



www.eirgrid.com

The Oval, 160 Shelbourne Road
Ballsbridge, Dublin D04 FW28, Ireland

Telephone +353 1 677 1700
Email info@eirgrid.com

Administrative Officer,
Review of County Development Plan,
Forward Planning Department,
Áras an Chontae,
Great Water Street,
Longford,
N39 NH56

cdp@longfordcoco.ie

21st November 2019

Re: Submission to the Review of the Longford County Development Plan 2015-2021

Dear Sir/Madam,

EirGrid Group welcomes the opportunity to make a submission to the review of the *Longford County Development Plan* and requests that this submission is taken into consideration in the drafting of the new plan.

EirGrid is a prescribed authority for the purposes of Section 11 (2) of the Planning and Development Act 2000, as amended and has been involved in the making of Project Ireland 2040 (National Planning Framework) and the Eastern and Midlands Regional Spatial and Economic Strategy in which the strategic issue of the future development of Ireland's electricity transmission grid was highlighted and extensively addressed in Section 10.3. It is requested the future development plan is in so far as is practicable consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development.

EirGrid's Function

EirGrid is responsible for the safe, secure and reliable transmission of electricity – now and in the future. EirGrid develops, manages and operates the electricity transmission grid. This brings power



from where it is generated to where it is needed throughout Ireland. The grid also supplies power to industry and businesses that use large amounts of electricity and powers the distribution network. The distribution network in turn supplies electricity to homes, businesses, schools, hospitals, and farms.

EirGrid's function as the national electricity Transmission System Operator (TSO) is set out in the *European Communities (Internal Market in Energy) Regulations, 2000 - SI 445/2000*. Article 8(1) (a) gives EirGrid as TSO, the exclusive statutory function:

"To operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical, and efficient electricity transmission system, and to explore and develop opportunities for interconnection of its system with other systems, in all cases with a view to ensuring that all reasonable demands for electricity are met having due regard for the environment."

The transmission system on the island of Ireland refers to the higher capacity electricity network and primarily comprises substations and circuits at 400 kV (i.e. 400,000 Volts), 220 kV, and 110 kV (in Northern Ireland, transmission infrastructure also occurs at 275 kV). EirGrid's (2016) Transmission System Map (ENCL1) is enclosed.

The midlands regional transmission network is pivotal in transporting power over considerable distances to a widely dispersed range of demand centres. The region has dispersed generation, mainly composed of peat-burning power stations at Lanesboro, Shannonbridge and Cushaling stations, and renewable energy. The existing Midlands transmission network is comprised of 400 kV, 220 kV and 110 kV infrastructures. In Co. Longford specifically there is significant transmission infrastructure in the county given its central location on the island. The regional demand centres (i.e. Longford) and generation sources (e.g. Lanesboro) are mainly served by the dispersed 110 kV meshed network,

Policy-Led Plan

The electricity transmission grid's importance in supporting our society and economy should not be understated in the forthcoming draft. EirGrid notes and welcomes reference and emphasis placed on climate action and energy in the issues paper. EirGrid considers that policies and objectives which support a safe, secure and reliable supply of electricity need to be explicit in the draft in order to assist EirGrid in the successfully implementation of its Grid Development Strategy - Your Grid, Your Tomorrow (2017) (ENCL2). This is imperative to meeting national targets for electricity generation, climate change targets, and security of energy supplies.

In this context the policies and objectives in the adopted Regional Spatial and Economic Strategy (Section 10.3 Energy) should be reviewed and considered as an example of robust and sustainable

policies and objectives. The planning authority may consider these adequate for inclusion in the forthcoming draft. An extract of the relevant sections of the Regional Spatial and Economic Strategy is attached for convenience.

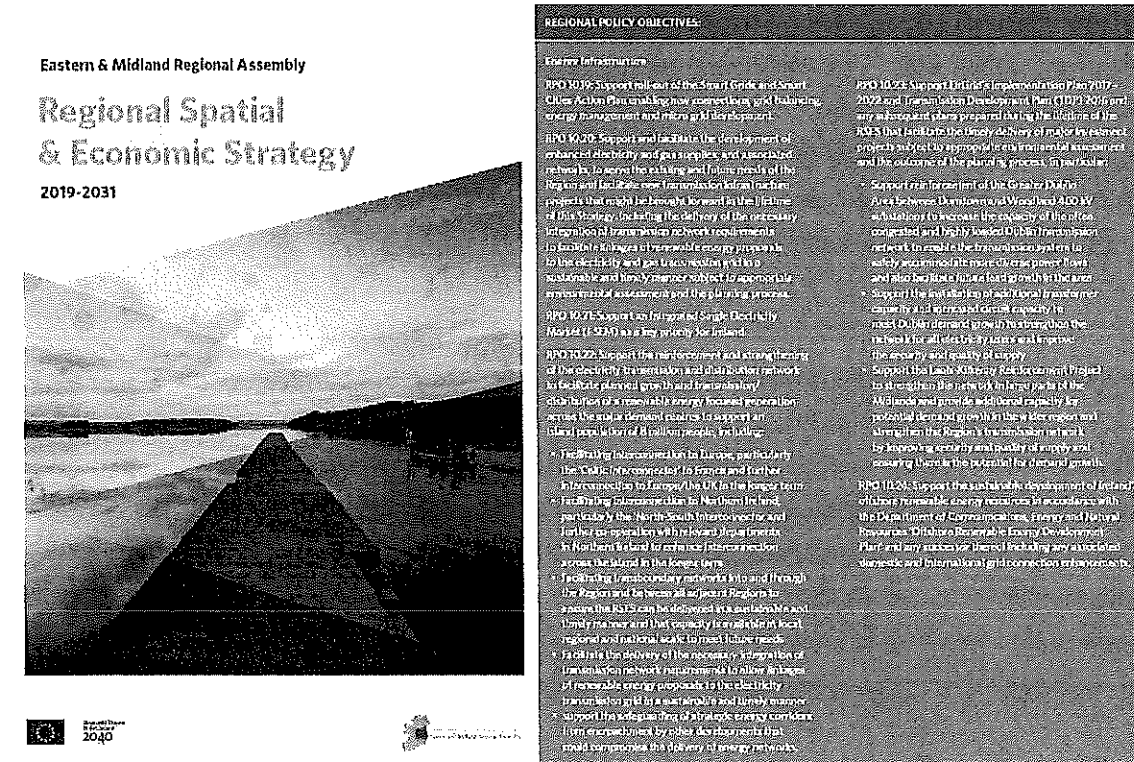


Figure 1: Policy Objectives from the Eastern and Midland Spatial and Economic Strategy (Section 10.3 Energy)

EirGrid also requests the draft be explicit as to how the various Government (and State Agency) policy documents have been considered in the preparation of the draft, and how they have informed the policy and objectives. A section should be included in the draft setting out how these policy documents have been considered in a holistic and integrated way to inform subsequent plan policy. This gives a clear policy-led foundation to the plan, which will prove invaluable as it subsequently informs the strategies, policies and objectives of local authority plans and public and private projects.

In terms of electricity transmission there are a number of important Government Policy documents namely:

- Department of Communications, Energy and Natural Resources (2015) White Paper On Energy: Ireland's Transition to a Low Carbon Energy Future 2015-2030;
- Department of Communications, Energy and Natural Resources (2019) Climate Action Plan;
- EirGrid's (2017) Grid Development Strategy - Your Grid, Your Tomorrow;



- EirGrid (2017) Tomorrow's Energy Scenarios 2017: Planning our Energy Future.

In this regard, the Department of Communications, Energy and Natural Resources (2015) White Paper on Energy titled Ireland's Transition to a Low Carbon Energy Future 2015-2030 reaffirms the Government's position on energy matters and should be relied upon as a source for policy formulation for energy in the draft. The White Paper acknowledges that developing, maintaining, and upgrading the grid is essential to meeting its short, medium and longer-term objectives. It also has considerable regard to wider emerging EU Policy which promotes smart low-carbon economies centred on energy efficiency. This policy in turn acknowledges the role of sustainable development of individual country's transmission grids to assist in their delivery.

The Climate Action Plan 2019, published on June 17th, 2019 by the Department of Communications, Climate Action and Environment, sets out a 'roadmap' to achieve a net zero carbon energy system by 2050. This Plan builds on the policy framework, measures and actions set out in the National Mitigation Plan, Project Ireland 2040 and the draft National Energy and Climate Plan in order to create a resilient, vibrant and sustainable country. The plan acknowledges that Ireland has to date been very successful in deploying renewable electricity with 30.1% of electricity produced from renewable sources in 2017. As of the 28th of March, 2019, the Irish government has confirmed that Ireland will now aim for at least 70% of Ireland's electricity supply to be generated from renewables by 2030. This aim is increased from the current target for 2030 which was 55% (RES-E) in Project Ireland 2040.

The plan notes that demand for electricity is forecasted to increase by 50% above existing capacity in the next decade. Therefore, in order to achieve the target of 70% in the context of rising energy demand, significant progress in renewable electricity deployment will need to continue, with an increased deployment rate of all renewable electricity technologies.

- At least 3.5 GW of offshore renewable energy;
- Up to 1.5 GW of grid-scale solar energy; and
- Up to 8.2 GW total of increased onshore wind capacity

The Climate Action Plan states that increased levels of renewable generation will require very substantial new infrastructure, including grid infrastructure.

EirGrid's (2017) Grid Development Strategy - Your Grid, Your Tomorrow is consistent with the Government White Paper on Energy and Climate Action 2019 and should also be incorporated/referenced in the plan. The Grid Development Strategy is also set in the context of Government Policy, in particular the Department of Business, Enterprise and Innovations (2017) Action Plan for Jobs 2017 and the Irish Development Authority's (IDA) (2015) strategy, Winning:

Foreign Direct Investment 2015-2019. The Grid Development Strategy acknowledges the need to achieve a balance between social, environmental and economic factors. On the basis of this need the Grid Development Strategy is underpinned by three Statements as follows:

Strategy Statements		
Strategy Statement 1	Strategy Statement 2	Strategy Statement 3
Inclusive consultation with local communities and stakeholders will be central to our approach.	We will consider all practical technology options.	We will optimise the existing grid to minimise the need for new infrastructure.

Figure 2: Strategy Statements of EirGrid's (2017) Grid Development Strategy - Your Grid, Your Tomorrow

it is important that the draft plan reflects EirGrid's need for robust policies to develop the electricity grid in a safe and secure way. This is necessary to meet projected demand levels; to meet Government Policy; and to ensure a long-term, sustainable and competitive energy future for Ireland. The draft plan should facilitate the development of grid reinforcements including grid connections and a transboundary network into and through the county and between all adjacent counties and to support the development of international connections.

An increased strategic spatial focus will be of the utmost benefit in facilitating EirGrid to successfully plan for the future transmission network and is of particular importance in EirGrid's (2017), recently published, Tomorrow's Energy Scenarios 2017: Planning our Energy Future (ENCL4) which brings together a wide range of factors which can influence the evolution of the electricity sector. One of EirGrid's roles is to plan the development of the electricity transmission grid to meet the future needs of society. The key to this process is considering the range of possible ways that energy usage may change in the future through scenario planning.

The increased spatial focus in the draft plan and the identification of suitable locations at a regional level for larger generation (i.e. renewable energy) and demand centres (i.e. data centres) is a key consideration and importance in formulating energy scenarios into the future and in identifying the optimum grid development solutions. It should be the intention of the draft plan to have this level of spatial focus and that an appropriate context is set in the draft plan to ensure that such development is directed to spatially suitable locations (e.g. a larger demand centre such as data centres should be directed to spatially suitable locations to ensure efficient use of the existing transmission network).



Conclusion

The development of the transmission grid as summarised above and outlined in detail in EirGrid's Grid Development Strategy - Your Grid, Your Tomorrow (2017) and associated Technical Report (2017) (ENCL3), is of critical importance to support the economy and society, as well as to realise the transformation of Ireland's energy system to meet climate change and energy obligations. Electricity infrastructure is critical for regional and local economic and spatial development.

To ensure Ireland's sustainable development and growth, EirGrid requires appropriate and robust policy and objectives for planning the national grid infrastructure and prioritising it appropriately in order to deliver national, regional and local benefit. In this regard, EirGrid requests that the importance of the grid is acknowledged as a strategic issue.

EirGrid is available to collaborate with the planning authority and to provide expert and focused input into the preparation of the draft plan, particularly from a strategic energy policy perspective. Should you have any comments in regard of this submission please contact the undersigned. EirGrid once more welcomes the opportunity to participate in the making of the plan and looks forward to further engagement.

Yours sincerely,

Senior Lead Planner



Enclosures (links to website)

ENCL 1: [Transmission System Map](#);

ENCL 2: [Grid Development Strategy - Your Grid, Your Tomorrow](#)

ENCL 3: [Grid Development Strategy - Your Grid, Your Tomorrow – Technical Report](#)

ENCL 4: [Tomorrow's Energy Scenarios 2017: Planning our Energy Future](#)

References

Department of Communications, Energy and Natural Resources (2015). Ireland's Transition to a Low Carbon Energy Future 2015-2030. Dublin: DCENR. Available Online.

Department of Communications, Energy and Natural Resources (2019). Climate Action Plan 2019. Dublin: DCENR. Available Online.

Department of Housing, Planning and Local Government (2019). Project Ireland 2040 – National Planning Framework. Dublin: DHPLG. Available Online.

Department of Business, Enterprise and Innovations (2017). Action Plan for Jobs 2017. Dublin: DBEI.

Eastern and Midland Regional Assembly (2019) Regional Spatial and Economic Strategy. Ballymun: EMRA.

EirGrid (2017). Tomorrow's Energy Scenarios 2017: Planning our Energy Future. Dublin: EirGrid. Available Online.

EirGrid (2017). Grid Development Strategy - Your Grid, Your Tomorrow. Dublin: EirGrid. Available Online.

EirGrid (2017). Grid Development Strategy - Your Grid, Your Tomorrow [Technical Report]. Dublin: EirGrid. Available Online.

EirGrid (2016). Transmission System Map. Dublin: EirGrid. Available Online.

Government of Ireland (2000). European Communities (Internal Market in Electricity) Regulations, 2000 (SI No. 445/2000). Dublin: The Stationary Office.

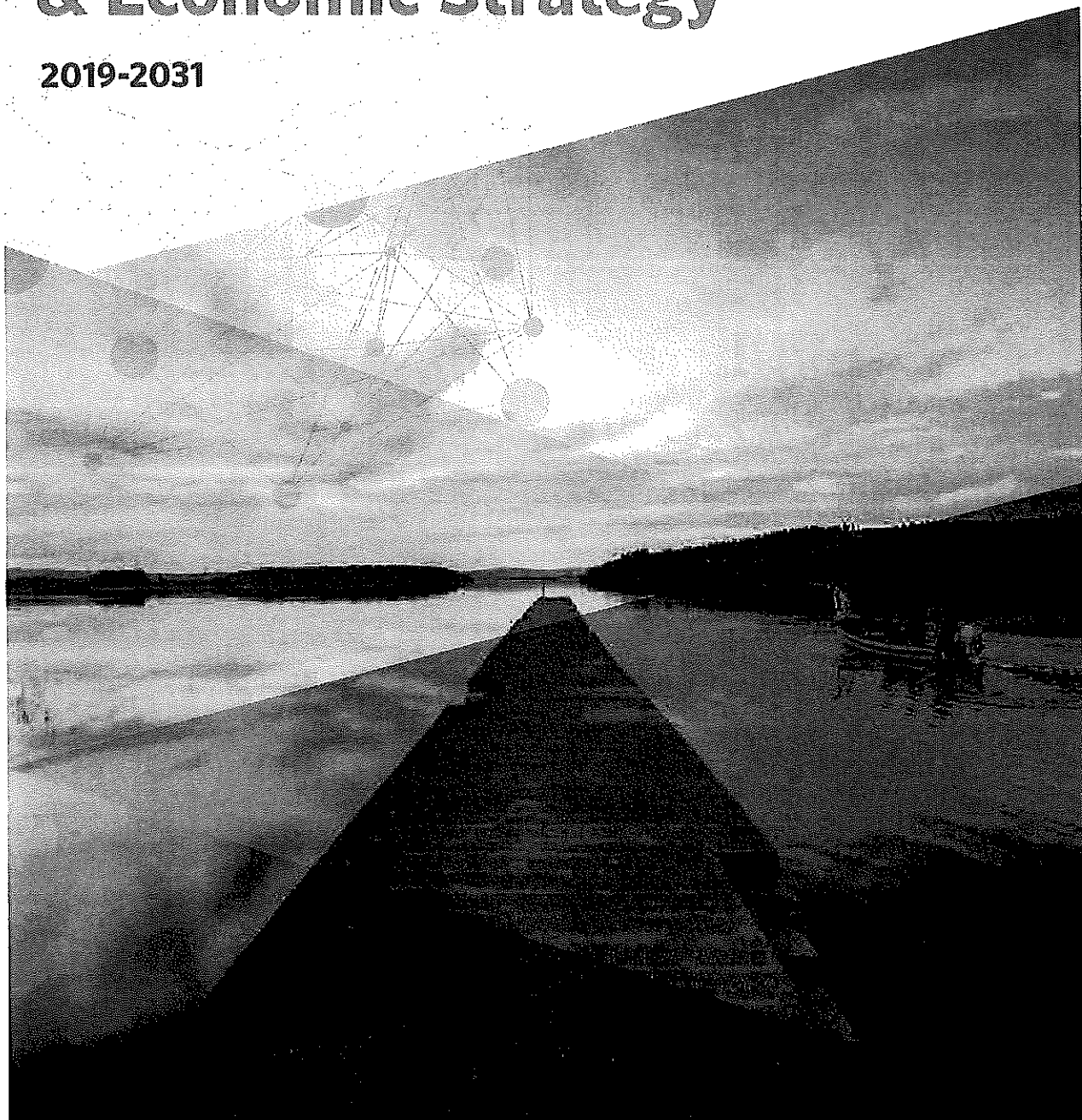
Irish Development Authority (2015) Winning: Foreign Direct Investment 2015-2019. Dublin: IDA. Available Online.



Eastern & Midland Regional Assembly

Regional Spatial & Economic Strategy

2019-2031



Tionscadal Éireann
Project Ireland
2040



Banail Bhoilánach Cúirte agus Léinn
Eastern and Midland Regional Assembly

Contents

i	Director's Foreword.....	4			
ii	Members of the Eastern and Midland Regional Assembly.....	4			
iii	Cathaoirleach's Message.....	5			
CHAPTER 1:					
	Introduction.....	6			
1.1	Vision.....	6			
1.2	Eastern and Midland Regional Assembly.....	6			
1.3	What is a Regional Spatial and Economic Strategy (RSES)?.....	8			
1.4	Spatial and Economic Policy Background.....	10			
1.5	The RSES Process.....	13			
1.6	Regional Profile.....	14			
CHAPTER 2:					
	Strategic Vision.....	20			
2.1	Our Shared Goals.....	20			
2.2	Vision and Key Principles.....	23			
2.3	Regional Strategic Outcomes.....	24			
CHAPTER 3:					
	Growth Strategy.....	26			
3.1	Developing a Growth Strategy for the Region.....	27			
3.2	Growth Enablers for the Region.....	33			
CHAPTER 4:					
	People and Place.....	42			
4.1	Introduction and context.....	42			
4.2	Settlement Strategy.....	44			
4.3	Defining a Settlement Typology.....	47			
4.4	Dublin City and Suburbs.....	52			
4.5	Regional Growth Centres.....	53			
4.6	Key Towns.....	71			
4.7	Self-Sustaining Growth Towns and Rural Places: Towns, Villages and the Countryside.....	93			
4.8	Rural Places: Towns, Villages and the Countryside.....	94			
CHAPTER 5:					
	Dublin Metropolitan Area Strategic Plan (MASP).....	98			
5.1	Introduction and Context.....	98			
5.2	Vision.....	100			
5.3	Guiding Principles for the growth of the Dublin Metropolitan Area.....	101			
5.4	Metropolitan Area Strategy.....	102			
5.5	Enabling Infrastructure.....	106			
5.6	Integrated Land use and Transportation.....	107			
5.7	Housing Delivery.....	112			
5.8	Employment Generation.....	114			
5.9	Green Infrastructure and Amenities.....	116			
CHAPTER 6:					
	Economy and Employment.....	120			
6.1	Introduction.....	120			
6.2	Profile.....	122			
6.3	Economic Strategy.....	124			
6.4	The Region's Economic Engines and their Sectoral Opportunities.....	132			
6.5	Specific sectors: Retail, Tourism, Marine, Low Carbon Economy and Agriculture.....	136			
6.6	Drivers for Resilient, Sustainable and Inclusive Economic Growth.....	142			
6.7	Capacity Building: Bidding capacity, Shared evidence base, future proof, and anticipating economic structural changes.....	148			
CHAPTER 7:					
	Environment and Climate.....	150			
7.1	Introduction.....	150			
7.2	Integrated Land and Marine Planning.....	152			
7.3	A Clean and Healthy Environment.....	155			
7.4	Flood Risk Management.....	156			
7.5	Biodiversity and Natural Heritage.....	160			
7.6	Ecosystem Services.....	163			
7.7	Green Infrastructure.....	164			
7.8	Landscape.....	169			
7.9	Climate Change.....	172			
CHAPTER 8:					
	Connectivity.....	182			
8.1	Introduction.....	182			
8.2	Transport Strategy.....	183			
8.3	Framework for the Integration of Transport Planning with Spatial Planning Policies.....	185			
8.4	Transport Investment Priorities.....	190			
8.5	International Connectivity.....	194			
8.6	Communications Network and Digital Infrastructure.....	197			
CHAPTER 9:					
	Quality of Life.....	198			
9.1	Introduction.....	198			
9.2	Diverse and Inclusive Region.....	199			
9.3	Housing and Regeneration.....	201			
9.4	Healthy Placemaking.....	205			
9.5	Social and Economic Opportunity.....	208			
9.6	Access to Childcare, Education and Health Services.....	211			
9.7	Access to Arts, Culture, Language and Heritage.....	214			
CHAPTER 10:					
	Infrastructure.....	218			
10.1	Introduction.....	218			
10.2	Sustainable Management of Water.....	219			
10.3	Energy.....	224			
10.4	Waste Management.....	227			
CHAPTER 11:					
	All Island Cohesion.....	228			
11.1	Introduction.....	228			
11.2	Collaboration with Northern Ireland in Support of an All Island Approach.....	229			
CHAPTER 12:					
	Implementation and Monitoring.....	234			
12.1	Introduction.....	234			
12.2	Legislative Background.....	235			
12.3	Implementation.....	237			
12.4	Monitoring and Reporting.....	241			
List of Tables.....242					
List of Figures.....243					
Appendices EMRA RSES					
Appendix A	Asset-Based Criteria				
Appendix B	SPA and County Population Tables				
Appendix C	Economic Chapter Appendices				
Appendix D	Environmental Legislation and Policy Background				
Appendix E	Functional Urban Area Methodology				
Appendix F	List of Designated Sites in EMRA				
Appendix G	Glossary				
Appendix H	List of Flood Relief Schemes to be advanced in initial phase to detailed design and construction				
Appendix I	List of Regional Policy Objectives				

Decarbonising the Energy Sector

The Region will need to shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. Decentralised energy will be critical to the Region's energy supply and will ensure that the Region can become more self-sufficient in relation to its energy needs.

Generating electricity supply from indigenous renewable sources requires:

- facilitating the provision of appropriate renewable energy infrastructure and technologies and deeper cooperation with Northern Ireland and the EU
- expansion and upgrading of the grid with the aim of increasing the share of variable renewable electricity that the all-island system can accommodate
- Onshore wind, bioenergy, solar and offshore energy
- Effective community engagement including support for micro generation
- Moving from carbon intensive fossil fuel generation to lower emissions fuels
- Increasing the use of electricity and bioenergy to heat our homes and fuel our transport
- The need to ensure sufficient electricity to meet increased demand

The Strategy supports an increase in the amount of new renewable energy sources in the Region. This includes the use of wind energy - both onshore and offshore, biomass, and solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this Strategy.

It is necessary to establish a consistency of approach by planning authorities, both in identifying areas suitable for renewable energy development and having regard to potential impacts, inter alia on biodiversity, landscape and heritage. It is also necessary to reflect the advancements in technology, and reflect the need to engage with, and be responsive to the needs of communities asked to host renewable energy infrastructure.

The need for early stakeholder engagement in relation to renewable energy generation projects is critical. Effective community engagement is essential for building public confidence and to help Ireland achieve a transition to renewable energy. An increase in community participation in renewable energy projects such as community ownership models should be supported in this regard. Optimisation of community benefit from renewable energy projects also needs to be ensured.

The Sustainable Energy Community Network is a programme established by Sustainable Energy Authority of Ireland (SEAI) supporting communities in which everyone works together to develop sustainable energy systems. 200 no. communities across Ireland are now part of the Sustainable Energy Communities network, a rapidly expanding national movement towards a cleaner energy future. This programme has been particularly successful in the Region.

CASE STUDY:

Dunleer Sustainable Energy Community



In 2015 the Dunleer Sustainable Energy Community (SEC) was established with the vision of providing leadership to the community of Dunleer, County Louth and other communities across Ireland on addressing the challenge of climate change. The objectives of the group are:

- Education: through the 'energy ambassadors' community education programme to advise people on everyday steps to reduce energy use
- Retrofit of homes: leading to a 30% reduction in energy use in 200 homes throughout County Louth
- Community energy generation, partnering with the Centre for Renewable Energy at Dún Dealgán IT, Louth County Council and the Altham region in Germany to develop knowledge and best practice

District heating offers an efficient and cost-effective heating option using networks from a variety of potential technologies and renewable energy sources, such as combined heat and power (CHP), biomass energy, geothermal or energy from waste. The use of renewable energy solutions to provide heating and hot water to houses and businesses contributes to sustainability as it reduces demand for and consumption of energy while using a renewable form of fuel.

Waste heat presents a huge indigenous resource. Waste heat is the single largest available, low-carbon source of energy available in the Region that is not being used. In Dublin City alone, there is enough waste heat to meet the heating demands of nearly half of the city's buildings. These sources of waste heat are typically used in District Heating systems. Sources of waste heat include data centres. Waste heat is a resource which is too often overlooked and can meet a large proportion of the Region's heat demands indigenously and without fossil fuels. In response, the Strategy seeks to support the micro-generation, geothermal energy, district heating, storage of heat and energy and the role of the electricity transmission and distribution network.

CASE STUDY:

HeatNet

South Dublin County Council has an established track record in participating in European projects, with a focus on Spatial Planning and Energy for Communities in partnership with other local authorities across Europe and the Covenant of Mayors initiative. In partnership with City of Dublin Energy Management Agency (CODEMA), the Council is now leading a project to develop Dublin city's first public district-heating network.

With partners across EU states, the 'Heatnet' project will link Tallaght Hospital to the County Hall complex to form the core of a district-heating network which when operational is expected to save the Council almost 1,900 tonnes per year after 5 years. Heatnet will run until 2020 and will receive European Regional Development Funding through the INTERREG North West Europe programme.

Local authorities should harness the potential of renewable energy in the Region across the technological spectrum from wind and solar to biomass and, where applicable, wave energy, focusing in particular on the extensive tracts of publicly owned post extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy.

The provision of infrastructure should be supported in order to facilitate a more distributed, renewables-focused energy generation system, harnessing both on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting sites of optimal energy production to the major sources of demand.

REGIONAL POLICY OBJECTIVES:

Decarbonising the Energy Sector

RD0735: EMCA shall, in conjunction with local authorities in the Region, identify Strategic Energy Zones as areas suitable for large energy generating plants, the role of community and micro energy, including the ability of industrial settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure an environmental constraint is addressed in the strategic regional land-use strategy could be developed to support delivery of projects within the Strategic Energy Zones.

RD0736: Planning policy at local authority level shall refer and refer to the principles of planning guidance set out in Department of Housing, Planning and Local Government publications relating to Wind Energy, development and the DCCGE Code of Practice for Wind Energy Development in relation to Guidelines for Community Engagement and any other relevant guidance which may be issued in relation to sustainable energy proposals.

RD0737: A local authority plan for the Region should be developed that sets out, in separate but the same, to apply the range of the energy resources available for the full mix available to the current and projected consumption requirements for growth in this market.

RD0738: Local authorities shall consider the use of public support to support investments which deliver energy efficiency - in particular energy efficiency investments which would otherwise be wasteful. A feasibility assessment for district heating in local authority areas shall be carried out and strategic planning commitments for district heating be established.

10.3 Energy

A secure and resilient supply of energy is critical to a well-functioning region, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity. With projected increases in population and economic growth, the demand for energy is set to increase in the coming years.

In the context of a move towards a more energy-efficient society and an increase in renewable sources of energy, there is a need to set a policy approach which will address an increased demand for indigenous resources and increased security of supply. Overreliance on non-indigenous supplies of energy is still a major issue for the Region. To meet our energy targets, we need to better leverage natural resources to increase our share of renewable energy. There is an established tradition of energy production in the Midland counties by state agencies, however national environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants in these counties. (Refer to Chapter 7 Environment & Climate in relation to renewable energy).

The main energy networks serving the Region are electricity and gas. Having regard to projected population growth and economic growth in the Region it is important that the existing electricity and gas networks can be upgraded to provide appropriate capacity to facilitate development of the Region. Improving energy efficiency is vital in order to reduce energy consumption while improving economic growth. The roll-out of Smart Grids to support Smart Cities development is supported to advance this sector. Increased connectivity with other grids is also needed and projects such as the North South interconnector are of great importance for the Region. See relevant policy supports in relation to Smart Technologies in Chapter 6 Economy and Employment and Chapter 7 Environment.

The diversification of our energy production systems away from fossil fuels and towards green energy such as wind, wave, solar and biomass, together with smart energy systems and the conversion of the built environment into both generator/consumer of energy and the electrification of transport fleets will require the progressive and strategic development of a different form of energy grid. The development of onshore and offshore renewable energy is critically dependent on the development of enabling infrastructure including grid facilities to bring the energy ashore and connect to major sources of energy demand. It is also necessary to ensure more geographically focused renewables investment to minimise the amount of additional grid investment required, for example through co-location of renewables and associated grid connections.

The Dublin Region is the major load centre on the Irish electricity transmission system. Approximately one third of total demand is located here, similarly the Eastern Region is a major load centre on the Irish transmission system. The main urban demand centres are composed of a mix of residential, commercial and industrial demand, which is expected to grow up to 2025 and beyond. Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. This is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality, electricity supply.

CASE STUDY:

CODEMA

CodeMa is Dublin's Energy Agency, providing advice and support for the four local authorities in the Dublin Region in ensuring their own sustainable energy use. CodeMa is also engaging with EU and SEAI funded energy programmes to promote innovation in the region. An increasingly important role is to increase energy awareness among citizens and energy stakeholders, thus providing a comprehensive local and regional service for energy and climate change.

Examples of CodeMa's work include Climate Change action planning, district heating system planning, energy performance contracting, management of European projects, energy saving behavioural campaigns, and detailed energy reviews.

Future Electricity and Gas Supply and Demand

Support for the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects that might be brought forward in the lifetime of this plan under the Grid's (2017) Grid Development Strategy will serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity.

GUIDING PRINCIPLES

Local authority development plans shall facilitate the provision of energy networks in principle based on the following guiding principles and considerations:

- The development is required in order to facilitate the provision or retention of significant economic or social infrastructure;
- The route proposed has been identified with due consideration for social, environmental and cultural impacts and address issues of climate resilience, biodiversity, impact on soils and water quality;
- The design is such that it will achieve least environmental impacts;
- Where impacts are, acceptable mitigation features have been included;
- Where it can be shown that the proposed development is consistent with international best practice with regard to materials and technologies and that it will ensure a safe, secure, reliable, economic and efficient high-quality network;
- In considering activities of this nature that traverse a number of counties or that traverse one county in order to serve another, planning authorities should consider the proposal in light of the criteria outlined above. It is important that planning authorities are engaged in early consultation and discussion with the relevant Transmission System Operator;
- Corridors for energy transmission or pipelines should avoid creating sterile lands proximate to key public transport corridors, particularly rail routes, and in built up urban areas;
- Regate for any National or Regional Landscapes/Coastal Character Assessment.



The following Regional Policy Objectives are outlined to ensure the development of the energy networks in a safe and secure way to meet projected demand levels, to meet Government Policy, to ensure a long-term, sustainable and competitive energy future for Ireland and enable energy service providers to deliver their statutory function.

REGIONAL POLICY OBJECTIVES:

Energy Infrastructure

- RPO 10.19 Support and build the Smart Grids and Smart Cities Action Plan enabling new connections grid balance energy management and micro-grid development.
- RPO 10.20 Support and facilitate the development of networks to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be undertaken over the lifetime of this Strategy including the delivery of the necessary interlink of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid that is sustainable and timely manner subject to appropriate environmental assessment and planning process.
- RPO 10.21 Support an integrated Single Electricity Market (SEM) as a priority for Ireland.
- RPO 10.22 Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission capacity distribution of a renewable energy focus on generation across the major demand centres (as in map 5.1) with a population of 8 million people in Dublin.
- Facilitating interconnection to Europe particularly the Celtic Interconnector to France and further interconnection to Europe (the GCH) in the longer term.
- Facilitating interconnection to Northern Ireland further cooperation with relevant departments in Northern Ireland to enhance interconnection across the island in the long term.
- Facilitating transmission networks into and through the Region and between all adjacent regions to ensure the SEM can be fully utilised to assist in long term energy and that capacity is available at local regional and national scale to meet future needs.
- Facilitate the delivery of the necessary interlink of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid that is sustainable and timely manner.
- Support the expansion of cross-regional energy corridors from interconnection to other adjacent regions that could complement the delivery of energy networks.

- RPO 10.23 Support the Grids Implementation Plan 2017 – 2022 and Transmission Development Plan (TDP) 2016 and any subsequent plans prepared during the life time of the SEM that facilitate the timely delivery of major interconnector projects subject to appropriate environmental assessment and the completion of the planning process. In particular:
 - Support reinforcement of the Greater Dublin Area (Greater Dublin Area and Woodlands 400 kV substations) to increase the capacity of the often congested and heavily loaded Dublin transmission network to enable the transmission system to effectively accommodate more diverse power flows and to facilitate further local growth in the area.
 - Support the installation of additional transformer capacity and increase of local capacity to meet Dublin demand growth with strengthening of the local distribution network and improve the security and quality of supply.
 - Support the local energy reinforcements Project to strengthen the network in the parts of the Midlands and provide additional capacity for potential demand growth in the region and strengthen the Region's transmission network by improving security and quality of supply and ensuring there is the potential for demand growth.
- RPO 10.24 Support the sustainable development of Ireland's offshore renewable energy resources in accordance with the Department of Communications, Energy and Natural Resources Offshore Renewable Energy Development Plan and any subsequent thereto, including any associated domestic and international grid connection enhancements.

10.4 Waste Management

Waste Management Policy for the Region is contained in the Eastern and Midlands Region Waste Management Plan 2015 – 2021. The overall vision of the Regional Waste Management Plan is to rethink the approach taken towards managing waste and that waste should be seen as a valuable material resource. The Plan, through this section and Chapter 7 Environment & Climate, also supports a move towards achieving a circular economy which is essential if the Region is to make better use of resources and become more resource efficient.

Waste is defined as anything that is discarded. A circular economy is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste. This Strategy supports the move to a more circular economy as this will save resources, increase resource efficiency and help to reduce carbon emissions. The successful implementation of circular economy principles will help to reduce the volume of waste that the Region produces and has to manage and will assist in delivering the resource efficiency ambition of the Europe 2020 Strategy.

Local authorities should achieve waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal. This can be achieved by complying with the strategic objectives, targets and goals set out in the Eastern – Midlands Region Waste Management Plan 2015 – 2021 and any subsequent waste management plans and promoting a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible. Waste minimisation and waste avoidance can be encouraged through the reuse of materials and using fewer resources in the production and distribution of products.

REGIONAL POLICY OBJECTIVES:

Waste Management
 RPO 10.25 Development of business liability for how waste will be reduced, it involving the production of the circular economy, facilitating the use of materials at their highest value for as long as possible and how remaining quantities of waste will be managed and how to promote the inclusion of developments to facilitate more easily accessible green space that supports the separate collection of dry, glass, paper and food and other household waste in line with the requirements of the Eastern and Midlands Region Waste Management Plan.

()

()