2 BACKGROUND TO THE PROPOSED DEVELOPMENT

2.1 Site of the Proposed Development

2.1.1 Site Location

The site of the proposed Meenbog wind farm development is located at Meenbog, Croaghonagh and other townlands (associated with the underground electrical cable), approximately eight kilometres southwest of the twin towns of Ballybofey and Stranorlar and approximately 12 kilometres north east of Donegal Town. The site of the Proposed Development adjoins County Tyrone and is located approximately 19 kilometres west of Castlederg. A list of the townlands in which the Proposed Development is located has been provided previously in Table 1.1. A site location map ispresented in Figures 2.1, Figure 2.2 shows an aerial view of the site of the Proposed Development.

2.1.2 Access

The site is served by a network of existing forestry and local roads and the site entrance to the proposed wind farm will be from the N15 National Primary Route via the existing road serving as the access point for an existing commercial quarry and forestry in the townland of Croaghonagh. Upgrade works will be required to this existing entrance and access road in order to accommodate access for construction and turbine delivery vehicles. The entrance will be used as the site entrance during the construction and operational phases of the Proposed Development. The location of the site entrance is shown on the site layout drawing in Figure 4.1.

There are two additional, existing site entrances located in the north east of the site. The entrance that is located approximately 590 metres northeast of Turbine No.18 will be used during the construction phase for the egress of empty construction vehicles such as empty concrete delivery trucks and during the operational phase of the proposed development to provide access to the eastern half of the site for routine maintenance vehicles. The other site entrance, located approximately 260m north of the easternmost construction compound, is proposed to provide access, for the public to the recreation and amenity area and walkways during the operational phase of the proposed development. Detailed layouts of the access junctions are also included in Appendix 4.1.

2.1.3 Physical Characteristics of the Study Area and Surrounding Lands

The study area of the proposed development site is located approximately 8 kilometres to the southwest of the twin towns of Ballybofey and Stranorlar, Co. Donegal. The County Tyrone border runs immediately to the east and south of the study area, and in places defines the boundary of the site. The study area generally comprises an area of upland forestry running along the border with County Tyrone. Castlederg, in Northern Ireland is located approximately 15 kilometres north west of the site.

The site is currently in use as commercial forestry and is proposed to accommodate a single distinct cluster of turbines mainly in the townland of Meenbog. The location of the proposed wind turbines is dominated by commercial forestry plantations that have been planted over blanket bog. The elevation of the proposed wind farm ranges between approximately 86 metres 0.D. and 327 metres 0.D. with the majority of the site sloping in a north or northwesterly direction. A small section on the south of the site slopes to the southeast. The site is generally bordered on all sides by forestry



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plantations with the eastern and southern boundaries also being defined by the Northern Ireland border. There is a network of existing forestry roads providing access in and around the site. The site drains directly to the Bunadowen River and the Glendergan River which are tributaries of the Mourne Beg River.

The closest Natura 2000 site is the River Finn, Special Area of Conservation (SAC). The River Finn SAC runs along the south eastern boundary of the site and forms the County boundary between Donegal and Tyrone. The SAC follows the river network established by the River Finn and its tributaries which flow along the border with and within County Tyrone in Northern Ireland, as well as flowing through Ballybofey /Stranorlar.

Natural Heritage Areas (NHAs) can be found to the west of the study area. These areas are Lough Hill Bog NHA, Meenagarranroe Bog NHA, Cashelnaveen NHA, Barnesmore Bog NHA and Croaghonagh bog which is a proposed NHA and SAC.

Croagh Bog, an Area of Special Scientific Interest (ASSI) runs along a portion of the southern boundary of the study area. The River Foyle (ASSI), Killester Forest, Bogs and Lakes (ASSI) and Essan, Burn and Moneyfarmore (ASSI) can be found further south of the study area in County Tyrone.

2.2 Planning History

This section of the EIAR sets out the planning history of the study area and other wind farm sites within the wider area. It also describes other infrastructure projects which are existing or proposed within the wider area.

2.2.1 Study Area

A review of the Donegal County Council Planning Register and Northern Ireland Portal shows that there has been a number of planning applications lodged within the vicinity of the EIAR study area. Planning applications lodged within the EIAR study area primarily relate to one-off housing or are agricultural in nature. There is one historical application for a wind farm development within the study area, as well as the previous Strategic Infrastructure Development (SID) planning application for a wind farm development (SID) planning application for a wind farm development on a larger site (which included the site of the proposed development). Further details on these applications are available in Section 2.2.3 below. An application for a 110kV electrical substation at Clogher was also granted permission in April 2011. This substation has now been constructed, is energized and will serve as the connection point to the national grid for the proposed development .

A substitute consent application within the study area boundary for the existing quarry, was granted permission by An Bord Pleanála (Pl. Ref: 05E.SU.0027) in 2014.

Relevant planning applications lodged within and in the vicinity of the study area include the following.

Planning Ref. No.	Description of Development	Decision
11/20064	Clogher 110kV Substation	Conditional
05E.SU.0027	Gravel Quarry	Conditional
06/20348	Extension to dwelling	Conditional
07/21076	Extension to dwelling	Conditional
04/1693	Change of house type	Conditional
01/20	Signage for bed and breakfast	Conditional
00/276	Outline permission for two Dwellings	Withdrawn

Table 2.1 – Planning Applications within and in the vicinity of the Study Area Boundary

Planning Ref. No.	Description of Development	Decision
98/2388	Outline permission for two dwellings	Withdrawn
13/51546	Extension of duration	Granted
07/20598	Dwelling	Withdrawn
08/20787	Dwelling	Conditional
02/190	Extension to dwelling	Conditional
91/1590	Extension to bed and breakfast	Conditional
99/542	Dwelling	Conditional
08/20393	Outline permission for 14 no. bedroom hotel	Refused
05/710	Dwelling	Conditional
01/84	Dwelling	Conditional
02/148	Retention of changes to house	Conditional
01/122	Revision of boundaries of house	Refused
95/1708	Extraction of gravel	Conditional
00/837	Washing facility for pit	Refused
98/2018	Washing facility for pit	No decision available
16/50348	Meteorological Mast	Conditional
16/50447	Meteorological Mast	Incomplete
01/37	Erection of dwelling and septic tank	Conditional
09/20521	Retaining wall	Conditional
04/515	Erection of dwelling & septic tank	Conditional
15/50765	Erection of 2 no. lightning protection masts & associated works on the Clogher substation.	Conditional
17/50543 & PL 05E.248796	110kV Substation and associated underground electrical cabling to connect the Dromnahough and Lenalea Wind Farms to the existing Clogher Substation	Currently under appeal with An Bord Pleanála

2.2.2 Other Wind Farm Sites within the Study Area Boundary

Within the study area, there have been four planning applications lodged in relation to previously proposed wind farm development. The relevant wind farm planning history is set out below:

Previous Planning Application for Carrickaduff Wind Farm

A previous planning application for a 49 no. turbine wind farm development on a larger site (which included the extent of the Proposed Development) was previously lodged under the Strategic Infrastructure Development (SID) process with An Bord Pleanála. That application was processed under the references PC0170 (pre-application consultation phase) and PL05.PA0040 (planning application phase). The SID planning application was lodged in February 2015, however, it was refused permission by An Bord Pleanála in March 2016. The sole reason for refusal was based on the Board's consideration that the ornithological survey data provided in the previously submitted EIS and NIS was inadequate in duration and scope with regard to best international practice, and that therefore the Board could not carry out a sufficiently robust assessment of the projects potential impacts on birds and the integrity of certain European Sites in the vicinity.

The Proposed Development is for a wind energy development on the western portion of the previous 2015 application site. The Proposed Development comprises 19 no. turbines located within a compact site which is isolated from residential properties and is predominantly comprised of commercial forestry operations. The reduction in the scale of the project (when compared to the previous 2015 application) is primarily related to compliance requirements with the adopted Variation No. 2 (Wind Energy) of the Donegal County Development Plan 2012-2018. The methodology and approach to addressing the previously cited concerns of An Bord Pleanála in relation to the Carrickaduff Wind Farm proposed under PL05.PA0040 have been previously set out in Section 1.3 of this EIAR.

2.2.3 Other Donegal Wind Farms in the Vicinity and Wider Area

Within the wider area there have been a number of planning applications for wind farm developments (comprising two or more turbines). The following list is a record of the permitted, appealed, proposed, and operational wind farm planning applications lodged within a 20 kilometre radius of the EIAR study area. This list is based on a review of the Donegal County Council Planning Register and the Northern Ireland Planning Portal. The planning history within a 20 kilometre radius is summarised below. This list is not exhaustive though the greater part of the planning history is summarised:

Tievecloghoge/Ballybofey Wind Farm

- Pl. Ref: 02/8123: Application by Shanahan Energy Ltd for the construction of a 40 metre mast with anemometers. This application was deemed incomplete.
- Pl. Ref: 02/8420: Application by Shanahan Energy Ltd for the construction of a 50 metre high wind measurement mast with stays and wind vane. Permission was granted in February 2003.
- Pl. Ref. 03/8133: Application by Shanahan Energy Ltd. for the construction of 6 no. wind turbines in Tievecloghoge/Ballybofey. This application was deemed incomplete.
- Pl. Ref. 03/8149: Application by Shanahan Energy Ltd. for the construction of 6 no. turbines in Tievecloghoge/Ballybofey. Application was refused by the Planning Authority and An Bord Pleanála (Pl.05.205868). This proposal was refused permission due to the proximity of the turbines to an existing dwelling and their proximity to Trusk Lough.

Lough Golagh Wind Farm

 Pl. Ref. 95/914: Application by Scottish Power PLC for permission to construct 26 no. wind turbines in Barnesmore, approximately 2 kilometres south west of the site boundary. Permission was granted by the Planning Authority in 1996 and was subject to a third party appeal to An Bord Pleanála. The decision was upheld and a 25 no. the wind turbine farm is now operational.

Meengrauv (Meenanilta III) Wind Farm

- Pl. Ref: 04/9275: Application by Rewind Energy for the construction of 4 no. turbine wind farm, approximately 9.5 kilometres from the proposed development. Permission was granted by the Planning Authority in August 2004.
- **Pl. Ref 07/60554:** Application for an amendment to the tower height of wind farm permitted under Pl. Ref: 04/9275 consisting of a revision to the hub height from 49 metres to 55 metres whilst reducing the rotor diameter from 52 metres to 44 metres.
- Pl. Ref: 09/60250: Application by Rewind Energy for extension of duration for the wind farm granted under 04/9275. Permission was granted in November 2014.
- Pl. Ref: 09/60311: Application by Rewind energy for an amendment to existing permission Pl. Ref: 04/9275 for the construction of a wind farm comprising of 4 no. Wind turbines of 49 metre hub height and with 52 metre rotor diameter. Permission was granted in January 2010.

- Pl. Ref: 09/60312: Application by Rewind Energy Phase 3 Ltd. for the construction of one turbine in Meenagrauv, Ballybofey, approximately 9.5 kilometres from the proposed development. Permission was granted by the Planning Authority in April 2010.
- **Pl. Ref: 11/60196:** Application for retention permission for 4 no. turbines granted under Pl. Ref: 09/30311. This application was deemed to be withdrawn.
- Pl. Ref: 11/60245: Application for the extension of duration for an existing permission file reference 04/9275 for the construction of a wind farm comprising of 4 no. wind turbines of 49 metre hub height and with 52 metre rotor diameter. Permission was granted in December 2011.
- Pl. Ref: 12/50509: Application for the construction of an access road, vehicular entrance and to carry out any necessary site and development works as may be required to facilitate access to wind turbine approved under planning permission ref: 09/60312. Permission was granted in November 2011 for Meengrauv Wind Farm Extension.
- Pl. Ref: 15/51071: Application by Connective Energy Holdings Ltd. for the development of 1 no. wind turbine with a 60 metre hub height and 48 metre rotor diameter, including the development of a 4.5 metre wide access road and vehicular entrance directly from the adjoining public road L-6674-1. Permission was granted, subject to conditions, in May 2016.
- Pl. Ref: 16/51768: Application by Connective Energy Holdings Ltd. for amendments to 1 no. wind turbine permitted under Pl. Ref. 15/51071 thereby increasing the hub height from 60 metres to 75 metres and the rotor diameter from 48 metres to 52.90 metres. Permission was granted, subject to conditions in February 2017.

Cark Wind Farm

 Pl. Ref: 96/780: Application by Michael Harper for the construction of 13 no. turbines in Cark approximately 15.5 kilometres from the proposed development. Permission was granted by the Planning Authority in July 1996.

Cark/Stranorlar Wind farm

 Pl. Ref: 95/1310: Application by B9 energy Services for 12 no. turbines in Cark. Permission was granted by the Planning Authority in October 1995. This wind farm is now operational.

Cark Extension

 Pl. Ref: 01/8262: Application by Wind Farm Developments Ltd. for the construction of 10 no. turbines in Cark, approximately 15.5 kilometres from the proposed development. Permission was granted by the Planning Authority in April 2002. Six turbines are now operational.

Meenanilta Wind Farm

 Pl. Ref: 01/8143: Application by Redwind Energy ltd. for the construction of 3 no. wind turbines in Meenanilta approximately 10.5 kilometres from the proposed development. Permission was granted by the Planning Authority in July 2001. This wind farm is now operational.

Meenanilta Wind Farm 2

 Pl. Ref: 01/8305: Application by Redwind Energy Ltd. for the construction of 4 no. wind turbines approximately 10.5 kilometres from the proposed development. Permission was granted for 3 no. turbines by the Planning Authority in February 2002. This wind farm is currently operational.

Meenbane Wind Farm

 Pl. Ref: 12/5004: Application by Michael Magee for 3 no. wind turbines in Meenbane, Co. Donegal. Permission was refused by the Planning Authority due to the absence of an Environmental Impact Statement (EIS) and inadequate visual splays at the entrance of the site.

Altilow Wind Farm

 Pl. Ref: 14/50326: Application by React Energy PLC for the construction of 6 no. turbines in Altilow, Donegal. Permission was refused in May 2014. This was appealed to An Bord Pleanála but refused on appeal due to its proximity to an Area of Especially High Scenic Amenity and its potential to be a highly visible and incongruous feature in the landscape. The proximity of the proposal to the Bluestacks Way, a scenic way marked route, was also considered to detract from the tourism resource of the area.

Lough Cuill Wind Farm

- Pl. Ref: 99/2078: Application by Conor Ronan for the construction of 11 no. turbines in Lough Cuill. Application was refused by the Planning Authority on ground of visual impact.
- Pl. Ref: 03/929: Application by Patrick O'Sullivan for the construction of 4 no. wind turbines in Lough Cuill. Permission was granted by the Planning Authority in October 2004.
- Pl. Ref: 05/103184: Application by Rewind Energy for the development comprising 15 no. wind turbines in Lough Cuill approximately six kilometres from the proposed development. Permission was granted by the Planning Authority but refused on appeal by An Bord Pleanála due to concerns over visual impact.
- Pl. Ref: 12/50866: Application by MD South Windfarm Ltd. for the construction of 11 no. Turbines in Lough Cuill. Permission was granted for 8 no. turbines by the Planning Authority in May 2013.

Anarget Wind Farm

- Pl. Ref: 96/1342: Application by Richard Timoney to construct 3 no. turbines in Meenaloghspar approximately 16 kilometres from the proposed development. Permission was refused by the Planning Authority but granted on appeal to An Bord Pleanála.
- Pl. Ref: 98/458: A change of turbine type was granted under Pl. Ref: 98/458. An application to relocate two wind turbines was refused by the Planning Authority but granted on appeal to An Bord Pleanála under Pl. Ref: 99/1366.
- Pl. Ref: 99/1366: In 2001, Saporito Wind Ltd was granted permission for retention of the wind farm granted under Pl. Ref: 99/1366. These wind turbines are now operational
- **Pl. Ref: 00/551:** An Application by Richard Timoney for an additional turbine to the permitted wind farm was granted under Pl. Ref: 00/551.
- Pl. Ref: 03/103: Application by Energen Ltd. to construct 2 no. turbines in Meenacloghspar. Permission was refused by the Planning Authority but granted on appeal to An Bord Pleanála in 2003. These wind turbines are now operational.

Croaghnameal Wind Farm

 Pl. Ref: 04/1461: Application by Eco Wind Power Ltd. for the construction of 8 no. turbines and associated works in Croaghnameal, approximately 6.5 kilometres from the proposed development. Permission was refused by the Planning Authority in September 2006. This was appealed to An Bord Pleanála and granted in October 2007.

Meenadreen Wind Farm

 Pl. Ref: 99/1257: Application by Whaplode Ltd. for the construction of 4 no. wind turbines as associated works in Meenadreen approximately 6.5 kilometres from the proposed development. Permission was granted by the Planning Authority in October 1999. This application was appealed to An Bord Pleanála and also granted on appeal. This wind farm is now operational.

Meenadreen Wind Farm Extension

- Pl. Ref: 04/1462: Application by Eco Wind Farm Ltd. for the construction of 5 no. wind turbines and associated works in Meenadreen, approximately 5.8 kilometres from the proposed development. This application was refused by the Planning Authority in September 2006 but overturned on appeal to An Bord Pleanála in October 2006. An extension of duration for wind farm was granted under Pl. Ref: 12/50108 in August 2012. This wind farm is now operational.
- Pl. Ref: 07/20572: Application by Eco Wind Power Ltd for the construction of 9 no. turbines and associated works. Permission was granted by the Planning Authority in April 2008. This decision was overturned on appeal to An Bord Pleanála and ultimately refused.

Straness Wind Farm

 Pl. Ref: 04/1526: Application by Eco Power for the construction of 28 turbines in Straness approximately 3.3 kilometres from the proposed development. Permission was granted in September 2009. An application for an extension of duration for the proposed wind farm was granted under Pl. Ref: 12/50109.

Dromnahough Wind Farm

 Pl. Ref: 08/50687: Application by Airtricity Developments for the construction of up to 15 turbines in Meenadaura approximately 15.5 kilometres from the proposed development. Permission was granted by the Planning Authority in February 2009. An application for an extension of duration for the proposed wind farm was granted under Pl. Ref: 13/551609.

Lenalea Wind Farm

- Pl. Ref: 09/50116: Application by Airtricity Developments Ltd and Coillte for the construction of 9 no. turbines in Lenalea, approximately 16 kilometres from the proposed development. Permission was granted in December 2009.
- Pl. Ref: 12/40091: Permission to increase the tip height from 85 metres to 110 metres and to locate transformers outside of the turbine structure was granted under Pl. Ref: 12/40091 in May 2012.

Culliagh

 Pl. Ref: 97/1740: Application by Dedeondo Ltd for the construction of 18 no. turbines on Culliagh Mountain, approximately 14 kilometres from the proposed development. Permission was granted by the Planning Authority in January 1998. This decision was appealed to An Bord Pleanála and granted in July 1998. This wind farm is now operational.

Culliagh Extension

- Pl. Ref: 08/60410: Application by John Herron for the construction of 3 no. turbines on Culliagh Mountain, approximately 14 kilometres from the proposed development. Permission was granted by the Planning Authority in January 2008.
- Pl. Ref: 12/60076: An Application by SSE Renewables Ltd was submitted in 2012 to relocate the three turbines granted under Pl. Ref: 12/60076. Permission was granted in June 2012. This wind farm is now operational.

Meentycat 1

 Pl. Ref: 01/8038: Application by Eirtricity Developments Ltd. for 15 no. turbines in Meentycat, approximately 13 kilometres from the proposed development. Permission was granted by the Planning Authority in September 2001. Nine turbines are now operational.

Meenlaban/Meentycat

Pl. Ref: 02/8008: Application by Eirtricity Developments Ltd. for the construction of 9 no. turbine and associated works in Leenalaban and Meentycat, approximately 12 kilometres from the boundary of the proposed development site. Permission was granted by the Planning Authority in March 2002. Seven wind turbines are now operational.

Meenahorna

Pl. Ref: 02/8373: Application by Airtricity Developments Ltd for the construction of a 9 no. turbine wind farm and associated works in Meenahorna, approximately 12 kilometres from the boundary of the proposed development site. Permission was granted by the Planning Authority in January 2003. Seven turbines are now operational.

Ballystrang

Pl. Ref: 02/8010: Application by Eirtricity Developments Ltd. for the construction of 9 no. turbines and associated works, approximately 15 kilometres from the boundary of the proposed development site. Planning permission was granted by the Planning Authority in June 2002. This wind farm is now operational. Six wind turbines are now operational.

Cark/Largymore

 Pl. Ref: 02/8328: Application by National Management Centre Airtricity Developments ltd. for the construction of 13 no. wind turbines and associated works, approximately 14.5 kilometres from the boundary of the proposed development site. Permission was granted by the Planning Authority in December 2002. Nine wind turbines are now operational.

Crilly/Tullylinn/Pettigo

 Pl. Ref: 13/51404: Application by Provento Ireland PLC. for the construction of 4 no. wind turbines and associated works in Crilly, Tullylinn and Pettigo. The application was refused by Donegal County Council and subsequently granted by An Bord Pleanála.

Meenhore

 Pl. Ref: 14/51419: Application by Aideen Brett for the construction of 2 no. turbines in Meenhore, Grousehall, Donegal. The application was refused by Donegal County Council.

Ballintra

Pl. Ref: 12/50652 (PL 05.242411) : Application by ESB Wind Development Ltd. for the construction of 7 no. wind turbines in Ballintra, Derries and Tievebrack, Co. Donegal. Permission was refused by the Planning Authority and An Bord Pleanála due to concerns that the application did not provide an adequate assessment of peat stability.

2.2.4 Other Tyrone Wind Farms in the Vicinity and Wider Area

Altgolan

 J/2006/0840/F: Application by Altgolan Wind Farm Ltd. to replace a 13 no. turbine wind farm proposal with 7 no. wind turbines with a tip height of 125 metres. Permission was refused by the Department of the Environment (DOE) Northern Ireland, however an amended proposal consisting of 5 no. turbines was granted by the Planning Appeals Commission in May 2017. is currently under appeal to the Northern Ireland Planning Appeals Commission (PAC).

Meenablagh

 J/2011/0148/F: Application by Meenablagh Wind Farm to construct 11 no. wind turbines in Meenablagh, Co. Tyrone. The application was refused by the Department of Environment Northern Ireland in 2012, and the decision to refuse was upheld by the Northern Ireland Planning Appeals Commission in August 2015.

Tievenamenta

J/2005/0104/F: Application by Airtricity Developments (UK) Ltd. for an amendment of original proposal including a reduction in turbine numbers from 22 to 15 turbines with a maximum tip height of 110m from ground level to blade tip. Permission was granted by the Department of the Environment Northern Ireland in August 2009.

Seegronan

 J/2006/0883/F: Application by Ms Doreen Walker for an amendment of original proposal from 9 no. turbines to 6 no. turbines with steel towers and composite fiber rotor blades and a reduction in overall max base to blade-tip height from 125m to 110m in Gortnagross, Seegronan and Meenamullan, Strabane. Permission was granted by the Department of the Environment Northern Ireland in January 2011

Seegronan Extension

 J/2013/0187/F: Application by Seagronan Windfarm Ltd. to construct a 3 no. turbine wind farm in Glenderg, Co. Tyrone. This application was granted in June 2017 by the Northern Ireland Planning Appeals Commission following a first party appeal in relation to the non-determination of the application for planning permission.

Crighshane

 J/2005/0133/F: Application by Provento Ireland Plc for the construction of 14 no. turbines in Crighshane, South of Ballymongan Road. Permission was granted by the Department of the Environment Northern Ireland in April 2007.

Crighshane Extension

 J/2011/0082/F: Application by DW Consultancy Ltd to replace 9 no. turbines with 5 no. new turbines in Crighane and Crighdenis, Co. Tyrone. This application is currently under consideration by the Department of the Environment Northern Ireland.

Bin Mountain

 J/2004/0295/F: Application by Airtricity Developments NI Ltd. for the construction of 6 no. turbines and associated works in lands to the north of Lough Lee at Bin Mountain. Permission was granted by the Department of the Environment Norther Ireland in February 2006.

Churchill

 J/2005/0358/F: Application for the construction of 8 no. turbines in Church Hill, Meenamullan Road, Killeter, Castlederg, and Magherakeel, Killeter, Castlederg, Co Tyrone. Permission was granted by the Department of the Environment, Northern Ireland in April 2007.

Church Hill Extension.

 J/2013/0183/F: Application by Viridian Renewables Company No 1 to construct 1 no. single turbine extension to the operational Church Hill. This application is pending a decision by the Department of the Environment, Northern Ireland.

Lough Hill II

 K/2004/1139/F: Application by Wind Farm Developments Ltd for the replace of 7 no. approved wind turbines with 6 no. new turbines and associated works. Permission was granted by the Department of the Environment, Northern Ireland in November 2005.

Meenakeeran

 J/2008/0240/F: Application by Northern Wind Power to reduce a 5 no. turbine wind farm proposal to 4 no. turbines in Glenderg, Co. Tyrone. This application was granted by the Department of the Environment, Northern Ireland.

Meenamullan

 J/2013/0287/F: Application by RES UK and Ireland to construct a 5 no. turbine wind farm in Clare, Co. Tyrone. This application is pending a decision by the Department of the Environment, Northern Ireland.

Gronan

 J/2007/0667/F: Application by Gronan Wind Farm Ltd. for 4 no. wind turbines in Glenderg, Co. Tyrone. This application is pending a decision by the Department of the Environment, Northern Ireland.

Figure 2.3 shows a map of all permitted, pending, constructed and refused wind farms within a 20 kilometre vicinity of the proposed development.

2.3 Energy Policy and Targets

2.3.1 Renewable Energy

Renewable energy resources include solar, wind, water (hydropower, wave and tidal), heat (geothermal) and biomass (wood, waste) energy. These sources are constantly replenished through the cycles of nature, unlike fossil fuels, which are finite resources that are becoming increasingly scarce and expensive to extract.

Map Legend

- EIAR Site Boundary
- Ballystrang WF (6 Turbines Operating)
- Straness WF (28 Turbine Permitted)
- Dunaree Hill WF (6 Turbines Proposed)
- Culliagh WF Ext. (3 Turbines Operating)
- Meenanilta WF (6 Turbines Operating)
- Cark Extension (6 Turbines Operating)
- Church Hill WF (8 Turbines Operational)
- Bin Mountain WF (6 Turbines Permitted)
- Cark/Largymore WF (9 Turbines Operating)

- Meentycat WF (9 Turbines Operating)
- Meenahorna WF (7 Turbines Operating)
- Culliagh WF (18 Turbines Operating)
- Meenadreen WF (4 Turbines Operational)
- Anarget WF (6 Turbines Operational)
- Lough Hill WF (6 Turbines Operational)
- Cark WF (25 Turbines Operating)
- Meenalaban WF (7 Turbines Operating)
- Lough Golagh WF (25 Turbines Operating)
- Crighshane WF (14 Turbines Permitted)

- Meenadreen WF Ext (5 Turbin
 - Altgolan WF (7 Turbines on Ap
- Meengrauv II WF (1 Turbine Po
- Altilow (1 Turbine Permitted)
 - Seegronan WF (6 Turbines Pe
 - Croaghnameal WF (7 Turbines
 - Lenalea WF (9 Turbines Perm
 - Dromnahough WF (15 Turbine
 - Lough Cuill WF (8 Turbines Pe
 - Meengrauv WF (4 Turbines Op



nes Permitted)		Tievenameenta WF (15 Turbines Permitted)
opeal)	•	Crigshane Extension (4 Turbines Proposed)
Permitted)	•	Church Hill Extension (1 Turbine Proposed)
		Meenhore WF (2 Turbines Proposed)
ermitted)	•	Gronan WF (4 Turbines Proposed)
s Permitted)	•	Meenamullen WF (4 Turbines Pending)
itted)	•	Meenakeeran WF (4 Turbines Proposed)
es Permitted)	٠	Meenablagh WF (11 Turbines Appealed)
ermitted)	•	Crilly Tullylinn WF (4 Turbines Proposed)
perating)	٠	Seegronan Extension (3 Turbines proposed)



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Renewable energy resources offer sustainable alternatives to our dependency on fossil fuels as well as a means of reducing greenhouse gas emissions and opportunities to reduce our reliance on imported fuels. These resources are abundantly available in Ireland, yet only a fraction has been harnessed so far (*Sustainable Energy Ireland* website, <u>www.sei.ie</u>).

A gradual shift towards increasing use of renewable energy resources would result in:

- Secure and stable energy for the long-term;
- Reduced carbon dioxide emissions;
- Reduced reliance on fuel imports;
- Investment and employment in our indigenous renewable energy projects, often in rural and underdeveloped areas.

Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland continues to be heavily dependent on the importation of fossil fuels in order to meet its energy needs, with fossil fuels accounting for 93% of all energy consumed in Ireland in 2012 (*SEI Energy in Ireland, 1990-2012)*. This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability (*'Jobs and Investment in Irish Wind Energy'*, Deloitte/Irish Wind Energy Association, 2009.) In 2013 there was a fall in all fossil fuel used for electricity generation falling by 10.5% in total.

2.3.2 EU Policy

The European Union (EU) Directive on the Promotion of the Use of Energy from Renewable Sources (Directive 2009/28/EC) was adopted on 23rd April 2009. This Directive establishes a binding target of a minimum 20% reduction in greenhouse gas emissions based on 1990 levels, 20% of overall EU energy consumption to come from renewable sources by 2020, as well as a binding 10% minimum target for energy from renewable resources in the share of transportation fuels and 20% reduction in primary energy use compared with projected levels by improving energy efficiency.

Directive 2009/28/EC imposes a legal obligation on each Member State to:

- Ensure that its 2020 target is met.
- Introduce "appropriate measures" and outline them in a National Renewable Energy Plan. The "appropriate measures" include ensuring that grid-related measures and administrative and planning procedures are sufficient to achieve the 2020 target. The Draft National Renewable Energy Plan for Ireland was published in June 2010.

Failure by Ireland to meet its legally binding EU targets on the use of energy from renewable sources could result in EU sanctions.

Ireland's mandatory target under Directive 2009/28/EC is for renewable resources to account for 16% of total energy consumption by 2020. This will be met by 40% from renewable electricity, 12% from renewable heat and 10% from the renewable transport sector.

The 2030 Climate and Energy Framework was adopted by EU leaders in October 2014 and marks a further development of EU renewable energy policy. The framework defines further EU wide targets and builds on the 2020 climate and energy package.

The Framework sets three key targets for the year 2030:

- A binding commitment at EU level of at least 40% domestic Green House Gas reduction by 2030 compared to 1990;
- An EU wide, binding target of at least 27% renewable energy by 2030; and
- An indicative EU level target of at least 27% energy efficiency by 2030.

On the 30 November 2016, the EU Commission published a proposal for a revised Renewable Energy Directive to ensure that the target of at least 27% renewables in the final energy consumption in the EU by 2030 is met.

Ireland currently has no national targets for 2030 and the process of allocating the EU targets at Member State level has been ongoing since 2014. The European Commission published its proposal for an effort sharing regulation on the allocation of national targets for greenhouse gas emissions for the period 2021-2030 in July 2016. The proposal implements EU commitments under the Paris agreement on climate change (COP21) which is discussed below in Section 2.4.3.3, and marks an important milestone in the allocation to Member States of a package of climate targets that were formally adopted as part of the 2030 Climate and Energy Framework.

2.3.2.1 Progress on Targets

The contribution of renewables to gross final consumption (GFC) was 9.1% in 2015, compared to a 2020 target of 16%. In 2015, with five years to go, Ireland was just over halfway towards each of the separate targets for contributions of renewable energy in electricity, transport and heat (*'Energy in Ireland 1990 – 2015'*, Sustainable Energy Authority of Ireland, 2016).

The European Commission report *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions'* was published in February 2017. This report provides a comprehensive overview of renewable energy deployment in the EU and progress towards meeting the 2020 targets. The report states that the vast majority of Member States are *"well on track in terms of renewable energy deployment"*. Four Member States –of which Ireland is one, Luxembourg, the Netherlands and the United Kingdom are currently projected *not* to meet their national binding targets. The United Kingdom's expected gap is however very short (approximately 0.2%) so it is expected that Ireland will be one of only three Member States projected to not meet their national binding 2020 targets.

Plate 2.1 below shows the latest data available for the share of renewable energies in gross final energy consumption according to the Eurostat online data and the targets that have been set for 2020. The share of renewables in gross final energy consumption stood at 16.0 % in the EU-28 in 2014.



Plate 2.1: Share of renewables in gross final energy consumption, 2014 and 2020 (*Source:http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics*)

It is estimated that 1 MW of wind capacity can provide enough electricity to supply approximately 650 homes. EirGrid in their Generation Capacity Statement 2017 – 2026 published in April 2017 stated that the amount of wind energy installed in the island of Ireland at the end of November 2016 had reached 2,800 Megawatts (MW) and over the course of 2016, 22% of all electricity consumed in Ireland was provided by wind. This EirGrid statement estimates that between 3.9 – 4.3 Gigawatts (GW) of wind may be required to meet the 2020 Renewable Energy Supply - Electricity (RES-E) target of 40%. This would mean an average of approximately 340 MW of extra wind capacity would be required to be installed each year between now and 2020 to achieve targets.

As of January 2017, there were 242 operational wind farms on the island of Ireland, with 212 of these located in the Republic of Ireland.

In April 2016 SEAI¹ estimated the historic buildrate for wind energy deployment as 180MW per year since 2005. This shows if the average buildrate over the remaining period between now and 2020 is assumed then approximately 3.5GW of wind will be built out between now and 2020 leaving an up to 780MW shortfall on the current demand forecast. This shortfall could double if there is increasing growth in data centre development.

It is noted that the full impact of the demand from data centres may be underestimated in the EirGrid Generation Capacity Statement² as it is understood that only the data

² *All-Island Generation Capacity Statement 2016-2025*', Eirgrid (2016), available at: <u>http://www.eirgridgroup.com/site-</u>

¹<u>https://www.seai.ie/Publications/Statistics_Publications/Energy_Modelling_Group_Publications/Irelan</u> <u>d%E2%80%99s-Energy-Targets-Progress-Ambition-and-Impacts.pdf</u>

files/library/EirGrid/Generation Capacity Statement 20162025 FINAL.pdf

centres with signed connection agreements have been considered in the report. There are other data centre projects which have made connection enquiries with EirGrid estimated at more than 1,000 Megavolt-Amperes (MVA), that are in the planning process and well advanced however they have not been included in this demand forecast. It should be noted that each MW of additional data centre load will add at least 1 MW of wind to the 40% RES-E 2020 target³. Alternatively, 3 MW of wind could be required per MW of data centrecenter electricity demand if the data centre wants to commit to being powered by 100% renewable energy. Many data centres have made such commitments and have well-publicised company policies to use only renewable electricity for their power needs.

In October 2015, the Irish Wind Energy Association (IWEA) commissioned a study titled *'Data-Centre Implications for Energy Use in Ireland'* and concluded that an additional 1 GW of electricity demand may be required in Ireland by 2020 due to growth in data centres.

2.3.3 National Policy

2.3.3.1 National Strategy for Intensifying Wind Energy Development 2000

The Strategy for Intensifying Wind Energy Development was published in 2000 by the Renewable Energy Strategy Group as part of the Department of Communications, Energy and Natural Resources. The main aim of the Group was to develop a strategy for the increased contribution of onshore wind energy to electricity generation. During the initial six-month period of the preparation of strategy, the Group examined many aspects of, and constraints to, the further development of wind energy.

The principal conclusion of the Renewable Energy Strategy Group was that three key elements: Electricity Market, Electricity Network and Spatial Planning, need to be integrated into a plan-led approach to wind energy deployment. The recommended strategy, arising from this approach, has been designed to meet the targets set for deployment of renewable energy at least cost.

The recommended plan-led approach as described in the Strategy sees spatial planning considerations as crucial in determining suitable areas where wind farms may be accommodated. It states that these decisions should be informed by the availability of the resource (wind), the strength of the electricity networks, and landscape and other planning considerations.

2.3.3.2 Ireland's Energy Policy Framework 2007 – 2020

A Government White Paper entitled *'Delivering a Sustainable Energy Future for Ireland: The Energy Policy Framework 2007 – 2020'* was published by the Department for Communications, Marine and Natural Resources in 2007. In 2014, 85% of Irish energy requirements were imported, as described in Section 2.1.1 above. Combined with our peripheral location, this reality leaves Ireland vulnerable to supply disruption and imported price volatility, as stated in the White Paper. The primary objectives of the Government's energy policy as set out in the Paper are security of supply, environmental sustainability and economic competitiveness. The Energy Policy Framework 2007 – 2020 sets out clear actions, targets and timeframes for meeting these interlinked objectives.

³ Data centres have high load factors of around 80%. Ech 1MW uses 24 x 365 x 80% = 7GWh. EU targets require that 40% or 3GWh of that should come from renewables. A 1MW wind turbine produces roughly 3GWh/yr.

Ireland's energy policy priorities are framed in the context of the European Union. Directive 2009/28/EC on the Promotion of the Use of Energy from Renewable Sources sets a target for Ireland for 16% of energy consumption to come from renewable sources by 2020. This target will be made up of contributions from renewable energy in electricity (RES-E), renewable energy in transport (RES-T) and renewable energy for heat and cooling (RES-H):

- RES-E: Renewables contribution to gross electricity consumption 40% by 2020;
- RES-T: Renewables (biofuels & the renewable portion of electricity) contribution to transport energy 10% by 2020; and
- RES-H: Renewable contribution to heat (Thermal requirement heating & cooling) 12% by 2020.

The 2007 Government White Paper sets a more ambitious target of 33% for energy consumption from renewable sources by 2020. In Ireland, it is widely acknowledged that the vast majority of the renewable electricity requirement is expected to be met through the development of indigenous wind power, as Ireland has a strong wind resource potential, with one of the best onshore wind speed averages in Europe (*'The Value of Wind Energy to Ireland'*, Pőyry, 2014).

The Energy White Paper 2007 states that renewable energy will be a critical and growing component of Irish energy supply to 2020 and beyond. The Government's strategic goals for sustainable energy include addressing climate change by reducing energy-related greenhouse gas emissions and accelerating the growth of renewable energy sources. Renewable energy and enhanced efficiency in power generation are integral to the Government's strategy to deliver Ireland's climate change targets under the Kyoto Protocol. The Paper states:

"Renewable energy is an integral part of our climate change strategy and sustainability objectives. The additional diversity which renewables bring to Ireland's energy demand will also make a direct contribution to our goal of ensuring secure and reliable energy supplies."

As of October 2017, there are 276 wind farms on-line and operational, in 32 counties on the island of Ireland (226 wind farms in the Republic of Ireland). The current grid connected and operational installed wind capacity on the island of Ireland is 3,916 Megawatts (MW). It is estimated that 1 MW of wind capacity can provide enough electricity to supply approximately 650 homes. Based on this figure, an installed capacity of 3,916MW can provide enough electricity to power over 2.5 million homes. (Source: IWEA website, figures correct as of 9th October 2017).

2.3.3.3 Strategy for Renewable Energy 2012 – 2020

The Government's Strategy for Renewable Energy 2012 – 2020 was published by the Department of Communications, Energy and Natural Resources in May 2012. It acknowledges the national importance of developing renewable energy and confirms the Government's commitment to this. It notes the significant potential for Ireland to become a renewable energy exporter within a short time and the Strategy seeks to realise this.

The Strategy sets out 5 no. strategic goals, the first of which is as follows: *"Strategic Goal 1 - Progressively more renewable electricity from onshore and offshore wind power for the domestic and export markets."* In order to achieve the above goal, the Strategy sets out a number of key actions, including the following:

- Support delivery of the 40% target for renewable electricity through the existing GATE processes. A further targeted Gate may be developed, if necessary, following a review of the take-up of Gate 3 offers, while developing a next phase plan led approach for additional onshore capacity in future.
- Review with the Department of Environment and CER the scope for further streamlining authorisation and planning processes for renewable energy projects.
- Implement REFIT 2 for onshore renewable energy and maintain a predictable and transparent REFIT support framework for onshore wind which is cost competitive.
- Provided the cost benefit analysis is positive, put in place the necessary legal and planning and infrastructure framework to support the development of onshore and offshore wind as an export opportunity without cost for the Irish consumer and to the benefit of the economy, in the context of the cooperation mechanisms under the Directive.

2.3.3.4 White Paper on Energy Policy in Ireland 2015 - 2030

On 12th May 2014, *The Green Paper on Energy Policy in Ireland* was launched, marking the start of a public consultation process on the future of Ireland's energy policy over the medium to long-term. The Department of Communications, Climate Action & Environment acknowledged that energy is an integral part of Ireland's economic and social landscape and that *"a secure, sustainable and competitive energy sector is central to Ireland's ability to attract and retain Foreign Direct Investment and sustain Irish enterprise. The three key pillars of energy policy are to focus on security, sustainability and competitiveness".* (Source: http://www.dcenr.gov.ie/energy/ga-ie/Energy-Policy-in-Ireland-.aspx)

Following on from an extensive consultation process, a Government White Paper entitled *'Ireland's Transition to a Low Carbon Energy Future 2015-2030'* was published in December 2015 by the Department of Communications, Energy and Natural Resources. This Paper provides a complete energy update and a framework to guide policy up to 2030. The Paper builds upon the White Paper published in 2007 and takes into account the changes that have taken place in the energy sector since 2007.

The White Paper states the advances in Ireland's energy efficiency and renewable energy and generation use between 2007 and 2015. Renewable electricity sources (which include wind) accounted for nearly 23% of Ireland's electricity consumption in 2015, which is just over halfway to Ireland's 2020 target of 40% (*Energy in Ireland: Key Statistics 2015*', SEAI, December 2015).

The policy framework sets out a vision for a low carbon future that maintains Ireland's competitiveness and ensures a supply of affordable energy. The paper advises that a range of policy measures will be employed to achieve this vision and will involve amongst many things, generating electricity from renewable sources of which there a plentiful indigenous supplies and increasing the use of electricity and bio energy to heat homes and fuel transport.

The White Paper states that onshore wind continues to be the main contributor of renewable energy, -18.2% of total generation and 81% of renewable electricity (RES-E) in 2014. The impacts of climate change in the context of EU and national policy refers

to the change in climate that is attributable to human activity arising from the release of greenhouse gases into the atmosphere and which is additional to natural climate variability (Department of the Environment, Heritage and Local Government, 2006). In 2008, the Environmental Protection Agency (EPA) published the results of a study entitled *'Climate Change – Refining the Impacts for Ireland'*, as part of the STRIVE (Science, Technology, Research and Innovation) Programme 2007 – 2013. This report states that mean annual temperatures in Ireland have risen by 0.7° Celsius (C) over the past century. Mean temperatures in Ireland relative to the 1961 to 1990 averages are likely to rise by 1.8 to 4.0° C by the 2050s and by in excess of 2° C by the end of the century due to climate change.

Future precipitation changes are less certain to project than temperature but constitute the most important aspect of future climate change for Ireland. The study projects that winter rainfall in Ireland by the 2050s will increase by approximately 10%, while summer rainfalls will reduce by 12 – 17%. Lengthier heat waves, much reduced number of frost days, lengthier rainfall events in winter and more intense downpours and an increased propensity for drought in summer are also projected. The STRIVE report on climate change impacts states that Ireland can and must adapt to the challenge of climate change. It notes that:

"Barriers to this, both scientific and socio-economic, are required to be identified and addressed in order that Ireland can be optimally positioned to thrive in a changing world."

The report discusses the impacts of climate change in terms of water resource management, agriculture and biodiversity, as described below.

2.3.3.5 Water Resource Management

The hydrological impacts of projected climate change encompass significant reductions in soil moisture storage in the nine representative catchments across Ireland. Soil moisture deficits commence earlier and extend later in the year as the century proceeds. This will result in a tendency for groundwater recharge to be lower for longer, sustained periods, increasing the risk of drought when a dry summer follows a drier than average winter. The STRIVE report states that such impacts would be felt greatest in catchments more dependent on groundwater, such as the Suir, Blackwater and Barrow. Significant changes in stream flow are likely to occur, with implications for flood management in winter and water resource availability in summer:

"In the vital water supply rivers of the east, for example, stream flow reductions in excess of 70% can be expected for some autumn months by the end of the century."

2.3.3.6 Agriculture

The STRIVE report states that the principal challenges to agriculture will come from wetter Winter and drier Summer soils, though increased temperatures will also play an important role. Different challenges will be posed in different regions, depending on crop type and dairying output. The report stresses however that Irish agriculture can, if positioned appropriately, adapt successfully to the challenges of climate change.

2.3.3.7 Biodiversity and Natural Ecosystems

Changes in species behaviour and viability and in ecosystem distribution across Ireland will occur in conjunction with the projected climate changes. Changes in the timing of life-cycle events such as leafing, bud burst and leaf fall can be expected as preliminary

responses and will be instrumental in altering biodiversity. The report states that particularly vulnerable ecosystems can be identified where successful adjustment to new conditions is unlikely. The most vulnerable habitats include sand dunes, lowland calcareous grasslands, montane heath, raised bogs, calcareous fens, turloughs and upland lakes. Increased decomposition of Irish peatlands will be facilitated mainly by cracking during drier periods and will be further exacerbated by compositional changes. The suitable climate area for fens may have declined by 40% by mid-century with corresponding losses for raised and blanket bogs of over 30% and 45% for turloughs over the same period.

2.3.4 International Climate Change Policy

2.3.4.1 United Nations Framework Convention on Climate Change

In 1992, fifty countries ratified an international treaty, the United Nations Framework Convention on Climate Change (UNFCCC), as a framework for international efforts to combat the challenge posed by climate change. The UNFCCC seeks to limit average global temperature increases and the resulting climate change. In addition, the UNFCCC seeks to cope with impacts that are already inevitable. It 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 framework set no binding limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. Instead, the framework outlines how specific international treaties (called "protocols" or "Agreements") may be negotiated to set binding limits on greenhouse gases.

Ireland is a Party to the Kyoto Protocol, which is a protocol to the UNFCCC. The Kyoto Protocol is an international agreement that sets limitations and reduction targets for greenhouse gases for developed countries. It came into effect in 2005, as a result of which, emission reduction targets agreed by developed countries, including Ireland, are now binding. Further details on Ireland's obligations under the Kyoto Protocol are presented below.

2.3.4.2 Kyoto Protocol Targets

Ireland is a Party to the Kyoto Protocol, which is an international agreement that sets limitations and reduction targets for greenhouse gases for developed countries. It is a protocol to the United Nations Framework Convention on Climate Change. The Kyoto Protocol came into effect in 2005, as a result of which, emission 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.

2.3.4.3 Doha Amendment to the Kyoto Protocol

In Doha, Qatar, on 8th 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.

During the first commitment period, 37 industrialised countries and the European Community committed to reduce GHG emissions to an average of 5% against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18% below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first.

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.

2.3.4.4 COP21 Paris Agreement

COP21 was the 21st session of the Conference of the Parties (COP) to the UNFCCC. Every year since 1995, the COP has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention in a different country, to evaluate its implementation and negotiate new commitments. COP21 was organised by the United Nations in Paris and held from 30thNovember to 12thDecember 2015.

COP21 closed on 12th December 2015 with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The Agreement provides for a limitation of the global average temperature rise to well below 2°C above preindustrial levels and to limit the increase to 1.5°C. It is flexible and takes into account the needs and capacities of each country. It is balanced as regards adaptation and mitigation, and durable, with a periodical ratcheting-up of ambitions.

2.3.4.5 Progress on Targets

The 'Europe 2020 Strategy' is the EU's agenda for growth and jobs for the current decade. The Europe 2020 Strategy targets on climate change and energy include:

- Reducing GHG emissions by at least 20% compared with 1990 levels;
- Increasing the share of renewable energy in final energy consumption to 20%; and
- Moving towards a 20% increase in energy efficiency.

The *'Europe 2020 indicators – climate change and energy'* report (<u>http://ec.europa.eu/eurostat/statistics-</u>

explained/index.php/Europe 2020 indicators - climate change and energy) provides a summary of recent statistics on climate change and energy in the EU, with reference to the progress of Member States in meeting the required targets. In 2014, EU greenhouse gas emissions, including emissions from international aviation and indirect carbon dioxide (CO₂) emissions, were down by 23% when compared with 1990 levels. The EU is therefore expected to exceed its Europe 2020 target of reducing GHG emissions by 20 % by 2020. In 2014, renewable energy provided 16.0 % of gross final energy consumption in the EU, up from 8.5 % in 2004.

However, regarding the progress of individual Member States, and Ireland in particular, the Europe 2020 indicators include the following statements:

• 24 countries are on track to meet their GHG targets, except Austria, Belgium, **Ireland** and Luxembourg.

- Luxembourg emitted the most GHG per capita in the EU in 2014 ... followed by Estonia, Ireland, the Czech Republic and the Netherlands.
- All EU countries have increased their renewable energy share between 2005 and 2014. Twelve have more than doubled their share, albeit from a low base. Nine have already met their 2020 targets. In 2014, France, the Netherlands, the United Kingdom and Ireland were farthest from reaching their national targets.

While the EU as a whole is projected to exceed it's 2020 target of reducing GHG emissions by 20%, Ireland is currently one of the countries projected to miss its national targets. The Europe 2020 report emphasises the importance of continued action on climate change:

"Despite the EU's shrinking share in global CO₂ emissions, recent findings on the potentially catastrophic impacts of climate change confirm the ongoing importance of its climate and energy goals. EU emission cuts alone cannot halt climate change, but if it can show that a low-carbon economy is feasible, and can even increase innovation and employment, it will serve as a role model to other regions. Continuous investment in advanced low-carbon technologies can also help the EU uphold technological leadership and secure export markets. A successful transformation of the energy sector, discussed in the next section, is pivotal in this respect."

Further details on Ireland's emissions projections are provided below.

2.3.4.6 Emissions Projections

In 2016, the EPA published an update on Ireland's Greenhouse Gas Emission Projections to 2020. Ireland's target is to achieve a 20% reduction of non-Emissions Trading Scheme (non-ETS) sector emissions, i.e. agriculture, transport, residential, commercial, non-energy intensive industry and waste, on 2005 levels, with annual binding limits set for each year over the period 2013 – 2020.

Greenhouse gas emissions are projected to 2020 using two scenarios; *With Measures*' and *With Additional Measures*'. The *With Measures*' scenario assumes that no additional policies and measures, beyond those already in place by the end of 2014 are implemented. The *With Additional Measures*' scenario assumes implementation of the With Measures' scenario in addition to full achievement of Government renewable and energy efficiency targets for 2020, as set out in the National Renewable Energy Action Plan and the National Energy Efficiency Action Plan.

The EPA Emission Projections Update notes the following key trends:

- Ireland's non-Emissions Trading Scheme (ETS) emissions are projected to be 6% and 11% below 2005 levels in 2020 under the 'With Measures' and 'With Additional Measures' scenarios, respectively. The target for Ireland is a 20% reduction.
- Ireland is projected to exceed its annual binding limits in 2016 and 2017 under both scenarios, 'With Measures' and 'With Additional Measures'.
- Over the period 2013 2020, Ireland is projected to cumulatively exceed its compliance obligations by 12 Mt CO₂ (metric tonnes of Carbon Dioxide) equivalent under the 'With Measures' scenario and 3 Mt CO₂ equivalent under the 'With Additional Measures' scenario.

The EPA report states that *"Failure to meet 2020 renewable and energy efficiency targets will result in Ireland's emission levels moving even further from its emission reduction targets".* The report also concludes:

 The latest projections estimate that by 2020 non-ETS emissions will be at best 11% below 2005 levels compared to the 20% reduction target. Emission trends from agriculture and transport are key determinants in meeting targets, however emissions from both sectors are projected to increase in the period to 2020.

It is clear that Ireland faces significant challenges in meeting emission reduction targets for 2020 and beyond (EPA, 2016, *'Greenhouse Gas Emission Projections to 2020 – An Update'*). In the document *"Ireland's Greenhouse Gas Emission Projections 2016 – 2035"*, (April 2017) produced by the EPA under the "With Additional Measures Scenario", Ireland is projected to cumulatively exceed its obligations in relation to emissions reduction by 11.5 Million tonnes CO₂ equivalent over the period 2013-2020.

2.3.5 National Climate Change Policy

2.3.5.1 National Climate Change Adaptation Framework 2012

Ireland's first National Climate Change Adaptation Framework (NCCAF), which was published in December 2012, aims to ensure that adaptation actions are taken across key sectors and also at local level to reduce Ireland's vulnerability to climate change. The NCCAF requires the development and implementation of sectoral and local adaptation plans which will form part of the national response to the impacts of climate change. Each relevant Government Department (or State Agency, where appropriate) are required to prepare adaptation plans for their sectors. 12 Sectors were identified in total including Transport, Flood Defence, Agriculture and Energy. The Climate Action and Low Carbon Development Act 2015 (see Section 2.2.3.2) puts the development of National Climate Change Adaptation Frameworks and Sectoral Adaptation Plans on a statutory basis.

The Climate Action and Low Carbon Development Act 2015 states that the first statutory National Climate Change Adaptation Framework has to be approved by Government by 9 December 2017 and will be reviewed at least every 5 years after that. Following approval of the statutory National Adaptation Framework, Section 6 of the Act requires the Government to request all relevant Government Ministers to prepare sectoral adaptation plans covering the relevant sectors under their remit within a specified time period. The Draft National Adaptation Framework Plan was published in September 2017, for public consultation.

2.3.5.2 National Policy Position on Climate Action and Low Carbon Development

The National Policy Position on Climate Action and Low Carbon Development, published by the Department of Environment, Community and local Government in April 2014, provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050. The position paper acknowledges that the evolution of climate policy in Ireland will be an iterative process, based on the adoption by Government of a series of national plans over the period to 2050. Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act, 2015.

2.3.5.3 Climate Action and Low Carbon Development Act 2015

The Climate Action and Low Carbon Development Act, 2015 was signed into law on 10 December 2015. The Act provides for the establishment of a national framework with the aim of achieving a low carbon, climate resilient, and environmentally sustainable economy by 2050, referred to in the Act as the "*national transition objective*".

The Act provides the tools and structures to transition towards a low carbon economy and it anticipates that it will be achieved through a combination of:

- A national mitigation plan (to lower Ireland's level greenhouse emissions);
- A national adaptation framework (to provide for responses to changes cause by climate change);
- Tailored sectoral plans (to specify the adaptation measures to be taken by each Government ministry); and
- Establishment of the Climate Change Advisory Council to advise Ministers and the Government on climate change matters.

2.3.5.4 National Mitigation Plan

Ireland's first statutory National Mitigation Plan (NMP), published in July 2017, gives effect to the provisions of the Climate Action and Low Carbon Development Act, 2015, and represents a landmark national milestone in the evolution of climate change policy in Ireland and provides for the statutory basis for the transition to a low carbon, climate resilient and environmentally sustainable economy by 2050.

The NMP reaffirms Ireland's commitment to concerted and multilateral action to tackle climate change following the adoption of the legally-binding Paris Agreement of which Ireland is a co-signatory. Under the Paris Agreement, the EU is committed to reducing greenhouse gas emissions by at least 40% by 2030, compared with 2030 levels. The Paris Agreement represents a landmark accord in tackling climate change, which is recognised by all parties as the defining global issue of this generation.

The NMP addresses the role of local authorities in facilitating the transition towards a low carbon economy, and recognises that this requires engagement from all levels of Government and that a bottom-up approach is also essential to promote awareness and engagement within individual communities across Ireland. The NMP further states that there "is also recognition within the Local Authority sector of the need for the sector to assume a leadership role within their local communities to encourage appropriate behavioural change". Moreover the Plan emphasizes that local authorities also have a key role to play "in addressing climate change mitigation action and are well places to assess, exploit and support opportunities within their administrative areas, in cooperation with each other and with national bodies, and through the involvement and support of local communities".

The NMP further 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. In this regard, the NMP states:

"To date, wind energy has been the largest driver of growth in renewable electricity. The total amount of renewable generation connected to the grid at December 2016 was 3,120MW, of which wind generation was approximately 2,796MW, hydro was 238MW and biomass was 86MW19. Eirgrid estimates that a total of between 3,900MW and 4,300MW of onshore renewable generation capacity will be required to allow Ireland to achieve 40% renewable electricity by 2020. This *leaves a further requirement of between 780MW and 1,180MW to be installed by 2020 if the 2020 electricity target is to be reached, requiring an increased rate of installation".*

2.4 Strategic Planning Context

2.4.1 National Policy

2.4.1.1 Draft National Planning Framework

The publication of the Draft National Planning Framework, entitled *'Ireland 2040 – Our Plan'*, in September 2017, marks a key step in the adoption of a strategic national plan to succeed the National Spatial Strategy. The Draft National Planning Framework (NDF) is a spatial expression of Government policy and will provide a framework to guide national, regional and local planning and investment decisions for the future, building on and coordinating the existing regional and local authority planning processes in the form of Regional Spatial and Economic Strategies (RSES's) and City and County Development Plans. The NPF, once adopted, will have legislative support placed on a statutory footing, with its implementation through the planning system to be overseen by the forthcoming Office of the Planning Regulator.

The objectives of the NPF will be applied on a regional basis through the statutory RSESs which must accord with the NPF and in turn, local authority development plans which address further detailed local matters such as the zoning of land, must be in accordance with the RSESs.

The NPF, once adopted, will set the context for a new ten-year National Investment Plan (NIP) from 2018-2027, ensuring alignment across government and establishing firm links between the planning framework and long-term investment.

2.4.1.1.1 Key Sustainability Elements of Draft National Planning Framework

A key focus running throughout the Draft NPF is the fostering of a transition toward a low carbon, climate-resilient society. In this regard, one of the stated key elements of the Draft NPF is an Ireland *"supported by strengthened and more environmentally focused planning at local level"* wherein the Draft NPF states:

"The future planning and development of our communities at a local level will be refocused to tackle Ireland's higher than average (45%) carbon-intensity per capita and enabling a national transition towards a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential and electrification of much of our mobility and energy systems".

The Draft NPF further states the need to *"develop capacity for new forms of self-reliance including reducing our dependence on imported energy"*, and references the National Climate Policy Position which established the fundamental national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.

In relation to energy production, the Draft NPF emphasises that rural areas have a strong role to play in securing a sustainable renewable energy supply for the country, and acknowledging that *"rural areas have significantly contributed to the energy needs of the country and continue to do so".* In this regard, the Draft NPF states:

"In meeting the challenge of transitioning to a low carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment".

Section 8 of the Draft NPF addresses the theme of sustainability and sets out a number of National Policy Objectives under this subject, with a key focus on resource efficiency and the transition towards a low carbon economy. In relation to climate action and planning, the Draft NPF reiterates the commitment of the Government to a long term climate policy based on the adoption of a series of national plans over the period to 2050, informed by UN and EU policy, and progressed through the National Mitigation Plan and the National Climate Change Adaptation Framework.

Key features identified in the Draft NPF to facilitate the transition towards a low carbon energy future include:

- A shift from predominantly fossil fuels to predominantly renewable energy sources.
- Increasing efficiency and upgrades to appliances, buildings and systems.
- Decisions around development and deployment of new technologies relating to areas such as wind, smartgrids, electric vehicles, buildings, ocean energy and bio energy.
- Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon society.

The Draft NPF reiterates that the *"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 for reducing our reliance on fossil fuels".* This position is cemented in National Policy Objective 57 of the Draft NPF which seeks to:

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

Section 9 of the Draft NPF sets out a series of desired National Strategic Outcomes, underpinned by the national planning objectives set out in the Draft NPF in combination with governance arrangements and aligned with capital investment. The transition towards a low carbon and climate resilient society is identified as one of the national strategic outcomes to guide the implementation of the NPF wherein is it stated:

"The National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and offshore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand".

The Draft NPF further emphasises that new energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generation system to harness the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and *"connecting the richest sources of that energy to the major sources of demand"*. The Draft NPF recognises that the development of on-shore and off-shore renewable energy is critically dependent on the development of enabling infrastructure including grid facilities to connect to major sources of energy demand.

Moreover, the Draft NPF establishes the need to *"ensure more geographically focused renewables investment to minimise the amount of additional grid investment required, for example through co-location of renewable and grid connections"*.

In achieving this desired National Strategic Outcome of a transition to sustainable energy, the Draft NPF re-emphasises the following national policy target of delivering "40% of our electricity needs from renewable sources by 2020 with a strategic aim of in excess of 50% by 2030 and more by 2040 and beyond using wind, wave, solar, biomass and hydro sources".

2.4.1.2 National Spatial Strategy 2002 – 2020

The National Spatial Strategy (NSS) is a twenty-year planning framework designed to achieve a better balance of social, economic, physical development and population growth between regions. The Strategy provides a national framework for the long-term development of Ireland, the key aim of which is to promote the potential of regions through policies that attract and generate investment and jobs and encourage more people to live in every region. While it is noted that the successor to the NSS, the National Planning Framework (NPF), is currently in draft form and pending formal adoption, the NSS remains pertinent as a nationally strategic policy document. Key objectives of the NSS include sustaining a strong competitive economic position, achieving balanced regional development and promoting the economic and social strengths and resources of rural areas. The spatial and sustainability objectives and the environmental protection and climate change objectives of the NSS are described below.

2.4.1.2.1 Spatial and Sustainability Objectives

The National Spatial Strategy states the need to make best use of natural resources, bring jobs closer to where people live, and ensure a high quality natural and built environment. The fundamental approach of the NSS is to encourage greater spatial balance by strengthening areas and places in a structured way. The spatial structure of Ireland is strongly influenced by the location of investment, which in turn influences where people work and live. Balanced regional development, which is a key objective of the NSS, is the development of the full potential of each area economically, socially and environmentally, in order to contribute to the optimal performance of the state as a whole.

The NSS identifies that rural areas play a vital role to play in contributing to balanced regional development. This involves utilising and developing the economic resources of rural areas, including agriculture and food, marine, tourism, forestry and renewable energy. The NSS states that movement of people to the areas where investment and jobs are generated, or can be drawn to, as well as natural population increase, reinforces the population base of these areas and fuels future population growth. The Strategy recognises that Ireland must continue to trade on its *"green image"*. It states that strong indigenous growth will be sustained and mobile international investment attracted by factors that include reliable access to energy. The NSS also states that business is likely to align itself closely with local strengths, facilities, talents and skills.

Investment opportunities for development in an area are linked to its potential in terms of natural resources, tourism, and access to key energy infrastructure. The NSS identifies that natural resource development, among other sectors, has a key role to play as a primary economic base for vibrant and diversified communities in rural areas and in providing work for which many of the skills required are available locally.

2.4.1.3 Environmental Protection and Climate Change Objectives

The policies and actions of the NSS with regard to protection of the environment focus on limitations on greenhouse gas emissions in the context of the National Climate Change Strategy, measures to support sustainable agriculture and initiatives to address the impact of transport on the environment. The targets and obligations for Ireland with regard to climate change and greenhouse gas emissions are described in Section 2.4 above.

2.4.2 Draft Renewable Electricity Policy and Development Framework

The Renewable Electricity Policy and Development Framework has been formulated to ensure Ireland meets its future needs for renewable electricity in a sustainable manner compatible with environmental and cultural heritage, landscape and amenity considerations (*Source:* <u>http://www.dccae.gov.ie/energy/en-ie/Renewable-Energy/Pages/Renewable-Electricity-Policy-and-Development-Framework.aspx</u>).

The Framework will contribute toward meeting Ireland's future energy needs, particularly up to 2030 and beyond, as informed by national and European policy, and be reviewed at five-yearly intervals. The Policy and Development Framework will be primarily for the guidance of An Bord Pleanála, Planning Authorities, other statutory authorities, the general public and persons seeking development consent in relation to large scale projects for the generation of renewable electricity on land. It will set out policy in respect of environmental considerations, community engagement and in relation to potential, future export of renewable electricity. It will seek to broadly identify suitable areas in the State, where large-scale renewable electricity projects can be developed in a sustainable manner. The existing system for planning permission applications to local authorities or An Bord Pleanála will remain unchanged in respect of renewable electricity projects. These will still require planning permission, including environmental impact assessment where appropriate. It is proposed that the Policy and Development Framework will be focused on providing for renewable electricity projects of large scale. It is considered that a threshold of 50 MW and upwards would be appropriate, having regard to the provisions of the strategic infrastructure development legislation.

The Draft Strategic Environmental Assessment Scoping Report for the Renewable Electricity Policy and Development Framework has been published for consultation. The consultation process is now closed and submissions are under review. It is envisaged that the Renewable Electricity Policy and Development Framework will be published, together with an SEA Statement, in 2017.

2.4.3 Regional and County Policy

2.4.3.1 Regional Planning Guidelines for the Border Region 2010-2022

The Regional Planning Guidelines 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.

The broad vision for the Regional Strategy is:

'By 2022, the Border Region will be a competitive area recognised as, and prospering from, its unique interface between two economies, where economic success will benefit all, through the implementation of the balanced development model, which will provide an outstanding natural environment, innovative people, which in themselves, will be our most valuable asset'.

Chapter 4 of the RPGs outlining the Regional Economic Strategy states that existing and potential areas for future growth and development in the border region include, amongst others, renewable energy based 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 (including off shore). 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.

In partnership with constituent Local Authorities, the Border Regional Authority aims to develop an integrated Regional Energy Strategy on renewable energy generation, identifying an optimal mix of renewable energy sources and proposed locations for development, to ensure consistent and complementary development across the border region.

The border region recognises that it is ideally located to make significant contributions, through wind energy, to the revised targets for renewable energy generation (RES-E) of 40% with resulting economic benefits.

Chapter 6 outlines the importance of Environment and Amenities at the regional strategic scale. This chapter recognises that developments associated with agricultural activities, wind-farms, afforestation, urban development and certain infrastructural works within, or close to, areas of ecologically sensitive sites, must be carefully planned and managed.

2.4.4 Regional Development Strategy for Northern Ireland, 2025

The Regional Development Strategy (RDS) sets out the strategy for the future development of Northern Ireland up to 2025. This takes into account the key driving forces such as population growth, household number growth, transportation needs, economic changes and spatial implications for a divided society. The strategy aims to guide the community towards a dynamic, prosperous and progressive Northern Ireland.

The document does not outline specific development policies for wind energy but it highlights the importance of the diversification of the rural economy and acknowledges the role which renewable energy can play in creating employment and in providing a power supply to serve other industry and businesses. West Tyrone is a designated location for area based rural strategies. Policy RNI 1.1 outlines the need to "*utilise the environmental and cultural resources of the land in a sensitive and innovative way as*

a competitive asset for economic development by measures such as.....developing renewable energy resources and exploring the potential for research and use of sustainable technology in rural areas."

In setting out a long-term spatial framework for supporting economic development, Economic Policy 5.1 aims to:

"develop a long term investment strategy supportive of the regional economy, involving both public and private sectors to.... promote a wider choice of energy supply, including the use of renewable energy sources – in the interests of regional competitiveness and sustainability and continue to upgrade regional electricity infrastructure to meet the needs of future growth, and particularly the power demand from new housing areas, commercial areas, industry and large scale IT developments."

2.4.5 Donegal County Development Plan 2012-2018

The Donegal County Development Plan 2012 – 2018 (CDP) is the principal instrument that is used to manage change in land use in the County. The Plan sets out the Council's strategic land use objectives and policies for the overall development of the County up to 2018 and beyond to a horizon year of 2022. On the subject of renewable energy, the CDP states that it is the aim of the plan to facilitate the development of appropriately located on and offshore wind energy proposals in accordance with the Wind Energy Strategy. The CDP aims to facilitate the future progress of Donegal in a sustainable manner. The CDP notes renewable energy as a potential element for future economic growth in the area. Objective ED-0-10 states:

"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 local wind and marine 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 CDP's Economic Development Strategy states it is the express target of the County to become energy independent and be an overall energy exporter:

"The Council shall be supportive of investigations into the potential to develop initiatives for the generation of renewable energy including wind, wave, tidal, hydro and biomass for both domestic use and for export..."

Section 7.2.3 of the CDP deals with Wind and Other Natural Resource Energy Technologies. The CDP aims to respond to Government policy on renewable energy and enable the County's resources to be harnessed in a manner that is consistent with proper planning and sustainable development. In this regard, the CDP sets out the following policies in relation to wind energy:

- Policy 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.
- **Policy E-P-9**: 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).

- **Policy E-P-10**: It is a policy of the Council to facilitate the development of renewable energy, through the development of on and offshore wind energy proposals, in accordance with the proper planning and sustainable development of the area.
- **Policy E-P-11**: It is the policy of the Council to:
 - (1) Facilitate the development of appropriate wind energy proposals in the "Area Open to Consideration" as identified on the Wind Energy Map No. 9, and
 - (2) Not favourably consider wind energy proposals in those areas identified "Not Favoured" on the Wind Energy Map No. 9.

Wind energy proposals should accord with Sections 6.3 – 6.9 of the Wind Energy, Development Guidelines, Guidelines for Planning Authorities, 2006 and with Chapter 10, section 10.6 (Wind Energy – Development Guidelines and Technical Standards).

- **Policy E-P-12**: It is a policy of the Council to encourage all wind energy developers to engage in preplanning consultation with the Planning Authority in relation to development proposals. Developers are also encouraged to engage with the local community to investigate the potential for local community benefit that may arise, and/or arrangements for local community investment.
- **Policy E-P-13**: It is a policy of the Council to encourage the development of community wind farms/cooperatives/auto-production to enable communities to generate their own electricity, income and to sell surplus back to the grid, in accordance with other policies of this Plan and the proper planning and sustainable development of the area.
- **Policy E-P-14**: It is a policy of the Council to support voluntary initiatives from developers/wind farm operators for local community benefits, in accordance with other policies of this Plan and the proper planning and sustainable development of the area.
- **Policy E-P-15**: It is a policy of the Council to facilitate the development of sustainable small-scale, community owned/agricultural and/or small enterprise, renewable energy proposals to meet localised energy needs and/or to provide surplus energy to the grid in the context of other policies of this Plan and the proper planning and sustainable development of the area.
- Policy E-P-16: It is a policy of the Council to support the clustering of wind farms within the vicinity of existing or proposed grid connections and existing operational and approved windfarms to achieve economies of scale and to minimise the spatial extent of environmental impacts.
- Policy E-P-17: It is a policy of the Council to strengthen and enhance the capacity and critical mass of existing wind farms, within the local environmental capacity including the sustainable upgrade/replacement of older turbines with newer and more efficient models.

- Policy E-P-18: It is a policy of the Council to permit proposals to extend existing or permitted wind farms. Where such proposals can satisfy the Planning Authority that they are in accordance with the Wind Energy Guidelines 2006 (DoEHLG) and the potential cumulative impacts of further onsite construction upon, landscapes, habitats, soil stability and environmental habitats do not result in significant environmental damage.
- **Policy E-P-19**: It is a policy of the Council to ensure that all roads associated with the development of wind farms are maintained or repaired at the developer's expense to the satisfaction of the Council.
- **Policy E-P-20**: It is a policy of the Council that potential impacts on natural, built and cultural heritage including impacts on archaeological monuments and watercourses are assessed as part of Windfarm development proposals. Where such impacts are identified, mitigation measures such as buffer zones, separation distances and access arrangements should be employed as appropriate.
- Policy E-P-21: It is a policy of the Council to facilitate the development of combined wind and wave, tidal and/or hydro proposals in areas where there are no significant environmental, heritage or landscape constraints, to generate and export renewable energy and to generate local revenue subject to the proper planning and sustainable development of the area.

Section 7.2.1 of the County Development Plan states that wind energy has the potential to be an important emerging sector of the economy of Donegal in place of traditional and declining industries such as fishing and farming, assisting in job creation, education and rural development while also reducing the dependency on fossil fuels;

"There is potential within the County to host renewable technologies (both on and offshore), to manufacture, transport (import / export) and to research and develop technologies. Many traditional and declining industries (e.g. fishing, farming, construction) have expertise and transferable skills and an established infrastructural base to capitalize upon the opportunities emerging from the green economy."

Section 7.2.1 of the Donegal County Development Plan also states that Donegal is becoming, and plans to build upon the research, development and education relating to wind power and renewable energy:

"Donegal is currently at the forefront of the supply of sustainable energy to the grid and with the development of the first college to provide a National Wind Academy at Letterkenny Institute of Technology. The County is becoming recognised as a Centre of Excellence within the renewable sector for research and development. Donegal County Council and the County Development Board, aim to develop Killybegs as a Centre of Excellence for the green economy with the development of a strong, vibrant and proactive cluster of support businesses. The CDB have supported the establishment of a new Higher Certificate Wind Energy Technician programme at Letterkenny Institute of Technology and complementary programmes through Donegal VEC (FETAC Level 5 Cert Renewable Technology)." The relevant objectives of the current Donegal County Development Plan with regard to wind energy development are listed below.

- **Objective E-O-1**: To develop sustainably a diverse renewable energy portfolio to meet demands and capitalize on the County's competitive locational advantage.
- Objective 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.
- **Objective 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.
- **Objective E-0-5**: 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).
- **Objective E-O-6:** To ensure that wind energy developments do not adversely impact upon the existing residential properties, and other centres of human habitation (as defined at 10.6.7) in Chapter 10 Development and Technical Standards.

The Plan recognises that though 392.84MW of wind farm generating capacity is currently operating in Donegal from a total of 36 wind farms⁴, there is potential to have 660 MW of energy generated by wind power in County Donegal by 2020, should all Gate 3 wind farms connect. The Council's approach to wind energy development has been prepared to inform developers, landowners and the public of the most appropriate sites for the location of wind energy proposals. Following an analysis of areas suitable for wind energy development within the County, a strategy was created which examines wind energy potential, proposed and existing grid connections, natural heritage designations and landscape sensitivity.

2.4.5.1 Donegal Wind Energy Strategy

The CDP Wind Energy Strategy identifies the following areas in relation to wind farm development:

- Areas Open to Consideration: These areas are open to consideration for appropriate wind energy proposals. The areas have been identified having regard to a range of factors, including wind energy potential, existing grid connections, proposed grid connections, natural heritage designations, landscape sensitivity, adequate road infrastructure and natural heritage designations.
- **Not favoured:** Areas where wind energy proposals will not be favoured have been identified due to the significant environmental, heritage and landscape

⁴ Wind farm statistics currently in operation in County Donegal obtained from IWEA website (<u>http://www.iwea.com/index.cfm?page=bycounty&county=donegal</u>) – October 2017.

constraints. These include; SAC and SPA (Natura 2000) Sites, NHAs, unspoiled areas of EHSAs, Areas of Fresh Water Pearl Mussel important views and prospects. It is considered that these areas have little or no capacity for wind energy development.

As stated above under Policy E-P-11, it is a policy of the Council to (1) Facilitate the development of appropriate wind energy proposals in "Areas Open to Consideration" as identified on Map No. 9 of the CPD and (2) not favourably consider wind energy proposals in those area identified "Not Favoured" on the Map No. 9.



Figure 2.4 – Donegal Wind Energy Strategy Map to be updated with appropriate red-line

Figure 2.4 above shows the Meenbog wind farm site location relative to the wind energy classification areas, from the CDP. The areas in green are the Open to Consideration Areas where wind energy developments are generally considered most favourable. The location of the proposed Meenbog wind farm turbines are within the "Open to Consideration" Area for wind farm development.

Chapter 10 of the CDP deals with development and technical standards and ensures the orderly and sustainable development of the County through the setting out of objectives and standards for the management of development. Section 10.6 of the CDP on Development and Technical Standards deals with wind energy. This provides a list of standards to be adhered to for wind farm development:

- Wind energy proposals shall be screened for Environmental Impact Assessment and Appropriate Assessment of the potential impacts of the proposal on the host environment. Where a development does not require an EIA, an Environmental Report should be prepared.
- The following should also be considered in the preparation of wind energy proposals:
 - o Geological assessment of the locality.
 - Geotechnical assessment of the overburden and bedrock.
 - o Assessment of local and migratory flora and fauna.
 - A Peat Stability Assessment to determine the possibility of a bog burst or landslide.
- No fencing should occur on any part of the site except for around ancillary developments such as substations.
- All grid cable connections within the site should be undergrounded

Following the adoption of Variation No. 2 (Wind Energy) to the CDP, Section 10.6.5 of the CDP has been amended to include the following:

"Wind turbines must meet the requirements and standards set out in the DEHLG Wind Energy Development Guidelines 2006, or any subsequent related Guidelines and in addition must not be located within:

- (a) The zone of visual influence (ZVI) of the Glenveagh National Park.
- (b) The zone of influence/flight path at Donegal Airport.
- (c) The 6 Fresh Water Pearl Mussel (S.I. 296 of 2009) catchments contained in the Freshwater Pearl Mussel Sub-Basin Management Plans for Clady, Eske, Glaskeelin, Leannan, Owencarrow and Owenea.
- (d) A set back distance of ten times the tip height of proposed turbines from residential properties and other centres of human habitation".

Section 10.6.5 of the CDP defines the Glenveagh National Park Zone of Visual Influence as the environmental and visual character of Glenveagh National Park consists of the geographic extent of the park and its immediate environs. The implementation of the relevant policy should not be interpreted as relating to lands with limited physical or visual connection to the park. The onus is on the applicant to demonstrate the extent of the potential impact a proposed wind energy development has on the National Park.

Section 10.6.7 of the CDP, inserted by Variation No. 2, defines centres of human habitation as including *"schools, hospitals, churches, residential buildings or buildings used for public assembly"*. The provisions of Variation No. 2 of the CDP are discussed further below in Section 2.4.6.

2.4.5.2 Landscape Appraisal

Chapter 6 of the CDP outlines the objectives to conserve and protect the natural heritage for Donegal.

The Plan states in Policy NH-P-10 states that "it is a policy of the Council to protect landscapes of Especially High Scenic Amenity (EHSA) and views and prospects and to
preserve the character of distinctive regional, local and cultural landscapes in the County."

The CDP has identified Areas of Especially High Scenic Amenity (EHSA) in County Donegal. *These areas are of the highest landscape quality in the County, characterized by wilderness and few, if any, man-made structures*". The policy for landscape conservation is to give these areas the highest degree of protection and to adopt a positive attitude to development proposals in areas outside EHSAs with relatively low scenic landscape quality. The proposed development is not located within an EHSA.

The CDP also provides a map of views and prospects which the council seek to preserve (Map 8). The Plan focuses particular attention on views between public roads and sea, lakes and rivers stating in **Policy NH-P-14**:

"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 situate on lands between the road and the sea, lakes or rivers shall be considered on the basis of the following criteria:

- Importance
- 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.

There are several areas of protected views/prospects in the vicinity (20km) of the Study Area Boundary. However, none of these are located within the Study Area.

2.4.6 County Development Plan Variation No. 2

In October 2013, the Planning Authority proposed to carry out a variation to the CDP 2012 requiring a setback buffer of ten times the tip height of the proposed turbines from residential properties and other centres of human habitation and the omission of certain fresh water pearl mussel catchments from areas designated as *"Open to Consideration"* for wind energy development. A Ministerial Direction was issued on 3rd of October which stated the 2nd variation would be inconsistent with national and regional guidance and government policy commitments to increase on and offshore wind energy production.

This direction was the subject of a High Court judicial review challenge by Donegal County Council whereupon a settlement was reached which left the Draft Ministerial Direction standing and the variation in abeyance, with an independent review of the direction to take place. The independent review which followed recommended that:

"The decision by the members to alter the policies and objectives in regard to the wind energy objectives as outlined in this direction is premature pending the review of the Wind Energy Guidelines and contravenes that advice contained in planning circular letter PL 20-13 which advised local authorities to defer amending their existing Development Plan policies as part of either the cyclical review or variation processes".

A second Ministerial Direction under Section 31 was issued to Donegal County Council following this independent review in October 2016, whereupon a second judicial review

challenge to this direction was submitted to the High Court by Donegal County Council. The judgement from this case subsequently quashed the Section 31 Direction issued, with the result that the variation has had effect and is now adopted as part of the current Donegal County Development Plan 2012-2018. At all times throughout the variation process the Local Authority's own planning officials and the Department were clear in stating that the proposed variation was in clear contravention of the current National Guidelines.

Since the quashing of the Ministerial Direction and subsequent adoption of Variation no. 2 of the current Donegal County Development Plan 2012-2018, a Departmental Planning Circular (PL 5/2017) has been issued by the Department of Housing, Planning and Local Government to all local authorities in relation to the review of wind energy and renewable policies in development plans. This circular re-emphasised key aspects of the preferred approach to the review of the Wind Energy Development Guidelines previously announced (in June 2017) by the Minister for Housing, Planning, Community and Local Government, in conjunction with the Minister for Communications, Climate Action and Environment. One of these key aspects related to the incorporation of a visual amenity setback of 4 times the turbine height between a wind turbine and the nearest residential property, subject to a mandatory minimum distance of 500 metres between a wind turbine and the nearest residential property.

Variation No. 2 of the County Plan, therefore, clearly contravenes current national guidance as well as the emerging preferred approach to the review of the Guidelines. The ten-times tip height separation distance is therefore clearly and disproportionately contrary to the current national guidance as well as the preferred draft approach as advocated by the Government and through National Policy. The continued imposition of Variation no. 2 of the County Development Plan is premature (pending the publication of the finalised National Guidelines), unjustified (in terms of scientific analysis) and contrary to proper planning and sustainable development (as it will unnecessarily, arbitrarily and inappropriately restrict the provision of wind turbines at locations which could otherwise be entirely suitable for wind farm development).

Notwithstanding the inappropriate nature of the policy change set out in Variation no. 2 of the County Development Plan the proposed Meenbog Wind Farm has been designed to provide a ten times tip height separation distance from third party sensitive properties.

2.4.7 Draft Donegal County Development Plan 2018-2024

The forthcoming Donegal County Development Plan 2018-2024 is currently at draft stage, and proposes a number of changes to existing wind energy and current landscape/scenic amenity designations contained within the current CDP. At time of writing this EIAR the period for public submissions to be made to the Draft Plan has been closed and the Planning Authority are preparing the Chief Executives report on all submissions made by the public and various statutory bodies and stakeholders, to inform the further consideration of the Councillors in the Plan making process.

Planree Ltd. have engaged with the Planning Authority and made a submission to the Draft Plan process. In the submission it is acknowledged that the Draft Plan does contain statements which provide policy support for on-shore wind energy and the Plan also recognises its national and strategic importance as well as the significant quantum of wind resource available to County Donegal because its location on the North-West Atlantic coast. Notwithstanding this, however, the submission recognises that there is a lack of overall cohesiveness within the Draft County Plan in terms of the

Council's approach to renewable energy and in particular in relation to wind energy. There is a very obvious conflict between the stated support for wind farm and renewable energy development and the significant policy and development control constraints and restrictions being applied through other policies in the Draft Plan (for example the ten-times tip height separation distance which is contrary to National Guidance remains). The Draft Plan therefore contains policy statements which clearly support the overall continued deployment of wind energy as a sustainable and renewable energy source, however, these are largely negated if not completely militated against when the impacts of the specific objectives and policies relating to wind energy that are also incorporated within the plan are considered. The net result is that should the draft plan be adopted in its current form, it will significantly and inappropriately reduce the ability to deliver wind farm developments on appropriate sites within the County, which will mean that the County Development Plan will not be able to deliver its own targets.

Furthermore, the current Draft Plan does not comply with either the previous Departmental Circular PL20-13, which requires Planning Authorities to defer amending their existing development plan policies in relation to wind energy pending the outcome of the current review of the guidelines, nor the more recent circular (PL5/2017) and their associated interim guidelines issued under Section 28 (these are discussed further in Section 2.5.1 below). The interim guidelines require Planning Authorities to:

- Ensure overall national policy on renewable energy is acknowledged and documented;
- Indicate how the plan will contribute to achieving national targets on climate change and renewable energy over its effective period, and in particular wind energy product and the potential wind energy resource;
- Compliance with the above point must be demonstrated in detail in support of any proposal to vary set-back distances from national guidelines. Furthermore any supporting Strategic Environmental Assessment (SEA) for a plan must consider likely significant effects on climatic factors.

While it is acknolwedged that the Departmental Circular (PL5-2017) and the interim guidelines were issued subsequent to the publication of the Draft Donegal Development Plan, it is considered that significant alterations to the Wind Energy Policies and Objectives will be necessiated through the next stages of the Plan process to more fully incoroporate national guidelines, targets and policies. As the Plan preparation process continues through its next stages towards final adoption the relevant provisions will become clearer. However, in the interests of clarity please note that pending the adoption of they new 2018-2024 County Development Plan, the pertinent Development Plan remains the 2012-2018 CDP.

2.4.8 West Tyrone Area Plan (Issues Paper 2018)

The West Tyrone Area Plan 2019 (The Plan) for the Omagh and Strabane Districts is part of an on-going programme to provide full coverage of contemporary plans for all Council areas in Northern Ireland. The 'Issues Paper', is a consultation document, intended to promote focused debate on those issues that will need to be addressed when preparing the Draft Plan. The paper sets out a series of strategic, general and local issues against which comments may be lodged or other public issues may be raised. West Tyrone lies within rural Northern Ireland, where the aim is to develop an attractive and prosperous rural area based on a balanced and integrated approach to the development of town, village and countryside whilst conforming with the Regional Development Strategy.

The Paper identifies County Tyrone as having the highest onshore potential for producing wind energy in Northern Ireland. Omagh Council are generally in favour of the promotion of wind farms and other renewable power sources though concerns have been raised on the growing number of wind farm proposals and their potential impact through community consultation. The Paper also recognises the cross border dimension to developing renewable energy.

2.4.9 Strabane Local Area Plan 1986- 2001

The Strabane Local Area Plan provides a broad land use and policy framework for the physical development of Strabane District. Whilst this development plan remains a statutory instrument for its particular plan area, a new development plan covering this area is being prepared, which will be the West Tyrone Area Plan 2019.

The existing plan contains a rural strategy which focuses on development control for the location, siting and design for housing in rural areas. With regard to wider rural conservation and management issues, the plan identifies Areas of Outstanding Natural Beauty (AONB) and Areas of Scientific Interest (ASSI). Areas of outstanding natural beauty are located east of Strabane within the Sperrin area. The proposed development is located west of Strabane and is not located near lands designated for outstanding natural beauty. An Area of Scientific Interest is located south of the proposed development. The plan does not refer to the development of wind energy due to the publication date of 1989 when renewable energy was not a common feature of the landscape.

2.4.10 Derry City and Strabane Local Development Plan 2032

Preparatory work has commenced on the Derry City and Strabane Local Development Plan (LDP) 2032 following the transfer of planning powers from the Department of the Environment (DOE) to the Derry City and Strabane District Council in 2015. A feature of the ongoing preparatory work has been the publication of the Preferred Options Paper (POP), published in May 2017 and coincided with a 12 week consultation period and marked the first formal consultation stage in the preparation of the Council's LDP.

The POP sets out the Council's initial proposals and policy direction aimed at stimulating public comment. The POP outlines a number of guiding policies and/or proposals under a number of headings and criteria. The POP sets out a number of economic objectives, including an objective to *"recognize the North West's significant renewable energy resource and encourage the use of sustainable energy both as a means of generating money for the local economy, attracting investment in enterprise and providing sustainable and affordable lighting and heating for the population"*.

Section 9 of the POP outlines a number of Options in relation to renewables, whereby two strategic planning options have been identified:

- **Option 1** Focuses on exploiting our prime location in relation to wind and solar energy and maximising the development of this industry, immaterial of the effect on the landscape, natural heritage and surrounding locality.
- **Option 2** Would protect our most sensitive landscapes and provide for appropriate development only at less sensitive locations throughout the District which have the capacity to absorb renewables. This will ensure the

protection our sensitive landscapes, while still allowing for suitable wind and development elsewhere in the District.

The Council's Preferred Option, as stated in the POP is Option 2 on the basis of its score on the Sustainability Appraisal of the POP which considers that Option 2 scores positively *"economically but is more neutral in terms of some environmental and social objectives in that it protects the most sensitive areas, while concentrating this type of development in other areas of the District which are more able to absorb such schemes visually and environmentally into the landscape".*

The draft Plan Strategy will be based on both the information the Council has gathered to date as part of its LDP Baseline Evidence and also the public and stakeholders' responses to the POP. The Local Development Plan is expected to be published in 2019.

2.4.11 Omagh Area Plan 1987 – 2002

The Omagh Local Area Plan provides a broad land use and policy framework for the physical development of Omagh District. Whilst this development plan remains a statutory instrument for its particular plan area, a new development plan covering this area is being prepared, which will be the West Tyrone Area Plan 2019.

Part 8 considers the strategy and policies for the countryside. The Plan addresses the issue of how to encourage rural regeneration and at the same time, protect the vulnerable areas of the countryside. The plan emphasises the goal to protect the countryside from inappropriate development and strengthen rural communities by creating economic potential. The Strategy aims and objectives are to "facilitate rural, economic and social regeneration" and" to achieve proper balance between economic and social demands and environmental protection". The Plan does not refer to wind energy due to the publication date of 1990 when renewable energy was not a common feature of the landscape.

2.4.12 Fermanagh and Omagh Local Development Plan

The preparation of the Fermanagh and Omagh Local Development Plan is currently ongoing, with a feature of this pre-draft phase the publication of the Preferred Options Paper (POP) which identifies the main planning issues within the Fermanagh and Omagh District Council (FODC) area with the aim of stimulating public consultation to inform the preparation of the Local Development Plan. Section 9 of the POP sets out the context for renewable energy developments, The POP considers the provision of renewable energy as being *"fundamental to ensuring the continued sustainable development of the FODC area"*, and acknowledges the need for *"policies within the LDP which enable alternative and appropriate forms of renewable energy in a manner that does not impact negatively on the environmental assets, landscape quality or amenity of an area"*.

The POP outlines two options in relation to the overarching policy for renewable energy development:

- Option 1 Retain existing policy provisions but introduce a spatial framework for renewable energy development reflecting those areas where development would not be permitted and those areas where there is capacity for development. (There will be a need to specify if such areas are specific to particular types of renewable energy.)
- **Option 2 –** *Retain existing policy provisions but introduce a stricter policy to protect sensitive landscapes e.g. designated landscapes (AONB), areas of*

high scenic value, and certain views or vistas - from wind energy developments.

The Council's Preferred Option, as stated in the POP is Option 2.

The Draft Plan Strategy will be based on both the information the Council has gathered to date as part of its LDP Baseline Evidence and also the public and stakeholders' responses to the POP, with the adoption of the Plan Strategy envisaged in the 1st quarter of 2018/2019. The publication of draft Local Policies Plan is expected to be published in the 4th Quarter 2018/2019.

2.5 Other Relevant Guidelines

2.5.1 DoHPCLG Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017

In July 2017, the Department of Housing, Planning, Community and Local Government (DoHPCLG) published *'Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change'* under Section 28 of the Planning and Development Act 2000.Planning authorities are obliged to have regard to guidelines issued pursuant to s.28 in the performance of their functions under the Planning and Development Acts 2000-2017.

The guidelines state that it is a specific planning policy requirement under Section 28(1C) of the Act, that in making a development plan with policies or objectives that relate to wind energy developments that a Planning Authority must:

1. "Ensure that overall national policy on renewable energy as contained in documents such as the Government's White Paper on Energy Policy - Ireland's Transition to a Low Carbon Future', as well as the 'National Renewable Energy Action Plan', the 'Strategy for Renewable Energy' and the 'National Mitigation Plan', is acknowledged and documented in the relevant development plan or local area plan;

2. Indicate how the implementation of the relevant development plan or local area plan over its effective period will contribute to realising overall national targets on renewable energy and climate change mitigation, and in particular wind energy production and the potential wind energy resource (in megawatts); and

3. Demonstrate detailed compliance with item number (2) above in any proposal by them to introduce or vary a mandatory setback distance or distances for wind turbines from specified land uses or classes of land use into their development plan or local area plan. Such a proposal shall be subject to environmental assessment requirements, for example under the SEA and Habitats Directives. It shall also be a material consideration in SEA, when taking into account likely significant effects on climatic factors, in addition to other factors such as landscape and air, if a mandatory setback or variation to a mandatory setback proposed by a planning authority in a development plan or local area plan would create a significant limitation or constraint on renewable energy projects, including wind turbines, within the administrative area of the plan."

2.5.2 Department Circular PL5/2017

On the 3rd of August 2017, the Department of Housing, Planning and Local Government issued Circular PL5/2017 to provide an update on the review of the wind energy and renewable policies in development plans, and the advice contained within a previous Departmental Circular PL20-13. Circular PL20-13 advised that local authorities should defer amending their existing Development Plan policies in relation to wind energy and renewable energy generally as part of either the normal cyclical six-yearly review or plan variation processes and should instead operate their existing development plan policies and objectives until the completion of a focused review of the Wind Energy Development Guidelines 2006. The new circular (PL05/2017) reconfirms that this continues to be the advice of the Department.

The Department circular also reaffirms the four key aspects of the preferred draft approach being developed to address the key aspects of the review of the 2006 Wind Energy guidelines as follows:

- The application of a more stringent noise limit, consistent with World Health Organisation noise standards, in tandem with a new robust noise monitoring regime, to ensure compliance with noise standards;
- A visual amenity setback of 4 times the turbine height between a wind turbine and the nearest residential property, subject to a mandatory minimum distance of 500 metres between a wind turbine and the nearest residential property;
- The elimination of shadow flicker; and
- The introduction of new obligations in relation to engagement with local communities by wind farm developers along with the provision of community benefit measures.

The release of Circular Letter PL05/2017 and the Interim Guidelines coincide with the publication of Irelands first statutory National Mitigation Plan (discussed in Section 2.3.5.4 above).

2.5.3 DoEHLG Wind Energy Guidelines 2006

In June 2006, the then Department of Environment, Heritage and Local Government (DoEHLG) published *Wind Energy Development Guidelines for Planning Authorities*' (the Guidelines) under Section 28 of the Planning and Development Act, 2000. The aim of these guidelines was to assist the proper planning of wind power projects in appropriate locations around Ireland. The Guidelines highlight general considerations in the assessment of all planning applications for wind energy. They set out advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. They contain guidelines to ensure consistency of approach throughout the country in the identification of suitable locations for wind energy development.

Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. The Department of the Environment, Community and Local Government published proposed revisions to the guidelines in December 2013 as part of a targeted review relating to Noise, Proximity and Shadow Flicker for discussion. The Department is continuing this review, however, to-date no further guidelines or update has been published. Publication of elements of a "preferred draft approach" were issued in June

2017. The four key aspects of the preferred draft approach have been set out previously in Section 2.5.2 above.

The SEA process and public consultation on the revised Guidelines will continue over the coming months and it is anticipated that the new statutory Guidelines will be finalised and issued to planning authorities in Q1 2018.

2.5.4 IWEA Best Practice Guidelines for the Irish Wind Energy Industry 2012

The Irish Wind Energy Association (IWEA) published updated Wind Energy Best Practice Guidelines for the Irish Wind Industry in 2012. The guidelines aim to encourage and define best practice development in the wind energy industry, acting as a reference document and guide to the main issues relating to wind energy developments. The purpose of the guidelines is to encourage responsible and sensitive wind farm development, which takes into consideration the concerns of local communities, planners, and other interested groups. The guidelines outline the main aspects of wind energy development with emphasis on responsible and sustainable design and environmental practices, on aspects of development which affect external stakeholders, and on good community engagement practices. In approaching the development of IWEA's guidelines the aim was to be complementary to the Department of the Environment Heritage and Local Government's *'Wind Energy Development Guidelines'* (2006).

2.5.5 IWEA Best Practice Principles in Community Engagement and Community Commitment 2013

Following on from the IWEA published Best Practice Guidelines in March 2012, the Association extended its guidance with the publication of this Best Practice in Community Engagement and Commitment. IWEA and its members support the provision of financial contributions by wind farm operators to local communities and have sought to formulate best practice principles for the provision of a community commitment. The document sets out IWEA's best practice principles for delivering extended benefits to local communities for wind farm developments of 5 Megawatts (MW) or above. Best Practice Principles of community engagement when planning the engagement strategy and preparing associated literature are also outlined in the document. The aim of these guidelines is to ensure that the views of local communities can share in the benefits.

Further details on the community engagement that has been undertaken as part of the proposed development are presented in Section 2.8.4 below.

2.5.6 DCCAE Code of Practice for Wind Energy Development in Ireland -Guidelines for Community Engagement

In December 2016, the Department of Communications, Climate Action and Environment (DCCAE) issued a Code of Practice for wind energy development in relation to community engagement. The Code of Good Practice is intended to ensure that wind energy development in Ireland is undertaken in adherence with the best industry practices, and with the full engagement of local communities. Community engagement is required through the different stages of a project, from the initial scoping, feasibility and concept stages, right through construction to the operational phase. The methods of engagement should reflect the nature of the project and the potential level of impact that it could have on a community. The guidelines advise that ignoring or poorly managing community concerns can have long-term negative impacts on a community's economic, environmental or social situation. Not involving communities in the project development process has the potential to impose costly time and financial delays for projects, or prevent the realisation of projects in their entirety.

2.5.7 Commission for Energy Regulation Gate System

The Commission for Energy Regulation (CER) is responsible for determining connection policy for proposed electricity generators, including wind farms, who wish to connect to the electricity network in Ireland. Due to the large volume of proposed new generation projects, especially wind farms, the CER approved a new connection policy known as the Group Processing Approach (GPA) for the connection of generator applicants to the network. The GPA allows for generator applicants to be processed for connection (by EirGrid and ESB Networks) together in geographic groups, instead of the one-by-one connection process used previously. To date the CER has developed policy for three groupings or "Gates" of generator connection applications being processed for connection through the GPA. These Gates involve a certain number of generator applicants being offered to connect to the network by EirGrid and ESB Networks. Having regard to Irelands target of 40% of electricity consumption from renewable sources by 2020, the CER's Gate 3 policy allows for over 150 new renewable generators (almost all of them wind farms), with a combined capacity of about 4,000MW, to connect to the network across Ireland.

2.5.8 REFIT

The current primary support mechanisms for renewable electricity are the REFIT (Renewable Energy Feed-in Tariff) schemes. The schemes were designed to provide certainty to renewable electricity generators by providing them with a minimum price for each unit of electricity exported to the grid over a 15-year period. REFIT is designed to provide price certainty to renewable electricity generators. It has been in operation for wind and hydro power since 2006. It operates on a sliding scale, acting to ensure a guaranteed price for each unit of electricity exported to the grid by paying the difference between the wholesale price for electricity and the REFIT price. This means that as electricity prices increase, the amount paid under REFIT falls, mitigating the effect on the consumer. The REFIT 1 scheme was set up in 2006 to support the construction of an initial target of at least 40MW of renewable energy powered electricity. The REFIT 2 scheme was opened in March 2012 for onshore wind, small hydro and landfill gas. The REFIT 3 scheme opened in February 2012 for biomass technologies. The Department of Communications, Climate Action and Environment (DCCAE) are currently developing a new support scheme and have confirmed that this support scheme will be in place by the end of 2017 subject to EU approval.

2.5.9 Forest Service Guidelines

The Forest Service is responsible for ensuring the development of Forestry within Ireland in a manner and to a scale that maximises its contribution to national socioeconomic well-being on a sustainable basis that is compatible with the protection of the environment. The forestry works (felling/planting) associated with the proposed development will carried out under the relevant guidance from the Forestry Service.

2.6 Scoping & Consultation

2.6.1 Scoping Document

Scoping is the process of determining the content, depth and extent of topics to be covered in the environmental information to be submitted to a competent authority for projects that are subject to an Environmental Impact Assessment (EIA). This process is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment with the potential to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIAR and the specific standards of information they require. Comprehensive and timely scoping helps ensure that the EIAR refers to all relevant aspects of the proposed development and its potential effects on the environment and provides initial feedback in the early stages of the project, when alterations are still easily incorporated into the design. In this way scoping not only informs the content and scope of the EIAR, it also provides a feedback mechanism for the proposal design itself.

A scoping report, providing details of the application site and the proposed development, was prepared by McCarthy Keville O'Sullivan Ltd. and circulated in November and December 2016. McCarthy Keville O'Sullivan Ltd. requested the comments of the relevant personnel/bodies in their respective capacities as consultees with regards to the scope and the preparation of the EIAR.

In Northern Ireland, the scoping process was engaged through the submission of "An Intention to Submit a Planning Application" Document to the Department for Infrastructure (DfI) (formerly the Department of the Environment) in Northern Ireland under the provisions of Regulation 8 of the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015 and was assigned a planning reference number (LA11/2016/1055/TBA) by the DfI. This document was circulated by the DfI to the relevant Northern Ireland Statutory Consultees with interest in the specific aspects of the environment. These organisations are also invited to submit comments on the scope of the EIAR and the specific standards of information they require.

2.6.2 Scoping/Consultation Responses

2.6.2.1 Republic of Ireland Consultees

Table 2.2 lists the responses received from the Republic of Ireland bodies to the scoping document circulated in November 2016. Copies of all scoping responses received by 31st October 2017 are included in Appendix 2-1 of this EIAR. If further responses are received, the comments of the consultees will be considered in the construction and operation of the proposed development in the event of a grant of planning permission. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the EIAR. The response from the Commission for Communications Regulations (Comreg) also contained a list of communications operators who have links in the area who were also contacted as part of the scoping process.

As referenced in Section 2.2.2 above, the proposal site formed part of a previous application site for a 49 no. turbine wind farm submitted to An Bord Pleanála under ABP Ref. PA0040 in February 2015. Whilst the current proposal is of a significantly reduced scale to the application presented to the Board under PA0040, and represents a distinctly different proposal on a more consolidated site, the consultations undertaken in respect of the previous application have also informed this current proposal. In this regard, all previous scoping responses, consultation feedback and submissions received in relation to the proposal under ABP Ref. PA0040 have fully informed the design process and layout of the Proposed Development.

Table 2.2 Republic of Ireland Scoping Consultees

	Consultee	Response	
01	An Taisce	No response to date	
02	Airspeed	Response received on 25 th October 2016	
03	Broadcasting Authority of Ireland	Response received on 5 th December 2016	
04	Bat Conservation Ireland	No response to date	
05	BirdWatch Ireland	No response to date	
06	BT Communications Ireland	Response received on 21 st October 2016	
07	Commission for Communications Regulation	Response received on 20 th October 2016	
08	Department of Agriculture, Food and the Marine	No response to date	
09	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	Response received on 9 th January 2017 and 3 rd February 2017	
10	Department of Communications, Climate Action & Environment	No response to date	
11	Department of Defence	Response received on 18 th January 2017 and 3 rd March 2017	
12	Department of Tourism, Transport and Sport - Irish Sports Council	No response to date	
13	Donegal Airport	No response to date	
14	Donegal County Council Planning Section	No response to date	
15	Donegal County Council Roads Section	No response to date	
16	Donegal County Council Water Services	No response to date	
17	Donegal County Council Environment Section	No response to date	
18	Eir Ltd.	Response received on 26 th October 2016	
19	EMR Solutions	Response received on 28 th October 2016	
20	ESB Telecoms	No response to date	
21	Failte Ireland	Response received on 5 th December 2016	
22	Geological Survey of Ireland	No response to date	
23	Health Service Executive	No response to date	
24	Imagine Communications	Response received on 9 th December 2016	
25	Inland Fisheries Ireland	Response received on 8 th December 2016	
26	Irish Aviation Authority	No response to date	
27	Irish Peatland Conservation Council	Response received on 15 th December 2016	
28	Irish Raptor Study Group	No response to date	
29	Irish Red Grouse Association	No response to date	
30	Irish Water	Response received on 16 th January 2017	

	Consultee	Response
31	Irish Wildlife Trust	No response to date
32	Mayo County Council Computer Aided Mobilisation Project (CAMP)	Response received on 25 th October 2016
33	Meteor Mobile Communications Ltd.	Response received on 13 th December 2016
34	02 Ireland	Response received on 21 st October 2016
35	Office of Public Works	Response received 11 th January 2017
36	RTE Transmission Network Ltd.	Response received on 21 st October 2016
37	Tetra Ireland Communications Ltd.	Response received on 20 th December 2016
38	The Heritage Council	No response to date
39	Three Ireland Ltd	Response received on 21 st October 2016
40	Towercom	No response to date
41	Transport Infrastructure Ireland (formerly National Roads Authority)	Response received on 15 th December 2016
42	TV3	No response to date
43	UPC	No response to date
44	Viatel	Response received on 21 st October 2016
45	Vodafone Ireland	Response received on 30 th December 2016 and 4 th January 2017

Table 2.3, overleaf presents the key points from the scoping responses from the Republic of Ireland bodies, and identifies where such points have been addressed in this EIAR.

No.	Consultee	Key Scoping Response Points	Comment
		 Detailed site drainage map will be required indicating all existing watercourses and all outfall points to watercourses or lakes and all settlement ponds. 	 Refer to Appendix 4.1 – Site Layout Drawings
		 Associated impacts of quarrying or extraction should be considered and assessed fully in the EIAR, with restoration/reinstatement plans required for all quarries/borrow pits on-site included in the EIAR 	 Potential impacts on environmental media due to the extraction of rock from the proposed borrow pits have been assessed in the various chapters of this EIAR. The reinstatement of the borrow pits is described in Section 4.3.4.
	Department of Arts, Heritage and the Gaeltacht	 Any proposals to combine peat disposal with habitat restoration or rehabilitation measures will require a detailed plans prepared by a suitably qualified ecologist in consultation with a hydrologist and other experts. 	 A suitably qualified ecologist, hydrologist and engineer will oversee all stages of the construction of the proposed development. Refer to Section 4.1.13 and Appendix 4.4.
1		 Excavated or exposed peat should not pose any threat to surface waters and water quality. 	 Refer to Section 4.7 – Site Drainage
		 The spreading or recovery of excavated peat on areas of intact bog, wet and revegetated areas of cutover bog or other habitats or vegetation of ecological value is unlikely to be acceptable. 	 Refer to Section 4.3.4 – Peat and Spoil Management Plan
		 Potential cumulative or in combination effects of other plans and projects should be considered at this early stage including the Donegal County Development Plan 2012-2018 and any other relevant new plans or projects. 	 An assessment of the potential cumulative effect between the proposed development and other plans and projects is included in Chapters 5-14 of the EIAR. Refer to Section 2.7 – Cumulative Impact Assessment.
		 EIAR and NIS (if required) should include sufficient project details so that the full nature and extent of the project are known and assessed in relation to the various features of the proposed development. 	 Refer to Chapter 4 – Description of the Proposed Development for a detailed description of the full nature and extent of the various features of the proposed development.

Table 2.3: Review of Scoping Responses from Republic of Ireland Bodies

 The impacts of any tree felling should be fully assessed in the EIAR, including impacts on wildlife, habitats and surface waters. 	 Impacts of tree felling required as part of the proposed development are assessed in Chapters 5- 14 of this EIAR
 Any obligations to replant on other lands should be assessed as part of the EIAR. 	 Refer to Appendix 4.3 – Assessment of Proposed Replanting
 Any restoration/reinstatement plans of planted areas, as mitigation for negative ecological effects should be included in the EIAR. 	 Refer to Appendix 7.7 – Hen Harrier Habitat Enhancement Plan
 The likely impacts of grid connection, particularly for birds, sensitive habitats and surface waters, should be given due consideration. 	 Refer to Chapter 7 -Ornithology
 Any improvement or reinforcement works required for access and transport anywhere along the proposed haul route(s) should be included in the EIAR and NIS, as appropriate. 	 Refer to Section 14.1 – Traffic and Transport
 Advised to consult the NPWS website as a key source of data, as well as Donegal County Council, National Biodiversity Data Centre and other EISs, NISs for projects in the general area and NIRs and SEA Environmental Reports for plans in the general area. 	 Refer to Section 2.6 – Scoping & Consultation
 Assessment of likely significant effects on European sites should be carried out with respect to the conservation objectives or the site(s), taking account of existing conservation status, and the cumulative or in combination effects of other plans and projects in all cases. 	 Refer to Natura Impact Statement and Chapter 6 – Flora and Fauna. Biodiversity of this EIAR
 Extent of ornithological and other ecological surveys should be informed by appropriate specialists or experts. 	 Refer to Section 7.2.2 - Consultation

	-	It is advised that no zone of influence or distance criterion should be identified until there has been thorough examination of what ecological effects might result from the project.	•	Refer to Section 7.2 – Assessment Approach and Methodology
	•	If the zone of influence concept is used, the scientific basis for its delineation and the area(s) involved should be made clear in any documentation.	•	Refer to Section 7.2 – Assessment Approach and Methodology
	•	Any NIS must contain the scientific data and analysis necessary to address the key issues of relevance and to reach robust conclusions.	•	Refer to Natura Impact Assessment submitted as part of this planning application
	•	Response outlines a number of important ecological receptors which should be included among the considerations at the current constraints study stage and in the flora and fauna section of the EIAR.	•	Refer to Section 7.2.5 – Identification of Target Species and Key Ornithological Receptors
	•	Habitat survey of the site and surrounds, following the Heritage Council methodology (Atkins 2010), with a particular focus on any Annex I or potential Annex I habitats present.	•	Refer to Section 6.3.2 – Field Assessment
	•	Identification, description, evaluation and mapping of any Annex I habitats present, including in terms of the vegetation communities, flora and fauna present, as appropriate. Correspondence with Annex I habitat types, or not, should be analysed and justified on scientific grounds.	-	Refer to Section 6.3.2 – Field Assessment
	•	A habitat map of the site and surrounds with the footprint of the entire project included to enable potential impacts on habitats to be quantified and qualified.	•	Refer to Section 6.3.2 and Figure 6.4 of the EIAR.
	-	Botanical survey of the receiving environment to be undertaken at the appropriate time of year to properly characterise and evaluate the habitats present, and	•	Refer to Appendix 6.4 – Turbine Base Botanical Assessment

		identify any rare or protected species, including bryophytes.	
		 Faunal surveys of the receiving environment to be undertaken at the appropriate time of year to properly characterise and evaluate the habitats present. 	 Refer to Section 6.2.4 – Field Surveys
		 Bird surveys to be at a sufficient frequency over all relevant periods (winter, breeding, spring and autumn migration) during at least one full year to determine bird usage of the site and surrounds. 	 Refer to Section 7.2 – Assessment Approach and Methodology
		 Mammal surveys, including multi-season bat surveys to be conducted. 	 Refer to Section 6.2.4 – Field Surveys
		 Aquatic species surveys to be conducted. 	 Refer to Appendix 6.2 - Aquatic Macroinvertebrate Sampling and Appendix 6-3 – Fisheries Assessment
		 Needs of Freshwater Pearl Mussels should be considered in relation to water and hydrology. 	 Refer to Appendix 6.5 – Freshwater Pearl Mussel Survey
		 The EIAR should identify any pre and post construction monitoring which should be carried out. 	 Refer to Appendix 4.4 – Construction and Environmental Management Plan
		 The post construction monitoring should include bird and bat strikes/fatalities including the impact on any such results of the removal of carcasses by scavengers. 	 Refer to Section 7.6.5 – Post-Construction Monitoring
		 The EIAR should address the issue of invasive alien plant and animal species. 	 Refer to Section 6.6.5 – Mitigation to Prevent the Spread of Invasive Species
		 Reference to the requirement of licences under the Wildlife Acts or derogations under the Habitat Regulations where a proposed development impacts on protected species and their habitat. 	 Refer to Section 7.6.3 – Hen Harrier Habitat Enhancement Plan.
2	Department of Defence	 Responded with comments from the Air Corps advising of turbine lighting requirements. 	 Turbine lighting scheme will be agreed with Irish Aviation Authority, Department of Defence and the Planning Authority in advance of turbine construction.

		 Advises that although the proposal site is technically inside the 3 NM clearance requirements of the Air Corps, the proposal site is elevated and shielded by the natural geographical feature of Barnesmore Gap and will not greatly impact Air Corps operations,
3	Fáilte Ireland	 Provided a copy of Fáilte Ireland's standard Noted Guidelines for the treatment of tourism in an EIAR.
4	Inland Fisheries Ireland	 Prior to any trenching works relating to the proposed grid connection cable route, a contingency plan/ works methodology must be developed in relation to any pumping that may be required along the N15 section of the proposed cabling. Pumping directly to the Lowerymore River from work areas is not an option favoured by Inland Fisheries Ireland. Refer to Appendix 4.4 – Construction and Environmental Management Plan
		 Cognisance should be taken of the proximity of the Lowerymore River and the N15 carriageway and the fact that significant sections of river bank have been reinforced, and the proposed cabling must not jeopardise the integrity of the existing bank protection. Noted in development design.
9	Irish Peatland Conservation	 Clarification requested in relation to the reduced number of sites of conservation importance associated with current proposal in comparison to previous application under ABP Ref. 05.PA0040 Current proposed development footprint is greatly reduced in comparison with the previous Carrickaduff Wind Farm application. Refer to Chapter 6 – Flora and Fauna
	Council	 Hydrological study at landscape level incorporating all wetland and aquatic protected sites and any other peatland sites recommended. Refer to Chapter 6 – Flora and Fauna. Biodiversity and Chapter 9 – Water.
		 Recommend undertaking a study to determine if any peatland sites within 15km buffer zone are likely to emit C02 as a result of your proposed development as Refer to Section 10.2.3 – Calculating Carbone Losses and Savings from the Proposed Development

		this may be in conflict with the National Plan to reduce GHG emissions by 20% by 2020	
		 Recommend project ecologists undertake a comprehensive frog survey within the 15km buffer zone to consider any potential negative impacts the wind farm development may have on frog populations within the buffer zone. 	 Refer to Section 6.3.2.2 – Fauna in the Existing Environment
		 Advises that fen peatlands can be hydrologically damaged by indirect human activities within a 5km radius of the fen. Cites IPCC peatland database which references another fen of major local importance inside 15km buffer zone, Raphoe Fen, which may be impacted upon as a result of the proposed development. 	 Refer to Chapter 6 – Flora and Fauna. Biodiversity and Chapter 9 – Water.
		 Response identifies a number of designated sites within the 15km buffer zone from the IPCC peatland database and advises that the proposed development would further threaten these already damaged, sensitive and rare peatland habitats, therefore a precautionary principal approach should be employed at all stages in relation to the proposed development. 	 Refer to Section 6. 3 – Baseline Conditions and Receptor Evaluation
10	Irish Water	 Response referenced Irish Water submission on previous application which advised that Lough Mourne Public Water Supply is of strategic importance for the northern part of County Donegal and currently supplies drinking water for approximately 17,000 people. There are long term plans to augment this supply to serve North Donegal by constructing a raw water intake on the Bunadowen River and the proposed development has the potential 	 No new development proposed within this supply catchment. Refer to Section 9.3.14 – Water Resources

		to impact on the quality of water on the Bunadowen River.	
		 There are no Arterial Catchment Drainage Schemes located within the area of works proposed. 	 Noted
11	Works (OPW)	 There are no records of flooding identified in the proposed project location of the Flood Hazard Mapping website (<u>www.floods.ie</u>) 	 Noted
		 The applicant should consider access to the proposed scheme in the context of official policy which is outlined in Section 2.5 of the DoECLG Spatial Planning and National Roads Guidelines (2012). 	 Refer to Section 14.1 – Traffic and Transport
		 Provides general guidance for preparation of the EIAR. 	 Noted
	Transport Infrastructure Ireland	 Consultation should be had with the relevant Local Authority/National Roads Design Office. 	 Refer to Section 2.6 – Scoping and Consultation
		 Address any potential significant impacts on the national road network and junctions with national roads in the proximity of the proposed development. 	 Refer to Section 14.1 – Traffic and Transport
12		 Developer should have regard to TII publications. 	 Refer to Section 14.1 – Traffic and Transport
		 Assess visual impacts from national roads. 	 Refer to Chapter 12.9 – Assessment of Visual Effects
		 Assess cumulative impacts. 	 An assessment of the potential cumulative effect between the proposed development and other plans and projects is included in Chapters 5-14 of the EIAR. Refer to Section 2.7 – Cumulative Impact Assessment.
		 Subject to meeting the appropriate thresholds, a Traffic and Transport assessment should be carried out, having regard to the relevant NRA guidelines on traffic, noise and vibration impacts. 	 Refer to Section 14.1 – Traffic and Transport

		 The EIAR should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. Refer to Chapter 11 – Noise and Vibration
		 The designers should consult with TII publications to determine whether a Road Safety Audit is required. Refer to Section 14.1 – Traffic and Transport
		 Clearly identify the proposed haul routes and assess the network to be traversed. Refer to Section 4.4 – Access and Transportation
		 The EIAR should identify the method/techniques proposed for any works traversing/in proximity to the national road network in the interests of maintaining the safety and standard of the national road network. Refer to Section 4.3.7 – Grid Connection Cabling and Section 4.8.6 – Grid Connection Cable Trench
		 Note locations of existing and future national road schemes in relation to potential cabling routes. Noted – there are no existing or future national road schemes in proximity to the grid connection routes
	Telecommunication	ns Operators:
17	Airspeed	 Response detailed the coordinates for current links in the area of the proposed scheme. Noted. See Section 13.2.5.3 on siting of Turbine 1 and calculation of required clearance zone from Airspeed link.
18	Broadcasting Authority of Ireland (BAI)	 No issues from wind farms on existing FM networks. Proposed development is not located close to any existing or planned FM transmission sites. Noted.
20	Commission for Communications Regulation (ComReg)	 Provided a list of operators in vicinity of the site. Noted – additional operators identified by ComReg were contacted as part of the scoping and consultation exercise.
21	Eir	 Response issued coordinates of radio links from Barnesmore Gap to various sites. Noted. Referenced links were found to be outside the proposed wind farm site and therefore no potential for interference.

No.	Consultee	Key Scoping Response Points	Comment
20	Commission for Communications Regulation (ComReg)	 Provided a list of operators in vicinity of the site. 	 Noted – additional operators identified by ComReg were contacted as part of the scoping and consultation exercise.
21	Eir	 Response issued coordinates of radio links from Barnesmore Gap to various sites. 	 Noted. Referenced links were found to be outside the proposed wind farm site and therefore no potential for interference.
22	EMR Solutions	 No impact on any fixed links arising from the proposed development. 	 Noted.
23	Imagine	 Response stated that Imagine have no links in the vicinity of the proposed development. 	 Noted.
24	Mayo County Council Computer Aided Mobilisation Project (CAMP)	 Response provided details of Mayo County Council CAMP radio links in the area. 	 Noted. Details on supplied radio link were mapped and subsequently found to be outside proposed wind farm site.
25	Mosaicnet (3 & 02)	 Response issued confirmed the proposed development would not have any negative impact on the 3 (incl. 02) transmission network. 	 Noted.
26	Mosaicnet (Meteor Mobile Communications)	 Response provided topology information on existing transmission links in the vicinity of the proposal site. 	 Noted. The supplied transmission links information was mapped within the context of the proposed development whereupon it was found that the proposed development would not impact on any of the existing Mosaicnet (Meteor) transmission links within the area.
27	Netshare (Vodafone)	 Response provided topology information on 3 no. existing transmission links in the vicinity of the proposal site. 	 Noted. The supplied transmission links information was mapped within the context of the proposed development whereupon it was found that the proposed development would not impact on any of the existing Netshare (Vodafone) transmission links within the area.

No.	Consultee	Key Scoping Response Points	Comment
24	RTÉ Transmission Network (2RN)	 Response provided topology information on 3 no. existing transmission links in the vicinity of the proposal site. 	 Noted – The supplied topology information was mapped within the context of the proposed development whereupon it was found that the proposed development would not impact on any of the existing RTÉ Transmission Network (2RN) within the area.
25	Tetra Ireland Communications	 Response stated that the proposal presents no network or coverage concerns. 	 Noted.
29	Viatel	 Response stated that the proposal presents no network or coverage concerns. 	 Noted.

2.6.2.2 Northern Ireland Consultees

Table 2.4 lists the responses received to the 'Intention to Submit' document circulated by the Department for Infrastructure (DfI) on the 11th January 2017 to the relevant Northern Ireland Statutory Consultees identified by the Dfl. Copies of all scoping responses received by 10th October 2017 are included in Appendix 2-2 of this EIAR. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the EIAR. If further responses are received, the comments of the consultees will be considered in the construction and operation of the proposed development, subject to the grant of planning permission.

Table 2.4 Northern Ireland Scoping Consultees

	Consultee	Response
1	DAERA NI Forest Service	Response received on 9 th February 2017
2	Department of Communities – Historic Environment Division	Response received on 31 st January 2017
3	Derry City and Strabane District Council	Response received on 18 th May 2017
4	Derry City and Strabane District Council Environmental Health Department	Response received on 18 th May 2017
5	Foyle Carlingford and Irish Lights Commission – Loughs Agency	Response received on 9 th March 2017
6	NIEA – DAERA – Planning response team	Response received on 22 nd March 2017
7	NI Water – Windfarms / strategic applications	Response received on 30 th January 2017
8	Tourism Northern Ireland	Response received on 2 nd June 2017
9	Rivers Agency – Planning Advisory Unit	Response received on 27 th January 2017
10	Royal Society for the Protection of Birds (RSPB)	Response received on 27 th January 2017
11	Transport NI	Responses received on 16 th January 2017 and 20 th February 2017

Table 2.5, (overleaf) presents the key points from the scoping responses from the Northern Ireland bodies, and identifies where such points have been addressed in this EIAR.

No.	Consultee	Key Scoping Response Points	Comment
1	DAERA NI Forest Service	 The Woodlands Register identifies one large forest block, Glenderg Forest, managed by the Forest Service and located along the southern and eastern boundaries of proposal site. Glenderg Forest is inhabited by red squirrels and hen harriers also frequent the forest. 	 Refer to Chapter 6 – Flora and Fauna. Biodiversity
2	Department of Communities – Historic Environment Division	 HED Historic Buildings advised that the application may have limited effect or an impact on the setting of the listed buildings within the locality. Considers that a listed building section is not required in the Cultural Heritage / Material Assets Chapter of the EIAR. HED Historic Monuments recommend that any subsequent EIA should have a Cultural Heritage section that includes a detailed assessment of the impact of the proposed development on the setting of Scheduled and State Care monuments within the environs of the proposed application site, including a cumulative impact assessment that includes an assessment of the impact of the proposal site and wind turbine sites nearby. 	 Refer to Chapter 13- Cultural Heritage and Archaeology
3	Derry City and Strabane District Council	 DCSD advised that the EIAR should address any potential impacts to residential properties in the Council area in terms of noise, shadow flicker, proximity of turbines, height, number, scale, size and siting as well as cumulative visual impacts associated with the proposal when read in conjunction with existing and approved wind farm developments in the area. 	 Refer to Section 5.7 – Shadow Flicker, Chapter 9 – Water, Chapter 11 – Noise and Vibration and Chapter 12 – Landscape and Visual

Table 2.5: Review of Scoping Responses from Northern Ireland Bodies

No.	Consultee	Key Scoping Response Points	Comment
		 A full visual assessment from key viewpoints within the Council area should be provided. The potential exists for transboundary noise impacts on properties within the Council area which should be given due consideration in the accompanying EIAR. There is potential for impacts on flora and fauna and water bodies and their quality within the Council area which should be given due consideration in the accompanying EIAR. 	
4	Derry City and Strabane District Council Environmental Health Department	 EHS is of the opinion that noise impact on properties located in Northern Ireland must be assessed in accordance with the noise standards and noise prediction methodologies relevant to the Northern Ireland jurisdiction. Environmental Health Department (EHD) advises that any noise impact assessment contained within the EIAR should adhere to the standards presented in the document, 'ETSU-R-97 - The Assessment and Rating of Noise from Wind Farms' in line with the good practice outlined in the IOA's 'Good Practice Guide to the application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise'. The noise assessment should include all wind farm developments in the vicinity with the potential to have a cumulative noise impact at any of the relevant properties. A limit of 45dBLA90 or maximum increase of 5dB above background noise is only recommended in Northern Ireland where a property occupier has a financial involvement with a proposed development. In all other circumstances the applicable noise limit is the 	Refer to Chapter 11 – Noise & Vibration

No.	Consultee	Key Scoping Response Points	Comment
		greater of a lower limit set between 35-40dBL _{A90} (with the agreement of the strategic Planning Division), or +5dB over the background, during quiet daytime hours; and the greater of 43dBL _{A90} , or +5dB over the background noise level at night.	
5	Foyle Carlingford and Irish Lights Commission – Loughs Agency	 The Loughs Agency has considered the information provided and would have no objection in principle to the proposed development. The applicant should demonstrate best environmental practice when working close to watercourses. The potential for deleterious matter to enter a watercourse is of primary concern. The applicant should also be aware that it is an offence under section 41 of the Foyle Fisheries Act (1952) to cause pollution which is detrimental to fisheries interests. 	 Refer to Section 4.7 Site Drainage, Chapter 9 – Water and Appendix 6.3 – Fisheries Assessment
6	NIEA – DAERA – Planning Response Team	 Drainage & Water – Water Management Unit notes that while the proposal site is not within its jurisdiction, transboundary issues should be fully considered and addressed and references a number of Standing Advice Notes. Acute and robust mitigation measures must be in place to protect water bodies at the location of the wind farm and surrounding waterbodies. Where works are in or near a waterway, method statements should be submitted by contractors for agreement with all relevant authorities. Drinking Water Inspectorate - The foundations of the proposed wind turbines have the potential to impact on groundwater flow paths, hence, groundwater 	 Refer to Section 4.7 – Site Drainage, Chapter 7, – Ornithology, Chapter 9 – Water, and Appendix 8.1 – Peat Stability Assessment Report

 quantity [and quality] could be impacted at private water supplies. Permanent borrow pits have the potential to intercept groundwater. Further investigations should be undertaken and potential private water supplies should be identified with a risk assessment carried out where the proposed development could have an impact on private water supplies situated in Northern Ireland. Inland Fisheries - The proposed development area is in the Loughs Agency area of jurisdiction, consequently said agency should be consulted in relation to potential impacts on Inland Fisheries. Land, Soil and Air - Borrow pits should be assessed to see if the groundwater will be intercepted and whether dewatering [active through pumping or passive through gravit] will take place. Natural Heritage - the site is hydrologically connected to River Foyle and Tributaries SAC, therefore a Habitats Regulation Assessment (HRA) of the proposal will need to be carried out. A peat slide risk assessment should be included in the EIAR. A storm drainage plan designed to the principles of Sustainable Drainage Systems (SuDS) should be included. Recommended that a 50m buffer should be provided to watercourses on site. 	 quantity (and quality) could be impacted at private water supplies. Permanent borrow pits have the potential to intercept groundwater. Further investigations should be undertaken and potential private water supplies should be identified with a risk assessment carried out where the proposed development could have an impact on private water supplies situated in Northern Ireland. Inland Fisheries - The proposed development area is in the Loughs Agency area of jurisdiction, consequently said agency should be consulted in relation to potential impacts on Inland Fisheries. Land, Soil and Air - Borrow pits should be assessed to see if the groundwater will be intercepted and whether dewatering (active through pumping or passive through pravity will take place 		quantity (and quality) could be impacted at private
	 Natural Heritage – the site is hydrologically connected to River Foyle and Tributaries SAC, therefore a Habitats Regulation Assessment (HRA) of the proposal will need to be carried out. A peat slide risk assessment should be included in the EIAR. A storm drainage plan designed to the principles of Sustainable Drainage Systems (SuDS) should be included. Recommended that a 50m buffer should be provided to watercourses on site. Applicant must comply with all relevant Pollution 		 water supplies. Permanent borrow pits have the potential to intercept groundwater. Further investigations should be undertaken and potential private water supplies should be identified with a risk assessment carried out where the proposed development could have an impact on private water supplies situated in Northern Ireland. Inland Fisheries – The proposed development area is in the Loughs Agency area of jurisdiction, consequently said agency should be consulted in relation to potential impacts on Inland Fisheries. Land, Soil and Air - Borrow pits should be assessed to see if the groundwater will be intercepted and whether dewatering (active through pumping or passive through gravity) will take place. Natural Heritage – the site is hydrologically connected to River Foyle and Tributaries SAC, therefore a Habitats Regulation Assessment (HRA) of the proposal will need to be carried out. A peat slide risk assessment should be included in the EIAR. A storm drainage plan designed to the principles of Sustainable Drainage Systems (SuDS) should be included. Recommended that a 50m buffer should be provided to watercourses on site. Applicant must comply with all relevant Pollution

 Current data from Conservation Science shows a significant amount of activity by raptors of conservation concern in the border area adjacent to the proposed development. The site is not close to a known flyway or foraging/roosting area for large numbers of waterfowl and therefore is unlikely to present a significant collision risk to these species. Conservation Science recommends that the developer carries out a range of baseline bird surveys at this site, covering the area within 500m of the proposed turbine perimeter (800m if habitat suitable for Curlew is present). Appropriate habitats within a radius of 2.5km should be surveyed for nesting raptors in the breeding season. Survey programme to address general breeding and wintering bird surveys of tight activity during the breeding season and winter (minimum 36 hours per vantage point ease on and winter (minimum 36 hours per vantage point in each season). Assessment of usage of water bodies by wintering waterfowl, particularly Whopper Swan and Greenland White-fronted Goose. An environmental management plan for the turbine area and builter and suid per survey would be induced by windering waterfowl, particularly Whopper Swan and Greenland White-fronted Goose. 	 Current data from Conservation Science shows a 	
	 significant amount of activity by raptors of conservation concern in the border area adjacent to the proposed development. The site is not close to a known flyway of foraging/roosting area for large numbers of waterfowl and therefore is unlikely to present a significant collision risk to these species. Conservation Science recommends that the developer carries out a range of baseline bird surveys at this site, covering the area within 500m of the proposed turbine perimeter (800m if habitat suitable for Curlew is present). Appropriate habitats within a radius of 2.5km should be surveyed for nesting raptors in the breeding season. Survey programme to address general breeding and wintering bird surveys using point counts within forested areas and methods based on those of Brown & Shepherd (1993) in open habitats. Vantage point surveys of flight activity during the breeding season and winter (minimum 36 hours per vantage point in each season). Assessment of usage of water bodies by wintering waterfowl, particularly Whopper Swan and Greenland White-fronted Goose. An environmental management plan for the turbing area and buffer zone should be included in the season and winter vantage prior surveys winter vantage and buffer zone should be included in the season of the season	

No.	Consultee	Key Scoping Response Points	Comment
No.	Consultee	 Key Scoping Response Points Recommends use of the Supplementary Planning Guidance 'Wind Farm Development in Northern Ireland's Landscapes'. The EIAR should include a description of the likely significant effects, both positive and negative, at all stages of the development to include direct, indirect, secondary and cumulative effects in the short, medium and long term. If the Phase 1 habitat survey identifies a frequency of devil's-bit scabious Succisa pratensis within the site we may require further survey work to determine the presence of marsh fritillary butterfly Euphydras aurinia. NIEA Natural Heritage recommend the use of guidelines developed by the Scottish Natural Heritage (SNH) to determine the impact of windfarm developments on important bird populations. Bat surveys should be carried out on proposal site. The consequences of changes to the hydro-geological system of the area on peatland, rivers, streams, flushes and wetland habitats should be described. An Environmental Management Plan (EMP) should be produced to detail the construction phase of the project and the implementation of the mitigation measures outlined in the EIAR. A Habitat Management Plan should form part of the EMD illustration bout the babitats floate and forma of the EMD. 	Comment
		 A Habitat Management Plan should form part of the EMP, illustrating how the habitats, flora and fauna of the site will be protected during and after construction and for the long term management of the site for nature conservation. 	

No.	Consultee	Key Scoping Response Points	Comment
		 Proposal illustrating the restoration of the site on decommissioning should also be detailed. 	
7	NI Water – Windfarms / Strategic Applications	 Response advises that the proposed development will not conflict with any NI Water infrastructure. 	 Noted
		 Response advised that Tourism Northern Ireland (TNI) does not consider it appropriate to participate in EIA Scoping discussions connected with major applications. 	 Noted
8	Tourism Northern Ireland	 TNI considers that the judgement of acceptability based on landscape protection should provide adequate protection for tourism assets, and that the planning authority is best placed to determine on the implications of wind turbine development for tourism assets. 	
		 Advises that research to date in Northern Ireland indicates that the impact of wind farms on the tourism industry is inconclusive, in terms of whether they have a negative, neutral or positive influence on the decision of tourists to visit here. 	
9	Rivers Agency – Planning Advisory Unit	 The Rivers Agency advises that under the terms of Schedule 6 of the Drainage (NI) Order 1973 any proposal either temporary or permanent, in connection with the proposed development which involves interference with any watercourse in Northern Ireland such as culverting, bridging, diversion, building adjacent to or discharge of storm 	 Noted

No.	Consultee	Key Scoping Response Points	Comment
		water etc. requires the written consent of the Rivers Agency.	
10	Royal Society for the Protection of Birds (RSPB)	 A full habitat survey should be carried out as part of the EIAR, at least to JNCC Phase 1 level. Serious consideration must therefore be given to whether the reduction in CO2 emissions arising from wind farm developments justifies the potential reduction in the carbon storing properties of peatland. A full bird survey should be carried out at appropriate times of the year, employing approved methodologies and using a reputable ecological contractor. Response recommends a number of survey methods to be employed such as a modified Common Bird Census (CBC) or a Brown & Shepard (B&S) survey, vantage point surveys conforming to Scottish National Heritage (SNH) guidelines. The EIAR must provide an assessment of the possible impacts of the development on the interests described by the surveys. The RSPB advocates no loss of biodiversity to development, through mitigation and compensation where necessary. 	 Refer to Section 6.3.2 - Field Assessment, Chapter 7 Ornithology and Section 10.2.3 - Calculating Carbon Losses and Savings from the Proposed Development.

No.	Consultee	Key Scoping Response Points	Comment
		 Monitoring should take place for all relevant species found on site (informed by surveys), and the "Before After Control Impact" approach should be used to add rigour to the process. 	
11	Transport NI	 Transport NI will require details regarding the delivery of materials from Northern Ireland. If any deliveries are anticipated via Northern Ireland, Transport NI will require to be involved in the Traffic Management Plan. The provision of passing bays will be required to be assessed along with any other road infrastructure improvements required to facilitate the delivery of materials and abnormal loads. 	 No deliveries of construction materials, from Northern Ireland, are anticpated during the construction phase of the proposed development.

2.6.3 Other Consultation

As referenced above, the previous application for the Carrickaduff Wind Farm (ABP Ref. PA0040) was prefaced by a number of consultation exercises which included a total of four meetings between the project team and Donegal County Council held between October 2013 and November 2014. At these meetings, the overall scale of the originally proposed development was set out and a general approach towards site identification methodology was discussed. Other items discussed included clarification on the transboundary process, local wind energy planning policy matters, the site selection process, site constraints and preliminary landscape assessment of the previous proposal.

The previous application under ABP Ref. PA0040 was also prefaced by a consultation meeting between the project team and the Department of the Environment Northern Ireland (DOENI) and included a discussion on the project details and site selection process. The location of the grid connection node and its proximity to the proposed development was also discussed.

Two meetings between the project team and An Bord Pleanála were also held in April and June 2014, and formed part of the pre-application determination process conducted by the Board in respect of the previous application (under ABP Ref. PC0170).

The current application for the proposed development has also been informed by a number of meetings with An Bord Pleanála and Donegal County Council, as well a number of additional public consultations measures conducted in a variety of media. The following provides an overview of these additional consultations.

2.6.3.1 Pre-Application Consultation with An Bord Pleanála

Three meetings were held with An Bord Pleanála ('the Board') since the preapplication consultation process for the current proposal was opened in September 2016 (under ABP Ref. PC0228). These meetings were held on 17th October 2016, 28th April and 28th May 2017. Over the course of these three meetings with the Board, the project team outlined the proposed extent of the proposed development, an overview of the various site constraints and the site selection methodology employed and details on the envisaged grid connection node to facilitate the proposed wind energy development. Items relating to ongoing engagement with stakeholders and local residents, preliminary visual/landscape impact assessment, and the findings of ongoing ecological assessments within the vicinity of the proposal site.

The Board and the project team also discussed relevant planning policy provisions relating to the proposed development, including the implications of Variation No. 2 of the Donegal County Development Plan (CDP) 2012-2018, which was formally incorporated into the current CDP in May 2017 having previously been the subject of a High Court decision which quashed a Ministerial Direction in relation to Variation No. 2. The project team determined that a reduction in the then proposed scheme of 36 no. turbines to the current proposal of 19 no. turbines would comply with the terms of Variation No. 2.

The project team also discussed the reasons for refusal relating to the previous wind farm application under ABP Ref. PA0040, and informed the Board that a peer review of the assessments and documentation undertaken by the project team previous in relation to PA0040 had been established and the findings of this review were used to inform the design and layout of the current application.

The project team also referred to the work undertaken in respect to bird surveying, in which perceived deficiencies in this element of the assessment was cited in the Board's reason for refusal. The Board were informed that such surveying was ongoing and in accordance with Scottish Natural Heritage Guidance. The Board were also informed that the prospective application will go beyond addressing the previous refusal reason relating to birds and seek to address other issues raised in the Inspector's Report under PA0040.

During this pre-application consultation period, a meeting also took place between the Board and Donegal County Council in March 2017 and formed part of an information-gathering exercise for the Board pursuant to section 37 (c) of the Planning and Development Act, 2000-2017. The basis for this meeting was in relation to the then proposed 36 no. turbine scheme, which has subsequently been reduced to a 19 no. turbine scheme in this current proposal. Items raised by the local authority in its discussions with the Board included water/drainage, grid connection, transportation, and design/layout of the then proposed 36 no. turbine scheme.

In order to be considered as Strategic Infrastructure Development, any project must satisfy the thresholds established in the 7th Schedule of the Planning and Development Act, 2000-2017 and also satisfy one or more of the three criteria set out in section 37A (2).

The relevant threshold established in the 7th Schedule for the current project is "*An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total power output greater than 50MW*". The proposed development has been confirmed as having both a generating capacity exceeding the specified thresholds in the 7th Schedule of the Planning and Development Act, 2000-2017.

Accordingly, on the 28th August 2017, the Board confirmed that the proposed application is strategic infrastructure within the meaning of section 37A of the Planning and Development Act, 2000 -2017 and must therefore, be directly submitted to An Bord Pleanála under section 37E of the Act.

2.6.3.2 Pre-planning Discussions with the Local Authority

There have been a total of four pre-planning meetings held with the Planning Authority since the decision issued from An Bord Pleanála in relation to PA0040. Two meetings each were held with the planning section and the roads section.

The first pre-planning meeting was held on the 20th of October 2016. At this meeting the details of the previous application and the An Bord Pleanála decision were discussed, as well as the previous submission made by the Planning Authority on the previous SID application. The design team informed the Planning Authority of its intention to submit a further planning application (which would be undertaking the SID process) and of the methodology being adopted to address the refusal reason attached by the Board to the previous application in terms of additional ornithological monitoring. There was no preliminary layout to discuss at this meeting as the entire project was being reviewed. It was agreed that a further meeting would be held to discuss an emerging preferred layout following the completion of additional survey and assessment and following discussions with local residents and An Bord Pleanála.

A pre-planning meeting was held with the Roads Section of the Planning Authority on the 6th of February 2017. The primary focus of discussion at this meeting was to review the content and technical requirements of the Roads Section arising from their submission to the previous Planning Application. This meeting discussed all proposed access arrangements and the requirements of the roads section in relation to the approaches to the site and construction traffic (including turbine delivery).

Following the adoption of Variation no. 2 of the County Development Plan and An Bord Pleanála confirming the SID status of the project two further meetings were held with the Roads and Planning Sections. These meetings were both held on the 4th of October, 2017. The meeting with the Roads Section was held in the morning while the meeting with the Planning Authority was held in the afternoon.

At these meetings the proposed 19 turbine layout was presented and the overall discussions reviewed the relevant planning policies in place, the engineering and access requirements, as well as providing a briefing on the public consultations.

2.6.3.3 Pre-Application Meeting with National Parks and Wildlife Service

A meeting was held with the National Parks and Wildlife Service (NPWS) on the 14th of February 2017, at their offices in Ballinafad. The design team and applicant were represented by A. Ash, J. Hynes, P. Roberts and N. O'Brien and the NPWS representatives at this meeting included L. McElaney (Divisional Ecologist) and C. Byrne, (NPWS Ranger). At this meeting the design team presented comprehensive details of the surveys that have been undertaken to establish the baseline ecology at the site. The NPWS were advised of the ecological work undertaken to provide comprehensive information on all ecological aspects within the Zone of Influence of the proposed wind farm.

At the meeting the Design Team presented the survey effort undertaken in relation to Flora and Fauna and Ornithology. In relation to Flora and Fauna the Key Ecological Receptors (KERs) were identified and used to inform a robust and comprehensive assessment of any potential effects. In relation to Ornithology the scope and duration of the surveying methodologies which were fully informed by the requirements of Scottish Natural Heritage Guidelines 2014 (SNH 2014).

The Design Team also reviewed and discussed the Appropriate Assessment methodology and noted that information necessary to allow the Competent Authority to conduct and complete its assessment will be provided. The Design Team confirmed that a Natura Impact Statement would be prepared in accordance with the European Commission guidance document Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC [EC, 2001] and the Department of the Environment's Guidance on the Appropriate Assessment of Plans and Projects in Ireland (December 2009, amended February 2010).

2.6.3.4 Public Consultation

When Planree Ltd decided to start preparations for a new planning application for a wind farm at this location, it was definitively decided that a new approach would be adopted to interact and listen to the local community. Therefore it introduced John Aston of Astoneco, with experience in this area to the project to consult with the local community in order to get a fuller understanding of any issues held by the local community that would have been articulated through the previous SID application process for the Carrickaduff Wind Farm application.

John Aston initially engaged and spoke with residents local to the area and with the project design team to get their views and went on to consult with some stakeholders; landowners, nearby houseowners, Coillte personnel and opposition spokespeople. The most common questions raised were collected and the project team set about addressing them.

Following initial correspondence with the local community, regarding ongoing studies, on the 8th and the 21st of November 2016, the general feedback was that there was a lack of information being issued to the public regarding the proposed wind farm. On the 19th of December, 2016 the project team issued correspondence to all houses within 1.5 kilometres (of the previously proposed Carrickaduff wind farm) providing the requested information regarding the project and addressing issues raised in discussions in the area. Three leaflets were included:

- Leaflet 1 presented the details of the applicant company and their previous renewable energy experience;
- Leaflet 2 reviewed the considerations that needed to be addressed in any preferred project design
- Leaflet 3 addressed how the information could be shared, what information would be shared and how the decisions made would impact local residents.

As part of the issued correspondence, feedback was requested from the locals be it critical or encouraging. Very few responses were formally received but it generated more discussion locally and feedback was provided informally.

On the 31st of January 2017, a second letter was sent to the community in response to feedback following the initial correspondence. In this it was also communicated that a public meeting would be held in February as requested by a number of people in the local community to present the new proposal. The agenda for this meeting was to:

- Show how the project design had evolved to arrive at the updated layout and what potential impacts had been considered;
- Outline the community gain component of the project.
- Plan with those in attendance what and where the follow-up meetings should be.

The letter also outlined how the design team were working with John Aston to improve community engagement. There were a few questions received in feedback forms from the first letter which were responded to as well as clarifications on a social media announcement that had been made by the Finn Valley Wind Action Group.

On the 9th of February 2017 a third letter was issued to inform people that a public information session was planned for the 16th of February.

The topics discussed and presented at this public information evening were:

- A draft layout Highlighting the changes between the previous Carrickaduff wind farm and the emerging preferred layout.
- Visual Impacts The residential visual amenity assessment team were present to answer any questions that people had.
- Noise and Shadow flicker Modelling –
- A review of the information issued in the 3 leaflets in December 2016.
- Community gain proposals.

Members of the design team were available to answer any queries from the attendees.
On the 14th of March 2017 a further letter was posted following the February public information session. This outlined the feedback that was received from the session, which included the following:

- People acknowledged that the layout had been reduced from 49 turbines to 36 turbines.
- People were still unconvinced about the project and that they felt they should still have concerns.
- A commitment was given to keep providing more information to the locals and answering any questions that arose about the project, it was also committed that there would be a mechanism put in place that if the noise levels previously agreed were exceeded Planree would address the situation immediately.
- It was recommended that people arrange a site visit to a local wind farm to gain an understanding of the noise levels and to get a picture of a wind farm.
- There was a clear indication that people wanted the community benefit fund to be used primarily for the homes and community activities nearest the turbines.
- People were looking to gain an understanding on the timeframe for the planning application.
- It was decided that people within 2km of the proposed project should receive all previously distributed information and any further correspondence about the project

A Question and Answer booklet containing further information about the project answering queries that had been asked at the meeting was issued, along with letters to the remaining dwellings within the 2km that had not received correspondence previously

Following the proposal by Donegal County Council to increase the separation distances to dwellings (Variation no. 2 of the County Development Plan), a further letter was issued on the 26th of May 2017. Further questions that had come from the locals as a result of DCC's announcement were answered in this correspondence, and a further letter was issued on the 30th of June 2017 to the local community following Ministers Naughton and Coveney announcement that there would be a release of draft wind farm planning guidelines.

Following the amendment in planning policy (10 times tip height separation to dwellings) the overall wind farm footprint reduced in scale. This resulted in a greatly reduced local community resident in the vicinity of the Proposed Development and the project team sought to create a local community supported project within the Meenbog area- this was a subset of the Carrickaduff Project. Residents within three kilometres of the updated proposal simultaneously organised themselves into a local community group – the Meenbog Community Group – so as to more effectively assess the proposals together.

There have been on-going discussions with the Meenbog Community Group regarding the proposed Meenbog Wind Farm, and the community group are supportive of the project and have provided additional input into the project which has resulted in their proposals for additional amenity features and Meenbog Nature Trails, being incorporated into the design of the proposed wind farm. On the 11th of September 2017, further correspondence was issued to Meenbog Community Group and the community surrounding the previous Carrickaduff proposal inviting them to a public meeting to discuss the proposed of 19 turbine wind farm mainly located in the townland of Meenbog.

This second public information event was held in Jackson's Hotel, Ballybofey, on Thursday 21st September 2017. The event was publicised and structured as an opportunity to view project information from 6pm to 8pm, with a presentation and questions and answers session from 8pm onwards on the proposal and was followed by a questions and answers session. During the information viewing segment, updated maps and drawings showing the project layout, environmental and planning constraints, separation distances from local properties and noise contours were on display. For the presentation and Questions and Answers, the session was opened and chaired by John Aston of Astoneco, and representatives from Planree (applicant) and McCarthy Keville O'Sullivan (planning and environmental consultants) spoke and presented. John Aston is a community liaison professional who has been supporting Planree on their local engagement efforts and was familiar to many in the audience. Approximately 50-60 people were in attendance for the presentation and Questions and Answers. Speakers and questions from the floor were accommodated throughout. Those that spoke on the night were largely opposed to the project and were generally part of the local community opposed to the previously proposed wind farm near the Lismullyduff and the Cross Roads area. They were concerned that the current proposal would lead to the old project gaining planning permission. They were re-assured that this project of 19 turbines was the only project going for planning permission in this application. A representative from the Meenbog Community Group spoke to say those residents living in the immediate vicinity of the proposed project site were still considering the proposal, and had not yet formed a definitive view. The Questions and Answers session concluded after 11pm

2.7 Cumulative Impact Assessment

The EIA Directive and associated guidance documents state that as well as considering any indirect, secondary, transboundary, short-, medium-, and long-term, permanent and temporary, positive and negative effects of the project (all of which are considered in the various chapters of this EIAR), the description of likely significant effects should include an assessment of cumulative impacts that may arise. The factors to be considered in relation to cumulative effects include population and human health, biodiversity, land, soil, water, air, climate, material assets, landscape, and cultural heritage as well as the interactions between these factors. To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIA process being undertaken by the consenting authority, each relevant chapter within this EIAR includes a cumulative impact assessment where appropriate.

The potential for cumulative impacts arising from other projects has therefore been fully considered within this EIAR.

2.7.1 Methodology for Cumulative Assessment of Projects

The potential cumulative impact of the proposed wind farm development combined with the potential impact of other projects has been carried out with the purpose of identifying what influence the proposed development will have on the surrounding environment when considered collectively with permitted and constructed projects in the vicinity of the proposed site location. Assessment material for the Cumulative Impact Assessments carried out within this EIAR was compiled in relation to the relevant infrastructure developments within the vicinity of the proposed development from which there may be potential for cumulative impacts to arise. The material gathered comprised EIS's, planning application details and planning drawings and served to identify past and future projects, their activities and their environmental impacts.

2.7.2 Projects Considered in Cumulative Assessment

The projects considered in relation to the potential for cumulative impacts and for which all relevant data was reviewed (e.g. individual EIS's, layouts, drawings etc) include the following:

Ballybofey Stranorlor N15 Bypass

The Ballybofey/Stranorlar Bypass comprises of approximately 15 kilometres of type two dual carriageway and will provide a bypass for the twin towns of Ballybofey and Stranorlar. The scheme includes a 1.2 kilometre road to link the bypass to the existing N15 at Ballybofey and a major bridge crossing of the River Finn. In October 2009, An Bord Pleanála made a decision to refuse to approve the proposed scheme. From discussion with Donegal County Council, it is intended that the scheme will be amended by Donegal County Council to accommodate the reasons for refusal notified by An Bord Pleanála. The previously proposed bypass is located approximately 3.5 kilometres from the proposed wind farm. Progression of this scheme through the planning phases has currently been suspended with no current plans to re-submit an application, however, the provision of this bypass remains an objective of the County Development Plan.

Clogher Substation

Clogher 110kV Substation comprises a compound area measuring 1,640m.sq, surrounded by a 2.6m high palisade fence, four end masts, associated site works and and site roads at Cullionboy, Barnesmore, Co. Dongeal. The constructed and operational substation is located in a rural location east of the Barnesmore Gap and is the connection point to the National Grid of the Proposed Development. Permission was granted by Donegal County Council in April 2011.

Proposed Lough Mourne Surface Water Abstraction

Donegal County Council is proposing to abstract surface water from the Bunadaowen River and pump it to the Lough Mourne Reservoir.

Stone Quarry

The quarry consists of stone extraction, washing screening and crushing facility, settling ponds, open storage of crushed stone, store buildings, site shelter and ancillary site works at Croaghonagh, Ballybofey, Co. Donegal. The site is located off the local road from which access to the current proposal is achieved from the N15 in close proximity to Barnesmore Gap. The Quarry is also located within the study area boundary. The Quarry was subject to an application for substitute consent in April 2013 which was granted in November 2014.

Dromnahough – Lenalea Wind Farms Substation & Underground Grid Connection

This proposed project consists of the provision of a 110kV electricity substation in the townland of Cark, Co. Donegal and associated underground electricity cabling and ancillary works to facilitate the connection of the permitted Dromnahough Wind Farm development (Pl. Ref. 08/551609 as extended under Pl. Ref. 13/51609) and the permitted Lenalea Wind Farm development (Pl. Ref. 09/50116) to the national

electricity grid at the Clogher substation located in the townland of Cullionboy, Co Donegal. The proposed 110kV substation is intended to replace the two substations previously permitted as part of the permitted Dromnahough and Lenalea wind farms. The proposal was processed by the Planning Authority under Pl. Ref. 17/50543, who refused permission and is currently the subject of a planning appeal with An Bord Pleanála under the reference PL 05E.248796.

• Other Wind Farm Projects

The wind farm projects previously detailed in Section 2.2 (Planning History) were also considered for the potential to give rise to cumulative impacts, these projects have been categorised into eight groups based on two considerations:

- 1. Their proximity to the proposed wind farm.
- 2. Whether the project is permitted/operational <u>or</u> pending/under appeal

The wind farm groups are divided as follows:

- Operational and Permitted Wind Farm Projects within 5 kilometres:
 - Lough Golagh Wind Farm (25 Turbines Operational)
 - o Straness Wind Farm (28 Turbines Permitted)
 - Lough Cuil Wind Farm (8 Turbines Permitted)
 - Meenadreen Wind Farm and Extension (4 Turbines Operational 5 Turbines Permitted)
 - Meenakeeran Wind Farm (4 Turbines Permitted) Total: 74 Turbines Operational and Permitted
- Operational and Permitted Wind Farm Projects within 5-10 kilometres:
 - Crighshane Wind Farm and Extension (14 Turbines Permitted).
 - o Craoghnameal Wind Farm (7 Turbines Permitted)
 - o Altilow Windfarm (1 Turbine Permitted)

Total: 22 Turbines Permitted

- Operational and Permitted Wind Farm Projects within 10-15 kilometres
 - o Cuilliagh Wind Farm and Extension (21 Turbines Operational)
 - Meenanilta Wind Farm (6 Turbines Operational)
 - o Church Hill Wind Farm (8 Turbines Operational)
 - Meentycat Wind Farm (9 Turbines Operational)
 - o Meenhorna Wind Farm (7 Turbines Operational)
 - o Anarget Wind Farm (6 Turbines Operational)
 - o Meenalaban Wind Farm (7 Turbines Operational)
 - o Meenagrauv Wind Farm (4 Turbines Operational)
 - Meenagrauv Extension (1 Turbine Permitted)
 - o Seegronan Wind Farm (6 Turbines Permitted)
 - o Seegronan Wind Farm Extension (3 Turbines Permitted)
 - o Tievenamenta Wind Farm (15 Turbines Permitted)
 - Crilly/Tullylinn/Pettigo (4 Turbines Permitted)

Total: 97 Turbines Operational and Permitted

- Proposed Wind Farm Projects within 10-15 kilometres
 - o Church Hill Windfarm (1 Turbine Proposed)
 - o Gronan Windfarm (4 Turbines Proposed)
 - Meenamullan Windfarm (5 Turbines Proposed)
 Total: 10 Turbines Proposed

- Operational and Permitted Wind Farm Projects within 15-20 kilometres
 - o Lough Hill Wind Farm (6 turbines Operational)
 - o Ballystrang Wind Farm (6 Turbines Operating)
 - o Altgolan Wind Farm (7 Turbines Permitted)
 - o Lenalea Wind Farm (9 Turbines Permitted)
 - o Dromnahough Wind Farm (15 Turbines Permitted)
 - Cark Wind Farm (24 Turbines Operational)
 - o Cark Wind Farm Extension (6 Turbines Operational)
 - o Cark/Largymore Wind Farm (9 Turbines Operational)
 - Bin Mountain Wind Farm (6 Turbines Operational)
 Total: 88 Turbines Operational and Permitted

The potential for cumulative impacts arising from the proposed wind farm development and the projects have been set out in full in the relevant chapters of this EIAR, where appropriate. Detailed consideration of all potential cumulative impacts can therefore be found in the relevant sections of this EIAR.