Roscommon County
Development Plan
2021-2027

Submission on the Draft Roscommon County Development Plan 2021-2027

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Name

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What is the topic of the submission?

Infrastructure, Transport and Communications, Climate Action, Energy and Environment

Submission

Please see attached submission on behalf of the ESB

Or

Attached Submission

ESB SUB TO ROSCOMMON DRAFT CO. CDP 2021 - 2027 ISSUED.pdf, 0.35MB

Energy for generations

ESB Group Property

Draft Roscommon County Development Plan 2021-2027

Submission on behalf of ESB to the Draft Roscommon CDP 2021-2027
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1. INTRODUCTION

Electricity Supply Board (ESB) welcomes this opportunity to make a submission to the Draft Roscommon County Development Plan (CDP) 2021 – 2027. ESB is an employer in Roscommon 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 of the Draft CDP. As outlined in the Draft Plan, 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 final CDP 2021 - 2027.

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 can deliver sustainable and competitive energy supplies to customers. ESB operates a renewable energy portfolio that has the capacity to supply over 1,003 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. Progressing towards achieving carbon net-zero operations is consistent with the objectives of the National Planning Framework (NPF) and Regional Spatial & Economic Strategy (RSES) for the Northern & Western Region.

1.2 Generation, Transmission & Distribution

It is our ambition that ESB will generate 40% of our electricity from renewable assets by 2030, significantly contributing to the national target of 3.5GW of offshore wind, 8.3GW of onshore wind and 1.5GW of solar. We remain committed to completely transforming our generation portfolio, replacing old plant with a mixture of renewables and high efficiency gas.

To support the transition of the electricity system to a low-carbon future ESB is developing assets such as battery storage and flexible gas fired units at our existing generating sites that respond quickly to system demand, which will be key to facilitating large scale renewables in the future.

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 County Roscommon 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 2020 over 28,500 new residential and business connections were completed. The focus of 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 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 Ireland's National and Motorway routes.

ESB's plans include investment in a green hydrogen production, storage and generation facilities by the end of this decade. A clean, zero-carbon fuel, green hydrogen will be produced from renewable energy. This is fully aligned with the EU strategy launched in 2020 on energy sector integration which prioritises a more 'circular' energy system, with energy efficiency at its core, greater direct electrification and using a renewable fuel like hydrogen for end-use applications where direct electrification is not feasible such as heavy goods transport, high temperature industrial heat and the cement/oil industries.

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 providers 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 and cities across Ireland, including areas in County Roscommon and enabling speeds of 1 Gigabit per second. SIRO will continue to accelerate this roll-out in 2021.

2. PLANNING POLICY & PROPOSED DRAFT CDP

ESB acknowledges that the process of preparing a new CDP, as set out in Chapter 1 of the Draft Plan, shall be informed by the hierarchy of planning policy in Ireland. This is confirmed in section 1.1 of the Draft Plan that states the CDP is set within the framework of the objectives of both the National Planning Framework (NPF) and the Regional Spatial Economic Strategy (RSES).

We welcome the inclusion of a dedicated Renewable Energy Strategy (RES), in addition to other climate action related Policy Objectives throughout the plan. This approach 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.

In 2019, the Minister of Communications, Climate Action and Environment committed to raise the amount of electricity generated from renewable sources to 70% in the National Climate Action Plan by 2030 with no generation from peat and coal. 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. This aligns with the aims of the Draft Plan set out under Strategic Aim No. 1.

> *"Achieve a transition to a competitive, greener, low carbon, climate resilient and environmentally sustainable county, facilitated through reducing the need to travel, by integrating land use and sustainable modes of transport, by reducing the use of non-*

renewable resources and by promoting and facilitating renewal energy initiatives on a domestic and commercial scale."

In reviewing the Draft CDP, 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 supports a new 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 that will accommodate the ongoing generation, transmission and distribution of electricity. The County Development Plan 2021 – 2027 must continue to ensure that the long-term operational requirements of existing utilities are protected. In this regard, ESB support the continuance of CDP Policy Objective CAEE 8.9 in the Draft CDP, where it states.

"Work in collaboration with EirGrid and other service providers and statutory bodies to facilitate a modern electricity network within the county, in line with recognised best practice. The Council will require comprehensive studies to be undertaken for all technical and environmental considerations, to inform the assessment of proposed transmission routes."

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. In this regard we welcome the inclusion of Section 5 in the RES recognising the importance of future development of the National Grid and its role in facilitating renewable energy generated power onto the transmission network.

The provision of a secure and reliable electricity transmission infrastructure and transmission grid is essential to meet the growth in demand and ensure that a reliable electricity supply is available. Roscommon has a very strong electrical grid and substation network and this network will be instrumental in supporting the development of the renewable energy industry in the county.

2.2 Generation & Renewables

In line with the Government's strategies to reach Ireland's 2030 reduced emissions targets ESB is increasing renewables in our power system from 30% to at least 70% with a broader range of technologies likely to be deployed e.g. offshore wind, solar, biomass etc.

ESB welcome the vision and ambition set out in Chapter 8 of the Draft CDP – *Climate Action, Energy and Environment* and the commitments stated in Section 8.5.

"In line with the Climate Action Plan (2019) and Project Ireland 2040, Roscommon County Council is committed to transitioning to a low carbon and climate resilient county."

In reviewing Chapter 8 and the RES, ESB acknowledge the overall consistency and alignment with the objectives of the NPF, RSES and national guidelines along with the ambition of Roscommon County Council to contribute to achieving national targets in consultation with local communities and businesses. This confirmed by Plan Objective CAEE 8.4

"Encourage and facilitate the various forms of renewable energy development detailed in the Renewable Energy Strategy that accompanies this Plan (as well as any other new forms of renewable energy which may be developed during the lifetime of this Plan), subject to satisfying the principles of proper planning and sustainable development."

ESB are developing assets that will support the grid to transition to a low-carbon future such as battery and energy storage assets and flexible gas fired units that respond quickly to system demand, which will be key to facilitating large scale renewables in the future. Set out below are comments in relation to these renewable technologies and ancillary developments in the context of the Draft Plan and our plans in County Roscommon.

2.2.1 Onshore Wind Energy

Based on SEAI analysis, February 2020 provided a record-breaking month with 56% of electricity 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 as highlighted in the RES and more specifically RES AIM 2, further acceleration of deployment is necessary to achieve the Government's target for electricity of 70% from renewables by 2030.

RES AIM 2
"Assist in achieving the national targets for energy from renewable energy, from renewable resources and reducing greenhouse gas emissions associated with energy production."

ESB support the plan led approach to wind energy development through the identification of areas for wind energy development adopted by Roscommon Co. Co. The intensive sieve analysis process followed, enables a structured and consistent identification of viable wind energy resources. RES Map (Fig. 7) in the Draft Plan provides comprehensive guidance for the development of wind energy projects in the County. As included in Policy Objective CAEE 8.5 we welcome that wind developments in areas designated as *'Most Favoured'* will be assessed having regard to the Wind Energy Guidelines (DECLG, 2006) and any update to the Guidelines that may issue during the lifetime of the Plan.

However, we wish to highlight that 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. ESB welcome this consistency, as it supports the development of windfarms across county boundaries. 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.

The plan led approach, consistent with national guidance as presented in the Draft Plan will ensure Roscommon County continues to deliver on its ambitions with regard to wind energy developments. However, there is an opportunity to strengthen the plan with the inclusion of Development Management Guidance to support the life-extension and repowering of existing wind farms. This entails extending the planning lifetime of existing windfarm with no or minimal new development. Well-maintained windfarms and associated plant can operate safely after a planning expiry date of 20-30 years. Existing wind farms have the benefit of acceptance by local

communities and contribute economically to the County through the payment of rates and community benefit funds.

2.2.2 Hybrid Renewables

Hybrid renewables consists of two or more renewable energy sources used together to provide increased system efficiency as well as greater balance in energy supply, whilst optimising use of existing infrastructure. 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.

As mentioned above, repowering with hybrid renewables can grant a new lease of life to existing windfarms and other generation sites. As recognised in the existing CDP, County Roscommon is well served by the grid with an existing 220kV transmission line providing a high capacity path for power to the east of Ireland. This is in addition to an extensive 110kV and 38kV network. For these reasons, there is a strong argument for giving hybrid renewables plant favourable consideration in suitable locations in County Roscommon.

2.2.3 Battery Storage & Hydrogen Energy

Energy Storage systems such as batteries, liquid air and synchronous condensers are some of the 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. As highlighted in the RES renewable energy sources have vast potential to reduce dependency on fossil fuels and greenhouse gas emissions.

ESB are installing Battery Energy Storage Systems (BESS) at existing generating facilities across Ireland. BESS will operate by charging batteries using electricity exported from the national grid. When the stored energy is required, it can be released to stabilise the frequency of the electricity network or provide energy during periods of electricity shortages. With the inclusion of Policy Objective CAEE 8.6 the Draft Plan highlights its support for energy storage systems.

> *"Facilitate proposals for energy storage systems and infrastructure, which support energy efficiency and reusable energy systems, provided such proposals accord with the principles of proper planning and sustainable development of the area."*

ESB wish to highlight, that Green Hydrogen, which is produced from renewable energy sources, offers potential for large scale seasonal storage of variable renewable energy. This enables zero carbon backup to the power system when intermittent renewables such as wind and solar are not available. Large scale Green Hydrogen production and storage could leverage the continental scale of Ireland's renewable energy potential to enhance Ireland's energy security and to make Ireland a net exporter of energy.

There is scope to expand the RES with the inclusion of specific policies supporting these new technologies.

2.2.4 Renewables-Enabling Plant

Notwithstanding the Government's aim to increase the percentage of electricity generation from renewables to 70% by 2030, the contribution from non-renewable sources will still consist of 30%. Furthermore, on dull still days or nights, 100% of all electricity may sometimes need to come from non-renewables generation.

Therefore, it will be a necessary to connect additional non-renewable plant to the grid. This efficient plant can be applied rapidly to provide operational flexibility and the required grid support services, when needed. Typical plant consists of fast-responding gas turbines (i.e. FlexGen plant) to provide backup power and synchronous condensers to provide inertia & grid stability. FlexGen gas turbines need to be located close to existing 110kV or 220kV stations and the gas grid.

2.2.5 Solar

Photovoltaic (PV) systems which produce electricity directly from solar radiation are becoming more widespread as their advantages become apparent and as costs fall. Section 6.4 of the RES supports the growth in solar photovoltaics and solar thermal use in the County. As outlined, larger solar farms have potential to be built on agricultural land, whilst also accommodating the continued use of the land for grazing.

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.

Roscommon County Council has significant existing grid network presenting the opportunity to maximise energy generation by solar means. In this regard and in the absence of national planning guidelines for solar developments we welcome the support for the development of this new technology in the County.

Currently, Solar PV developments can take in excess of 5 years to develop to construction phase. Securing a grid connection, relevant support tariff or corporate power purchase agreement and securing project finance has introduced significant delays for developers. Therefore, notwithstanding the provisions of Section 42 of the Planning & Development Act 2000 (as amended), it may be more appropriate for the Planning Authority to retain the option to grant permission for a longer period if requested by the developer in appropriate circumstances.

In addition, the lifetime of solar developments is extending with most technologies now suitable for a minimum of 30 years operation. Investment decisions for projects are being made on project lifetimes of up to 40 years. In this regard, ESB request that permissions are granted with a lifetime up to a maximum of 40 years. Concerns regarding the deterioration of the infrastructure can be addressed by the lodgement of a financial security in the form of a bond and the requirement to provide a Decommissioning Plan, as specified. This will ensure that the development is maintained until decommissioned and appropriately restored to agricultural use.

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 Telecommunications

The provision of high-quality telecommunications infrastructure is recognised by Roscommon County Council as critical to the development of a knowledge economy and will help attract inward investment in hi-tech, knowledge-based industries.

ESB supports the approach and the view of Roscommon County Council that to facilitate the provision of telecommunications services at appropriate locations within the County, the applicant must demonstrate compliance with national guidance. The updated guidelines facilitate the improved development of telecommunications infrastructure and promotion of a policy of co-location. In this regard, we support Policy Objective ITC 7.60.

> *"Encourage co-location of antennae on existing telecommunications structures. The shared use of existing structures will be required where the numbers of masts located in any single area is considered to have an excessive concentration."*

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. In addition, ESB Telecoms are working with ESB Networks to upgrade internal ESB Communications Networks to facilitate the roll-out of ESB's 'Smart Metering' project. The successful delivery of 'smart metering' is a central component of Ireland's plan to combat climate change through the reduction of unnecessary energy usage. Due to the extent and reach of the electricity network, additional masts may be required in some locations to ensure the delivery of 'smart metering' to all areas. ESB Telecoms will work within the development management standards to deliver this infrastructure.

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 national guidance to allow for the improved development of telecommunications infrastructure, particularly broadband capability in the area.

2.4 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.

The support for Electric Vehicles throughout the Draft Plan is acknowledged. Development Plan Objective ITC 7.21 outlines that infrastructure will be integrated into developments in line with national requirements. This is confirmed in Section 12.24 *Roads and Transportation* where it states.

> *"All developments should provide facilities for the charging of battery-operated cars at a rate of at least 10% of the total car parking spaces. The remainder of the parking spaces should be constructed so as to be capable of accommodating future charging points, as required. Rapid Charging points should be provided within centres of commercial activity in collaboration with ESB networks."*

ESB welcome the above initiative, however it is very important to note that the EU Energy Performance of Buildings Directive comes into force soon. The new Directive calls for an **increase to 20%** for the number of parking spaces which should have provision for electric vehicle charging infrastructure. In preparing the final County Development Plan, an opportunity exists to ensure availability is expanded, in line with the new directive so that the County is consistent with National and Regional Policy in relation to the provision of electric vehicle infrastructure over the lifetime of the new plan. Therefore, to ensure that the Roscommon County Plan increases the usage of electric vehicles to the levels required, we request that the amended standard below is included in Chapter 12 Development Management Standards in the final Plan (Below table 12.2).

> **Electrical Vehicles**
> *"All developments should provide facilities for the charging of battery-operated cars at a rate of at least ~~10%~~ **20%** of the total car parking spaces. The remainder of the parking spaces should be constructed so as to be capable of accommodating future charging points, as required. Rapid Charging points should be provided within centres of commercial activity in collaboration with ESB networks."*

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.

2.4.1 Other Sustainable Transport

ESB acknowledge that Roscommon County Council has considered *Renewable Energy in Transport* in the RES. In this regard we wish to highlight that, green renewable hydrogen enables the further electrification of transport, allowing the full decarbonisation of the transport sector, as well as improved air quality as the technology replaces diesel buses, diesel HGV and potentially some diesel trains across Ireland.

ESB is currently part of a new, in-service, trial of a fuel cell electric bus in the Dublin area. These buses are powered by hydrogen produced from renewable electricity from ESB's Ardnacrusha hydro-electric power station. ESB has been actively engaging with Hydrogen Mobility Ireland (a partnership of businesses, public sector and academic stakeholders) which is delivering a coordinated approach to the introduction of this new technology. This will ensure that Ireland can benefit from being an early starter in this solution to further decarbonise transport using renewable energy

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 final County Development Plan retains clear policies in relation to:

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

- The final 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 and hybrid renewables. 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.*

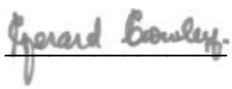
- It is appropriate that permissions for Solar PV are granted with a lifetime up to a maximum of 40 years which reflects the operational life and financial modelling for current solar technologies.

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

- The EU Energy Performance of Buildings Directive which comes into force shortly calls for an increase to 20% for the number of parking spaces which should have provision for electric vehicle charging infrastructure. By updating the Development Management Standards, an opportunity exists to ensure that the new County Development Plan will be consistent with National and Regional Policy in relation to the provision of electric vehicle infrastructure over the lifetime of the new plan.

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,



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