

5.0 POLICY, PLANNING & DEVELOPMENT CONTEXT

5.1 INTRODUCTION

This chapter considers the proposed project in terms of legislative context and in relation to International, Strategic, National, Regional and Local Planning policies and objectives, in order to ascertain whether it is consistent with the relevant legislation and with the proper planning and sustainable development of the area.

The nature and location of the proposed project is described fully in Chapter 3 but will include up to 18 wind turbines and will be built within a wind farm site that extends to approximately 2,282 hectares (ha) of cutover and cutaway bog, owned by Bord na Móna Plc. The site of the proposed development will be located on the eastern part of Oweninny Bog, which is located in North Mayo, approximately 12km west of Crossmolina and 15km east of Bangor Erris, and just north of the N59 National Primary Road. The overall area of Oweninny Bog is approximately 5,140 hectares.

As such, the wind farm site and the associated areas lie within the functional area of Mayo County Council and is thus informed by the provisions of the Mayo County Development Plan 2022-2028.

The relevant Global, European, National and Regional climate, energy and planning policies as set out in Section 5.4 emphasise the need to generate renewable energy and the importance of moving towards decarbonising the economy. The proposed wind farm will contribute to the expansion of the renewable wind resource in Ireland and contribute towards Governmental, National and Regional goals and targets by generating more power from renewable resources. The 2009 EU Renewable Energy Directive (2009/28/EC) set Ireland a legally binding target to meet 16% of our energy requirements from renewable sources by 2020. In 2018, the Directive was recast (2018/2001/EU) to move the legal framework to 2030 targets, setting a new binding target of at least 32% with a clause for a possible upwards revision by 2023. Ireland is committed to meeting 40% of electricity demand from renewable sources, with 10% for transport and 12% for heat. It is now established that Ireland has not met the 2020 renewable energy targets. A report issued by the Sustainable Energy Authority of Ireland (SEAI) entitled 'Renewable Energy in Ireland – 2020 Update' shows that Ireland is still heavily dependent on fossil fuels. ¹ Out of the 27 EU member states, plus the UK, Ireland had made the second lowest progress towards

¹ https://www.seai.ie/publications/2020-Renewable-Energy-in-Ireland-Report.pdf



hitting the targets, with only the Netherlands performing worse. Ireland will be subject to tariffs through the EU Emissions Trading System (ETS) until these targets are realised.

The Irish Government published the Climate Action Plan 2023 (CAP23) on the 22nd of December 2022 which sets ambitious actions to ensure our 2030 targets can be achieved. This is in the context of substantial and continuing failure by Ireland in meeting climate targets to date. According to a report by Climate Action Network Europe (CAN), Ireland is "Way off track with its greenhouse gas emission reductions in sectors such as transport, buildings, waste and agriculture (non-ETS) both for 2020 and 2030"².

CAP23 recognises that Ireland must significantly increase levels of renewable energy in the country. It states that "Transformational policies, measures and actions, and societal change are required to increase the deployment of renewable energy generation, strengthen the grid, and meet the demand for flexibility in response to the challenge."

The analysis in this chapter will include a review of relevant European, National, and Local planning policy documentation, planning legislation, strategies and plans and examines the local planning context of the project. It will also review the Regional Spatial and Economic Strategy for the Region (RSES), Mayo County Development Plan and County Wind Energy Strategies the current and draft revised Wind Energy Guidelines, and any other appropriate renewable/wind energy development policies.

As mentioned previously, the proposed development (as described in Chapter 3 (Description of the Proposed Development)) is located within County Mayo and is thus informed by the provisions of the Mayo County Development Plan 2022-2028. This chapter will include a full review of the relevant wind energy development policies included in the Mayo County Development Plan. The site is currently identified in the Renewable Energy Strategy for County Mayo 2011-2020 as a 'Tier 1 (large Wind Farms)' location, suitable for the erection of large-scale wind farms.

The local area predominantly consists of large wind farms, commercially harvested cutover peat bog and forestry, some dispersed rural housing and farming activity. Oweninny Wind Farm Phase 1 is located immediately west / northwest of the proposed development site and was commissioned in 2019, while Oweninny Wind Farm Phase 2 has been consented further to the west and is currently in the final stage of construction. In addition, since 1992, Ireland's first

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² CAN, Time to Pick up the Pace – Insights into the draft National Energy & Climate Plans (2019)



commercial wind farm, a 21-turbine development known as Bellacorick Wind Farm, which is owned and operated by Renewable Energy Ireland Limited, has been operating on the site.

5.2 PLANNING LEGISLATION

The 7th Schedule of the Planning and Development Act 2000 (as amended) sets out classes of development which, following consultation with An Bord Pleanála, may be considered to constitute Strategic Infrastructure Development (SID) under Section 37A of that Act. Class 1 of the 7th Schedule includes the following:

"An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts".

The proposed development will have an output in excess of 50 Megawatts. In view of the fact that the development proposed fits into this category, consultations were held with the Board under Section 37B of the Planning and Development Act (as amended). The Board by letter dated 5th April 2022, confirmed that the proposed development falls within the scope of paragraphs 37A(2)(a), (b) and (c) of the Act. Accordingly, the Board have confirmed that the proposed development would be strategic infrastructure within the meaning of Section 37A of the Planning and Development Act, 2000 (as amended), and that any application for permission must therefore be made directly to the Board. A copy of this correspondence is included in Appendix 1.1 (Case Ref ABP- 309375-21). The planning application for the proposed development, which this EIAR accompanies, is made to An Bord Pleanála under Section 37E of that Act.



5.3 PLANNING HISTORY

A review of the Mayo County Council and An Bord Pleanála (ABP) planning registers was conducted to establish existing and approved projects to be considered cumulatively with the proposed project including renewable energy developments. The full list of approved projects is summarised in this chapter and included in Tables 5.1 and 5.2.

As previously mentioned, Oweninny Wind Farm Phase 1 is located immediately west/northwest of the proposed development site and was commissioned in 2019, while Oweninny Wind Farm Phase 2 has been consented further to the west. In addition, since 1992, Ireland's first commercial wind farm, a 21-turbine development known as Bellacorick Wind Farm, which is owned and operated by Renewable Energy Ireland Limited, has been operating on the site.

The area around Oweninny Bog is sparsely populated. Within a buffer area of 2km of the site boundary, 78 sensitive receptor addresses have been identified. There are no properties located or proposed within 1km of the proposed turbine locations. There are a total of 9 properties within 2km of the nearest turbine. A 2km radius was used to identify all properties proximal to the proposed site. The distances and potential impacts of the proposed development on residential properties are discussed further in individual chapters in this EIAR and in Chapter 6 Population and Human Health.

Finally, a 'zone of influence' was identified for other developments for the purpose of the cumulative assessment. This was set at a 2km ³ and 10km ⁴ radius of the proposed development site within which 'other development' is either in situ or has planning permission. These other developments included searches for any Electricity Infrastructure, Quarries, Wastewater Treatment Plants, Piggeries, Power plants, Biomass Developments and any other large developments. Again, these are all included in Table 5.2 of this chapter.

5.3.1 Planning History of the Proposed Development Site

The planning history search of applications was conducted within the zone of influence for a 10-year period between 1st January 2010 to 13th March 2023. There are no prescriptive techniques used in determining the period but as planning permission normally lasts for 5 years, it was felt a 10-year planning history period was appropriate in this instance.

³ For applications made to Mayo County Council.

⁴ For Applications made to An Bord Pleanala.



Table 5.1: Historical Permissions within the Proposed Development Site

Registered Reference	Description of Development	Year of Decision
P90/1077	Bellacorick Wind Farm 21 Turbines	1990
P92/355	Wind Farm Control Building	1992
01/1975	Bord Gáis Eireann Temporary site compound associated with the construction of the Galway – Mayo gas pipeline	2001
P01/2826	3 x 50m high wind measuring masts	2002
01/2542(PL 16. 131260)	180 Wind Turbine Development	2003
P12/554	Retention of 4 no. temporary meteorological masts	2013
PA0029	Oweninny Wind Farm - 61 Wind Turbines	2016
PL16 .PM0011	Request to alter the terms of the previously permitted Oweninny Wind Farm (Application ref: 16.PA0029).	2017
16/1013	Wind Monitoring Mast, with Instruments, up to 100m in height	2017
PL16 .PM0013	Proposed alteration to the Oweninny Windfarm development and associated works at Bellacorrick.	2018
18/447	Wind Monitoring Mast, with instruments up to 100m in height	2018
PM16.307261	Section 146B Planning application for amendments to An Bord Pleanála case reference PA0029 for Oweninny Wind Farm	2020
PM16.309043	Section 146B application for amendments to An Bord Pleanála case reference PA0029 for Oweninny Wind Farm	2021
LS16.311862	Application for leave to apply for substitute consent for peat extraction.	2021 (Decision pending)
PL16.309375	Pre-Application Consultation for Oweninny Wind Farm Phase 3. Between 10 and 20 wind turbines (including tower sections, nacelle, hub, rotor blades) with an approximate capacity of 90 MW and a maximum blade tip height of 200 metres. Decision due 14/06/2021 (PL16 .309375);	2022

Mayo County Council granted permission for 21 wind turbines on the site (Planning Authority Ref. P90/1077) which was subsequently developed as the Bellacorick Wind farm. This comprised 21 turbines located within the site and was Ireland's first commercial wind farm. It has operated successfully since 1992 with an installed capacity of 6.45 MW. Twenty of these turbines are rated at 300 kW and the other is rated at 450 kW. The total output of this existing wind farm is sufficient to meet the needs of approximately 3,000 households. Bord na Móna has operated and maintained the wind farm since its commissioning and is the majority shareholder since 1997. The 300 kW turbines are 46.5m high to the uppermost tip of a vertical blade, while



the 450 kW turbine is 53.5m high to the uppermost tip of a vertical blade. The spacing of the turbines varies somewhat and is typically 235m.

Permission was also granted for a wind farm control building on the site in 1992 (Planning Authority Ref. P92/355).

A planning application (Ref 01/2542) was lodged with Mayo County Council on 31st October 2001 for 210 wind turbines including 14km of 110 kV transmission lines at Corvoderry, Bellacorick, Co. Mayo. The maximum hub height of wind turbines was indicated as 65m with a maximum blade tip height of 100m.

On 19th December, 2001, the planning authority requested further information on 50 issues. A response to the request, dated 13th August, 2002, was submitted to the planning authority from the applicant.

On 10th October, 2002, the planning authority requested clarification on eight of the items of further information. A response to the clarification request was submitted on 30th May, 2003.

On 7th July, 2003, the applicant submitted an analysis report to the planning authority on a further water sample from a trial well for a potable water supply. Planning permission was granted by Mayo County Council on the 28th July 2003 subject to a schedule of 43 conditions.

Mayo County Council's grant of permission was appealed both by Bord na Móna Energy Ltd. and by third parties to An Bord Pleanála, which subsequently granted planning permission (Ref. PL 16.131260) in December 2003, having regard to the following reasons:

- the national policy with regard to the development of sustainable energy sources;
- the guidelines issued by the Department of the Environment and Local Government in 1996 on Wind farm Development;
- the general suitability of the site for a wind powered electricity generating facility due
 to the wind resource available and the existing land uses including wind farm use on part
 of the site;
- the nature of the landscape;
- the location of suitable ESB apparatus for power connection;
- the available infrastructure associated with the existing wind farm; and
- the separation distance of the proposed turbines from inhabited dwellings Planning permission was granted subject to a schedule of 15 conditions.



An Bord Pleanála considered that "subject to compliance with these conditions the development would not seriously injure the visible amenity or landscape character of the area, would not seriously injure the amenities or property values of residential properties or farms in the vicinity, would not be prejudicial to public health or be otherwise contrary to the proper planning and development of the area".

One of these conditions (Condition 4 (a)) reduced the number of turbines proposed from 210 to 180. The remaining turbines were required to be located such that they were:

- not within 100m from the site boundary without written consent of adjacent landowner
- to ensure a minimum separation distance of at least 1000m from any occupied dwelling
- 200m from any designated conservation area
- 100m from the Oweninny and Owenmore Rivers and their primary tributaries
- to ensure access tracks, power lines and associated poles and pylons to be a minimum 200m distance from any designated conservation area and 100m from the Oweninny and Owenmore Rivers and their primary tributaries

Condition No.1 in An Bord Pleanála's grant of permission provided a limit of 10 years on the duration of permission.

Permission was granted for an operational period of 20 years from the date of commissioning of the final phase of the wind farm as per condition no. 3 of the permitted scheme.

In 2002 permission was granted to Bord na Móna Energy Ltd. for the erection of 3 no. 50 metre high wind measuring masts at Corvoderry, Laghtanvack, Srahnakilly, Bellacorick, Co. Mayo (Planning Authority Ref. P01/2826). The permission was granted for a period of three years. The decision was appealed by Bord na Mona Energy Ltd. but the appeal was subsequently withdrawn in July, 2002 (Appeal Ref. PL 16.130093).

An application for Planning Permission (Ref. No. P12/554) was made in October 2012 by Oweninny Power Limited in respect of retention of four existing meteorological masts at the site, three 50 metre high guyed meteorological masts and one 80 metre high guyed meteorological mast fitted with anemometers and wind vanes. A request for further information relating to an archaeological assessment at the four meteorological mast sites was issued by Mayo County Council on November 20th, 2012. A grant of permission was issued in February 2013.



Planning Application PA0029, for the construction of a wind farm comprising of 61 wind turbines with a maximum electricity generating capacity of approximately 172MW was granted approval by An Bord Pleanála on the 2nd June 2016 subject to 20 no. conditions. The wind turbines were permitted for a hub height of up to 120 metres and a rotor diameter of up to 120 metres. The permitted overall height of the structures (i.e. tip height) is up to 176 metres. A Leave to Apply for Substitute Consent Application was made on the 4th November, 2021 (ABP-311862-21).

5.3.2 Other Developments and Cumulative Impact Assessments

A review of the Mayo County Council Planning Register shows that the following 'other developments' as described above are relevant planning applications in terms of the 10km zone of influence radius surrounding the proposed development site.

Table 5.2: Power Generation, Transmission, Industry, and Dwelling Planning History of the Surrounding Environs

Registered Reference	Description of Development	Relevance
09/2590	Permission for extension of duration of P09/259 to erect 1 no. 2 mw wind turbine, control house and ancillary associated works	Renewable Energy Development
11/645 ((ABP Ref. PL16.239924))	Continuance of use of the existing 36m high, free standing lattice type communications structure, carrying antennae and communication dishes within a 2.4m high palisade compound previously granted under p07/646 and permission to attach 6 antennae and 2 communication dishes.	Energy Transmission Infrastructure
11/838	Permission to erect an electricity generating wind farm consisting of 10 wind turbines each with an overall height of up to 100 metres, hardstandings, an electrical compound and substation building, 4 car park spaces, associated site roads, drainage and site works.	Renewable Energy Development
12/171	Section 5 application for renewing and altering of existing busbar equipment within Bellacorrick 110kv substation.	Energy Transmission Infrastructure
14/279	Permission for Material recovery and transfer facility capable of recovering up to 50,000 tonnes per annum of inert construction and demolition (c&d)/commercial and industrial (c&i) waste and restoration of part of the existing quarry (p.a. reg. Ref. No p07/1874) using up to 100,000 tonnes of inert waste soil and stone. Any small quantities of timber, plastic, paper and steel will be separated for recovery and/or disposal off site. It is also proposed that small quantities of leaf litter, hedgerow/grass cuttings will be recovered as mulch for improvement of topsoil as part of the quarry restoration scheme. The development will be subject to the requirements of a waste facility permit. The proposed development will use the existing site infrastructure including internal roads, crushing and screening plant, site office, weighbridge, wheel wash, bunded fuel storage, water treatment system including hydrocarbon interceptor and other ancillaries. Permission granted 04/11/2014 with 11 conditions attached.	Industrial Development



Registered Reference	Description of Development	Relevance	
14/410	EirGrid - uprating of 19.5km section of the existing Bellacorick to Castlebar 110kV overhead line.	Energy Transmission Infrastructure	
15/825	Permission for 8 wind turbines with associated hardstandings, construction of new internal access tracks, upgrading existing access tracks, underground cabling, permanent meteorological mast and associated hardstanding, electrical substation, recreational walking trail, site compound and associated works, each wind turbine will have an overall max height of 150 metres, comprising a tower 95-105m high, to which three blades of 45-55 m length will be attached.	Renewable Energy Development	
15/45	Permission for upgrade of the existing Bellacorrick to Moy 110kv overhead line. Section of line to be uprated is approx. 27km long. Uprate works will consist of alterations to all of the existing 129 no. Structures on the line, works include replacement of 14 no. Wooden polesets and 10 no. Steel angle mast support structures, removal of 1 no. Steel angle mast support structure and its replacement with 1 no. New wooden polseset, and replacement of cross arms insulators and/or fittings on 104 structures. Replacement structures will be constructed at, or immediately adjacent to the structures they will replace and will be of a similar height and appearance. Works also will include stringing of a new conductor along the full length of the line (approx. 27km) and ancillary works including the creation of temporary access routes to facilitate construction and all associated site development works. Permission granted 04/08/2015 with 15 conditions attached. Appeal lodged PL16245415.	Energy Transmission Infrastructure	
15/611	ESB Networks Refurbishment / Uprate of the Bellacorick to Bangor Erris 38kV overhead line; application lodged with Mayo County Council.	Energy Transmission Infrastructure	
15/456	Extension and upgrade of the existing Bellacorick substation, planning permission granted (October 2015).	Energy Transmission Infrastructure	
15/460	Proposed Meteorological Mast at Sheskin for ABO Wind Ireland Limited, temporary permission for three years granted, (October 2015).	Energy Transmission Infrastructure	
16/441	Retain dwelling house, and domestic shed and upgrade septic tank to tertiary treatment system.	Residential Infrastructure	
17/42	Section 5 application for an underground 38kv cable grid connection from Sheskin Windfarm to existing ESB 110kV substation at Bellacorrick.	Energy Transmission Infrastructure	
17/357	Retain existing dwelling house, domestic garage and all existing site works. Construct extension to dwelling house. Upgrade existing septic tank system to include new proprietary effluent treatment unit and percolation area.	Residential Infrastructure	
17/419	Permission to continue the use of the existing 36 metre high, free standing lattice type communications structure, carrying antennae and communication dishes within an existing 2.4-metre-high palisade fence compound previously granted temporary permission under p11/645 and permission to attach 3 x 2.6m panel antenna for third party co-location at ESB telecoms Itd telecommunication compound at Bellacorrick, Ballina.	Communications Infrastructure	
18/190	Permission for a c.3 mw capacity battery storage facility and will - subject to detailed design, commercial and technical considerations include: 2 no. battery storage containers (up to $16.6 \text{m} \times 2.9 \text{m} \times 3.7 \text{m}$ high) a single-storey electrical	Energy Storage And	



Registered Reference	Description of Development	Relevance
	control room (c.77sqm), ancillary electrical plant including 5 no. transformers, inverters and other containerised plant, a c.15.5m high lightning mast and c.18m high scada communications mast, c.2.6m high boundary fence and access gate, c.100m long access road connecting with the existing substation access road and ancillary site works including the installation of site services.	Transmission Infrastructure
18/274	Permission for decommissioning and removal of electrical plant and associated structures and the demolition of the existing fence along a portion of the north eastern boundary of the existing substation, the extension of the existing substation by 3970sq m to accommodate c. 30m of overhead 110kv conductor connecting to an existing 110 kV busbar and associated structures c. 16m high, incorporating lightening protection measures, 1 no. 38/110kv bunded transformer, and additional 38 kV electrical equipment such as arc suppression coil, cable chairs/sealing ends, etc. all ancillary works within the site including the provision of additional areas of hard-standing, internal access-ways, associated drainage works and all works associated with removal, relocation, replacement and installation of underground cables, electrical plant and switchgear on the site, and a 2.6m high palisade perimeter fence with a dedicated access gate.	Energy Transmission Infrastructure
18/364	Retention of existing dwelling house with upgrade to existing septic tank and percolation area. Including retention of access, boundaries and all other associated works/services.	Residential Infrastructure
18/592	1 no. forest road access onto local road with associated turning head and security barrier.	Road Infrastructure
19/29	Permission for Restoration of Sand and Gravel Pit and associated site works using imported clean inert soil and stones within a sand and gravel pit of 1.092 hectares (plus the additional access roadway and remainder of site of 2.152 hectares - total site area is 3.244 Hectares). A five-year planning permission is requested, and during this period 99,603 tonnes of inert soil and stones will be imported for the purposes of quarry restoration back to agricultural use.	Industrial Development
20/270	Development will consist of 1 no. $4.5 \mathrm{m}\mathrm{x}3.5 \mathrm{m}\mathrm{x}3 \mathrm{m}\mathrm{high}(14.6 \mathrm{sqm})$ prefabricated glass reinforced plastic (grp) analyser kiosk, 1 no. $3 \mathrm{m}\mathrm{x}2.5 \mathrm{m}\mathrm{x}2.3 \mathrm{m}\mathrm{high}(6.8 \mathrm{sqm})$ prefabricated grp generator kiosk and 1 no. $3.5 \mathrm{m}\mathrm{x}3.5 \mathrm{m}\mathrm{x}3 \mathrm{m}\mathrm{high}(11.3 \mathrm{sqm})$ prefabricated grp analyser supervisory kiosk. The development will also include the replacement of the existing $2.45 \mathrm{m}\mathrm{high}\mathrm{chain}\mathrm{link}$ perimeter fencing with new $2.4 \mathrm{m}\mathrm{high}\mathrm{palisade}\mathrm{security}\mathrm{fencing/gates}\mathrm{and}\mathrm{all}\mathrm{associated}\mathrm{site}\mathrm{works}.$	Supporting Energy Infrastructure
20/467	Permission for a Single wind turbine generator and 20kV grid connection to Bellacorrick 110kV substation.	Renewable Energy Development
21/254	Construction of a 3 bay slatted shed with underground slurry storage tank along with all associated site works.	Agricultural Infrastructure
22/1081	Construct new dwelling house, construct new domestic garage, construct new effluent treatment system with all associated works, construct new domestic entrance off public road and carry out all required ancillary works on site	Residential Infrastructure
22/244	Continued use of an existing guyed wind monitoring mast.	Renewable Energy Development
22/502	Single storey process building of 13.3m height; 16 no. Fin fan coolers of 6.9m height; hydrogen storage area with area of 4650m2; gas injection compound with area of 1000m2; 2 no. Gas AGI buildings, each of 3m height; electrical substation with area of 2407.6m2; 2 no substation buildings, each of 4m height; raw water and fire water storage tank with volume of 879.6m3; pump house of 5m height; water abstraction chamber with volume of 2.9m3; resurfacing, repair and improvement of existing site entrance; replacement bridge; internal access roads and associated grid connection works within the I52925 public roadway. The development will include the provision of 12 no. Parking spaces, footpaths, landscaping, fencing and all other associated site development plant and	Energy Transmission Infrastructure



Registered Reference	Description of Development	Relevance
	equipment and other works including surface water and foul wastewater drainage infrastructure within a total overall application boundary of 6.51ha	
PL16.PC0135	Pre-Application Consultation for Wind Farm. Determined Is a Strategic Infrastructure Development	Renewable Energy Development
PL16.PC0133	Pre-Application Consultation for Windfarm. Determined Is a Strategic Infrastructure Development	Renewable Energy Development
PL.16A.VC0072	Pre-Application Consultation for Upgrade of the existing 110kv electricity line between Bellacorrick and Castlebar, Co. Mayo.	Energy Transmission Infrastructure
PL/16 .VC0079	Pre-Application Consultation for Upgrade of Existing 110kV Electricity Circuit between Bellacorrick and Moy Substations. Determined Is not Strategic Infrastructure Development	Energy Transmission Infrastructure
PC16.310528	Wind energy development and associated works and services	Renewable Energy Development
PC16.310529	Wind energy development and associated works and services.	Renewable Energy Development
PC16.312282	Proposed Kilsallagh Wind Farm consisting of 13 wind turbines and ancillary equipment including 110kV substation infrastructure.	Renewable Energy Development
PC16.315005	Pre-application consultation request for the proposed development of an open cycle gas turbine peaking power plant	Renewable Energy Development
PC16.315073	Proposed development for Killala Energy Hub- Open Gas Turbines, Gas Engines, 110kV Substation & Provision of Utility Connections to the National Grid.	Energy Transmission Infrastructure
PA16.PA0029	Proposed Oweninny Wind Farm and associated works, Bellacorick,	Renewable Energy Development
VC16.300488	Proposed development of the existing 110kV substation	Energy Transmission Infrastructure
23/60016	The installation of approximately 15Km of 250mm OD water Trunk Main, which will extend from a position approximately 1Km from Westport at the junction of Pound Road and the R355 in the townland of Carrownalurgan to Kilsallagh Lower at the road junction between the R355 and the L1826 road to Drummin and the installation of approximately 29.3Km of a mains distribution network to supply water to 473 No Consumers along the route of the Trunk Main and in the area to the Townlands to the West of Croagh Patrick.	Services Infrastructure (Decision Pending)
23/60028	The development will consist of a 114 Megawatt gas fired peaking power plant (which will be capable of running on a mix of natural gas and hydrogen) comprising the 'electricity generating station'. The electricity generating station will comprise of 2 no. open cycle gas turbine (OCGT) generators each consisting of an air intake filter system, exhaust stack (28 metres high), air vent stack, inter cooler system, turbine control room and transformers.	Renewable Energy Development (Decision Pending)
PA16.315933	Proposed development of 21 no. wind turbines and all associated works.	Renewable Energy Development (Decision Pending)



5.4 PLANNING AND DEVELOPMENT POLICY CONTEXT

When considering wind as an energy source, it is important to place the development in an international, national, and local policy context from the perspective of environment, energy, and planning. This section outlines legislative mechanisms and requirements from a global to local level, which have been formulated to support the generation of energy from renewable sources and reduce the dependency on fossil fuels and increase in national security.

The Irish planning policy system (Figure 5.1) is set within a hierarchical structure. National policy is informed by EU Directives, Planning Legislation, Ministerial Guidelines. Government Policy and Capital programmes.

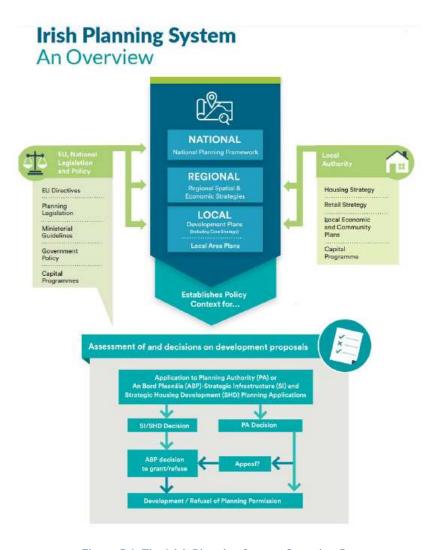


Figure 5.1: The Irish Planning System Overview 5

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⁵ Project Ireland 2040, National Planning Framework



5.4.1 International and European Policy

5.4.1.1 1992 United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro 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. The convention enjoys near universal membership, with 197 countries listed as being Parties to the Convention⁶.

5.4.1.2 Kyoto Protocol Targets

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

5.4.1.3 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;

⁶ https://ec.europa.eu/knowledge4policy/organisation/unfccc-united-nations-framework-convention-climate-change_en



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.

5.4.1.4 Paris Agreement 2015

This is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance, starting in the year 2020, which aims to keep the global average temperature rise this century to below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

In 2016, the threshold for entry into the agreement was adopted and the agreement came into force on the in November 2016. Ireland is legally bound by Article 7 of the United Nations COP21 Paris Agreement, signed in December 2015, to prepare and submit periodic updates on its national adaptation and mitigation plans in the global effort to keep global warming below $1.5\,^{\circ}\text{C}$.

The Conference of Parties, more commonly known as COP, is held annually to agree policies for limiting global temperature rises and policies for adapting to impacts associated with climate change. In 2021, the following agreements were reached by participating parties under COP26:

- Recognition that impacts from climate change will be lower at a temperature increase of 1.5 °C when compared with an increase of 2 °C;
- A request for participating countries to provide stronger national action plans for the year 2022 instead of the original agreed timeline of 2025;
- Agreement for participating nations to phase-down coal power and phase-out inefficient fossil fuel subsidies;



- A reaffirmed commitment by all parties to deliver financial aid to developing countries with a request for this aid to be doubled;
- An agreement on issues contained within the "Paris Rulebook", pertaining to operational details for the practical implementation of the Paris Agreement;
- An acknowledgment that the impacts of climate change are increasing with developing nations especially affected;
- Agreement to strengthen the Santiago Network for the connection of at-risk countries for the provision of assistance, knowledge and resources.

COP27 was held in November 2022, where it was agreed for the first time to set up a loss and damage fund for the most vulnerable countries.

5.4.1.5 European Green Deal 2019

The European Green Deal 2019 resets the European Commission's commitment to tackling climate and environmental-related challenges. It is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. The various elements of the deal are indicated in the infographic below:

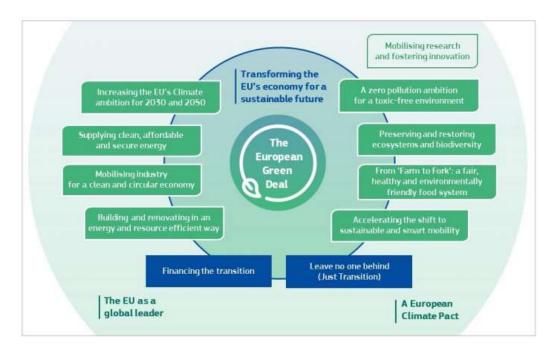


Figure 5.2: Elements of the Green Deal7

First climate action initiatives under the Green Deal include:

- European Climate Law to enshrine the 2050 climate-neutrality objective into EU law;
- European Climate Pact to engage citizens and all parts of society in climate action.

Based on a comprehensive impact assessment, analysis of the national energy and climate plans, and considering stakeholder contributions received to the public consultation, the Commission will propose a new EU ambition to reduce greenhouse gas emissions by 2030.

By summer 2020, the Commission proposed to present an impact assessed plan to increase the EU's greenhouse gas emission reductions target for 2030 to at least 50% and towards 55% compared with 1990 levels in a responsible way. In a speech by the President of the European Commission, Ursula Von der Leyen, on September 8th, 2020, it was confirmed that the EU would increase the reduction target from the 40% in the Europe 2030 and Energy Framework to a new target of 55%. This will put the EU on track for climate neutrality by 2050 and for meeting its Paris Agreement obligations. The Carbon Border Adjustment mechanism will help ensure others will follow Europe's lead.

⁷ https://ec.europa.eu/info/sites/info/files/european-green-deal-communication en.pdf

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In July 2021, the European Commission launched the first tranche of its 'Fit for 55%' measures that will support Europe's climate policy framework and put the EU on track for a 55% reduction in carbon emissions by 2030, and net-zero emissions by 2050. The interconnected proposals cover areas of climate, land use, energy, transport and taxation to bring them into line with the targets agreed in the European Climate Law. The package is comprised of thirteen proposals, with the follow changes of note:

- Amendment of the Renewable Energy Directive, setting a new 2030 target of 40% (up from 32%) energy use from renewables by 2030 and strengthening bioenergy sustainability criteria;
- Revision to the Alternative Fuels Infrastructure Directive to require aircraft and ships have access to clean energy supply in major ports and airports; and
- Revision of the Energy Taxation Directive to align taxation of energy products with climate policies and promote clean technologies.
- A Social Climate Fund to help citizens finance investment in energy efficiency, clean mobility and renewable energy.

The proposed development will support the EU's commitment to tackling climate and environmental-related challenges.

Further proposals and amendments are expected, including a revision of the Energy Performance of Buildings Directive, and new Climate, Energy and Environmental State Aid Guidelines.

A REPowerEU Plan was published by the European Commission in 2022 with the purpose of saving energy, producing clean energy and diversifying the supply of energy. The plan was produced in response to Ukraine war to reduce Europe's dependence on Russian fossil fuels. The Plan contains strategies and measures to phase out the EU's dependency on Russian fossil fuels by the end of the decade by building on the implementation of the European Green Deal and the EU's "Fit for 55" proposals (seeking to cut emissions by at least 55% by 2030). The Plan focuses on diversifying energy sources, accelerating a transition from fossil fuels to clean energy, saving energy, smart investment and reinforcing preparedness.

5.4.1.6 Renewable Energy Directive 2009/28/EC & 2018/2001/EU

This Directive concerns the promotion of the use of energy from renewable sources and sets out a target of 20% of EU energy consumption from renewable sources by 2020 and a 20% cut in greenhouse gas emissions by 2020, the so-called 20:20:20 plan. The Directive recognises the



need to promote renewable energy sources and technologies which will have a positive impact on:

- Security and Energy Supply;
- Regional and Local development opportunities;
- Rural development;
- Export prospects;
- Social cohesion;
- Employment opportunities.

The Renewable Energy Directive (RED) is the most important legislation influencing the growth of renewables in the European Union (EU) and Ireland. The RED set out mandatory targets for renewable energy in Ireland to be met by 2020. The first relates to overall renewable energy share (RES) and is commonly referred to as the overall RES target. For Ireland, the overall RES target was for at least 16% of gross final energy consumption (GFC) to come from renewable sources in 2020.

In addition to the EU mandatory targets, Ireland had two further national renewable energy targets for 2020. These were for the electricity and heat sectors and are designed to help Ireland meet the overall RES target. Ireland's target is for 40% of gross electricity consumption to come from renewable sources in 2020 and 12% of energy used for heating and cooling to come from renewable sources. According the SEAI's publication "Renewable Energy in Ireland, 2020 Report" 8, Ireland did not meet the 2020 renewable energy targets.

In 2018, the renewable energy directive 2018/2001/EU was revised and became legally binding in 2021 (Renewable Energy – Recast to 2030 (RED II Directive), which is discussed further in Section 5.4.1.7 below.

The proposed development supports the shift towards increased levels of renewable energy production and helps Ireland towards achieving its renewable energy targets as set out in the 2009/28/EC and the revised figure as outlined in the RED II Directive.

5.4.1.7 A Sustainable Europe by 2030 and RED II

'A Sustainable Europe by 2030' (January 2019) is the EU's ten-year growth strategy for years 2020-2030 which focuses on the implementation of the United Nations 2030 Strategic

⁸ https://www.seai.ie/publications/2020-Renewable-Energy-in-Ireland-Report.pdf



Development Goals (SDG's) and informs the EU Strategic Agenda 2019-2024. The plan identifies several key areas of importance to the sustainable growth of the Eurozone through to 2030 while transitioning to a carbon friendly economy and maintaining rankings in the 2030 SDG's. The four important policy areas include:

- 1. Transitioning from a linear to a circular economy;
- 2. Sustainability from Farm to Fork;
- 3. Future proofing energy, buildings and mobility; and,
- 4. Ensuring a socially fair transition (to ecologically sustainable economic growth).

In 2019, more than half of the European Union's energy supply was climate neutral, underpinning the importance of renewable energy to the EU. As part of the Energy Union regulation, the European Commission framework for energy transition brings together climate, energy, transport, research and other policies. It is this framework which is responsible for requiring under EU legislation that at least 32% of all energy consumption be from a renewable energy source by 2030. This framework also seeks to have 32.5% energy efficiency by 2030. A strategic aim of this policy is to reduce greenhouse gas emissions by at least 40% by 2030 compared to 1990 levels, in alignment with the EU commitment under the Paris Climate Agreement and beyond.

"Beyond 2030 more is needed to live up to the letter as well as the spirit of the Paris Climate Agreement, exploiting the full economic potential of the energy transition. The EU can significantly decrease its costly dependency on fossil fuels, reduce its fossil fuel import bill of some EUR 260 billion, increase its energy autonomy, and contribute to a fairer energy market. It is essential that we continue the integration of the energy market by building the missing interconnections and facilitating cross-border energy trade. The clean energy transition can also be supported by ocean energy and offshore wind energy. As a leader in this field, the EU should continue enjoying its first-mover advantage."

The EU indicates in this policy document that it can significantly decrease the costly dependency on fossil fuels, increase energy autonomy, lower our carbon footprint and contribute to a fairer energy market while growing the EU economies. It is understood that the economic measures to keep the EU at the forefront of SDG's in the world rely heavily on renewable energy. However, not all EU countries, such as Ireland are on par with their renewable targets as indicated in Figure 5.3 below:



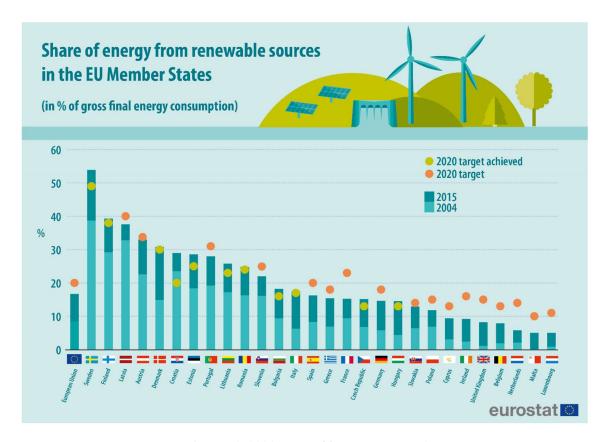


Figure 5.3: 2020 Renewable Energy Target 9

In 2018, the Directive was recast to RED II (2018/2001/EU) to move the legal framework to 2030 targets, setting a new binding target of at least 32% with a clause for a possible upwards revision by 2023. The recast Directive includes new provisions for enabling self-consumption of renewable energy, an increased 14% target for the share of renewable fuels in transport by 2030 and strengthened criteria for ensuring bioenergy sustainability. The revision aims to ensure that renewable energy fully contributes to achieving the higher EU climate ambition for 2030, in line with the 2030 Climate Target Plan. The strategy will help build an integrated energy system, based on renewable energy and fit for climate neutrality, and help reach the objectives of the European Green Deal.

5.4.1.8 The 2030 Climate and Energy Framework

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 sets out a policy framework for climate and energy in the period from 2020 to 2030 and aims to make the European Union's economy and energy system more competitive, secure and sustainable. The

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Infographic_REN-2004-2015.png



framework defines further EU wide targets and builds on the 2020 climate and energy package in setting three key targets for the year 2030 as follows:

- 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.

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) and marks an important milestone in the allocation to Member States of a package of climate targets formally adopted as part of the 2030 Climate and Energy Framework.

On the 27th of June 2018, EU ambassadors endorsed the provisional agreement reached by the Bulgarian Presidency on the revision of the renewable energy directive. The new regulatory framework is expected to pave the way for Europe's transition towards clean energy sources such as wind, solar, hydro, tidal, geothermal, and biomass energy. The agreement sets a headline target of 32% energy from renewable sources at EU level for 2030. Other key elements of the agreement include:

- The design of support schemes will provide for a possibility of technology specific support, aligned with state aid guidelines. The opening of renewable support towards neighbouring member states will be voluntary, at an aspirational pace of at least 5% between 2023 and 2026 and 10% between 2027 and 2030. Except for certain cases, member states will be obliged to issue guarantees of origin.
- Permit granting procedures will be simplified and streamlined with a maximum of two
 years for regular projects and one year in case of repowering, both extendable for an
 additional year in case of specific circumstances and notwithstanding environmental
 and judicial procedures. For small-scale projects below 10.8kW simple notification
 procedures will apply. Each member state may choose to apply simple notification
 procedures also to projects up to 50kW.
- The annual increase of energy from renewable sources in heating and cooling will be 1.3
 percentage points indicatively, or 1.1 percentage points if waste heat is not taken into
 account.



 Via obligations on fuel suppliers, renewables will reach a level of at least 14% in transport by 2030, supplemented by a set of facilitative multipliers to boost renewables in different sectors.

The grant of permission for the proposed development will directly contribute to Ireland's ongoing progression towards its 2030 targets in line with the 2030 Climate Energy Framework.

5.4.1.9 Roadmap for moving to a competitive Low-Carbon Economy in 2050

The low carbon Roadmap sets out cost-efficient pathways for key economic sectors for achieving an overall 80% reduction in the EU's emissions by 2050 (compared to 1990). Extensive economic modelling undertaken to prepare the Roadmap shows that domestic emission cuts of the order of 40% and 60% below 1990 levels could be achieved in a cost-effective way by 2030 and 2040, respectively. Current policies are projected to reduce emissions domestically to -30% in 2030 and -40% in 2050.

Figure 5.4 below illustrates the pathway towards an 80% reduction by 2050, shown in 5-year steps. The upper "reference" projection shows how domestic greenhouse gas emissions would develop under current policies. A scenario consistent with an 80% domestic reduction then shows how overall and sectoral emissions could evolve, if additional policies are put in place, considering technological options available over time.

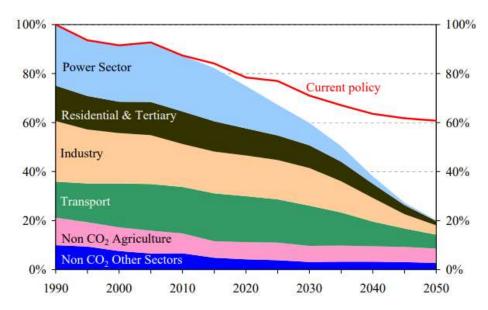


Figure 5.4: EU GHG emissions towards an 80% domestic reduction (100% = 1990)10

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¹⁰ https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0112:FIN:EN:PDF



The Commission intends to use the Roadmap as a basis for developing sector specific policy initiatives and Roadmaps. They will ensure that the EU Emissions Trading System remains a key instrument to drive low carbon investments in a cost-efficient manner. It will also remain attentive to the risk of carbon leakage in order to ensure a level-playing field for industry.

5.4.2 National Policy Context

The following section sets out the relevant national policies which will influence the development of the country in the coming decades with respect to energy production, carbon neutrality and climate change mitigation. These policies are supported by the latest Programme for Government (2020) 'Our Shared Future' which presents strong climate governance in rapidly reducing climate change in order to protect and improve public health and quality of life.

5.4.2.1 The National Planning Framework: Project Ireland 2040



The National Planning Framework (NPF) and the National Development Plan (NDP) together make up Project Ireland 2040. It was published by the Department of Housing, Planning and Local Government in February of 2018. The NPF is a framework to guide Ireland's development and investment in the coming years. It is the Government's high-level strategic plan to shape Ireland's development until the year 2040. It contains a set of national objectives and key principles from which more detailed and

refined plans will follow. This document acknowledges that new energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generating system from energy sources such as wind.

The NPF sets out the key goals and objectives for the State, and central to this is the theme of *Realising Our Sustainable Future*. In particular, the NPF notes in section 9.2: Resource Efficiency and Transition to a Low Carbon Economy that our transition to a low carbon energy future requires:

- "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, smart grids, electric vehicles, buildings, ocean energy and bio energy; and
- Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon economy."



With respect to the locating of renewable energy projects, the NPF states that "Rural areas have significantly contributed to the energy needs of the country and will continue to do so, having a strong role to play in securing a sustainable renewable energy supply." Furthermore, the NPF goes onto state that, "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 rural settings, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas."

National Policy Objective 55 of the NPF has a stated aim to: "Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050."

1.1.1.1 Revised National Development Plan 2021-2030

The revised National Development Plan (NDP) 2021 – 2030 published in 2021, is aligned with the delivery of the objectives of the National Planning Framework. It sets out the significant level of investment, almost €165 billion, which will underpin the successful implementation of the National Planning Framework and drive it forward over the next 10 years.

The NDP includes National Strategic Outcome 8 – Transition to Climate-Neutral and Climate Resilient Society. The NDP recognises that the national objective of transitioning by 2050 to a competitive low-carbon, climate resilient, and environmentally sustainable economy and society must influence public capital investment choices over the next 10 years. It acknowledges that Ireland's energy system requires a radical overhaul to achieve its energy and climate objectives by 2050. This means how energy in Ireland is generated and used needs to fundamentally change. Investment in renewable energy sources, ongoing capacity renewal, and future technology affords Ireland the opportunity to comprehensively decarbonise our energy generation. Renewable energy, including wind technology, will play a key role in helping to diversify away from a reliance on fossil fuels.

1.1.1.2 Climate Action Plan 2023 (CAP23) Changing Ireland for the Better

CAP23 sets out the government's ongoing and urgent response to the climate crisis. The Plan implements carbon budgets and sectoral emission ceilings, first introduced in 2022 and builds on previous climate action plans, which set a roadmap to halve Ireland's emissions by 2030 and reach net zero no later than 2050. The Plan sets out how Ireland can accelerate the actions that





are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

The updated action plan has a greater focus on system change and recognises the milestones already achieved such as the start of Ireland's offshore wind energy programme. The Plan lists six vital high impact sectors, with Powering Renewables identified as being critical to decarbonising the power section as well as enabling the electrification of

other technologies. The Plan seeks to accelerate the delivery of onshore wind by providing up to 9 GW of onshore wind.

The Plan outlines the current state of play across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and charts a course towards ambitious decarbonisation targets. The Plan also acknowledges that some sectors and communities will be more impacted than others with the costs of transition to a low carbon economy. To address this, the Plan embodies Just Transition principles and a Just Transition Commission will be established to provide advise to the Government.

The Plan retains one of the most important measures of the previous action plan (CAP21) which is to increase the share of electricity demand generated from renewable energy sources to up to 80% by 2030.

The Plan notes that in 2020 42% of all electricity generated in Ireland came from renewable sources, while in 2021 electricity accounted for just 14.4% of Ireland's greenhouse gas emissions.

Prior to CAP21, climate action plan policies estimated a reduction in electricity emission to 4-5 $MtCO_2$ eq by 2030. Under CAP21 and CAP23, it is recognised that a significant step up is now required to meet 2030 targets and to deliver a decarbonised economy for Ireland by 2050, with the key metric identified:



Theme	2025 KPI	2025 abatement (vs 2018) MtCO ₂ eq.	2030 KPI	2030 abatement (vs 2018) MtCO² eq.	2031-2035 measures
Accelerate Renewable Energy Generation	50% renewable electricity share of demand 6 GW onshore wind capacity Up to 5 GW solar PV capacity including at least 1 GW of non-new grid solar	MtCO₂eq.	80% renewable electricity share of demand 9 GW onshore wind capacity At least 5 GW offshore wind capacity 8 GW solar PV capacity including 2.5 GW of nonnew grid solar Green Hydrogen in production from surplus renewable electricity	8.7	Roadmap for a net-zero power system Green Hydrogen Production via 2 GW Offshore Wind
Accelerate Flexibility	Level of renewables at any one time on grid: 85% Dispatch down (excluding oversupply) of renewables below 7% Minimise oversupply Required long term storage (4 hour plus) in place		Level of renewables at any one time on grid: 95-100% Dispatch down (excluding oversupply) of renewables below 7% Minimise oversupply Required Long term storage (4 hour plus) in place At least 2 GW of new flexible gas fired generation Zero Emission gas fired generation from biomethane and hydrogen commencing by 2030		Long Duration Storage technologies Increased zero emission gas generation to enable a net zero power system

Figure 5.5: CAP23 Key Metrics to Deliver Abatement in Electricity

The Plan reinforces the Government's commitment to a significant increase in clean, renewable energy and to accelerate onshore wind electricity generation.



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



This White Paper on energy policy (Department of Communications, Energy and Natural Resources (December 2015) provides a complete energy policy update for Ireland. It sets out a framework to guide policy and actions that the Government intends to take in the energy sector up to 2030. It also outlines a transition to a low carbon energy system by 2050. It is significant as it was the first time a government has proposed the eventual elimination of fossil fuels from Ireland's energy system. The then Minister for Energy Alex White stated that "high-carbon fuels like"

peat and coal will give way to lower-carbon or renewable alternatives in the short to medium term before fossil fuels are largely replaced by renewable energy sources by 2050. Greenhouse gas emissions from the energy sector will "fall to zero or below by 2100".

The 2015 White Paper's stated objective is to "guide a transition to a low carbon energy system, which provides secure supplies of competitive and affordable energy to our citizens and businesses" as Ireland progresses towards a low carbon energy system. In doing so, it takes into account European and international climate change objectives and agreements, as well as Irish social, economic and employment priorities.

The White Paper sets out how Ireland's energy transition will be facilitated by an accelerated and diversified programme of renewable energy generation, and an increased focus on energy efficiency, facilitated by innovative financing. It promises strong regulation, effective markets, appropriate infrastructure, and deeper European cooperation. It heralds a new focus on citizens and communities as agents of change in the way Ireland generates, transmits, stores, conserves and uses energy. And it sets out actions to enable people to participate in energy-related decisions, including decisions about grid and renewable energy infrastructure.

The White Paper, and achievements since its introduction, underpins government policy to continue to support development of both onshore and offshore wind energy developments in accordance with published planning guidelines and local development plan policy.



1.1.1.4 Climate Action and Low Carbon Development Act 2015



This Act provides the statutory basis for the national transition objective set in the national policy position. It commits Ireland to being carbon neutral by 2050 and to also match Ireland's targets with those of the EU. It requires that the Minister for Communications, Climate Action, and the Environment must make and submit to Government a series of successive National Mitigation Plans and National Adaptation Frameworks. While there are no explicit targets set out within the Act itself, the legislation

obliges the State to consider any existing obligations of the State under the law of the European Union or any international agreement.

In effect the Act formally obliges the State to adhere to EU targets.

1.1.1.5 Climate Action and Low Carbon Development (Amendment) Act, 2021

The purpose of the Climate Action and Low Carbon Development (Amendment) Act, 2021 is to provide for the approval of plans 'for the purpose of pursuing the transition to a climate resilient and climate neutral economy by the end of the year 2050'. The 2021 Climate Act will also 'provide for carbon budgets and a decarbonisation target range for certain sectors of the economy'. The 2021 Climate Act removes any reference to a national mitigation plan and instead refers to both the Climate Action Plan and a series of National Long Term Climate Action Strategies. In addition, the Environment Minister shall request each local authority to make a 'local authority climate action plan' lasting five years and to specify the mitigation measures and the adaptation measures to be adopted by the local authority. The Act has set a target of a 51% reduction in the total amount of greenhouse gases over the course of the first two carbon periods ending 31 December 2030 relative to 2018 annual emissions. The 2021 Climate Act defines the carbon budget as 'the total amount of greenhouse gas emissions that are permitted during the budget period'.

5.4.2.2 Renewable Electricity Support Scheme (RESS)

RESS is a Renewable Electricity Support Scheme, which provides financial support to renewable electricity projects in Ireland. It is a pivotal component of the National Energy and Climate Plan and is essential for achieving Ireland's renewable electricity target by 2030. Auctions will decide which generators will receive contracts.

The first RESS auction (RESS 1) was delivered by a number of organisations and agencies, namely the DCCAE, Commission for Regulation of Utilities (CRU) and EirGrid, working together.



With a primary focus on cost effectiveness, the RESS will deliver a broader range of policy objectives, including:

- An enabling framework for community participation through the provision of pathways and supports for communities to participate in renewable energy projects;
- Increasing technology diversity by broadening the renewable electricity technology mix (the diversity of technologies);
- Delivering an ambitious renewable electricity policy to 2030;
- Increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy.

On 27th February 2020, the Department of Communications, Climate Action and Energy published the final terms and conditions for the first competition under the Scheme. The RESS will be implemented through a series of renewable electricity competitions, providing a renewable electricity roadmap and indicative timelines and capabilities.

RESS 1 took place in August 2020. A total of 114 projects applied to participate, with 82 successful projects. Figure 5.6 below shows the location of each provisionally successful project by Eligible Technology.



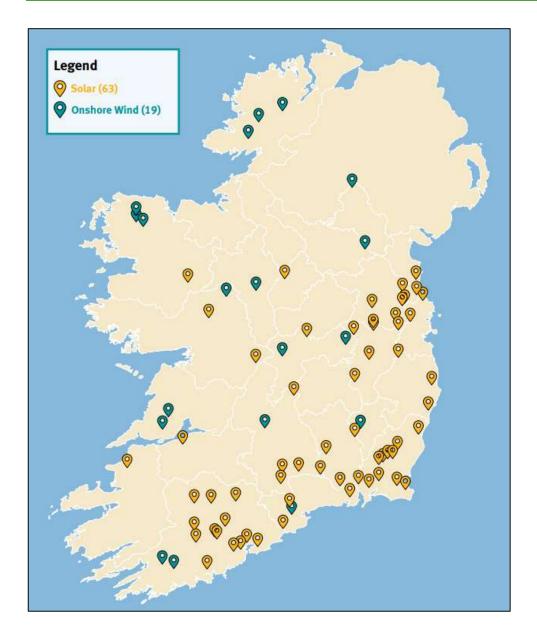


Figure 5.6: Location of Each Successful Project by Eligible Technology

Following this, the Renewably Electricity Scheme 2 (RESS 2) auction process commenced with qualification for RESS 2 opening in December 2021.

The new auction sought to support the implementation of Climate Action Plan 2021 to secure new renewable energy targets of 80% renewable electricity by 2030. The scheme is crucial in helping Ireland to meet new climate targets and ambitions. The final results¹¹ of the RESS 2

¹¹ https://www.gov.ie/en/publication/7f0bb-renewable-electricity-support-scheme-2-ress-2/



auction were approved by government and have been published on the EirGrid website¹². The successful projects in RESS 2 represent a potential increase of nearly 20% in Ireland's current renewable energy generation capacity; 2,748 GWh of the 3,772 GWh bids submitted were successful in the auction. This equates to approximately 414 MW of onshore wind and 1,534 MW of solar. These projects will be delivered between 2023 and 2025.

Renewable energy projects supported through the RESS scheme are required to provide a community benefit fund for the area local to the proposed development. This is to ensure that communities most impacted by the transition to a greener energy system receive the greatest benefit. This a policy initiative to deliver on the previous CAP21.

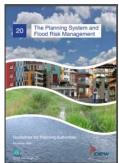
The terms of the fund are set out under the RESS Good Practice Principles Handbook for Community Benefit Funds. The handbook is in place to ensure there is a good relationship between the developers and communities to ensure they work together to maximise the benefits of the funds to local communities living in proximity to RESS Projects.

Key stakeholders involved are the community, the developer, the fund committee, and the administrator. The community is the heart of the scheme, and they should be benefit from the development due to the location e.g. retrofitting of homes. The fund committee is the decision making body of the fund, it is made up of volunteer community representatives, the developer and the administrator. The committee aims to represent the community and ensure funds are being used to facilitate climate action and sustainability. Ultimately the developer is responsible for ensuring the fund is compliant with the RESS meaning there are limits. Without the developer there is no project, they play a critical role in delivering on Ireland's objective of fully supporting our economy with clean, green energy. It is within a developers best interest to work collaboratively with the community and have established good relationships. They are responsible for ensuring the fund is fully compliant with the RESS. The role of the administrator is to guide the committee. This role is not mandatory; however, the Developer may appoint a third-party administrator or employee. The SEAI have been appointed the Funds support, oversight, and compliance body and as such have a key role in supporting the successful delivery of Funds. The Department has taken the decision to establish a RESS Communities Steering Board for the purpose of providing strategic direction for the ongoing development of this new sector.

¹² https://www.eirgridgroup.com/site-files/library/EirGrid/RESS-2-Final-Auction-Results-(R2FAR).pdf



5.4.2.3 The Planning System & Flood Risk Management – Guidelines for Planning Authorities



These Guidelines include comprehensive mechanisms for the incorporation of flood risk identification, assessment, and management as part of the planning process and outline how this will be implemented and achieved through actions at various levels, including site-specific levels. These guidelines require the planning system at national, regional, and local levels to:

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction, and mitigation of flood risk;
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

5.4.3 Other Relevant Policies

5.4.3.1 National Energy Security Framework

The National Energy Security Framework was launched in 2022 to provide an overarching and comprehensive response to Ireland's energy security needs in the context of the war in Ukraine.

The Framework sets out how the government can support households and businesses, with a particular focus on protecting those most at risk of fuel poverty, how it is already ensuring Ireland's energy security, and how it will speed up the country's shift to increased energy efficiency and indigenous renewable energy systems. It also sets out how consumers and businesses can be supported to save energy and save money.

The Framework sets actions in response to issues such as ensuring the security of energy supply in the near-term and over the longer term, reducing Ireland's dependency on imported fossil fuels.

Within the context of the proposed development, the framework seeks to replace fossil fuels with renewable energy sources such as wind.



5.4.3.2 Wind Energy Development Guidelines 2006

In 2006, the Department of the Environment, Heritage and Local Government (DoEHLG) published 'Wind Energy Development Guidelines for Planning Authorities' under Section 28 of the Planning and Development Act, 2000. The Wind Energy Development Guidelines (WEDG) provide statutory guidance for wind energy development, including consideration of environmental issues, such as noise and shadow flicker, design, siting, spatial extent and scale, cumulative effect and spacing, as well as the layout and height of wind turbines having regard to the landscape and other sensitivities. Planning authorities must have regard to the Guidelines on planning for wind energy through the development plan process and in determining applications for planning permission. The guidelines are intended to ensure a consistency of approach throughout the country in the identification of suitable locations for wind energy projects and in the treatment of planning applications for wind energy developments.

Relevant points include:

- Visual impact is among the more important considerations and advice is given on spatial
 extent, spacing, cumulative effect, layout, and height. There is an emphasis on the
 distinctiveness of landscapes and their sensitivity to absorbing different types of
 development;
- Environmental considerations such as the impact on habitats and birds and the need for
 habitat management are discussed. It is noted that designation of an area of natural and
 cultural heritage does not in itself preclude development, unless it is judged to be such
 that it would impact on the integrity of such sites and their natural heritage interests;
- The need for information on the underlying geology of the area including a geotechnical assessment of bedrock and slope stability and the risk of bog burst or landslide. Geological consultants should be employed to ensure that sufficient information is submitted:
- Impacts on human beings such as noise and shadow flicker.

These guidelines have been considered in the preparation of this EIAR as at the time of writing they are the current guidelines.

5.4.3.3 Draft Revised Wind Energy Development Guidelines - December 2019

The Draft Revised Wind Energy Development Guidelines were published in December 2019 and issued for public consultation, which concluded in February 2020. The revised guidelines primarily focus on addressing a number of key aspects including noise, visual amenity setback, shadow flicker, community consultation obligations, community dividend and grid connections.



The draft guidelines propose the following main changes to the 2006 Guidelines:

- New noise standards;
- Setback distances;
- Automatic shadow flicker control mechanisms;
- Community consultation;
- Community dividend;
- Grid connections;

These revised guidelines are still under review and until such time as the new guidelines are published, the 2006 guidelines remain the statutory policy guide in relation to all wind energy developments. As demonstrated in the subsequent chapters, the proposed development will not result in any likely significant effects on the environment and is in accordance with the principles of proper planning and sustainable development and has been designed such that it is anticipated it is capable of adhering to the draft guidelines.

5.4.3.4 Ireland's Greenhouse Gas Emission Projections 2016-2035

The National Climate Change Strategy designated the Environmental Protection Agency (EPA) with responsibility for developing annual national emission projections for greenhouse gases for all key sectors of the economy, including transport.

The International Panel on Climate Change has put forward its clear assessment that the window for action on climate change is rapidly closing and that renewable energy sources such as wind energy will have to grow from 30% of globally electricity at present to 80% by 2050 if we are to limit global warming to below 2 degrees¹³.

The EPA's most recent publication, the State of the Environment Report (2020) defines Climate and biodiversity as the most pressing issues to be addressed in Ireland. It highlights concerns about environmental indicators which are regressing. The report states that "Climate change is the defining challenge for this century". Last year, the government published its Climate Action Plan, "an important step," the EPA says in reaching national and EU climate goals. However, when it comes to tackling the causes of climate change — greenhouse gas (GHG) emissions in the form of carbon dioxide, methane and nitrous oxide — the EPA grades the country's current performance as "very poor".

^{13 &}quot;IPCC Fifth Assessment Synthesis Report" Intergovernmental Panel on Climate Change AR5 report



The report says air pollution is the "single largest environmental health risk in Europe". The three main sources of air pollution in Ireland are:

- Emissions from burning of solid fuels in homes
- Transport emissions from vehicles in urban areas
- Ammonia emissions from agriculture

The proposed development will contribute positively to both climate and air quality in Ireland. This will come about through increased electrification of home heating and transport, along with increased renewable electricity generation (and associated avoidance of fossil fuel burning generation) with an overall reduction in air pollution.

The previous EPA report (May 2014) stated that current projections indicate that Ireland is not on a pathway to a low-carbon economy. Total national greenhouse gas emissions are projected to, at best, decrease by an average of 0.4% per annum up to 2020 if all national policies are implemented and delivered. Furthermore, emissions are projected to increase between 2020 and 2030 (12% in total), with transport a key contributor to this trend, in the absence of additional policies and measures. However, it should be noted that renewable electricity generation in the Ireland is estimated to have saved 778 Kilotonne of Oil Equivalent (ktoe) of fossil fuel, with an associated CO_2 emissions reduction of 1.94 million tonnes. ¹⁴ Wind generation is the largest contributor, with savings estimated at 586 ktoe of fossil-fuel and a CO_2 emissions reduction of 1.51 million tonnes.

The key findings of the EPA's latest projections for Ireland's Greenhouse Gas Emissions (2021-2040) published in 2022 indicate that urgent implementation of all climate plans and policies, plus additional new measures, are needed for Ireland to meet the 51% emissions reduction target and put Ireland on course for climate neutrality by 2050. Furthermore, it states that "Ireland can meet its non-ETS EU targets of a 30% emission reduction by 2030 (compared to 2005) assuming implementation of planned policies and measures and the use of the flexibilities available. These include a land use flexibility using the Climate Action Plan 2021 afforestation rate of 8,000 hectares per annum" (EPA, 2022)¹⁵.

<u>Plan</u>.

¹⁴ SEAI Quantifying Irelands Fuel and CO₂ Emissions Savings from Renewable Electricity in 2012

¹⁵https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-greenhouse-gas-emissions-projections-2021-2040.php#:~:text=Under%20the%20Existing%20Measures%20scenario,the%202021%20Climate%20Action%20



The operational stage of this proposed development will have significant long-term positive impacts on air quality and climate change. Further details relating to the positive effects of the proposed development on air quality and climate change are included in Chapter 12 (Air Quality & Climate) of this EIAR.

5.4.3.5 Wind Energy Ireland (Irish Wind Energy Association) – Best Practice Guidelines for the Irish Wind Energy Industry, 2012

Wind Energy Ireland (formerly known as the Irish Wind Energy Association or IWEA) published 'Best Practice Guidelines for the Irish Wind Energy Industry' in 2008 with Guideline aims updated in 2012¹⁶. 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).

5.4.3.6 Commission for Regulation of Utilities: Grid Connection Policy

The Commission for Regulation of Utilities (CRU) launched a new grid connection policy in March 2018 for renewable and other generators, known as the Enduring Connection Policy (ECP-1), which sought to allow "shovel ready" projects, that already have a valid planning permission, connect to the electricity networks. The principal objective which guides this decision is to facilitate greater opportunities for advanced projects to connect to the network in addition to preparing for future, more regular batches for connection. In August 2018, the successful applicants for new connection capacity under ECP-1 were published.

On the 10^{th of} June 2020, the CRU further published the Enduring Connection Policy – Stage 2 (ECP-2) Decision (CRU/20/060). This decision marks a major milestone in the Enduring

¹⁶ Irish Wind Energy Association, Best Practice Guidelines for the Irish Wind Energy Industry, 2012; http://www.iwea.com/index.cfm/page/industryreports?twfld=1061&download=true



Connection Policy regime and provides for three batches of new generation connection offers to access the electricity network.

The number of connection offers represents an increase in ambition from ECP-1 and sets a challenging but achievable programme for the System Operators. This will facilitate new renewable generators competing in forthcoming RESS auctions as well as conventional generators and system service providers.

5.4.3.7 Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement (DCCAE, 2016)

In December 2016, the Department of Communications, Climate Action and Environment DCCAE published a Code of Practice for Wind Energy Development in Ireland on Guidelines for Community Engagement. The code cites ten key areas that wind farm promoters must comply with when engaging with communities. These include:

- 1. Contact and visibility;
- 2. Arrangement for making contacts;
- 3. Engagement;
- 4. Compliance with statutory and regulatory obligations;
- 5. Community benefit;
- 6. Impact mitigation;
- 7. Independent advisory and information bodies:
- 8. Expert professional advice;
- 9. Ancillary development;
- 10. Reports.

It is intended to ensure that wind energy development in Ireland is undertaken in observance of best industry practices, and with the full engagement of communities around the country. 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 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.

The proposed development fully complies with the Code of Practice for Wind Energy Developments in Ireland.



5.4.4 Regional Policy Context

5.4.4.1 Regional Spatial and Economic Strategy, Northern and Western Region 2020

The Regional Spatial and Economic Strategy (RSES) came into effect on the 24th of January 2020 and provides a high-level development framework for the Northern and Western Region that supports the implementation of the National Planning Framework (NPF) and the relevant economic policies and objectives of Government. It provides a 12-year strategy to deliver the transformational change that is necessary to achieve the objectives and vision of the Northern and Western Regional Assembly (NWRA).



Figure 5.7: RSES Northern and Western Spatial Area

The RSES is aligned with the *Europe 2020* strategy, which is the EU's agenda for growth and jobs for the current decade to 2020. It emphasises smart, sustainable and inclusive growth as a way to overcome the structural weaknesses in Europe's economy, improve its competitiveness and productivity and underpin a sustainable social market economy. The Post 2020 Strategy shall focus on five priorities, which includes the following:

PO2 A Greener, carbon-free Europe, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change.

The RSES considers the region to have a huge potential for growth in renewables, with its diverse and growing environmental goods and services sector, and not least because of the proactivity and drive with which it embraces this agenda. Demonstrating its commitment



through the support of test sites, innovative green policies and investing in infrastructure to support a low carbon future. To achieve this, policies must encourage:

- Practices to reduce the production of CO2;
- Increase in our energy security;
- Reduced cost of electrical power for domestic purposes, and regional development of value-adding of primary production;
- Increased industry development of modern high efficiency building materials;
- Increased efficiency in the development of renewable energy production
- Improved efficiency of freight and passenger transport systems;
- Greater protection of areas of high primary production value;
- Greater protection of environmentally sensitive areas; and,
- Increase cluster of R&D focused on technological application to renewable energy.

Figure 5.8 illustrates the operational windfarms in the NWRA region.

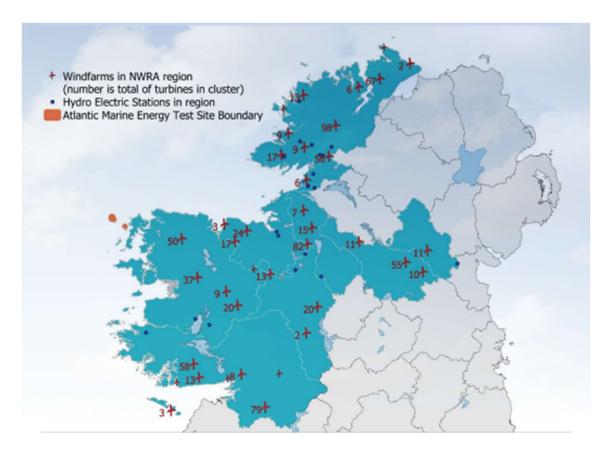


Figure 5.8: Windfarms and Hydro Electric Stations in RSES Spatial Area, Northern and Western Region

The NWRA RSES sets out the following Regional Policy Objectives (RPO) in support of the proposed development:



- Regional Policy Objective 4.16: The NWRA shall co-ordinate the identification of potential renewable energy sites of scale in collaboration with Local Authorities and other stakeholders within 3 years of the adoption of the RSES. The identification of such sites (which may extend to include energy storage solutions) will be based on numerous site selection criteria including environmental matters, and potential grid connections.
- Regional Policy Objective 4.17: To position the region to avail of the emerging global market in renewable energy by:
 - Stimulating the development and deployment of the most advantageous renewable energy systems
 - Supporting research and innovation
 - Encouraging skills development and transferability
 - Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses
- Encourage the development of the transmission and distribution grids to facilitate the
 development of renewable energy projects and the effective utilization of the energy
 generated from renewable sources having regard to the future potential.
- Regional Policy Objective 4.18: Support the development of secure, reliable, and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry and create jobs.
- Regional Policy Objective 4.19: Support the appropriate development of offshore wind
 energy production through the adequate provision of land-based infrastructure and
 services, in line with national policy and in a manner that is compatible with
 environmental, ecological and landscape considerations.
- Regional Policy Objective 5.1: The Assembly will support through Climate Change
 Action Plans (CARO) and Local Authorities the preparation and implementation of Local
 Climate Strategies which will, inter alia, address vulnerability to climate risks and
 provide prioritised actions in accordance with the guiding principles of the National
 Adaptation Framework.

Section 8.2 of the RSES relates to the electrical grid network and again reinforces the strengths of the region in relation to renewable energy resources. It notes that the existing transmission network is predominantly lower capacity 110 kV with very little higher capacity of 220 kV and 400 kV transmission infrastructure as depicted in Figure 5.9.



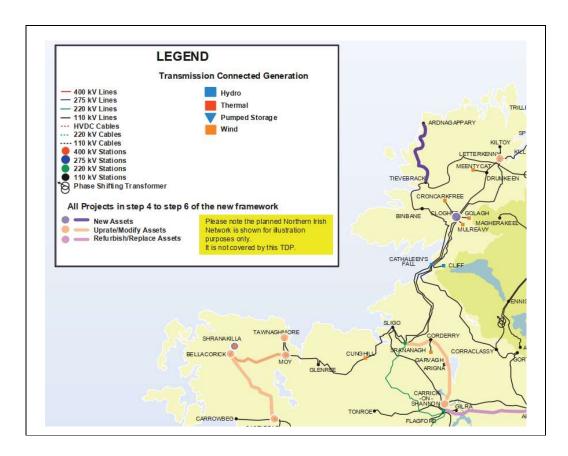


Figure 5.9 North West Transmission Grid Infrastructure

Developing the grid will enable the transmission system to safely accommodate more diverse power flows from surplus regional generation and also to facilitate future growth in electricity demand, particularly from wind. The RSES states that these developments will strengthen the network for all electricity users, and in doing so will improve the security and quality of supply. This is particularly important if the region is to attract high technology industries that depend on a reliable, high-quality, electricity supply. The following relevant regional policy objectives are listed:

- Regional Policy Objective 8.1: The Assembly support the development of a safe, secure
 and reliable electricity network, and the transition towards a low carbon economy
 centred on energy efficiency and the growth projects outlined and described in this
 strategy.
- Regional Policy Objective 8.3: The Assembly support the necessary integration of the transmission network requirements to allow linkages with renewable energy proposals at all levels to the electricity transmission grid in a sustainable and timely manner.
- Regional Policy Objective 8.4: That reinforcements and new electricity transmission infrastructure are put in place and their provision is supported, to ensure the energy



needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs. Ensure that development minimises impacts on designated areas.

5.4.5 Local Policy Context

Chapter 3 of this EIAR sets out an overall description of the proposed development and provides a list of all townlands that the proposed development is located within. As previously mentioned, the proposed development is located entirely in Mayo County and thus informed by the provisions of Mayo County Development Plan 2022-2028 and any emerging development plans, as can be seen from Figure 5.10 below. Therefore, this section will set out the relevant objectives, policies, and provisions for wind energy in the adopted Mayo County Development Plan which are relevant to the proposed development.



Figure 5.10: Location of Proposed Windfarm Development

5.4.5.1 Mayo County Development Plan 2022-2028

The Mayo County Development Plan 2022-2028, (hereafter referred to as "the Plan") was adopted by Mayo County Council on the 29th June 2022 and came into effect on the 10th August 2022. The Plan establishes policies and objectives for the proper planning and sustainable development of County Mayo and is aligned with the NWRA RSES, to give effect to National



Strategic Outcomes and the National Climate Action Plan. Chapter 11 of the Plan provides Climate Action & Renewable Energy policy with the stated strategic aim:

"to transition to a low carbon and climate resilient county, with an emphasis on reduction in energy demand and greenhouse gas emissions, through a combination of effective mitigation and adaptation responses to climate change; in addition to maximising the opportunities to become a national leader in renewable energy generation, whilst increasing the resilience of our Natural and Cultural Capital to climate change by planning and implementing appropriate adaptation measures"

The Plan sets a minimum target of 600MW of renewable energy to be delivered across Mayo County over the Plan period. The Plan considers this target to be achievable but may need to be revised over the lifetime of the Plan to ensure alignment with the Northern and Western Regional Assembly's forthcoming Renewable Energy Strategy.

The Plan further recognises the importance of onshore wind energy as a renewable energy source with the Plan stating that it will "endeavour to continue to facilitate wind energy projects that accord with the Mayo RES [Renewable Energy Strategy], the Landscape Appraisal of County Mayo and the relevant Section 28 ministerial guidelines.

The following renewable energy policies and objectives are provided under the Plan in support of the proposed development:

- REP-1: To support Ireland's renewable energy commitments outlined in national policy
 by facilitating the development and exploitation of a range of renewable energy sources
 at suitable locations within the county, where such development does not have a
 negative impact on the surrounding environment (including water quality), landscape,
 biodiversity or local amenities to ensure the long-term sustainable growth of the county.
- REP-3: To actively encourage and support the sustainable development, renewal and
 maintenance of energy generation infrastructure in order to maintain a secure energy
 supply, while protecting the landscape, archaeological and built heritage and having
 regard to the provisions of the Habitats Directive.
- REP-4: To ensure that developers of proposed large-scale renewable energy projects carry out community consultation in accordance with best practice and commence the consultation at the initiation of project planning.
- **REP-5:** To promote the use of efficient energy storage systems and infrastructure that supports energy efficiency and renewable energy system optimization, subject to the



proper planning and sustainable development of the area and consideration of environmental and ecological sensitivities.

- **REP-7:** To promote the harnessing of wind energy to contribute toward decarbonising County Mayo, including new emerging by-product markets.
- REO-1: To co-operate with the Northern and Western Regional Assembly in identifying
 Strategic Energy Zones as areas suitable for larger, energy generating projects,
 community and micro energy production, whilst ensuring environmental constraints
 and a regional landscape strategy are considered.
- **REO-3:** To encourage and facilitate, where possible, the production of energy from established and emerging renewable technologies.
- REO-6: To ensure all renewable energy proposal comply with the provisions of the Mayo County Council Renewable Energy Strategy 2011-2022 (or as updated).

On the 2nd of December 2022, the Minister of State, Peter Burke, issued a Direction pursuant to Section 31 of the Planning and Development Act 2000 (as amended) on the adopted Mayo County Development Plan 2022-2028 to ensure that the Plan sets out an overall strategy for proper planning and sustainable development and meets the requirements of the Act. It is noted that the Direction does not pertain to the planning policy listed above. It therefore, has no relevance to the proposed development.

5.4.5.2 Renewable Energy Strategy for County Mayo 2011-2020

The Renewable Energy Strategy (Strategy) has been prepared for County Mayo in the context of EU and national renewable energy targets. The Strategy is underpinned by Strategic Environmental Assessment (SEA) and Habitats Directive Assessment (HDA). The SEA has evaluated five potential strategy options and their effects on the environment and designated sites, including Natura 2000 sites. The HDA assessed the effect the Strategy would have on the conservation objectives of any Natura sites in the County and within 15km of the County boundary. According to the Strategy Mayo has been identified as having one of the best wind regimes in Europe 17, and notes that,

"in order to achieve the national renewable energy targets and the objectives of the Strategy, improvements and the provision of new infrastructure to the electricity

5-44

¹⁷ https://www.mayo.ie/getmedia/1345826c-f84b-49c2-8485-84f3f3a7f646/2-3 Document3,24887,en.pdf



transmission network in Mayo is considered imperative for all renewable energy technologies."

The site is currently identified in the Strategy as a 'Tier 1 (large Wind Farms)' location, suitable for the erection of large-scale wind farms. See Figure 5.11 below.

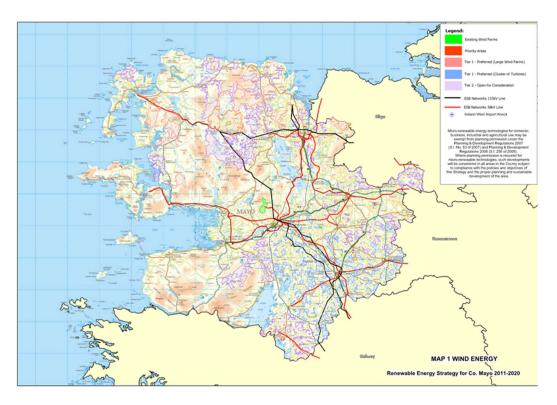


Figure 5.11: Wind Energy Designations - Mayo Renewable Energy Strategy 2011-2020

The nature and location of the proposed development is therefore consistent with the zoning designation of the current CDP and Plan.

Chapter 15 (Landscape and Visual Impact) assesses the potential for the proposed project to cause any impacts, and contains further information on this topic, which finds that there will be no significant impacts on the wider landscape and visual amenity of the region.

Finally, as demonstrated in the subsequent chapters of this EIAR, the proposed development complies with the development management standards and requirements for windfarms and is fully complaint with national, regional and local policies in particular it adheres to the current Wind Energy Development Guidelines 2006. Furthermore, the proposed development will significantly contribute towards the national targets by which Ireland is bound as described in Section 5.4. The proposed project will contribute approximately 90MW of clean renewable



energy and will allow County Mayo to make a significant contribution towards reaching those targets.

5.5 PLANNING NEED FOR THE PROPOSED DEVELOPMENT

Section 5.4 of this chapter outlines the national policy that clearly drives the need for the type of development that is proposed and is under consideration in this EIAR. Of particular relevance is the Energy White Paper – Ireland's Transition to a low Carbon Energy Future, as well as the targets outlined under CAP23. Ireland faces significant challenges to meet its EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. The proposed development is critical to helping Ireland address these challenges as well as addressing the country's over-dependence on imported fossil fuels.

It should be noted that there is a considerable economic benefit to the development of wind farms nationally. In the national context, Baringa published a report in October 2018 titled '70 by 30 - A 70% Renewable Electricity Vision for Ireland in 2030'. In the report Baringa analysed two different scenarios for the energy sector on the island of Ireland in 2030. 'Renewable Energy' is a scenario where the island of Ireland continues to be a world leader in renewable electricity and in wind and solar power in particular. Ireland achieves a renewable electricity target of 70% by 2030 in this scenario. 'Fossil Fuel' is a scenario where there is no further deployment of renewable generation after the 2020 target of 40% renewable electricity is met. In this scenario, Ireland still primarily relies on fossil fuels to generate electricity in 2030.

Baringa's '70 by 30' report demonstrated that 70% renewable electricity by 2030 in Ireland can be achieved at a net financial benefit to end consumers ¹⁸. This report played an important role in influencing Ireland's renewable energy ambitions and in March 2019 the Irish government pledged a binding target of 70% renewable electricity by 2030. Further to this, both the Irish ¹⁹ and UK²⁰ governments have set a goal of net-zero emissions by 2050 and decarbonisation has also been made a primary goal in the strategies of key all-island stakeholders such as the Commission for Regulation of Utilities, Water and Energy (CRU), the Utility Regulator in Northern Ireland, and the Transmission System Operators (TSOs) EirGrid and SONI.

The analysis shows that:

¹⁸ https://www.iwea.com/images/files/70by30-report-final.pdf

¹⁹ https://www.dccae.gov.ie/en-ie/climate-action/publications/Pages/Climate-Action-Plan.aspx

²⁰https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law



- Procuring system services from zero-carbon providers could reduce all-island power sector emissions by almost 2 million tonnes of CO₂ per year by 2030. This is equivalent to one third of total 2030 power sector emissions that could be avoided by transitioning to a Zero-Carbon Model.
- There are significant operational cost savings associated with sourcing all system services from zero-carbon sources, with up to €90m per year of savings by 2021, increasing to €117m per year by 2030, primarily from avoided fuel and carbon costs. They project an annual operational cost saving of €57m per year by 2030 if reserve requirements alone are met by zero-carbon technologies.
- There is a significant reduction in renewable curtailment if system operational
 constraints are met using zero-carbon service providers. In 2030, the analysis suggests
 a greater than 50% reduction in renewable curtailment from 8.1% to 4.0%. This
 reduction in the curtailment of zero-marginal cost renewables results in lower
 electricity generation costs as it displaces more expensive, typically fossil-fuelled,
 generators in the production of electricity.

Pöyry also published a report in March 2014 titled 'The Value of Wind Energy to Ireland' (https://windenergyireland.com/images/files/9660bd6b05ed16be59431aa0625855d5f7dca 1.pdf). The report stated that the sector could support 22,510 jobs in the construction stage and double the amount of existing jobs in the operational phase by 2030. It also projected an investment of €4.8 billion in the time period from 2020 to 2030. Specifically, in the case of Oweninny up to approximately 100 no. jobs will be supported during the construction phase and up to 1-2 no. jobs during the operational phase.

The proposed development will have several significant long-term and short-term benefits for the local economy including job creation, provision of amenity, local authority commercial rate payments and a Community Benefit Scheme. In addition, during construction, additional employment will have been created in the region through the supply of services and materials to the development. In conjunction to this, there will also be income generated by local employment from the purchase of local services i.e., travel and lodgings.

Furthermore, a report published by Trinity College Dublin and the Economic Social Research Institute in 2014 (https://windenergyireland.com/images/files/9660bd656c1448e5714754977c7202c77987e f.pdf), outlined three future scenarios for the industry that could be pursued and stated that as many as 35,000 jobs could be generated by developing Ireland's wind energy sector further. The



report entitled "An Enterprising Wind: An Economic Analysis of the Job Creation potential of the Wind Sector in Ireland" was jointly commissioned by Siemens and the Irish Wind Energy Association (IWEA). It suggests that an overall private sector investment of between €7 billion and €29 billion would be required, depending on the level of ambition pursued.

According to the study, if Ireland were to meet its current 2020 targets and install 4,000MW of wind energy, 8,355 new positions would be created, more than double the number of jobs that then existed in the sector. The report goes on to suggest that if Ireland were to build on the existing target and add an additional 4,000MW of onshore and offshore wind energy capacity for export, that over 17,000 jobs could be created and if 12GW of installed wind capacity were to be developed, there would be 35,275 new jobs created. The figures are suggestions made in the report only.

The need for the proposed project is driven by the following factors:

- 1. A legal commitment from Ireland to limit greenhouse gas emissions under the Kyoto protocol to reduce global warming;
- 2. A requirement to increase Ireland's national energy security as set out in the Energy White Paper;
- 3. A requirement to diversify Ireland's energy sources, with a view to achievement of national renewable energy targets and an avoidance of significant fines from the EU (the EU Renewables Directive);
- 4. Provision of cost-effective power production for Ireland which would deliver local benefits: and
- 5. Increasing energy price stability in Ireland through reducing an over reliance on imported gas.

The proposed development will produce energy from indigenous, renewable resources. As such, it will contribute towards international, EU, national, regional, and local policy regarding the reduction of dependence on fossil fuels, increased reliance on renewable energy and reducing emissions of GHGs. It will contribute towards national policies to increase wind electricity generation capacity in the country and assist in the exploitation of Ireland's renewable energy resources. It will also contribute to meeting the EU's challenging target of 32% renewable energy by 2030.

In addition, the proposed development is aligned with the objectives of RSES for the Northern and Western Region i.e., to support the development of secure, reliable and safe supplies of renewable energy. Finally, at the local level, the proposed development is in line with and supports the policies of the Mayo County Development Plan and is located in an area identified as a Tier 1 location for Large Wind Farms.



5.6 PROJECTS CONSIDERED IN CUMULATIVE 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 have therefore been fully considered within this EIAR.

The projects considered in relation to the potential for cumulative impacts and for which all relevant data was reviewed include those planning applications listed in Table 5.2, and relevant ongoing activities in the area, as described below.

For the purpose of the evaluation of potential cumulative impacts development has been taken to include:

- Any permitted electricity transmission developments, or proposed developments currently in the planning process, located within Mayo and surrounding areas of adjoining counties.
- Permitted or proposed developments with the potential for significant cumulative
 effects with the proposed development, e.g., major linear infrastructure development,
 such as proposed road development, windfarms, other Strategic Infrastructure
 Development (SID), or public utilities and services along the grid route corridor.

Section 5.3 above identifies the proposed, permitted and the constructed wind farms within a 10-kilometre radius of the proposed development site. The cumulative impact of the proposed development in association with adjoining wind turbines has been assessed in the relevant sections of this report. Oweninny Wind Farm Phase 1 is located immediately west / northwest of the proposed development site and was commissioned in 2019, while Oweninny Wind Farm Phase 2 has been consented further to the west and is currently under construction. In addition, since 1992, Ireland's first commercial wind farm, a 21-turbine development known as



Bellacorick Wind Farm, which is owned and operated by Renewable Energy Ireland Limited, has been operating on the site.

The review of the relevant local authorities planning registers documented existing and approved projects and planning applications pending a decision in the vicinity of the proposed wind farm site and the grid connection route, most of which relate to the provision and/or alteration of one-off rural housing and agriculture-related structures. These existing, approved and in-planning projects have also been taken into account in describing the baseline environment and in the relevant assessments. Details of all these developments in the wider area of the site are provided in Table 5.2.

5.7 SUMMARY

There are significant International, European, National and Local policy supports for renewable energy technologies in the country. Following confirmation from the Climate Change Advisory Council – 'Annual Review September 2020'²¹, that Ireland yet again missed its targets for reducing greenhouse gas emissions, the most recent annual review has confirmed that "national greenhouse gas emissions fell in 2020 but bounced back in 2021 as the COVID-19 related restrictions were lifted. Emissions in 2020 were largely the same as the levels in 2011, and this lack of progress over the decade is no longer acceptable given our national and EU obligations."²²

2050 European targets mean that Europe's energy production will have to be almost carbon-free by that time, and while Ireland has come a long way in recent years to increase renewable energy generation, the targets are ever increasing. It is this commitment on energy and climate policy that justifies a clear need for renewable energy generation in Ireland. It is recognised that there are a range of renewable resources alternatives that could be explored to meet our International and European commitments however, onshore wind is recognised as being the most economically competitive and viable at this point in time.

Ireland is fortunate to have access to the lowest cost renewable electricity resources in the world. As a small island nation, the challenges are to deliver a secure supply of energy to meet our growing needs and drive economic prosperity, while making sure cost is to the forefront of

²¹ http://www.climatecouncil.ie/media/CCAC_AnnualReview2020FINALWEB.pdf

²² Climate Change Advisory Council - ANNUAL REVIEW 2022 (climatecouncil.ie)



decision-making, alongside reducing CO₂ emissions to protect the environment and limit the impact of climate change for future generations.

Ireland is one of the leading countries in its use of wind energy and is in third place worldwide in 2018 after Denmark and Uruguay. As mentioned previously the Irish government is ramping up its aspirations on renewables, aiming for 80% renewable electricity by 2030. Wind energy provides a clean, sustainable solution to our energy problems. It can be used as an alternative to fossil fuels in generating electricity, without the direct emission of greenhouse gases.

The benefits of wind power are considered to be many and these can be summarised as follows:²³

- Wind energy releases no pollution into the air or water.
- Wind energy is both renewable and sustainable. The wind will never run out, unlike the earth's fossil fuel reserves (such as oil and gas).
- Adding wind power to the energy supply diversifies the national energy portfolio and reduces reliance on imported fuels.
- Wind turbines have a relatively small footprint. Although they can tower high above
 the ground, the impact on the land is minimal. The area around the base of the wind
 turbine can often be used for other purposes such as agriculture.
- Wind turbines are considered relatively low maintenance. A new wind turbine can be expected to last some time prior to any maintenance work needing to be carried out.
- Local and Economic Benefits. As well as attracting investment into Ireland, wind energy
 is also contributing to our national growth through paying taxes and is predicted to
 contribute a tax revenue of €1.8 billion by 2030²⁴. Ireland saves money (over €1 billion
 in the last five years) on wind energy from cutting down on expensive fossil fuel imports.
 In 2014, wind energy alone saved us over €200m on fossil fuel payments.

A windfarm development at this location will produce energy from indigenous, renewable resources. As such, it will contribute towards international, EU, national, regional, and local policy regarding the reduction of dependence on fossil fuels, increased reliance on renewable energy and reducing emissions of GHGs. It will also contribute towards national policies to increase wind electricity generation capacity in the country and assist in the exploitation of

²³ https://www.esb.ie/tns/education-hub/future-energy/wind-energy

²⁴ Wind Energy (esb.ie)



Ireland's renewable energy resources and contribute to meeting the EU's challenging target of 32% renewable energy by 2030.

The need for the proposed project is driven by the following factors:

- 1. A legal commitment from Ireland to limit greenhouse gas emissions under the Kyoto protocol to reduce global warming;
- 2. A legally binding commitment detailed in the Climate Action and Low Carbon Development (Amendment) Bill 2021 to support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050
- 3. A requirement to increase Ireland's national energy security as set out in the Energy White Paper;
- 4. A requirement to diversify Irelands energy sources, with a view to achievement of national renewable energy targets and an avoidance of significant fines from the EU (the EU Renewables Directive);
- 5. Increasing energy price stability in Ireland through reducing an over reliance on imported fossil fuels;
- 6. Provision of cost-effective power production for Ireland which would deliver local benefits

It is requested that the Planning Authority have regard to the national objectives to support wind energy development as part of the International, European, and National binding agreements to increase the use of renewable energy. The proposed development is compliant with the policies and objectives of the Mayo County Development Plan 2022-2028, and the Renewable Energy Strategy for County Mayo 2011-2020. It also complies with the RSES, and the Wind Energy Development Guidelines 2006. The proposed development is cognisant of the Draft Revised Wind Energy Development Guidelines (2019) and the policies and objective of the surrounding county development plans as described above. The proposed project will contribute towards achieving National and EU targets for renewable energy production and CO₂ emission reductions.

The Climate Action and Low Carbon Development Acts 2015 to 2021 as adopted has set a target of a 51% reduction in the total amount of greenhouse gases over the course of the first two carbon periods ending 31 December 2030 relative to 2018 annual emissions. The 2021 Climate Bill defines the carbon budget as 'the total amount of greenhouse gas emissions that are permitted during the budget period'.

Individual county councils in Ireland have also published their own Climate Change Strategies which outline the specific climate objectives for that local authority and associated actions to achieve the objectives.