Energy for generations

esb.ie

27 Sráid Mhic Liam Íochtarach
Baile Átha Cliath, D02 KT92, Éire
Fón +353 1 676 5831

27 Lower Fitzwilliam Street
Dublin, D02 KT92, Ireland
Phone +353 1 676 5831

First Revision to the NPF Consultation,
Department of Housing,
Local Government and Heritage,
Custom House,
Dublin 1,
D01 W6XO.

12th September 2024

RE: ESB Submission to the Draft First Revision to the National Planning Framework (NPF) Consultation

Dear Sir/Madam,

I am pleased to submit the enclosed document titled "ESB Submission to the National Planning Framework (NPF) Review 2024" on behalf of the Electricity Supply Board (ESB) in response to this consultation on the draft revision to the NPF. This submission reflects ESB's commitment to advancing Ireland's energy infrastructure and achieving net zero emissions by 2040, aligning with the Government's strategic goals for sustainable development and climate action.

The attached document provides a comprehensive overview of ESB's strategic objectives and observations on the draft revision of the NPF. It highlights our dedication to fostering robust collaboration between the ESB, government, and local authorities to address priority areas such as housing, renewable energy capacity, the electrification of society, and the integration of renewable technologies.

The detailed feedback and proposed amendments within the document aim to enhance the NPF's framework, ensuring it effectively addresses Ireland's evolving energy requirements and supports the timely delivery of critical infrastructure.

We appreciate the opportunity to contribute to the First Revision of the NPF and are keen to continue our collaboration to realise a sustainable and resilient infrastructure that supports Ireland's economic development and prosperity.

Should you require any further information or wish to discuss our submission in detail, please do not hesitate to contact me.

Yours sincerely,

Marie Sinnott

Marie Sinnott
Company Secretary

Energy for generations

Electricity Supply Board

Consultation on the First Revision to the NPF

Submission on behalf of ESB to the First Revision to the NPF
12/09/2024

Contents

1. EXECUTIVE SUMMARY

The Electricity Supply Board (ESB) welcomes the opportunity to contribute to the First Revision of the National Planning Framework (NPF). Ireland is undergoing a significant transformation with climate action driving the rapid transition to full renewable electricity. This shift underscores the strategic importance of electricity infrastructure like never before. The NPF must prioritise the planning and development of electricity infrastructure. As Ireland's leading electricity utility company, ESB is committed to achieving zero carbon emissions by 2040, aligning with the Government's strategic goals for sustainable development and climate action.

To ensure Ireland's future growth, it is imperative that we foster robust collaboration and synergy between the ESB, government and local authorities. This unified approach is essential to address priority areas such as housing, the electrification of society and transport, meeting increased industrial demand, and integrating renewable technologies. By delivering on these priorities, we can build a sustainable and resilient infrastructure that supports our nation's development and prosperity.

Delivery of the foregoing requires immediate interventions and supports, including a significant shift in land-use and infrastructure management across all sectors, with a plan-led approach supporting delivery of critical infrastructure for the generation, distribution and transmission of electricity and enabling infrastructure such as ports and transportation hubs. In this regard, ESB is suggesting minor but important modifications to the NPF to better address Ireland's changing energy requirements and to expedite the delivery of critical infrastructure. The key issues addressed in this submission, include.

Electricity & Housing Delivery: Housing is a key priority for Ireland, and the supply of electricity to each new home is essential to the successful delivery of housing for all our citizens. ESB Networks emphasises the planning and development of electrical infrastructure to support future housing projects. We must ensure thorough collaboration between the government, local authorities, and stakeholders to ensure the timely delivery of infrastructure needed for sustainable growth.

Renewable Energy Capacity: ESB supports the NPF's goal to accelerate renewable energy deployment through regional and local targets for renewable electricity. The alignment of strategic national targets for the renewable sectors and development plans that provide a framework for positive planning decisions is critical in supporting deployment of new renewables and repowering of existing assets. Achieving these targets hinges on three critical factors: securing timely planning approvals supported by proactive land use plans, land access and fostering state agency collaboration to utilise existing infrastructure, and when required, expand transmission and distribution infrastructure effectively. Cooperation among stakeholders is essential to integrate renewable energy into the network seamlessly.

Repowering Existing Renewables: The repowering of existing renewable energy generators aligns with the European Commission's REPowerEU document. Repowering and maintaining existing renewables assets is essential if Ireland is to make real progress towards our ambitious targets. The NPF should be strengthened with an objective to highlight the importance of repowering and life extensions for renewable generators and their respective network connections, encouraging regional and planning authorities to favourably consider and facilitate these processes.

Electrification of Society: ESB is actively investing in smart, reliable network infrastructure to enable increasing levels of e-cars, public transport, electrification of heat and increased industrial demand for energy. ESB advocates for the NPF to ensure collaboration among government, local authorities, and infrastructure stakeholders to align planning and development efforts, facilitating the timely delivery of necessary infrastructure for the electrification of society.

Port & Marine Development: Prioritise the development of port infrastructure, to facilitate the development, maintenance and operation of off-shore renewable electricity generating developments; and to promote the development of mixed-use clusters of industrial development at appropriate locations.

Planning and Land Access: ESB highlights that securing timely planning permission and dedicated infrastructure corridors is crucial for delivering the electricity infrastructure needed to achieve the NPF's goals. Priority access to land will be essential for the delivery of critical electricity infrastructure.

Landscape Protection: ESB calls for the NPF to develop guidance on local landscape character assessments, including coastal landscapes and seascapes, to ensure a consistent approach to landscape character assessment.

ESB's submission underscores its commitment to advancing Ireland's energy infrastructure and achieving net zero emissions by 2040. The company is dedicated to collaborating with various bodies to support the implementation of the NPF, ensuring that Ireland's energy needs are met sustainably and efficiently. By leveraging its expertise and resources, ESB is well-positioned to lead the transition to a low carbon economy and support the country's long-term growth and development

2. INTRODUCTION

ESB welcomes this opportunity to make a submission to the First Revision of the NPF. As a strong, diversified, vertically integrated utility, ESB operates right across the electricity market; from generation, through transmission and distribution to supply of customers. Each of these segments is considered a regulated business and operates under licenses issued and enforced by the Commission for the Regulation of Utilities (CRU). However, in the interest of clarity and to support the revision of the NPF, this submission is on behalf ESB Group, covering all aspects of ESB businesses.

ESB is Ireland's leading electricity utility with approximately 2.3 million customers throughout the island of Ireland. The Company also has strong ambitions to lead in the decarbonisation of Ireland's energy sector, as captured in our corporate strategy which commits us to achieving zero carbon by 2040. In addition, ESB uses its networks to carry over 2,000 km of fibre optic cable for telecommunications to a total of 472,000 homes and to further provide charging infrastructure for electric vehicles.

ESB acknowledges the NPF as the Government's overarching strategic blueprint for directing future growth through to 2040. It also recognises that the Framework is undergoing revisions and updates to reflect the changes since its initial publication in 2018. The Draft Revised Framework indicates that by 2040, our country will see an additional one million residents. This population increase necessitates infrastructural development on a scale sufficient to meet the rising demand. Building world-class infrastructure is essential for Ireland to sustain its international competitiveness.

ESB supports the ambition of the Draft Revised Framework to create a single vision, a shared set of goals for every community across the country. Among the goals expressed as a National Strategic Outcome is the '*Transition to a Low Carbon and Climate Resilient Society'*, that recognises that new energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential energy sources such as wind, wave and solar. ESB welcomes the foregoing objective, however, as outlined in the submission below, we believe the final Revised NPF can be further strengthened with the inclusion of direct references to the decarbonisation of the energy system, going beyond just renewable energy but including all forms of energy generation, storage and enabling infrastructure.

2.1 Overview of ESB Strategy

As outlined earlier, ESB spans the entire electricity market—covering generation, transmission, distribution, and customer supply. We acknowledge the pivotal role of electricity in combating climate change by eliminating carbon and other detrimental emissions from the energy sector. Accordingly, ESB is committed to urgent, targeted actions to achieve net zero emissions by 2040, while developing the necessary infrastructure and services for our customers and society to adopt more sustainable living. This strategy aligns with Ireland's legally binding objectives under the Climate Action and Low Carbon Development (Amendment) Act 2021, which aims for net-zero greenhouse gas emissions by 2050 and a 51% reduction by 2030, aiding Ireland in its pursuit of climate targets and the transition to a low-carbon future. Our strategy has pinpointed three key strategic objectives essential to realizing our net zero goals.

2.1.1 Decarbonised Electricity

We are investing in sustainable energy solutions that harnesses the power of solar, wind, wave, storage and green hydrogen to provide a cleaner future. We will deliver a fourfold increase in our renewable generation portfolio to 5 GW by 2030 and double the amount of renewable energy connected to our networks over the same period. Meanwhile we continue to play a key role in maintaining our existing operations to support security of supply for

Ireland. Our objective is to develop and connect renewables to decarbonise the electricity system by 2040.

2.1.2 Resilient Infrastructure

To support transformation of the energy sector, ESB is embracing new technologies that are revolutionising the energy industry, including smarter electricity networks. Achieving net zero will require the deployment of these new energy technologies at massive scale that can provide reliable zero carbon energy when intermittent renewable power from the wind or the sun is unavailable. New technologies and fuels will be deployed to transition our thermal generation to a zero carbon dispatchable portfolio which, combined with existing and new storage assets, can compete to meet society's need for non-intermittent sources of energy. To this end, ESB Networks will invest in smart, reliable network infrastructure to enable increasing levels of housing, renewable generation, and to underpin widespread electrification of transportation and heating.

2.1.3 Empowered Customers

The ESB empowered customers strategic objective aims to support customers and communities in achieving net zero emissions. This involves providing sustainable energy solutions, making it easy for customers to participate in energy markets, and scaling the business to become the leading energy retailer in Ireland by 2030. The objective also includes partnering with leaders in EV and smart technologies and implementing solutions for network customers to enable the electrification of heat and transport.

ESB's progress towards achieving carbon net-zero operations is consistent with the objectives of the NPF.

2.2 ESB Generation

Mirroring Government objectives, by 2030 ESB will develop an additional 3.6 GW of new onshore and offshore wind, solar PV and storage assets to add to our 1.4 GW of renewables and storage operating today. By 2030, 63% of our electricity will come from renewable sources and we will be a net zero producer of electricity by 2040. ESB remains committed to completely transforming our generation portfolio, replacing old, inefficient plant with a mixture of renewables and high-efficiency gas capacity that can be transitioned to net zero fuels in future.

To support the transition of the National Grid to a low-carbon future ESB is developing assets such as battery storage, green hydrogen and flexible gas fired units that respond quickly to system demand. These will be key to facilitating large scale renewables in the future.

ESB's plans also include investment in alternative fuels, including 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 electrification using a renewable fuel like hydrogen for end-use applications where direct electrification is not feasible (e.g., heavy goods transport, high temperature industrial heat and zero carbon dispatchable electricity generation) will play a significant role in achieving carbon-neutral by 2040.

2.3 ESB Networks

ESB's networks businesses, comprising the licensed transmission system asset owner and distribution asset owner functions, and the ESB Networks DAC licensed distribution system operator function, are collectively referred to in this response as 'ESB Networks'.

ESB Networks works to meet the needs of all Irish electricity customers – generation and demand - providing universal access to the electricity system. ESB Networks delivers and manages the performance of a system of almost 157,000 km of overhead networks, 27,000 km of underground cables and 800 high voltage substations and over 1.8 million smart meters. ESB Networks invest circa €1 billion per annum in the electricity network and employ approximately 4,000 people, to deliver a reliable, resilient and sustainable network for almost 2.5m customers.

The transition to a low-carbon future powered by clean electricity requires a network that is resilient to the impacts of climate change and disruptive events such as storms and cyber threats. It also recognises we need to build capacity to connect the renewable generation to our network that will generate the clean electricity, and this will require a doubling of the amount of renewable energy currently connected to our networks by 2030. In addition, ESB Networks need to provide network capacity for the demand associated with significant population growth, new housing developments, economic growth, as well as a significant increase in demand due to the electrification of heat, transport and industry.

As part of ESB Networks Strategy – *"Networks for Net Zero Strategy"*, we have adopted a *'Build Once for 2040*' approach to ensure that the distribution network and supporting services, such as demand management, are designed and developed to meet the anticipated needs of customers in 2040 and to deliver a clean electric future. This will eliminate the need for repeated, costly and resource intensive interventions on the network by deploying solutions today, where possible, that are scalable to meet the needs of our customers and stakeholders in 2040.

Electricity networks are playing an increasingly important role in enabling the mass adoption of low carbon technologies including electrification of heat, electrification of public transport, electric vehicles and microgeneration, and the connection of large volumes of renewable generation. This provides opportunities and challenges for ESB Networks and increases the requirement for engagement and interaction with the national, regional and local planning processes.

2.4 ESB Roll-out of EV Infrastructure

ESB eCars builds, owns and operates Electric Vehicle Charging Networks for public use in Ireland (ROI), Northern Ireland (NI) and Great Britain (GB). Our public charging network comprises of over 1,600 charge points across the island of Ireland that includes thirty-six High-Powered Charging (HPC) hubs. These hubs are primarily located on motorway or primary routes and will provide 100km of range in six minutes.

In the Climate Action Plan (2024) 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 Ireland's National and Motorway routes.

2.5 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 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 over 50 towns across Ireland.

3. ESB OBSERVATIONS ON DRAFT REVISION OF NPF

In general, ESB strongly endorses the goals set forth in the NPF. We recognise that the NPF represents the Government's overarching strategic plan for guiding the future expansion and development of our country until 2040. ESB is committed to advancing decarbonised transportation, incorporating more renewable energy sources, and constructing the critical energy infrastructure necessary for economic progress and accommodating population growth. Our initiatives are consistent with the National Strategic Outcomes (NSO), the Climate Action Plan, and the objectives in Housing for All, fostering a sustainable future for Ireland.

In particular, NSOs 5 and 8 are particularly relevant to ESB. NSO No. 8, *Transition to a Low Carbon and Climate Resilient Society*, acknowledges the significant challenge faced by the electricity sector in meeting the targets established by the Climate Action Plan, highlighting that accelerating additional renewable electricity generation and transmission and distribution infrastructure is crucial. We appreciate the recognition under NSO No. 5 that Electric Vehicles will play an essential role in transforming the Irish transport system into one that is both green and sustainable, as part of a broader shift towards increased walking, cycling, and public transportation use.

Through this submission, our goal is to support and enhance the NPF by proposing minor modifications that refine the framework to better address Ireland's changing energy requirements while expediting the achievement of ambitious targets. Constructing the necessary infrastructure brings considerable challenges, such as securing timely planning permissions, coordinating with numerous agencies, and ensuring the availability of skilled labour and materials. Securing prompt planning consents for electricity infrastructure has proven difficult. The EU Renewable Energy Directive III (RED III) is supportive of streamlining the planning process and providing definitive information for investment in renewable capacity, transmission and grid infrastructure. An updated and revised NPF aligned with RED III provides an opportunity for improved overall alignment of the planning process and the timely delivery of critical infrastructure.

3.1 Part 1 – The Vision

3.1.1 Reducing Carbon Intensity

Section 1.2 *Making the Vision a Reality,* under the heading *Strengthened and more Environmentally Focused Planning at Local Level,* acknowledges tackling Ireland's higher than average carbon-intensity per capita requires harnessing our country's prodigious renewable energy potential.

Among the most critical measures in the Government's Climate Action Plan 2024 (CAP24) is that 80% of electricity will be generated by a mix of at least 5 GW offshore wind, 9 GW onshore wind and at least 8 GW from solar PV, with an additional 2GW of offshore wind in support non-grid connected generation. Energy storage systems and landside developments for offshore wind and an enhanced electricity transmission and distribution infrastructure are essential to achieving these targets. 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.

According to the CAP24, the share of electricity from renewable energy increased over five-fold between 2005 and 2022 – from 7.2% to 38.6%. Based on SEAI analysis, December 2023 provided a record-breaking month with 55% of energy demand met by wind energy, one of the highest monthly totals since records began. In the 12 months to end of May 2024, wind and other renewable sources, hydro, solar and biomass accounted for 48% of demand. These are encouraging trends, but further acceleration of deployment is necessary to achieve the Government's target for 2030. ESB propose that the NPF should be amended where possible, to reinforce the scale of the challenge ahead, in this regard, we believe there is an opportunity to provide greater clarity to the first paragraph below.

Proposed amendment with additional text shown in *red* below.

> ***Strengthened and More Environmentally Focused Planning at Local Level***
> *"The future planning and development of our communities at local level is being refocused to tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential. This will require significant shift in land-use and infrastructure management across all sectors, with a plan-led approach supporting delivery of critical infrastructure for the generation, distribution and transmission of electricity and enabling infrastructure including ports and transportation hubs."*

3.1.2 Using State Lands for Strategic Purposes

Also, under Section 1.2 *Making the Vision a Reality,* it states that the vision will be achieved by.

> "…*using public and private lands for certain strategic purposes with a more active approach to the management of land..."*

ESB wishes to highlight the importance of priority access to state land banks and interconnecting land bank corridors (required for overhead lines and underground cables) for advancing electricity infrastructure essential to achieving the plan's goals. As outlined in Part 4 of the NPF, under NPO 21, the Government will support the LDA to leverage public lands for development. In this regard, it is imperative that it prioritises the needs of utility infrastructure providers and ensures land is allocated accordingly. This approach will facilitate the prompt development of vital energy infrastructure, helping meet rising electricity demands and support Ireland's sustainable development objectives.

3.2 Part 2 – A New Way Forward

3.2.1 Compact Growth & Network Delivery

The NPF is dedicated to ensuring that both rural and urban areas of Ireland can adapt to growth and change effectively. One of its main goals is to attain compact growth through the sustainable development of cities, towns, and villages. This requires prioritising the redevelopment of centrally located spaces, often infill and brownfield sites, to provide housing, employment, amenities, and services. The emphasis on achieving higher density and consolidation, curbing urban sprawl, and improving residents' quality of life is commendable. ESB Networks is committed to supporting these compact growth initiatives by making sure that our energy infrastructure can meet the increased housing and industrial electricity demand in urban centres, thus aiding in more efficient and sustainable urban development.

ESB Networks is tasked with managing the electricity distribution network. Over the course of the plan, this network must adapt to a substantial increase in renewable generation connections and meet the heightened electricity demand driven by economic growth, housing expansion, and the electrification of heating, transport, and industry. The extensive time required for constructing and upgrading energy infrastructure makes long-term planning and coordination crucial. Predictable future housing development locations assists ESB Networks to effectively address future energy needs and foster sustainable growth. In this context, ESB Networks welcomes the ambitions of NPO's 4, 7, 8, 9, 15 & 16 that aim to deliver a considerable number of new homes within the existing settlements' built-up areas. However, achieving the target of accommodating 50% of all new developments in Dublin, Cork, Limerick, Galway, and Waterford will necessitate significant investment in electrical infrastructure, with the delivery timeline being a critical factor for success. Consequently, it is vital that the planning and development housing in these regions include a

thorough evaluation of current and future electrical infrastructure and land requirements to support expected growth and development.

ESB Networks is dedicated to ensuring that our distribution network development plans correspond with these designated growth areas, providing the necessary infrastructure to accommodate the rising demand for electricity. However, as a key stakeholder, we suggest that coordination of national infrastructure is crucial for the successful realisation of the NPF, necessitating collaboration among Government, Local Authorities, Developers, ESB Networks, EirGrid, Gas Networks Ireland, Transport Infrastructure Ireland, and Úisce Éireann. Forming a working group or committee comprising representatives from these critical infrastructure stakeholders could enhance effective communication, planning, and implementation of infrastructure projects. This unified approach will guarantee that all parties are aligned and striving towards common objectives, ultimately advancing the sustainable development and economic prosperity of Ireland. In this regard, ESB Networks are seeking improved clarity on the prioritisation of development lands and have further comments on NPO 19, and also NPO's 100 & 101 further below in Section 3.8 of this document.

It is essential that priority access to state and private land banks is granted for the development of electricity infrastructure to support energy usage from industrial demand sites that create employment. ESB Networks believes that collaboration between utility infrastructure providers and regional and local authorities is essential to ensure the local development plans are cognisant of utility requirements and efficient connection of these sites.

Proposed amendment with additional text shown in *red* below.

> ***National Policy Objective 19***
>
> *"Working in collaboration with utility infrastructure providers Regional and Local Authorities to identify and quantify locations for strategic employment development including the location and interconnection of utility services, where suitable, in urban and rural areas generally."*

3.3 Part 5 – Planning for Diverse Rural Places

3.3.1 Planning for the Future Growth and Development of Rural Areas

ESB agree that rural areas make a major contribution to Ireland's identity and to overall national development in economic, social, cultural and environmental terms. We acknowledge that there is a continuing need for housing provision for people to live and work in Ireland's countryside. In this regard, ESB Networks provides secure and reliable electricity supplies to a significant rural population, the network length per capita is well above the European average, highlighting the extensive infrastructure required to serve these dispersed areas.

Proposed amendment with additional text shown in *red* below.

National Policy Objective 30

> "*Project the need for single housing and the electricity infrastructure needed to connect housing in the countryside through the local authority's overall Housing Need Demand Assessment (HNDA) tool and county development plan core strategy processes."*

Quantifying the need for single housing on an evidence basis assists in supporting ESB Networks with the delivery of necessary electricity infrastructure.

3.3.2 Planning and Investment to Support Rural Job Creation

Creating the environment to support job creation in rural areas will be a key enabler to rejuvenating rural towns and villages, sustaining vibrant rural communities and addressing population decline. In Part 9 of the NPF, under the heading *Rural Areas and Energy Production (p. 134),* it is recognised that

> *"Rural areas will continue to contribute to the energy needs of the country playing a strong role in securing a sustainable renewable energy supply. Renewable energy is being championed as a significant new source of jobs and rural growth in OECD countries*."

It is also acknowledged on page 134 that renewable energy has the potential to significantly boost economic development in communities by creating jobs, generating revenue through commercial rates, and supporting Community Benefit Funds. In this context, ESB recommends amplifying the positive effects on rural communities by emphasising the crucial role of renewable energy in the future of the rural economy under Section 5.4 of the plan, by expanding the third paragraph.

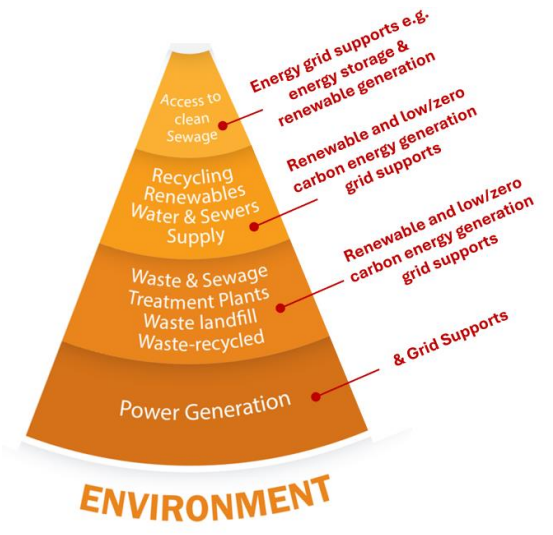
Proposed amendment with additional text shown in *red* below.

> *"…Local services sectors, including tourism and small- scale manufacturing, are a significant part of the rural economy and are also important local employers. However, supporting the diversification of the rural economy is essential, not just to create additional jobs in rural areas, but also to maximise the opportunity to link employment to issues such as climate change and managing sustainable land use. Emerging areas, such as the renewable energy sector, can make significant contributions to local economies and support secondary industries and regional specialisms…"*

3.4 Part 6 – People, Homes and Communities

3.4.1 Hierarchy of Settlements and Related Infrastructure

In reviewing the NPF, ESB seeks to ensure consistency in the approach to the delivery of electricity infrastructure. In this regard, we note that Figure 6.2, derived from the Strategic Investment Board Limited, suggests that energy generation is confined to cities, which is not reflective of the current reality or the future potential for distributed renewable electricity generation. The role of energy generation should be reflected across the settlement size scale to ensure that local level plans promote an appropriate and realistic pattern of development; and also, to align with national policies e.g. The Hydrogen Strategy, which promotes clustering of activities.



Please see adjacent extract of the *'Environment Wedge'* with additional text as proposed by ESB displayed in red.

To reduce ambiguity, it is important to amend the adjacent wedge to ensure that renewable energy and associated grid infrastructure are recognised as necessary infrastructure across the hierarchy of settlements and related infrastructure.

3.5 Part 7 – Realising our Island & Marine Potential

3.5.1 Port Infrastructure

ESB aligns with the NPF's vision of advancing Ireland's offshore renewable energy capabilities. We acknowledge the crucial role of sustainable development in supporting onshore infrastructure, which includes improving grid connectivity both domestically and internationally, non-grid transmission elements, and port facilities for the assembly and operation of wind turbine components, as well as the maintenance of offshore renewable energy initiatives.

Achieving success in these offshore renewable ventures will depend on our capacity to develop, construct, and bring into operation the required onshore electricity infrastructure promptly. Establishing this infrastructure is essential for fully harnessing the potential of offshore renewable energy.

Furthermore, Ireland's electricity system with a high percentage of wind and solar generation will require a backbone of dispatchable generators. ESB is already a major provider of dispatchable power, and we plan to transition our thermal generation fleet to zero carbon operation using hydrogen or hydrogen derivates such as ammonia or e-fuels. To enable this, we will develop and invest in large scale hydrogen production using offshore wind and electrolysis. We are already starting to make this happen through the early-stage development of regional clean energy clusters.

Energy Hubs can leverage offshore wind to produce zero-carbon energy products such as hydrogen. The hydrogen fuelled zero-carbon electricity will help attract green industrial investment, and the hubs will promote emerging technologies. It will bring scale to hydrogen use, and the proximity of large-scale green energy storage will open up opportunities in Ireland and beyond.

In this regard, we welcome the addition of NPO 52 which recognises the importance of developing adequate port infrastructure to ensure successful delivery of the offshore renewable potential in Ireland. However, to realise the full benefits of the emerging offshore wind sector ESB suggest that this objective can be strengthened, with the incorporation of the additional text shown in red below:

> ***National Policy Objective 52***
>
> *"Support the sustainable and timely delivery of port and harbour infrastructure to facilitate the development, maintenance and operation of off-shore renewable electricity generating developments; and to promote the development of mixed-use clusters of industrial development at appropriate locations, to ensure Ireland realises the full benefits of our marine and renewable energy potential."*

3.5.2 Offshore Renewable Energy

As highlighted in the NPF, 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. We strongly endorse NPO 56, that supports the progressive development of Ireland's offshore renewable energy potential along with associated infrastructure. However, we believe it can be further strengthened by ensuring that the NPF is updated to include CAP24 targets and amended to ensure consistency with our proposed additions to NPO 52 above, promoting the clustering of large energy demand.

While we welcome the update to the NPF to support the 5 GW target of offshore wind by 2030, the NPF fails to reference the additional 2 GW target of offshore wind in support non-grid limited generation. This is an updated target in CAP 23 and 24 to accommodate commitments under the Sectoral Emissions Ceiling. It is essential that this is acknowledged in the NPF in order to fully

recognise the onshore and offshore infrastructure and development that will be needed; and also, to stimulate innovation in the development of the hydrogen and e-fuel sectors.

National Policy Objective 56

"To support, the progressive development of Ireland's offshore renewable energy potential, the sustainable development of enabling onshore infrastructure including domestic and international grid connectivity enhancements, non-grid transmission infrastructure, clustering of energy demand and low and zero-carbon electricity generation infrastructure, as well as port infrastructure for the marshalling and assembly of wind turbine components and for the operation and maintenance of offshore renewable energy projects".

The NPF recognises that the Maritime Area Planning Act 2021 provides for a new licensing and development management regime in the maritime area known as Maritime Area Consent, to be administered by the Maritime Area Regulatory Authority (MARA). In line with the Maritime Area Planning Act 2021, future offshore wind developments will be located within Designated Maritime Area Plans (DMAPs) established by Government. As DMAPs form a critical planning tool for the maritime area, ESB recommend the inclusion of a specific NPO, noting the commitment to delivering robust DMAPs to manage maritime activities and interactions with land-based plans. This would align with cross-government commitments and DECC's planned publication of a DMAP Roadmap in late 2024.

Suggested additional objective to read:

*"**National Policy Objective (After NPO 56)***

In line with existing commitments, to prepare, adopt and review (as required), Designated Maritime Area Plans (DMAPs) for sub-national maritime areas to promote the orderly management of the maritime environment"

Moreover, considering the importance of DMAPs in executing public policy that itself supports large-scale offshore energy production and maritime resource management, the Government must dedicate itself to a public awareness campaign to promote these tools and increase 'public buy-in' for the forward planning process. This campaign should aim to enhance the public's understanding of the diverse benefits of this offshore strategy, emphasising environmental, economic, and societal advantages. In this regard, a further NPO promoting this strategy would be beneficial.

Suggested additional objective to read:

*"**National Policy Objective (After NPO 56)***

In line with public policy favouring both the deployment of offshore renewable energy projects and the management of the marine environment; support and deliver a public awareness campaign to increase understanding of this key public policy and the potential benefits to Irish society and our domestic economy."

3.6 Part 8 – Working with Our Neighbours

3.6.1 Energy

ESB welcome the recognition that cross border collaboration in the energy sector, driven by the single electricity market and combined with the development of interconnections has reduced energy

prices, enhanced energy systems resilience and diversification away from a near total reliance on fossil fuels, and supported the island economy. ESB Networks and NIE Networks continue to work together to ensure that both regions benefit from improved infrastructure and sustainable development. ESB wish to highlight our support for NPO 62.

National Policy Objective 62

"In co-operation with relevant Departments in Northern Ireland, strengthen all-island energy infrastructure and interconnection capacity, including distribution and transmission networks to enhance security of electricity supply, and explore the potential for strategic cooperation on offshore wind energy development."

3.7 Part 9 – Climate Transition & Our Environment

3.7.1 Climate and Environmental Capacity

As recognised under Section 9.1 of the Plan, accelerating action on climate change is one of the key national environmental challenges. NPO 67 highlights that our planning system will be responsive to our national environmental challenges. ESB wish to highlight that there is an opportunity to reinforce NPO 67 by amending it to reflect that the forward planning system should promote measures and developments that minimise climate degradation. By amending it thus it delivers greater alignment with NPO 70 and will support sound decision making in relation to individual projects and proposals.

Amended NPO 67 to read, (additional text shown in *red* below).

National Policy Objective 67

"The planning system will be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the medium and longer-term requirements of all relevant environmental and climate legislation and the sustainable management of our natural capital. Forward plans will ensure that measures, projects and proposals that minimise climate degradation will be promoted and supported, as Ireland seeks to attain its statutory targets and objectives to address the challenges of climate change."

3.7.2 Resource Efficiency & Transition to a Zero Carbon Economy

Section 9.2 of the Plan outlines that the planning process provides an established means through which to implement and integrate climate change objectives, including mitigation and adaptation, at local level. It states that the Framework can support the response to climate change by encouraging the reduction of greenhouse gases through a variety of measures. Among the measures identified to deliver a reduction in dependency on imported fossil fuels and decarbonisation of the energy system are onshore wind energy and solar development. However, to ensure that the measures required to facilitate the necessary transition to a net zero electricity system as referenced in NPO 74, ESB requested that the text in this section be amended.

Suggested amendment (p. 127) with additional text shown in red below:

"This Framework can support the response to climate change by encouraging the reduction of greenhouse gases through a variety of measures including;

- *the achievement of our compact growth objectives and the consequential reduction of overall land take;*

- *the interaction between land use planning and transport infrastructure, associated potential for carbon emissions reductions resulting from reduced commuting patterns associated with future growth;*
- *promoting re-use of existing buildings to reduce emissions associated with new construction;*
- *the continued reduction in dependency on imported fossil fuels and decarbonisation of the energy system as a whole and in particular the electricity sector through the identification of binding targets for renewable electricity – specifically on-shore wind and solar energy, and the accelerated roll out of all necessary energy infrastructure including low- and zero carbon thermal generation, the transmission and distribution networks and energy storage systems;*
- *encouraging climate resilient planning policies;*
- *limiting inappropriate developments in areas where climate impacts are likely to be most severe;*
- *providing guidance to local authorities on climate resilient planning practises including nature-based solutions."*

3.7.3 Electrification of Heating

ESB Networks would like to express our endorsement of NPO 69, which advocates for the electrification of heating. This initiative is consistent with ESB's strategy, and we are dedicated to facilitating the electrification of heat and transport, promoting the integration of renewable energy sources, and ensuring a reliable and adaptive electricity network. Nonetheless, it is essential to highlight that, as previously indicated, the prompt development and enhancement of the transmission and distribution infrastructure to support these initiatives is crucial for the electrification of heat in both residential housing and industrial sectors. Provision of land and infrastructure corridors for the planning and development of the transmission and distribution electricity infrastructure is critical to cater for this increased electrical demand.

National Policy Objective 69

"Support the growth and development of efficient district heating, electrification of heating, and utilisation of geothermal energy."

3.7.4 Renewable Electricity

In the energy sector, transitioning to a zero-carbon economy through renewable energy sources is crucial to Ireland's climate change strategy, aiming to decrease dependence on fossil fuels. Section 9.2 of the Plan, titled *Renewable Electricity*, outlines the renewable energy targets as detailed in the CAP24. To ensure accuracy, ESB suggests updating this paragraph to precisely reflect the CAP24 targets. Significantly, this section should also include the target for an additional 2GW of floating offshore wind for non-grid use that will be developed over a slightly longer timeframe.

Suggested amendment (p. 133) with additional text shown in red below:

"Government has set ambitious targets to achieve 9 GW of onshore wind, at least 5 GW of offshore wind and 8 GW of solar by 2030, and an additional 2GW offshore wind for green hydrogen production, as well as supporting at least 500 MW of local community-based renewable energy projects and increased levels of new micro-generation and small-scale generation."

The goal of generating green fuels is in line with ESB's strategy to convert our thermal generation fleet to zero carbon operations using hydrogen and its derivatives, such as ammonia or e-fuels. To achieve this, we plan to develop and invest in large-scale hydrogen production through the utilisation of offshore wind-generated electricity and electrolysis.

It is important to acknowledge that Ireland's security of electricity of supply, with a substantial share of wind and solar energy, will necessitate a foundation of dispatchable generators. ESB currently serves as a significant provider of dispatchable power through the use of fast-responding gas turbines, which can be quickly deployed to offer operational flexibility and essential grid support services when required. It must also be acknowledged that natural gas, especially renewable and locally sourced gas, will remain an integral part of the transition to a low-carbon economy. Over the duration of this plan, renewable energy advances may need backing from these or other progressively lower-carbon technologies with the ultimate aim of converting them to net zero fuels as they develop. Our strategy involves transitioning our thermal generation fleet to zero-carbon operation, utilising hydrogen or hydrogen derivatives such as ammonia or e-fuels. To facilitate this shift, we will invest in large-scale hydrogen production powered by offshore wind-generated electricity and electrolysis. We have already begun this process through the early-stage development of regional clean energy clusters.

3.7.5 Renewable Electricity – Transmission and Distribution

ESB Networks is strategically aligned with National Policy Objective 70, we recognise the need for continuous collaboration with stakeholders to ensure that our transmission and distribution of electricity infrastructure development keeps pace with the ambitious climate action targets. Building the necessary electrical infrastructure presents significant challenges, including securing timely planning permissions, coordinating with multiple agencies, and ensuring the availability of skilled labour and materials. Addressing these challenges is crucial to achieving our shared climate goals.

Electricity infrastructure encompasses more than just traditional power stations, renewable generators and substations; it also includes the interconnection of overhead lines, underground cables, and the land corridors essential for their development and operation. ESB Networks relies on the close collaboration and support of various stakeholders, such as Local Authorities, Transport Infrastructure Ireland, and Iarnród Éireann to ensure that our infrastructure can traverse their assets effectively. This cooperation is crucial for the seamless integration and maintenance of the electricity network across different regions and sectors. Therefore, NPO 72 should make provision for these land corridors in the national infrastructure targets and Local Authority climate action targets.

Proposed amendment with additional text shown in *red* below:

> ***National Policy Objective 72***
>
> *"Support the development and upgrading of the national electricity transmission and distribution infrastructure, ensuring the provision of land and infrastructure corridors, to support the delivery of renewable electricity generating development, with prioritisation for those works that support delivery of the regional renewable electricity capacity allocations (per Table 9.1)."*

3.7.6 Regional Renewable Electricity Capacity Allocations

ESB supports the decision to include the range of Renewable Electricity Capacity Allocations specified in Table 9.1. Integrating these allocations into the Regional Spatial and Economic Strategies (RSES), along with the related Regional Renewable Energy Strategies (RRES), and

further extending them to county-level targets that will guide city and county development plans, will contribute significantly to accelerating the deployment and achievement of national goals.

However, for a successful rollout, it is essential that ESB Networks play a central role in further disseminating the targets. We are eager to contribute to refining capacity allocations to better align with locations and regions where network capacity exists. This partnership will ensure that the infrastructure can support ambitious renewable energy objectives by effectively and efficiently utilising the current electricity infrastructure.

Additionally, in alignment with NPO Objective 76, which mandates that Local Authorities must plan for the delivery of Target Power Capacity (MW) allocations consistent with the relevant RSES through their City and County Development Plans, ESB Networks is fully prepared to facilitate tripartite discussions with Local Authorities and EirGrid. These discussions aim to effectively determine the Target Power Capacity (MW) allocations for each Local Authority. As previously highlighted, Local Authority plans should also accommodate space for electricity infrastructure and interconnecting land corridors for overhead lines and cables. This collaborative method will ensure that infrastructure needs are met efficiently and effectively, thus supporting overarching climate action goals.

Therefore, we endorse the amended NPOs 75 & 76 as proposed below, which require each Regional Assembly and Local Authority to prepare for the allocation of Target Power Capacity (MW) in alignment with the planning hierarchy and Table 9.1. Nonetheless, to achieve the necessary acceleration, incorporating a reasonable timeframe for accomplishing these goals will offer more predictability for infrastructure providers. It is also crucial to create a direct connection between the provision of adequate grid infrastructure and meeting the targets. Ensuring that capacity allocations are aligned with regions possessing existing network capability will encourage a more sustainable approach to implementation.

Amended NPO 75 &76 to read, (additional text shown in *red* below).

National Policy Objective 75

"Within 1 year of the completion of this review, each Regional Assembly must plan, through their Regional Spatial and Economic Strategy, for the delivery of the regional renewable electricity capacity allocations indicated for onshore wind and solar reflected in Table 9.1 below, and identify allocations for each of the local authorities, based on the available electricity infrastructure capacity, best available scientific evidence and in accordance with legislative requirements, in order to meet the overall national target."

National Policy Objective 76

"Local Authorities, working in collaboration with EirGrid and ESB Networks, shall, within 2 years of the completion of this review adopt plans for the delivery of Target Power Capacity (MW) allocations consistent with the relevant Regional Spatial and Economic Strategy, through their City and County Development Plans."

3.7.7 Repowering Existing Renewables

The NPF Review (p. 133) recognises the significance of repowering existing renewable energy plants. This is in strong agreement with the European Commission's REPowerEU document, where repowering existing renewable energy facilities was highlighted as a viable method to boost renewable energy production swiftly, thus decreasing gas consumption with minimal impact on grid infrastructure and the environment. As specified in the REPowerEU document, repowering allows continued utilisation of brownfield sites with considerable renewable energy potential, thereby limiting

the need to designate new sites for renewable projects. In contrast, decommissioning such projects would result in a notable reduction of current renewable energy capacity, further complicating decarbonisation efforts. Consequently, the Commission advocates for simplified and expedited permitting processes for repowering, which must be reflected in the revised NPF.

Because repowering will be critical in ensuring our existing onshore wind energy fleet remains available to meet renewable energy demand – either by way of extending timeframes for operations, or by re-engineering existing sites, subject to new planning permission being granted, the wording of the NPF should be strengthened to highlight the importance of repowering (and life extensions) and encourage regional and planning authorities to favourably consider and facilitate repowering and life extensions. A new National Policy Objective in respect of repowering is recommended to read as follows:

National Policy Objective (after existing NPO 74)

"Support and facilitate the repowering of existing renewable energy developments and their transmission and distribution electricity connections to ensure they continue to support the decarbonisation of the energy sector."

3.7.8 Landscape

Section 9.3, Landscape (page 142) highlights that Ireland's landscape offers a wealth of natural and cultural assets which support our quality of life and our visitor economy. Visual impact assessment is highly subjective and positive decision making would be best supported by additional guidance, particularly in managing impacts associated with development in the coastal and maritime environment. Page 104 and 105 of the SEA of the Draft first revision to the NPF notes:

> *"In the absence of national or regional guidance and assessments, local authorities currently conserve and protect scenic value as areas of high amenity, high sensitivity, areas of outstanding natural beauty, protected views and similar designations, but the approach is uncoordinated and can lead to different prioritisations in neighbouring counties. […] Further, seascapes are increasingly being recognised as being a key element of the coastal and marine environment. Seascape characterisation should form an integral part of any overall landscape character assessment (LCA) where there is any coastal element."*

Given the importance of this factor in many planning decisions, particularly forthcoming decision in relation to renewable energy developments in maritime locations, we recommend NPO 88 be amended, with additional text shown in red, to read.

National Policy Objective 88

"Facilitate landscape protection, management and change through the preparation of a National Landscape Character Map and development of guidance on local landscape character assessments including coastal landscapes and seascapes, (including historic landscape characterisation) to ensure a consistent approach to landscape character assessment, particularly across planning and administrative boundaries."

3.8 Part 10 – Implementing the NPF

3.8.1 The Planning System and Prioritising Development Lands

Timely planning consents from Local Authorities and An Bord Pleanála are the critical first step to ensure the timely delivery of electrical infrastructure for both ESB Networks and Renewable Generators. Delays in the planning system is a barrier to Ireland meeting its binding Climate Action targets. EU policy on renewables is supportive of streamlining the planning processes and providing definitive information for investment in renewable capacity and grid infrastructure in order to meet our climate commitments. According to the EU Renewable Energy Directive III (RED III), Ireland must complete a coordinated mapping for renewable energy deployment by 2025. By 2026, it needs to establish 'renewables acceleration areas' where new renewable energy projects will have a simplified fast-track approval process.

The prioritisation of development lands is crucial for the timely construction of electricity infrastructure to ensure adequate capacity is available on our network. The time required to build and upgrade energy infrastructure necessitates long-term planning and coordination. To better align our network development plans with the NPF, it is essential that these plans provide clear roadmaps indicating where investment and development is needed on our network to meet the increasing demand for electricity. This enhanced alignment will enable us to proactively rather than reactively work to address future energy needs and support Ireland's growth and sustainability goals. In this regard, we acknowledge that in Part 2 of the NPF, Section 2.7 *Translating the NPF to City and County Levels* and NPO 11 aims to ensure that planned future growth is carried through from national, to regional and local level with the assistance of an 'Implementation Road Map'. However, we are of the view that this approach can be reinforced with the amendment to NPO 101 below.

Proposed amendment with additional text shown in *red* below.

> ***National Policy Objective 101***
>
> *"Within 1 year, a working group consisting of planning authorities and infrastructure delivery agencies, should be formed to focus on the timely delivery of enabling infrastructure to priority zoned lands in order to deliver planned growth and development. In addition, to ensure that infill and brownfield lands are being developed and that the compact growth targets set out in NPO 7 - 9 are being achieved, it is also important to develop and implement new approaches to measuring and monitoring compact growth in cities and larger settlements, aligned to greater digitalisation of the planning system."*

4. CONCLUSION

In conclusion, the ESB submission to the First Revision of the NPF underscores the company's commitment to advancing Ireland's energy infrastructure and achieving net zero emissions by 2040. ESB's strategy aligns with the NPF's vision of creating a low carbon and climate-resilient society, emphasising the importance of renewable energy sources, resilient infrastructure, and empowered customers, however, this can be reinforced by adopting the suggested amendments above.

ESB's comprehensive approach includes significant investments in sustainable energy solutions such as solar, wind, wave, storage, and green hydrogen. The company aims to increase its renewable generation portfolio to 5 GW by 2030 and double the amount of renewable energy connected to its networks. Additionally, ESB is embracing new technologies to revolutionise the energy industry and ensure reliable zero carbon energy.

This submission highlights the critical role of electricity networks in connecting homes and industry, enabling the mass adoption of low carbon technologies and supporting the electrification of transport and heating. ESB Networks is committed to building a resilient and smart network infrastructure to meet the increasing demand for clean electricity across all sectors to support Ireland's economic growth.

ESB is dedicated to collaborating positively with various bodies to support the implementation of the NPF, ensuring that our distribution network development plans are seamlessly integrated with the NPF at the earliest possible opportunity. To that end we would strongly support continued meaningful engagement with ESB, and all utility providers, to ensure adequate infrastructure and services are available to meet the needs of our growing and decarbonising society.

Furthermore, ESB's initiatives in rolling out electric vehicle infrastructure, developing telecommunications infrastructure, and supporting rural job creation demonstrate the company's dedication to fostering sustainable development across Ireland. The submission also emphasises the importance of timely planning and coordination among various stakeholders to achieve the ambitious targets set forth in the NPF.

Overall, our submission to the NPF reflects the company's proactive approach to addressing Ireland's energy challenges and contributing to a sustainable future. By leveraging its expertise and resources, ESB is well-positioned to lead the transition to a low carbon economy and support the country's long-term growth and development.