nature of the Development, throughout the design of the Development and preparation of the EIAR (including SID screening and scoping consultation), consideration has been given to the potential transboundary effects of the Development.

It was identified that the Development could have the potential to give rise to transboundary effects in the following areas, which were then assessed as part of the EIAR to consider potential significance;

6.1.3.1 Landscape

The scope of the landscape and visual impact assessment (LVIA) is led by consideration of the likely receptors and potential

effects upon them within a Study Area of 20 km radius from the Development. In this case, a significant proportion of the LVIA study area falls into the DCSDC administrative area.

The LVIA details that there are very few sensitive receptors in this sector of the LVIA Study Area, which consist of large tracts of forestry and open moorlands, with no significant settlements or transport routes within 15 km, and only a sparse, low density settlement pattern across the eastern LVIA Study Area where ZTV data shows intermittent visibility of the scheme.

Five of the LVIA Viewshed Reference Points (VRP) were in locations within, or representative of, views from the DCSDC area (VPs 8, 13, 17, 19 &, 25). In all cases the assessment of visual effects from these VRPs found that no significant effects are predicted to arise due to the Development.

The Landscape assessment reviewed the baseline of the DCSDC area with reference to the NI Landscape Capacity Assessment 2000 and Planning Policy statement 18. The landscape in this area was again judged to be less sensitive than the other areas such as Lough Derg, Bluestacks etc.

> "*to the east, the landscape is predominantly contained in rolling uplands of forestry and marginal grazing interspersed with occasional farmsteads and small settlements".*

It was found that across the entire LVIA Study Area that landscape effects would be moderate-slight within 5 km reducing to slight beyond 5 km. Given the lower sensitivity of the DCSDC portion of the LVIA Study Area, there can be robust confidence that the Development will not give rise to any transboundary significant landscape effects.

6.1.3.2 Biodiversity and Ornithology

The Development's proximity to the border and elevated setting mean that there is hydrological connectivity with ecological receptors located in Northern Ireland which could result in transboundary effects on Biodiversity arising. This potential has been considered in the EIAR and NIS.

The desktop studies undertaken in Chapter 6 and 7 included review of data for the Northern Irish section of the respective Study Areas and review of the relevant NI legislation and guidance. The majority of the site drains into the cross-border River Foyle catchment, which includes the River Foyle and Tributaries SAC (12 km downstream from the Site). It was observed that any construction project at the Site, in the absence of mitigation, would carry the potential to result in sediment release or hydrocarbon pollution with potential to impact the river system and associated SAC.

The reuse of existing water crossings and culverts throughout the Site reduce the potential for new effects to arise. A single new water crossing is proposed within the windfarm to access T13 which could give rise to a potential significant effect on the River Foyle receptors (qualifying species being Atlantic salmon and otter). The potential for transboundary ornithological effects is considered fully in Chapter 7.

The EIAR Chapter 6 and NIS both concluded that with application of the proposed best practice mitigation during construction and operation, as detailed in the EIAR and CEMP, that there would be no impact on the integrity of the River Foyle and Tributaries SAC. Measures proposed as part of the HMP avoid the potential for a significant effect on NI resident hen harrier.

6.1.3.3 Cultural Heritage

From review of archaeological monument records, historic mapping and fieldwork, it was found that there are two archaeological sites located within Republic of Ireland (RoI) but adjacent to the border and recorded under Northern Ireland Sites and Monuments Record, with potential to be indirectly affected by the Development.

These are both potential crannog sites associated with small lakes in close proximity to the Site boundary. The setting of these sites is currently affected by the Operational Barnesmore Windfarm and would continue to be affected by the repower during operation. It is judged that the lake systems themselves are the key contributor to understanding and appreciation of the setting of these sites moderating any negative effects from the turbines. The potential indirect effect on the setting was considered to be slight and therefore not significant.

As the Development is located entirely within the ROI there is no potential for direct effects to arise on transboundary cultural heritage assets.

6.1.4 Any relevant policies of the Government, a State Authority, the Minister or any Minister of the Government,

Sections 2.1 – 2.7 of this Planning Statement, and EIAR Chapter 4 Planning Policy, set out the wealth of current policy and legislative support for the development of renewable energy in Ireland. The substance of these documents indicates that there is a strong presumption in favour of such development and compelling urgency to facilitate its instigation. The further interpretation provided in this Planning Statement illustrates the importance of the Development in leading the industry in demonstrating how early sites can be redeveloped to maximise the contribution to the goals and targets set out in the Government policy. The design of the Development and the EIAR have also taken account of the emerging ministerial guidance with respect to wind energy development. This has ensured that the Development not only follows the extant guidance but is also highly likely to follow and conform to the requirements of future guidance.

6.2 The national interest and strategic importance

Through the review of policy in legislation and outlining of the needs case for the Development, it has been shown that the Development is firmly in the Irish national interest. It will make a valuable contribution to climate change adaptation and greenhouse gas reductions while also adding to Irish energy security reducing reliance on imported fossil fuels. Maximising the energy output of the Site with deployment of modern, efficient wind turbine technology, currently the cheapest form of new generation, will also contribute to reducing the levelised cost of energy and benefit Irish consumers through lower energy prices.

The additional renewable energy that the Development will generate will help support Ireland's wider low carbon transition helping to meet the additional electrical demand created by electrification of the transport and heating networks and growing tech industry installations such as data centres.

The construction of the Development will also positively contribute to the Donegal and border area economy bringing investment and jobs that will help to support and retain confidence in the key regional industries of construction and renewable energy, while bolstering existing resources such as the Killybegs harbour.

The CAPEX investment for the Development is estimated to be approximately €90 million. This expenditure will result in economic benefit at a national, regional and local level. The OPEX (based on a conservative 24-year period) in nominal terms is estimated to be €105 million. Research undertaken on SPRs behalf by BVG Associates, that analysed the economic impact of other windfarm sites constructed by SPR, suggests that as much as 66% of the total project spend (CAPEX & OPEX) could be retained within the Irish National economy, with 17% of the total potentially being retained in the local regional economy.

As one of the first repowering projects in Ireland, the Development can inform strategic consideration towards solving the upcoming issue of how to prevent backsliding against renewable energy targets as older windfarm sites reach the end of their planning terms, and maximising the continuing utilisation of the country's most productive and favourable wind energy sites.

The Development also contributes to the needs case to justify investment in reinforcement of the electrical transmission network in the northwest of the country to improve the national infrastructure and facilitate further development and diversification of renewables technologies in the northwest. The inclusion in the Development of energy storage will further contribute to the stability and cost-effective operation of the electrical grid network.

Figures from the Sustainable Energy Authority Ireland report, entitled 'Introduction to the Wind Energy Roadmap to 2050 illustrate how important the onshore wind industry is likely to be to employment in Ireland through the period of the next 30 years (Figure 6.1). Repowering projects such as the Development will provide a sustaining influence on this valuable growing industry and help to maintain investment levels and momentum towards achieving Ireland green energy targets.

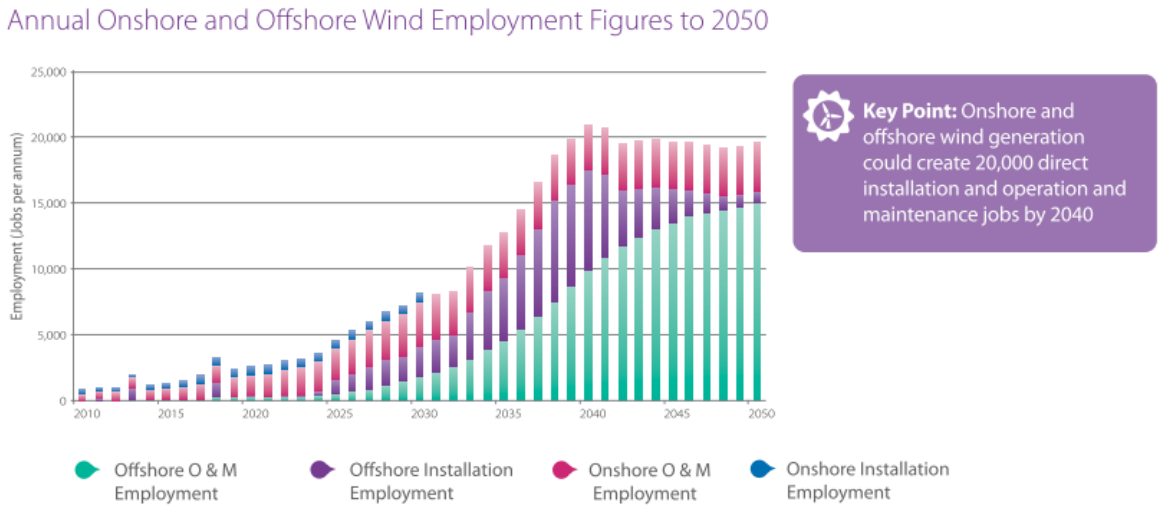

Figure 6.1: Extract from Wind Energy Roadmap to 2050

6.2.1 The National Planning Framework and any regional planning guidelines

The Development supports the strategic objectives of the NPF, through an increase in the provision of renewable energy, and it represents innovation in the renewable energy sector being one of, if not the, first major windfarm repowering projects in Ireland. The Development aligns with facilitation of the shift to a lower carbon economy, the mitigation and adaption to climate change and also the delivery of a secure and sustainable energy supply.

The Development will utilise existing infrastructure, wherever possible to minimise the impact upon the receiving environment and in particular the NHA. The ancillary energy storage element of the Development will improve the strength and agility of grid infrastructure and represents an opportunity to deploy the latest technology to support further renewable energy growth.

6.2.1.1 National Policy Objective 54

"Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."

In the energy sector, transition to a low carbon economy from renewable sources of energy is an integral part of Ireland's climate change strategy and renewable energies are a means of reducing our reliance on fossil fuels. The forthcoming Renewable Electricity Policy and Development Framework will aim to identify strategic areas for the sustainable development of renewable electricity projects of scale, in a sustainable manner, compatible with environmental and cultural heritage, landscape and amenity considerations. The development of the Wind Energy Guidelines and the Renewable Electricity Development Plan will also facilitate informed decision making in relation to onshore renewable energy infrastructure.

National Policy Objective 54 has been fulfilled by the establishment of national, regional and local policy to facilitate renewables. By demonstrating accordance with these policies, the Development will therefore contribute to the achievement of the national policy objective.

6.2.1.2 National Policy Objective 55

"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."

It is clear that the National Policy Objective 55 demonstrates policy support for projects such as the Development that improve progress towards the targets in a location that has been proven to be suitable for wind energy by the successful operation of the Operational Barnesmore Windfarm for over 20 years without giving rise to any complaint or significant effects.

6.2.2 The Border Regional Authority – Regional Planning Guidelines (2010-2022)

6.2.2.1 Overview

The Regional Planning Guidelines (2010) for the border region formulates public policy for the region covering the administrative areas of Counties Cavan, Donegal, Leitrim, Louth, Monaghan and Sligo. The Plan provides a long-term strategic planning framework for the sustainable development of the Region for a 12-year period up to 2022 and seeks to implement the planning framework set out in the National Spatial Strategy (NSS) published in 2002 whilst providing direction to County Development Plans.

Chapter 4 of the RPGs outlines the Regional Economic Strategy and states that existing and potential areas for future growth and development in the border region include, amongst others, renewable energy built on the natural resource base.

Chapter 5 sets out the key physical infrastructure needs of the border region which are required to ensure the successful delivery and implementation of the Settlement and Economic Strategies. A key area of priority investment is Renewable Energy Infrastructure. The Plan recognises the considerable potential that exists for the exploitation of renewable energy generation, particularly wind. The Border Region strongly supports the national targets for renewable energy and reducing energy consumption and seeks to contribute to achieving these targets through the development of sustainable energy policies and practices.

It is clear that the Development accords with and contributes to the objectives of the Regional Planning Guidelines (2010-2022).

6.2.3 The Draft Regional Spatial and Economic Strategy for the Northern and Western Regional Assembly (RSES)

6.2.3.1 Overview

The Regional Planning Guidelines will be superseded by the RSES. The RSES went out to consultation between November 2018 and February 2019. The objective of the RSES is to support the implementation of the National Planning Framework – Ireland 2040 and the economic policies and objectives of the Government by providing a long-term planning and economic framework which shall be consistent with the NPF and the economic policies or objectives of the Government.

The Draft RSES recognises that the region has a rich natural energy resource, declaring that the region is open to renewable energy ideas, and recognises the required transition from fossil fuels to the use of renewables. It further notes that this can contribute to new employment, community sustainability and attract additional people to the region.

It goes on to note that there is an opportunity for the region to be a leader in clean, smart and responsible energy and recognises that ensuring the necessary investment in the transmission and distribution networks to meet the needs of a growing economy and the transition from fossil fuels to renewables is imperative.

The Development is sited at the Operational Barnesmore windfarm where the local and wider landscape visually accommodates the windfarm. The Development, where possible, utilises existing windfarm infrastructure to minimise environmental and amenity impacts. The Development supports the move to a low carbon economy, helps combat climate change, creates opportunities for investment and employment within the Council area and NI (detailed in **Chapter 5 - Population and Human Health** of the EIAR). The Development incorporates other innovative renewable technologies such as energy storage.

6.2.3.2 Renewable Energy Policy

The repowering of Barnesmore Windfarm meets the objectives of the Project 2040 as it will contribute to the economic, environmental and social objectives of the NPF, in particular National Policy Objectives 54 & 55.

Repowering projects such as the Development will make the best use of existing infrastructure including existing grid infrastructure. It is critical that a progressive approach is taken to repowering existing windfarms in order to deliver the EU's objective of meeting a 70% share of electricity generated by renewables by 2030.

As a form of sustainable energy, with output level potential of c.75 MW, the Development will contribute significantly to the renewable energy targets and strategy supported in the Border Regional Authority Planning Guidelines and the Draft RSES NWRA which also acknowledge the benefits from interconnection to the Northern Ireland grid and also into grids both north and south as planned.

Mobilisations of the endogenous potential is the clear thrust of the emerging economic approach contained in the RSES, and Barnesmore Windfarm Repowering's utilisation of the local resources (wind, existing site infrastructure, grid assets and skilled labour etc.) to fuel further growth demonstrates how the Development will substantially contribute to the fulfilment of the emergent regional economic strategy.

6.3 Other Material Considerations

There are a number of other considerations that are material to the determination of the Application for Development. These are summarised in Table 6.1 below.

Table 6.1: Other Material Considerations

Consideration	EIAR Location	Comments
Population and Human Health	Chapter 5 of the EIAR considers the potential direct or indirect effects on employment, recreation and tourism and the local population in terms of community benefit.	The EIAR concluded that the overall impact during the decommissioning/construction phase is predicted to be positive due to the socio-economic effects arising from the investment in the local area and increased level of economic activity, while this will be a multimillion pound investment, it is not considered significant in EIA terms.
Residential Amenity	• Noise (Chapter 10) • Shadow Flicker (ES Chapter 12- Material Assets & Other Issues) • Visual Amenity (Chapter 11**)**	Noise – The Development has been assessed (in isolation and accumulatively) to comply with noise limits in both the 2006 Guidelines and the Preferred Draft Approach 2017 (*relative rated noise limit of 5dB(A) above existing background noise within the range of 35 to 43dB(A) for both day and night, with 43dB(A) being the maximum noise limit permitted*) Comparative modelling of the Development predict that the proposed turbines would reduce operational noise immissions. Noise during initial decommissioning and construction of the Development will be managed to comply with best practice, legislation and guidelines current at that time so that effects are not significant. Shadow Flicker - There are no inhabited properties located within 10 rotor diameters of the Development and only one uninhabited property. Residential Visual Amenity Assessment - An assessment was completed for properties within 3 km. In all cases it was found that no significant effects were predicted.
Landscape and Visual Amenity	Chapter 11 of the EIAR assessed the landscape effects and visual amenity effects of the Development	No significant effects are predicted, which is a reflection of the fact the Site is an appropriate location, in a landscape conducive to such development and the effects of increasing the turbine height are balanced by the reduction of turbine numbers from 25 to 13.
Material Assets and Other Issues	Effects on Material assets and the transport network are assessed in Chapters 12 and 14 of the EIAR.	Assesses potential effects on fisheries, agriculture, telecommunications, grid, shadow flicker, aviation and radar and air and climate. The potential effects of the Development on Material Assets are considered not significant. Chapter 14 of the EIAR sets out the effect that decommissioning/construction traffic would have on the road network, and the consequent effects that that could have on people and communities nearby. No significant are predicted.

7 Analysis of Issues

7.1 Principle of Development

The Development Proposal will result in the decommissioning of the existing turbines and the installation of new, more energy efficient turbines within the site confines. The proposal will retain and enhance the principal use of the Site as a renewables development, which accords with the permitted use of the site in perpetuity. The development will therefore be acceptable in principle.

7.2 Need

There is a positive presumption in favour of renewable energy projects at National, Regional and Local levels. This is reflected in the Wind Energy Development Guidelines for Planning Authorities, 2006, the Regional Planning Guidelines for the Border Region 2010-2022 and draft Regional Spatial and Economic Strategy for the Northern and Western Region and the Donegal County Development Plan 2018-2024. As outlined above there is a lacuna in relation to detailed wind energy policy within the Donegal County Development Plan as a result of a legal challenge, however, the policy aim for the Council, as stated within the development plan, is to facilitate the development of a diverse energy portfolio by the sustainable harnessing of the potential of renewable energy including wind and to facilitate the appropriate development of associated infrastructure to enable the harnessing of these energy resources and to promote and facilitate the development of Donegal as a Centre of Excellence for Renewable Energy.

7.3 Land Use and Nature Conservation

The permitted use of the landholding is as a windfarm in perpetuity following construction of the windfarm, the land around the Operational Barnesmore Windfarm has been designated as a Natural Heritage Area (NHA). The National Parks and Wildlife Service (NPWS) site synopsis of the NHA, which concludes by stating:

> *"Apart from very localised damage, Barnesmore Bog NHA is a site of considerable conservation significance containing a very large area of relatively intact upland blanket bog with virtually no peat extraction or overgrazing. This site supports a good diversity of blanket bog microhabitats including hummock/hollow complexes and flushes. Other habitats on the site include rocky outcrops, dry heath, wet heath, streams, several naturally nutrient-poor lakes that add to the habitat diversity and therefore conservation value of the site. Blanket bog habitat is a globally scarce resource. It is largely confined to coastal regions at temperate latitudes with cool, wet, oceanic climates. North-west Europe contains some of the best-developed areas of blanket bog in the world".*

Given that the NHA designation was applied during the operational phase of the windfarm, the construction and ongoing operation of the existing windfarm have not undermined the integrity or wider conservation value of the bog, indeed baseline studies for the EIA found that the bog is highly intact with extensive areas of active blanket bog in good condition demonstrating that the adjacency of the designation and the windfarm is not incompatible.

The Development has been designed with recognition of the existing sensitivities and while it is not possible to construct the Development without causing an impact on the surrounding lands, including within the NHA and resulting in small areas of loss of annex 1 habitat, The use of best practice methods, mitigation and the application of beneficial ecological measures as outlined in the draft Habitat Management Plan shall ensure that the Development will result in a biodiversity net gain further ensuring that the conservation value of the designated site shall be maintained and well-kept for many years to come.

7.4 The Development as Sustainable Development

The repowering of Barnesmore Windfarm could not be a better example of sustainable development, enshrined in the National Planning Framework. There are three facets to sustainable development which are economic, social and environmental. The repowering of Barnesmore windfarm meets each of the three facets of sustainable development.

Table 7.1: The Development as Sustainable Development

Sustainability Role	[15]The three facets of sustainable development are economic, social and environmental. Sustainable Development can be defined as "*Development that meets the needs of the present without compromising* the ability of future generations to meet their own needs."

[15] Bruntland Report 1987

Economic Role	As a repower project, the Development provides the opportunity to reinforce the existing local renewable energy industry knowledge and skills base, providing the stability and diversity to the rural economy that can stimulate further industry investment and diversification to take place. The Development is already having a positive economic impact with several Irish firms commissioned to work on the design, environmental assessment and planning. The repowering of Barnesmore Windfarm represents a strategically significant investment in the locality of Donegal and border area. BVG Associates undertook a study of the economic benefits of 8 SPR windfarms constructed in Scotland in 2016/17 to understand the economic value of the direct investment, and also the gross value-added benefit to the economy. The study considered the development, construction and operational phases of the windfarms. The analysis examined where benefits were retained within the economy, finding that 66% of project value was retained nationally, 51% regionally and 16.5% in the economy local to the windfarm site. Extrapolation of these findings to the repowering of Barnesmore provides evidence that the Development is likely to be worth in excess of €100m to the regional economy and tens of millions to the immediate local rural economy over the lifetime of the Development.
Social Role	The influence of the Development to the de-carbonisation of the Irish electricity network will contribute positively to an issue of strategic social importance. This is illustrated by the Climate Action Plan 2019 which sets a 70% target for electricity production from renewable sources by 2030, and highlights the need to remove barriers to the development of renewables, including onshore wind, such as streamlining regulation and encouraging reinforcement of the grid to facilitate greater renewables penetration. The significance of the action plan is further underlined by the Irish government's recent declaration of a climate emergency. The establishment of a local community benefit fund can play a valuable role by providing resources to help the local community achieve their social objectives
Environmental Role	As well as the contributions to reducing CO_2 emissions and helping to avoid the negative environmental effects associated with climate change. The Development will also contribute to the long-term conservation and management of Barnesmore Bog preserving the habitats and peatland resource for future generations through the implementation of the proposals in the draft HMP both mitigating the effects of the Development and providing a biodiversity net gain.

7.5 Summary / Planning Balance

All planning applications have to be determined upon their individual merits with due consideration given to the overall planning balance of a scheme. While many development proposals will encompass both positive and negative aspects that require consideration, planning weight should air on the side of a 'presumption in favour of development unless material considerations indicate otherwise'.

The Development contributes to supplying the demand for renewable energy, which in the context of the ongoing climate emergency is an urgent Irish national priority. As a repower, the Development maximises the benefits of the existing windfarm site while minimising the environmental effects that would be manifest from development of a comparable greenfield site. The number of turbines reduces by almost 50%, yet the site could produce five times the power as well as strengthening the local grid network with the inclusion of the energy storage unit. It is also shown that the Development is likely to provide a multi-million euro benefit to both the Irish and local economies.

The augmentation of the existing site infrastructure, increasing the land take, including the loss of 4.37 Ha of annex 1 habitats associated with a NHA, along with the deployment of turbines up to three times the size of those existing onsite are factors requiring consideration.

These have been considered by the EIA and through the process of assessment, embedded mitigation, and additional proposed mitigation outlined in the EIAR, outline CEMP and draft Habitat Management Plan it has been shown that the Development can be constructed and operated without significant effects arising and indeed shall lead to a biodiversity net gain demonstrating the acceptability of the proposal.

8 Conclusion

In accordance with The Planning and Development Act 2000, as amended, this Planning Statement has assessed the Application against the provisions of the DCDP, and relevant material considerations.

The Development contributes to supplying the demand for renewable energy, which in the context of the ongoing climate emergency is an urgent Irish national priority that must be given significant weight given the wealth of supporting national and international policy. As a repower, the Development maximises the benefits of the existing windfarm site while minimising the environmental effects that would be manifest from development of a comparable greenfield site. The number of turbines reduces by almost 50%, yet the site could produce five times the power as well as strengthening the local grid network with the inclusion of the energy storage unit. It is also shown that the Development is likely to provide a multi-million euro benefit to both the Irish and local economies.

Repowering this Site will sustain and build upon a contribution (potentially up to75 MW) towards Ireland's legally binding targets for reductions in CO_2 and producing energy from native and renewable resources. Importantly, the Development will be one of the first planning applications made to repower an existing operational windfarm in Ireland and will maintain and increase the renewable energy output at an already established renewable energy asset.

Based on the findings of the accompanying EIAR and the assessment of the Development's compliance with the relevant policies of the County Development Plan, and compliance with the relevant regional planning policies and relevant guidance, it is concluded that the Development fully accords with the National Planning Policy, Regional Planning Policy and the County Development Plan hierarchy when read as a whole.

The development process adopted by the Applicant has represented a best practice approach to the responsible repowering of a renewable energy scheme, minimising the potential impact of the Development by utilising existing infrastructure where possible and through multiple design iterations and modifications to minimise the impact on the receiving environment, particularly Barnesmore Bog NHA and ensure compliance with the suite of planning policy. The layout of the Development presented in the Planning Application and EIAR represents the optimum fit with the technical and environmental parameters of this project having specific regard to the existing infrastructure of the Operational Barnesmore Windfarm.

The augmentation of the existing site infrastructure, will increase the land take at the site, including the loss of 4.37 Ha of annex 1 habitats associated with the NHA, along with the deployment of turbines up to three times the size of those existing onsite. The embedded mitigation, and additional proposed mitigation outlined in the EIAR, outline CEMP and draft Habitat Management Plan are considered to adequately mitigate and compensate for the potential environmental effects predicted resulting in an ecological net gain.

Having regard to the energy targets set out in the Climate Action Plan 2019, local and regional planning policy and guidance presented and assessed within this Statement, it is imperative that renewable energy developments which are acceptable in planning policy terms, such as the Development, are given consent.

In particular, those targets set out in the Climate Action Plan 2019. The Plan envisages a radical step-up of our existing targets in order to meet the required level of emissions by 2030, including:

- A reduction in CO_2 eq. emissions by 50–55% relative to 2030 NDP projections
- An increase in electricity generated from renewable sources to 70%

The Applicant therefore respectfully requests that consent is granted subject to appropriate planning conditions.

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