Submission No: 101

Energy for generations

ESB Group Property

Issues Stage – Clare County Development Plan 2022 - 2028

Submission on behalf of ESB to the Clare County Development Plan 2022 – 2028 Issues Paper.
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Contents

1. INTRODUCTION

Electricity Supply Board (ESB) welcomes this opportunity to make a submission to the Clare County Development Plan (CDP) 2022 – 2028. ESB is a landowner and employer in Clare with property and infrastructural assets throughout the County. As a strong, diversified, vertically integrated utility, ESB operates right across the electricity market; from generation, through transmission and distribution to supply of customers. In addition, ESB uses its networks to carry fibre for telecommunications and to provide charging infrastructure for electric vehicles. ESB is Ireland's leading electricity utility with approximately 3.2 million customers throughout the island of Ireland.

ESB broadly supports the vison included in Pre-Draft CDP Issues Paper. Climate change and achieving the national target of zero emissions by 2050 is one of the key challenges identified in the Issues Paper. We recognise that Clare Co. Co. has a strong reputation in placing climate action at the heart of all policies and strategies. However, there continues to be significant advancement in renewables technology and outlined below are observations regarding strategic issues that should be taken into consideration in the preparation of the Draft Clare CDP 2022 - 2028.

1.1 Overview of ESB Strategy

ESB is Ireland's foremost energy company and the largest supplier of renewable electricity in Ireland. Through innovation, expertise and investment, ESB is leading the way in developing a modern, efficient electricity system that is capable of delivering sustainable and competitive energy supplies to customers in the 'all-islands market' (Republic of Ireland, Northern Ireland, England, Wales and Scotland). ESB operates a renewable energy portfolio that has the capacity to supply over 830 MW of green energy to the homes, farms, hospitals, schools and businesses of Ireland and the United Kingdom.

ESB is embracing new technologies that are revolutionising the energy industry, including smarter electricity networks. We are investing in sustainable energy solutions that harnesses the power of solar, wind, wave and storage to provide a cleaner future. Our goal is to reduce ESB's carbon emissions 40% by 2030 and move towards becoming carbon-neutral by 2050. By the end of 2020, ESB will be delivering one-third of its electricity from renewable generation as it progresses towards achieving carbon net-zero operations which is consistent with the objectives of the National Planning Framework (NPF) and Regional Spatial & Economic Strategy (RSES) for the Southern Region.

1.2 Generation, Transmission & Distribution

Located near Kilrush, ESB Moneypoint is one of Ireland's largest electricity generating stations with a total capacity of 915 MW – yearly, this can add up to around 5 million MW hours. In 2008, we completed a major environmental equipment upgrade to make sure the plant complies with the strictest environmental requirements. Located on lands adjacent to the power station is Moneypoint Wind Farm. This 17MW renewable energy project consists of 5 wind turbines and has the ability to deliver enough clean, green, indigenous electricity equivalent to the needs of approximately 10,000 homes.

In addition, ESB owns and operates the hydro-electric power station at Ardnacrusha, County Clare. The hydro system (also known as the Shannon Scheme) is the largest hydroelectric power scheme in the country, with a current capacity of 86MW. About two percent of Ireland's electricity generating capacity is in the form of hydropower.

ESB is the asset owner of the Transmission System and Distribution System and ESB Networks provides the essential service of building, managing and maintaining the electricity networks in Clare and throughout Ireland. ESB Networks is unique in that it is in direct contact with all electricity users.

The electricity network extends to over 180,000km across the Republic of Ireland and in 2018 over 26,900 new residential and business connections were completed. The focus on recent investment in the network was on continuing the reinforcement of the system to facilitate the connection of new renewable electricity generation.

1.3 ESB Roll-out of EV Infrastructure

ESB, has developed a network of almost 1,100 electric vehicle charge points across the Island of Ireland. In the Climate Action Plan (2019) the Irish Government has set stretching targets for EV adoption in Ireland in order to address energy demand and emissions from transport. To help meet this increase in electric vehicles, ESB, with the support of the Government's Climate Action Fund, is rolling out high power charging hubs across the country. These hubs will be capable of quickly charging between two and eight vehicles simultaneously and will facilitate vehicles travelling longer distances across Irelands National and Motorway routes.

1.4 ESB Telecoms & Telecommunications Infrastructure

ESB Telecoms has grown from its original function of providing a communications system for ESB to become one of Ireland's leading independent telecommunications infrastructure provider with over 400 locations nationwide. ESB Telecoms now provides network solutions for a wide variety of mobile network operators, wireless broadband providers and public sector business activities. All sites developed by ESB Telecoms are made available to third party mobile phone and wireless broadband operators as points for co-location. Our open policy of sharing infrastructure limits the overall number of telecoms structures appearing in urban and rural landscapes.

Our telecoms fibre network wrapped on our 110kV electricity network provides an extensive network throughout Ireland with International connectivity to the UK. In addition, SIRO (a joint venture between ESB and Vodafone) is bringing 100% fibre-to-the-building to 50 towns across Ireland enabling speeds of 1 Gigabit per second. SIRO will continue to accelerate this roll-out in 2020.

2. PLANNING POLICY & PROPOSED DRAFT CDP

In reviewing the Issues Paper, ESB has a number of observations in relation to the key issues identified that may set the framework for the future development of the County. ESB acknowledges that the process of preparing a new CDP shall be informed by the hierarchy of planning policy in Ireland. Both the National Planning Framework (NPF) and the Regional Spatial Economic Strategy (RSES) contain policies in relation to Energy Infrastructure.

In addition, we welcome the recognition that the CDP will play an important role in influencing a reduction in Green House Gas (GHG) Emissions by guiding the sustainable growth of the county. ESB is working towards the delivery of Ireland's target (part of the pledged EU target) of at least 40% reduction in domestic GHG emissions by 2030 compared to 1990 levels.

The draft 2030 National Energy and Climate Plan envisages a target of at least 55% renewable energy in electricity by 2030. In 2019, the Minister of Communications, Climate Action and Environment committed to raise the amount of electricity generated from renewable sources to 70% by 2030 with no generation from peat and coal in the Climate Action Plan. This ambition is needed to honour the Paris Agreement. It represents a significant change for the electricity industry and ESB is committed to doing its part in supporting and delivering on the Government's energy policy. We welcome the recognition in the Issues Paper that;

> *"The Clare County Development Plan must take account of the significant challenges that are present as a result of the effects of climate change. It is critical that the plan sets out policies and objectives that support the development of a low-carbon, climate resilient County."*

ESB supports a review of the CDP which will include policies and objectives to support the delivery of energy infrastructure to meet future energy needs.

2.1 Electricity Transmission & Distribution

Both the NPF and the RSES contain promoting policies in relation to Energy Infrastructure and ESB fully supports the reinforcement of those policies at a local level. Under the *Transport and Infrastructure* Section in the Issues Papers it states that;

> *"The provision and maintenance of high-quality service infrastructure is vital to attracting and retaining economic development and improving the quality of life in the County."*

The NPF and RSES for the Southern Region supports the enhancement and upgrading of existing infrastructure and networks and the safeguarding of strategic energy corridors from encroachment by other developments that would compromise the delivery of energy networks. The new County Development Plan 2022 – 2028 must continue to ensure that the long-term operational requirements of existing utilities are protected, and we would welcome continuance of policy and zoning objectives that safeguard strategic energy corridors.

Due to established electricity generation, there is strategic transmission infrastructure traversing the County. The existing County Development Plan deals with the Electricity Networks under Section 8.8.4 and it recognises that new transmission infrastructure and upgrades to existing infrastructure is required to ensure ongoing adequacy of regional connectivity and to facilitate the connection of renewable energy resources. In this regard, we support the retention of existing Development Plan Objective CDP8.38 (A-E) in the new plan.

2.2 Generation & Renewables

To achieve a transition to a low carbon, climate resilient and environmentally sustainable economy and in line with the Government's response to the Climate Change Crisis, ESB is committed to leading the delivery of a low carbon energy sector. We are implementing programmes supporting the Government strategies to reach Ireland's 2030 reduced emissions targets and increasing renewables in our power system from 30% to at least 55% with a broader range of technologies likely to be deployed, e.g. offshore wind, solar, biomass.

ESB welcome the vision set out in the *Climate Change Renewable Energy and Environment* Section of the Issues Paper, calling for consistency with current standards;

> *"Renewable and Wind Energy Strategies help to guide the transition away from fossil fuel use towards a renewable low-carbon energy future. The County Development Plan will consider the future of renewable energy sources within the county to ensure that they are up to date and align with the objectives of the NPF, RSES and national guidelines."*

In this regard, we support a review of Volume 5 & 6 of the existing CDP, the *Wind Energy Strategy* (WES) and the *Renewable Energy Strategy* (RES) in the context of full alignment with the objectives of the NPF, RSES and national guidelines.

2.2.1 Solar

We note the number of solar projects which have sought planning permission in County Clare in recent years. Solar projects will play a critical role in diversifying our renewable generation

portfolio for the period out to 2030. Ireland is in a great position to take advantage of the significant reduction in the cost of solar energy over the past few years as the technology has advanced with the potential to provide a clean, diversified renewable electricity source for decades to come. Solar energy is suited to Ireland's climate and we expect to follow the trend of other European countries and see increasing deployment of rooftop and grid scale solar energy. There is a strong correlation between wind and changing weather systems. In times of low wind there are often good solar conditions. In this regard, we welcome the continuance of Objectives RES 8.2 (A-E), as set out in the Clare RES that encourages the facilitation of large-scale solar PV installations in the County.

2.2.2 Onshore Wind Energy & County Wind Energy Strategy 2017-2023

Based on SEAI analysis, February 2020 provided a record-breaking month with 56% of energy demand met by wind energy, the highest monthly total since records began. In the 12 months to end of January 2020, wind and other renewable sources, hydro, solar and biomass accounted for 37% of demand. This is an encouraging trend, but further acceleration of deployment is necessary to achieve the Government's target for electricity of 70% from renewables by 2030.

ESB owns and operates Moneypoint Wind Farm (17MW) in County Clare. The County Clare WES forms Volume 5 of the existing CDP. The WES sets out the Clare Wind Energy Strategy and the planning framework for development of wind energy in the county. An Objective of the Strategy is to;

> *"To develop a Wind Energy Strategy having regard to the Wind Energy Development Guidelines, Guidelines for Planning Authorities (DoEHLG, 2006) (the Planning Guidelines issued by the Department of Environment, heritage, and Local Government)."*

A review of the Wind Energy Development Guidelines 2006 has been underway since 2013. In June 2017 a *"preferred draft approach"* was jointly announced between the Dept. of Housing, Planning, Community & Local Government (DHPCLG) and the Department of Communications, Climate Action and Environment (DCCAE). The recently published Draft Revised Wind Energy Development Guidelines (2019) confirm the *"preferred draft approach"* which should inform the planning authority policy for wind energy development. Therefore, it is appropriate that planning policy and development management standards for sustainable wind energy developments are updated where required to reflect the revised guidelines.

As highlighted in Section 2.3.5 of the WES – *Landscape and Visual Impacts*, there is merit in assessing the County Development Plans and Wind Energy Strategies of adjoining counties. It is noted that there is good consistency across County Development Plan's and the Wind Energy Strategies of some counties. However, there is scope to improve on this consistency further in order to facilitate the development of windfarms across county boundaries. Implementation of Regional Policy Objective (RPO 98 and RPO 99) of the RSES would help ensure consistency across the region. Unless this is achieved, a windfarm development on one side of border may not have scale to compete in future Renewable Electricity Support Scheme auctions and therefore may never get built – thereby reducing opportunity for both counties to benefit from jobs, rates and community benefit schemes associated with the windfarm development.

2.2.3 Marine Renewables & Floating Offshore Wind

Chapter 10 of the RES sets out a comprehensive set of policies, objectives and targets to assist the development of the marine renewable sector. As highlighted, the emergence of opportunities to exploit offshore energy potential have developed significantly in recent years and will continue to do so as technology advances in this sector.

Floating offshore wind (FOW), it is a fast-maturing generation technology and is moving progressively and steadily towards a real commercial opportunity which could unlock the significant potential in Irelands deeper offshore areas. Most wind turbines today are fixed to the seabed, so-called bottom-fixed, in waters less than 60 metres deep. The next generation of offshore wind turbines are designed to float further out to sea, where winds are stronger, but the water depths make bottom-fixed designs uneconomic.

The technical resource available to floating offshore wind off the coast of Ireland is immense, with the SEAI, OREDP and the Programme for Government 2020 referencing up to 30GW. The majority of this potential is located in areas off the west coast. The Programme for Government 2020 acknowledges the role floating offshore energy will play in Irelands future, stating:

> *"We will also produce a longer-term plan setting out how, as a country, we will take advantage of the massive potential of offshore energy on the Atlantic Coast. This plan will set out how Ireland can become a major contributor to a pan-European renewable energy generation and transmission system, taking advantage of a potential of at least 30GW of offshore floating wind power in our deeper waters in the Atlantic."*

ESB's Brighter Future Strategy sets outs a major aspiration to develop in excess of 2GW of offshore wind in Ireland and the UK by 2030 and floating offshore forms part of that target. In recognition of this ambition, ESB entered into a development partnership with Equinor, a broad-based energy company in 2019. Equinor is a global leader in the development of floating offshore wind having successfully constructed Hywind Scotland, the world's first commercial floating wind farm located off the coast of Peterhead in Scotland. The partnership has identified a number of potential offshore wind development sites, one of which is a floating wind project located off the coast of Clare. The partnership is currently investigating a suitable site layout for this project and will shortly make a foreshore licence application to the Department of Housing, Local Government and Heritage in respect of this area.

The creation of a new industry presents a major opportunity for economic growth on the western seaboard and the Shannon Estuary has the potential to be at the centre of that development. We are of the view that the Moneypoint site represents the best location for the fabrication of floating wind substructures along the west coast of Ireland given both the presence of the deep-water jetty and its industrial character. The construction of this facility can become the catalyst for the creation of a broader offshore wind enterprise zone which can be a major employment centre for the region.

In this regard, ESB supports the Objectives and Targets, set out in Section 10.4 of the RES. In particular, RES 10.3 (A-C), which states, in Parts A & B, that it is an objective of Clare County Council;

> *"To actively explore and pursue opportunities to service the marine renewable energy sector at existing ports, to facilitate the growth of new ports, supporting infrastructure and associated development, in compliance with the Strategic Integrated Framework Plan for the Shannon Estuary and any future coastal zone management plans;"*

> *"To facilitate the expansion of ports and provision of additional quayside harbour working areas and /or additional quay length to further enhance their attractiveness to marine renewable industry developers;"*

The continuance and reinforcement of these Objectives and Targets will ensure the development of this key supporting ancillary onshore infrastructure required to support this emerging industry.

2.2.4 Energy Storage

Development Plan Objective CDP 8.41 supports the development of secure and appropriately scaled energy storage facilities in the County. Chapter 14 of the existing RES outlines some energy storage solutions but predominately focuses on Pumped Hydroelectric Energy Storage (PHES). Whilst we support the development of a PHES, we wish to highlight that, ESB continues to invest in programmes aimed at ensuring a secure supply of electricity using increasing amounts of intermittent and variable renewable generation. We are also investing heavily in the transmission and distribution systems to provide the infrastructure and operational requirements needed to facilitate an even greater reliance on renewable electricity. Storage systems such as battery storage, liquid air storage and synchronous condensers are some of the storage technologies being explored that will be essential to smoothing out the natural variability that occurs in renewable energy sources and to provide electricity at times of peak demand. In addition to Objective, RES 14.2, we would welcome the inclusion of specific policies supporting these new technologies.

2.2.5 Hybrid Renewables

Hybrid sites and hybrid units present an opportunity to provide more flexible plant with improved capacity factors with potential for optimising use of existing infrastructure. To this end, Eirgrid already allows an increase in the installed capacity of existing connections without increasing the Maximum Export Capacity (MEC). By developing hybrid renewables plant consisting of wind, solar and battery exporting from common point of connection, but at different times, the need for transmission infrastructure associated with new generation is minimised and grid stability can be improved on.

Additionally, repowering with hybrid renewables can grant a new lease of life to old windfarms and other generation sites. As recognised in the existing CDP, County Clare is exceptionally well served by the grid with two existing 400kV transmission lines providing a high capacity path for power to the east of Ireland. This is in addition to an extensive 220kV and 110kV network. For these reasons, there is a strong argument for giving hybrid renewables plant a favourable consideration in suitable locations in County Clare & elsewhere in Ireland.

Overall, ESB supports the promotion of energy infrastructure objectives and submit that they must **continue to protect the County's future capacity for the development of energy generating**, processing, transmission and transportation infrastructure whilst encouraging the sustainable **development of the County's renewable energy resources.**

2.3 Moneypoint & Shannon Estuary

As mentioned previously, ESB owns and operates Moneypoint Generation Station located near Kilrush, Co. Clare. The overall site operational site area is 561 acres; the area within ESB ownership measures c.398 acres and the foreshore lease area is c.163 acres. Moneypoint Generating Station has an installed capacity of 915MW with the recently installed Windfarm with 17MW installed capacity. Moneypoint continues to be strategically important in terms of capacity and security of supply through providing diversity in fuel supplies and providing critical energy storage in an increasingly volatile global energy market. However, as Moneypoint nears the end of its operating life in its current configuration, more suitable low carbon generation technology will have to be identified to capitalise on the extensive Marine, Transmission, Distribution and ancillary facilities at this strategically important location.

- The existing CDP (Section 6.3.7) recognises the importance and significant contribution that Moneypoint Power Station makes to the local economy. We support the continuance of Development Plan Objective CDP6.10 which states;

"To facilitate the diversification and expansion of Moneypoint Power Station and to work with all relevant stakeholders to identify and secure alternative future uses for the Strategic Development Location, that complement and are compatible with the existing energy use, in accordance with the findings and recommendations in the SIFP, in order to ensure on-going employment and support economic growth in the West Clare area."

On page 14 of the Issues Paper, it poses the question; *How can we support the future of Moneypoint?* In the context of Strategic Integrated Framework Plan (SIFP), we recognise that the Shannon Estuary is of both national and international importance and can support act an international economic hub by harnessing the potential of offshore and onshore renewables. ESB support the proactive implementation of the SIFP for the Shannon Estuary. In particular, we support the continued promotion of Moneypoint & Adjacent Lands as a Strategic Development Location (SDL) in the SIFP, including Development Objectives SIFP MRI 1.2.2 & SIFP MRI 1.2.3., which state;

SIFP MRI 1.2.2 Moneypoint Strategic Energy Location
"To safeguard the role and function of ESB Moneypoint as a key strategic driver of economic growth in the Region, encouraging its sustainable growth, operational expansion and diversification in accordance with national and regional energy objectives."

SIFP MRI 1.2.3 Moneypoint Marine Related Industry
"To support and facilitate the development of marine related industry on lands adjacent to Moneypoint, which is compatible with the primary use of this SDL, as a Strategic Energy Location, subject to compliance with criteria in SIFP MRI 1.2."

In this context, the ESB landholding at Moneypoint will remain an important site for electricity generation and associated infrastructure into the future. In considering the future of Moneypoint we are guided by the need for the protection of this site, to ensure the continuation of core power generation, transmission and distribution functions and to ensure that future expansion requirements in this area are not compromised by inappropriate neighbouring land uses or activities. It is important to recognise that the considerable incremental investment over the last forty years makes Moneypoint a site-specific location the significant strategic importance.

2.3.1 Connection to Transmission Grid

The Moneypoint facility comprises a major hub for electricity transmission at 400kV and has a significant role in the continued provision of a secure and reliable electricity supply to the region and the State generally. The Cross Shannon Cable Project is a submarine 400kV link between the electricity substation at Kilpaddoge in North Kerry to the Moneypoint generating station. It is planned that these cables and associated infrastructure will be constructed in in 2022 and made operational in 2023. This electrical infrastructure will operate in conjunction with the electricity transmission cables that have been laid previously in the Shannon Estuary including the Moneypoint - Kilpaddoge 220 kV cables which were installed in 2015.

This infrastructure provides three essential functions and has the potential to develop Hybrid Generation solutions as outlined above in section 2.2.4.:

- It connects the generation plant to the National Grid system.

- It forms one of the Bulk Supply Points supplying the region.
- It is an essential component of the ESB meshed transmission system.

2.3.2 Direct Access for Shipping Traffic

To provide for diversity in the source of energy supply, there is a need for direct access to shipping traffic. Accordingly, the existence of coastal generating stations, such as Moneypoint, are essential for the long-term security of electricity supply in Ireland. Moneypoint is a cable landing point for existing submarine cables in the Shannon Estuary with additional 400kV submarine transmission cables planned for installation in 2022.

In addition, given the scale of the landholding, Moneypoint has the potential to facilitate the delivery and storage of wind turbine components and transformers for use onshore or offshore. Moneypoint has the infrastructure and available berthing, support facilities and equipment necessary to support offshore renewable energy activities with the capacity to ensure environmentally safe and sound operations. As highlighted in Section 2.2.2, the Moneypoint site represents the best location for the fabrication of floating wind substructures, given both its deep-water jetty and its overall industrial character. ESB has identified a number of potential offshore wind development sites, one of which is a floating wind project located off the coast of Clare. Any such development would make landfall at Moneypoint for connectivity to the existing transmission and distributions systems and ancillary plant.

The footprint of Power Stations is subject to constant change due to the changing nature of technologies and increasing energy demands. There is limited room for expansion of core power generation, transmission and distribution facilities on the Power Station sites including jetty and other ancillary plant. Therefore, it is necessary for ESB to safeguard power station sites at these strategic locations for the efficient production of electricity into the future.

The Shannon Integrated Framework Plan (SIFP) recognised the importance of the Shannon Estuary including a wide range of strategic economic assets including Moneypoint which is identified as Strategic Development Location 'B'.

2.4 Ardnacrusha & Hydro Lands

For the purposes of the Clare County Development Plan the key elements of the Shannon Scheme comprise Ardnacrusha Power Station, Parteen Weir, the Head Race and Tail Race Canals. In addition, there is Transmission, Distribution, Fisheries, engineering plant and equipment which are integral to operations.

Ardnacrusha Hydro Electric Power Station has been strategically located in order to facilitate use of the River Shannon. The Headrace and Tailrace Canal is a purpose-built water course used in conjunction with Ardnacrusha Power Station for the generation of electricity. The Headrace Canal is a 12.6km canal into which part of the Shannon is directed and conveyed to Ardnacrusha. The water emerging from the power station is carried by a 2.4km long Tailrace Canal back into the Shannon. The lands in ESB ownership which border the Headrace and Tailrace Canal are an integral part of this infrastructure.

Ardnacrusha Power Station is the largest of its type in the country. It currently has a capacity of 86MW. About two percent of Ireland's electricity generating capacity is in the form of hydropower. This power derives mainly from ESB's hydropower stations, with minor contributions coming from smaller, independently owned sites. Ardnacrusha accounts for about 40% of ESB's Hydro Generating Capacity and is fully integrated into the local and national electricity transmission and distribution network.

Parteen Weir is a Category 'A' dam that controls the flow of water from the Shannon and divides it into both the headrace serving the power station and the original river channel. Therefore, ongoing dam safety measures, and associated works for their implementation, are of critical importance. The control of water levels is the key function of the weir and adequate control of these water levels plays an essential role in the continued successful operation of Ardnacrusha power station and the control of water in the river, both upstream and downstream of the dam.

The Headrace and Tailrace Canals are an essential component of Ardnacrusha Power Station and are essential to the provision of electricity. ESB needs to maintain unimpeded access to the Headrace and Tailrace Canal Lands for the critical purpose of ongoing regular maintenance, checking for and monitoring leakage from the canal, monitoring of pore water pressure and in the event of emergency due to embankment damage/failure.

When the station is generating at full capacity an exceptionally strong current is created. In addition, embankments and rock cut sections have steep inclines. Irish Water Safety carried out an independent audit and issued a comprehensive set of risk assessments recommending, among other things, that access to the Headrace and Tailrace Canal Lands should be discouraged in the interests of public safety. ESB note that the *"Lough Derg Way"* traverses the Headrace Canal Lands at O'Brien's Bridge and Clonlara. ESB will continue to express their cautious support for this public walkway due to its established nature. However, ESB would not encourage its continued expansion into the future.

2.5 Telecommunications

A high quality and competitive telecommunications service is considered essential in order to promote industrial and commercial development and to improve personal security, enhance social inclusion and mobility. This view is reinforced in the Issues Paper *Transport & Infrastructure* where it highlights that;

> *"The communications sector plays a substantial role in supporting development and attracting inward investment, therefore it is essential that our communications network is of a high quality, reasonably priced and available throughout the country."*

Section 8.8.10 *Telecommunications,* and Development Plan Objective CDP 8.44 *Telecommunication Infrastructure* in the current Development Plan sets out the requirements for a proposal for planning permission for telecoms infrastructure. ESB supports the continuance of this Objective and the view of Clare County Council that to facilitate the provision of telecommunications services at appropriate locations within the County;

> *"Having regard to the DoEHLG 'Telecommunications Antennae and Support Structures (1996), Guidelines for Planning Authorities 1996 (as updated by PL 07/12 of 2012)."*

ESB's telecoms infrastructure in the county continues to assist in delivering enhanced communications networks through the provision of backhaul fibre and shared telecommunications towers. The updated Guidelines facilitate the improved development of telecommunications infrastructure and promotion of a policy of co-location. All ESB Telecoms Mast sites are open for co-location and duplication of infrastructure is reduced as a result. ESB supports the Telecommunications policy that promotes co-location.

ESB encourages policies consistent with the Department Circular to allow for the improved development of telecommunications infrastructure, particularly broadband capability in the area.

2.6 Sustainable Transport & Electric Vehicles

With Ireland's natural advantages in terms of wind and other renewables a large proportion of the power used by electric cars will be carbon free in the future. The Irish Government's Climate Action Plan 2019 has set stretching targets for EV adoption in Ireland in order to address energy demand and reduce emissions from Transport including achieving:

- 840,000 passenger vehicles by 2030.
- 95,000 electric vans and trucks by 2030.
- Procuring 1,200 low-emissions buses for public transport in cities.
- Building the EV charging network to support the growth of EVs at the rate required and develop our fast-charging infrastructure to stay ahead of demand.

The above targets demonstrate that EV's (incl. plug-in hybrid electric vehicles PHEV's) are central to Government targets for zero carbon emissions transportation systems. The establishment of EV infrastructure by ESB and the associated EV usage aligns with the key principles and benefits of sustainability and the National Climate Change Strategy on reduction of emissions.

ESB welcome the support for Electric Vehicles as set out under Development Objective CDP 18.4 – *Energy Efficiency*, part D, where it states;

> *"Facilitating the provision of installations for powering electric vehicles at convenient locations across the County."*

This is reinforced under RES 15.1 – *Energy & Transportation* and in Appendix 1 of the CDP – *Development Management Guidelines* under A1.9.3 *Car Parking and Bicycle Parking Standards* which calls for all car parks to be constructed to be capable of accommodating charging points as required.

However, with the preparation of a new County Development Plan, an opportunity exists to ensure that policy in this area is consistent with National and Regional Policy in relation to the provision of electric vehicle infrastructure. ESB wish to take this opportunity to highlight the standards required in order to achieve the desired targets for Electric vehicles.

S.I. No. 325 of 2014 ROAD TRAFFIC (TRAFFIC AND PARKING) (CAR CLUBS AND ELECTRICALLY POWERED VEHICLES) REGULATIONS 2014 makes provision for EV parking in public areas. Therefore, in order to meet the targets of the Governments Electric Transport Programme, we respectfully submit that Clare County Council should strengthen their support for the roll-out of EV infrastructure with the inclusion of following updated parking standards:

2.6.1 Proposed parking standards for Draft CDP

1. ***For Developments with Private Car Spaces (residential and non-residential) including visitor car parking spaces e.g. office –spaces***

    a. *At least one parking space should be equipped with one fully functional EV charging point in accordance with IEC 61851 Standard for Electric Vehicle Conductive Charging Systems. This should be capable of supplying 32A 230V single phase AC electricity and be equipped with Mode 3 protection. It should be fitted with a Type 2 socket as defined by IEC 62196.*

b. *It should be possible to expand the charging system at a future date (e.g. by installing appropriate ducting now) so that up to 10% of all spaces can be fitted with a similar charging point.*

2. ***For Developments with Publicly Accessible Spaces (e.g. supermarket car park, cinema etc.)***

   a. *At least one parking space should be equipped with one fully functional EV charging point in accordance with IEC 61851 Standard for Electric Vehicle Conductive Charging Systems. This should be capable of supplying 32A 230V single phase AC electricity and be equipped with Mode 3 protection. It should be fitted with a Type 2 socket as defined by IEC 62196.*

   b. *It should be possible to expand the charging system at a future date (e.g. by installing appropriate ducting now) so that up to 10% of all spaces can be fitted with a similar charging point.*

   c. *The Charge Point Parking space(s) should be clearly marked as being designated for EV charging.*

   d. *Appropriate signage indicating the presence of a charge point or points should also be erected.*

   e. *All charge points fitted in publicly accessible areas should be capable of communicating usage data with the national charge point management system and use the latest version of the Open Charge Point Protocol (OCPP). They should also support a user identification system such as RFID.*

As the use of electric vehicles continues to increase the Council may increase the number of parking spaces to be equipped with fully functional charge points in either of the above cases.

The above standards or similar have been implemented in the latest review of development plans by planning authorities in Ireland. Promoting policies and objectives are facilitating growth in charge point infrastructure, to become a comprehensive network of public and domestic charge points with open systems and platforms accessible to all supply companies and all types of electric cars.

3. CONCLUSION

Investment in infrastructure is crucial to the economic and social well-being of our country. Such investment creates jobs, stimulates economic activity and provides modern, efficient facilities to provide the services that people need including healthcare, education and community services amongst others. There is a significant multiplier effect from investment in infrastructure which means that it stimulates growth in the local economy. This investment in infrastructure is also necessary to support EU and national policy on Climate Change adaptation and mitigation.

ESB, Ireland's leading electricity utility, is building a truly sustainable company by investing in smart networks, renewable energy and modernising the generation portfolio. Sustainability, both within the company and in the services, we provide, is integral to our corporate strategy. We are committed to reducing carbon emissions and addressing long-term concerns over future fuel supplies. ESB is implementing energy strategies that support the transition of Ireland to a low-carbon and ultimately post-carbon economy to

become a competitive, resilient and sustainable region. We request that due consideration is given to the issues raised in this submission, most particularly, that the Draft County Development Plan includes the clear policies outlined in relation to:

- Ensuring that the long-term operational requirements of existing utilities are protected. The importance of existing infrastructure and the associated Power Generation, Transmission and Distribution operations are strategic and national in nature.

- Renewable energies are an integral part of our fight against climate change. The need for curtilage management and for the restriction of land uses for the Shannon Scheme, between Parteen Weir and Ardnacrusha Power Station, is critical to maintain the ability for ESB consolidation and/or expansion as well as essential access, monitoring and maintenance of the canal banks.

- ESB support the approach of an inter-jurisdictional land and marine based framework plan (SIFP) and the policies of the current County Development to guide the future development and management of the Shannon Estuary. Moneypoint Power Station is a strategic energy hub within the Shannon Estuary plan area with the associated national grid infrastructure facilitating the growth of further synergistic industries and renewable generation.

- The Draft Plan should maintain the planning policies which protect the county's future capacity for the development of energy infrastructure whilst encouraging the sustainable development of renewable energy resources, including energy storage systems. This will enable ESB to develop and maintain *a safe, secure, reliable, economical and efficient electricity Generation, Transmission and Distribution System with a view to ensuring that all reasonable demands for electricity are met having due regard for the environment.*

- For the development of wind projects, the recently published Draft Revised Wind Energy Development Guidelines (2019) should inform the planning authority policy.

- Facilitating expansion and improvement in telecommunications infrastructure and to help position the county to attract intellectual & physical capital and to act as a mechanism to improve virtual connectivity.

- Promoting, encouraging and facilitating the use of sustainable modes and patterns of transport, including electric vehicles, with appropriate Parking Standards that will set minimum levels of parking provision for EVs.

If we can be of any further assistance, or if you wish to clarify any of the points raised, please do not hesitate in contacting the undersigned.

Yours sincerely,

Gerard Crowley.

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