



Energy for  
generations

Eastern & Midland Regional Assembly

# Draft Regional Spatial & Economic Strategy

Submission on behalf of Electricity Supply Board  
23/01/2019



# Contents

- 1. INTRODUCTION ..... 3
- 2. OVERVIEW OF ESB ACTIVITIES ..... 3
- 3. DRAFT REGIONAL SPATIAL & ECONOMIC STRATEGY ..... 3
  - 3.1 Climate Change ..... 4
  - 3.2 Energy Policy ..... 4
    - 3.2.1 Strategic Infrastructure ..... 4
    - 3.2.2 Renewables ..... 5
    - 3.2.3 Inter- connectors ..... 6
    - 3.2.4 Transmission Networks ..... 6
  - 3.3 Transport Related Planning Policy ..... 7
- 4. CONCLUSION ..... 7



## 1. INTRODUCTION

Electricity Supply Board (ESB) is a statutory corporation established under the Electricity (Supply) Act 1927. Its responsibilities include electricity generation, electricity supply to end use customers and electricity networks - ESB owns the high voltage Transmission System and owns and operates the medium to low voltage electricity Distribution System.

ESB has technical assets of strategic national and regional significance, therefore we welcome the opportunity to make a submission to the Eastern & Midland Regional Assembly (EMRA), Draft Regional Spatial & Economic Strategy (RSES). We recognise that the principal statutory purpose of the RSES is to support the implementation of the National Planning Framework (NPF) and the economic policies and objectives of the Government, by providing a long-term strategic planning and economic framework for the development of Ireland's regions.

As set out in the Vision & Guiding Principles of the draft strategy a key challenge facing the Region, along with all other regions, is the transition to a low carbon society. ESB fully supports policies which align with meeting Government targets for emissions reduction, energy efficiency and increased use of renewable energy.

## 2. OVERVIEW OF ESB ACTIVITIES

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, we extract further value from our assets through supplying gas, using our networks to carry fibre for telecommunications and to provide charging infrastructure for electric vehicles. ESB is a leading Irish utility, with 42% of generation in the all-island market and supplier of electricity to approximately 1.25 million customers throughout the island of Ireland.

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

Our goal is to reduce ESB's carbon emissions 40% by 2030, and towards becoming carbon-neutral by 2050. ESB aims to achieve this through expanding its wind portfolio, and continually investing in other renewable energy technologies that take advantage of the natural resources available to us. By 2020, ESB will be delivering one-third of its electricity from renewable generation as it progresses towards achieving carbon net-zero operations which is consistent with the NPF and Draft RSES. ESB is embracing new technologies that are revolutionising the energy industry, including smarter electricity networks. We are investing in exciting energy solutions that harnesses the power of solar, wind, wave and storage to provide a cleaner future.

## 3. DRAFT REGIONAL SPATIAL & ECONOMIC STRATEGY

ESB acknowledge that the preparation of the draft RSES has been directly informed by the NPF, the National Development Plan, economic and other relevant Government policies. Energy infrastructure, including grid infrastructure and electricity generation, is critical to support Ireland's future growth. The development of world class infrastructure is critical to Ireland to maintain international competitiveness. Therefore we welcome the consistency with the NPF in that, energy, climate change and the need to accelerate a transition to a low carbon economy is a guiding principle of the draft RSES.

### 3.1 Climate Change

As highlighted in Section 7.8 of the draft strategy, climate change is a global challenge which requires a strong and coherent response at national, regional and local level. In this regard, ESB, 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 are integral to our corporate strategy. We are committed to reducing carbon emissions and addressing long-term concerns over future fuel supplies.

ESB support the transition to a low carbon and climate resilient Region. We are divesting much of our older inefficient thermal plants and replacing them with high-efficiency, combined cycle gas turbines. We're also making rapid progress in building our renewables portfolio based on wind. Presently, there are a number of offshore opportunities in wind generation at early stage development off the coast of Ireland and the UK. In early 2018, in a major move into offshore electricity generation, ESB acquired a share in the 353MW Galloper Offshore Windfarm in the UK.

ESB aims to achieve its goal of being carbon neutral by 2050 through expanding its wind portfolio, and continually investing in other renewable energy technologies that take advantage of the natural resources available to us. By 2020, ESB will be delivering one-third of its electricity from renewable generation as it progresses towards achieving carbon net-zero operations which is consistent with Energy Policy and Planning objectives contained in the draft RSES.

### 3.2 Energy Policy

ESB agrees that a secure and resilient supply of energy is critical to a well-functioning Region. With the projected increases in population and economic growth, the demand for energy is set to increase in the coming years. The *Eirgrid Generation Capacity Statement 2018* cites a growth in energy demand for the next ten years. Therefore, we welcome the collection of Regional Policy Objectives contained in the draft strategy that support the delivery and continuation of a secure and resilient supply of energy.

Under the heading *Decarbonising Electricity Generation* (page 135), the draft strategy outlines that the Region will need to shift from its reliance on using fossil fuels to a more diverse range of low and zero-carbon energy sources. It highlights that the draft strategy supports an increase in the amount of new renewable energy sources in the Region, which include the use of wind energy – both onshore and offshore, biomass, solar photovoltaics and solar thermal, both on buildings and at a larger scale. We welcome the call for the establishment of a consistent approach by planning authorities, both in identifying areas suitable for renewable energy development while having regard to potential impacts on biodiversity, landscape and heritage. However, we would like to highlight some specific issues below that should be considered in the finalisation of the Regional Policy Objectives;

#### 3.2.1 Strategic Infrastructure

In the context of a transition to a low carbon energy sources, it should be considered that some uncertainties will remain e.g. wind cannot be relied upon to provide security of supply - it doesn't always blow. Therefore, the requirement for investment in other forms of generation remains necessary to provide back up to intermittent renewables. It is essential that the existing locations of strategic national infrastructure are retained in the long-term for electricity generation and that there is ongoing investment in new technologies, plant and equipment. The existing infrastructure, which has developed over many years, represents major and on-going capital and infrastructural investment in strategic national assets and is essential for the continued provision of a secure and reliable electricity supply.

This is particularly the case within the Dublin Metropolitan Area Strategic Plan (MASP) area and existing ESB infrastructure on the Poolbeg Peninsula. ESB's development plans include for the likely development of plant at this location that has a high level of output flexibility and can assist in

smoothing out the natural variability that occurs in wind powered generation. This plant makes it more feasible to accommodate increasing amounts of wind energy into the system thus helping the transition to a low carbon future. These plants will require additional ground for emergency generation plant, oil storage and laydown areas for the construction period and annual maintenance overhauls. In this regard we welcome Regional Policy Objective RPO 5.1 that supports continued collaboration between infrastructure providers, state agencies and Local Authorities in the metropolitan area to inform cross sectoral support to accelerate development of strategic development in the Dublin metropolitan area. As highlighted in the draft strategy, this will be important if the Region is to attract high technology industries that depend on reliable, high quality, electricity supply.

### 3.2.2 Renewables

In conjunction with the above, ESB is investing in exciting energy solutions that harnesses the power of solar, wind, wave and storage to provide a cleaner future. In this regard, we welcome the specific Policy Objectives for renewable energy, off shore renewable energy resource development and the associated strengthening and improvement of the transmission network. ESB is making rapid progress in building our renewables portfolio based on wind. In 2016, 20.9% of the electricity generated in Ireland came from wind. (SEAI). ESB has over 400MW of installed capacity in the Republic of Ireland with additional wind farms in development. ESB plan to deliver a total operating capacity based on wind energy of 1,600 MW by 2030.

In this context, ESB supports the Regional Policy Objectives RPO 7.34 – 7.37, in particular RPO 7.34 which states;

*“EMRA shall, in conjunction with Local Authorities in the Region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of the community and micro energy production in urban and rural settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure all environmental constraints are addressed in the analysis. A regional landscape strategy should be developed to support delivery of projects within the Strategic Energy Zones.”*

The NPF highlights that over the period to 2040, it is likely that technological advances will accelerate the commercial application, development and deployment of a marine renewable energy sector including offshore floating windfarms, tidal turbine devices and wave energy convertors. However, there is a recognition that the development of offshore renewable energy will be critically dependent on the development of enabling infrastructure including grid facilities to bring energy ashore and connect to major sources of energy demand. Given the potential for renewable generation in the Irish Sea, this will require effective integrated land and marine planning to ensure that the existing transmission network in the east can facilitate the transfer of renewable energy generated to the grid. Therefore, ESB fully support Regional Policy Objective RPO 7.1 which states;

*“To ensure consistency and alignment between the upcoming National Maritime Spatial Plan (due in 2021) and regional approaches to marine spatial planning and to integrate the Marine Strategy Framework Directive and Marine Spatial Planning implementation into future land use plans in the Region in recognition of the opportunity to harness Ireland’s ocean potential.”*

In an effort to further diversify energy sources and building on an established tradition of energy production in the midlands, ESB, in partnership with Bord na Móna aim to deliver a portfolio of solar farms up to 600MW in capacity on cutaway bogs in the Midlands. The first project, located in Co. Kildare, is currently in the planning system. These proposals are strategically located and geographically focused to maximise the use of existing grid infrastructure associated with traditional fossil fuel plants. We feel this approach is consistent with the draft strategy as it states on p135 in relation to Local Authorities harnessing the potential of renewables in the Region;

*“...focus in particular on the extensive tracts of publicly owned peat extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy.”*

### 3.2.3 Inter-connectors

The NPF outlines that electricity interconnection is strategically important to Ireland and states;

*“It helps support economic and population growth and impacts positively on each of the three pillars of Ireland’s energy policy – sustainability, security of supply and competitiveness. Interconnection also supports the energy transition, delivering a variety of wide-ranging benefits to the Irish consumer, including lower long term costs of electricity through connection to a larger market and diversity of electricity supply.”*

Recent scenario planning by EirGrid (Tomorrow’s Energy Scenarios - 2017) outlines that Ireland requires interconnection in order to deliver on its renewable energy ambitions and the greater the scale of renewable energy sources for electricity the higher the level of interconnection needed. ESB welcome Regional Policy Objective RPO 10.17 which supports the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people. Facilitation of the both cross border and continental interconnections will form an integral element of this delivery.

The proposed North South interconnector will increase capacity of the grids North and South, helping to facilitate the connection of more renewable electricity generation. This is essential to achieve sustainable energy targets set by the EU. The introduction of the second North South interconnector will improve the security of electricity supply and enhance the efficiency of the system in both jurisdictions. There will be implications from Brexit that may well impact on planning across the border with Northern Ireland. However, there is an opportunity to ensure a joined-up approach to strategic infrastructure and investment decisions that have a cross-border dimension and on how to co-ordinate mutually beneficial ways to address common environmental challenges across shared catchments.

However, the potential for interconnectivity is not limited to cross border on the island; the Celtic Interconnector linking Ireland and France and the Greenlink linking Ireland and Wales form additional options being explored. Substantial preparatory work has been carried out for the Celtic Interconnector which will enable the movement of electricity between Ireland and France and will be the first direct energy link between Ireland and continental Europe. The proposed Celtic Interconnector project consists of a High Voltage Direct Current (HVDC) link, rated at a capacity of 700 MW. Therefore, development will be required at sea, foreshore and land. To deliver greater efficiencies in implementing and monitoring energy interconnector projects will require that projects, which span both marine and terrestrial planning, should have a streamlined consent process that will allow for timely processing that will not hinder overall development.

### 3.2.4 Transmission Networks

The delivery of more sustainable energy sources, through renewables or inter-connectors will require provision for the development, expansion and renewal of electricity infrastructure to meet growing demand and to protect the future capacity for the development of our main urban centres and the Region generally. ESB support the various Regional Policy Objectives (RPO 10.14 – RPO 10.19) set out in Section 10.3 of the draft strategy. Among other objectives, the policies contained in Section 10 of the draft strategy seek to facilitate transboundary networks into and through the Region and the delivery of necessary integration of transmission networks requirements to allow linkages of renewable energy proposals to the transmission grid in a sustainable and timely manner.

Government policy recognises that public acceptability is required for the delivery of key networks projects. In order to achieve public confidence, project proposals must adhere to the highest international standards of technology choice, health and safety, environmental and visual impacts.

The Government affirms that ESB Networks are obligated to adhere to all relevant guidelines and standards and they act in the national interest, and on behalf of all electricity consumers. In this regard, we welcome the inclusion of guidance to local authorities to facilitate the provision of energy networks in principle, based on the guiding principles and considerations highlighted on page 180 of the draft strategy. Hopefully, this clear guidance will limit the possibility for Local Plans to include policies that could potentially hinder the delivery of National and Regional policy objectives. In addition, the support for safeguarding strategic energy corridors under Policy Objective RPO 10.17 is welcomed.

We believe that the implementation of these Policy Objectives will ensure the development of the energy networks in a safe and secure way to meet projected demand levels and will enable energy service providers, such as ESB, to deliver our statutory function.

### 3.3 Transport Related Planning Policy

The European Commission Proposal (January 2013) for a Directive of European Parliament and of the Council on the development of alternative fuels infrastructure proposes a minimum of 2200 publicly accessible EV charging points in Ireland by 2020. 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 establishment of EV infrastructure by ESB and the associated EV usage both nationally and internationally aligns with the key principles and benefits of sustainability and the National Climate Change Strategy on reduction of emissions. We submit that the RSES supports the positive steps taken to date with the inclusion of clear policies to promote, encourage and facilitate the use of sustainable modes and patterns of transport. This is critical to the development of resilient urban settlement and the transition to a low-carbon sustainable Ireland.

To date many Local Authorities have adopted policies promoting EV charging infrastructure. However, ESB would like to ensure that the roll-out of EV infrastructure is integrated into spatial and planning policy and supported across all levels of governance. In this context we support Regional Policy Objective RPO 7.41, which states;

*“Local Authorities shall include proposals in statutory land use plans to facilitate and encourage an increase in electric vehicle use, including measures for more recharging facilities and prioritisation of parking for EV’s in central locations.”*

Consistent implementation of the above policy will assist in promoting, encouraging and facilitating the use of sustainable modes and patterns of transport including electric vehicles, that will contribute towards lowering our national carbon emissions.

## 4. CONCLUSION

ESB welcome the Draft RSES and its ambitions to deliver sustainable development, long term economic growth and a plan for tackling climate change in the Region, in line with the NPF. 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. It 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 are integral to our corporate strategy. We are committed to



reducing carbon emissions and addressing long-term concerns over future fuel supplies. ESB is implementing energy strategies that support the transition of Ireland to a low-carbon and ultimately post-carbon economy to become a competitive, resilient and sustainable region. We request that due consideration is given to the issues raised in this submission, most particularly, that the draft RSES retains its clear policies in relation to:

- Backing the delivery and continuation of a secure and resilient supply of energy.
- Supporting continued collaboration between infrastructure providers, state agencies and Local Authorities in the metropolitan area to inform cross sectoral support to accelerate development of strategic development in the Dublin metropolitan area.
- Consistency and alignment between the upcoming National Maritime Spatial Plan (due in 2021) and regional approaches to marine spatial planning and to integrate the Marine Strategy Framework Directive and Marine Spatial Planning implementation into future land use plans in the Region.
- Harnessing the potential of renewables in the Region, focus in particular on the extensive tracts of publicly owned peat extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy.
- That are supportive of infrastructure development where there is a clear requirement.
- To promote, encourage and facilitate the use of sustainable modes and patterns of transport including electric vehicles.

If we can be of any further assistance, or if you wish to clarify any of the issues raised in this submission, please contact the undersigned.

Yours sincerely,

Gerard Crowley | Planning and Asset Manager | ESB Business Service Centre  
| T: +353 1 702 7163 / [REDACTED] [www.esb.ie](http://www.esb.ie)