

## Engineers Ireland

# Submission on ‘Draft Regional Spatial and Economic Strategy for the Eastern and Midland Region’

For the attention of the Eastern & Midland Regional Assembly

23<sup>rd</sup> January 2019

### Highlights

- Draft RSES is a welcome step in the implementation of the National Planning Framework
- Overall vision should be revisited to incorporate EMRA’s wider responsibilities
- Residential development in Dublin must be compact and supported by infrastructure
- Greater detail required in how RPOs will advance e.g. climate action and all-island cohesion
- Spatial planning and investment must be aligned for delivery of sustainable infrastructure

## 1. Introduction

This submission is informed by a series of ‘Engineering our Regions’ workshops held in Dublin, Cork and Galway at which Engineers Ireland members and other stakeholders raised their priorities for the RSEs and more generally overcoming the challenges facing our regions to 2031. Based on these discussions, our publications and other research, we have developed a series of recommendations for the Regional Spatial and Economic Strategies, grouped as follows: People and Place, Environment, and Connectivity & Infrastructure. We would firstly like to make some general recommendations.

Engineers Ireland welcomes the publication of the draft RSES for the Eastern and Midland Region. We believe this process is an important step in the implementation of ‘Ireland 2040 Our Plan – National Planning Framework’ (NPF). It is now vital that the Regional Policy Objectives (RPOs) and the Metropolitan Area Strategic Plan (MASP) are implemented through the forthcoming local authority development plans and aligned with the allocation of investment (p191).

It is positive to note that the 16 Regional Strategic Outcomes are aligned with the NPF’s 10 National Strategic Outcome. However, there is one clear omission: NSO 4 (Sustainable Mobility). This should be listed as aligned with RSO 6 (Integrated Transport and Land Use). Furthermore, it would be useful

if a full list of RPOs is included (perhaps in an appendix) in the RSES. This list should be structured by RSO to demonstrate the alignment of the RPOs with the RSOs.

Engineers Ireland is broadly supportive of the RSES's vision (p4/21):

*"To create a sustainable and competitive region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all"*

However, we believe that the vision could be more holistic in terms of infrastructure, services and climate action. Cognisance should be given to the EMRA's wider responsibility under the Planning and Development Act 2000 (as amended) to:

*"address employment, retail, housing, transport, water services, energy and communications, waste management, education, health, sports and community facilities, environment and heritage, landscape, sustainable development and climate change"*

For example, Engineers Ireland supports the development of both civil infrastructure (transport, energy, water / wastewater, waste, communications) and social infrastructure (education, social housing, health, childcare). These facilities must be planned and prioritised to sustainably meet future needs and to transform land use patterns, where necessary<sup>1</sup>.

## **2. People and Place**

Ireland is currently facing considerable housing challenges and demographic and economic trends are increasing the pressure on our housing system. While housing completions have improved in recent years, this level is still far below the estimated level of housing demand based on demographic trends (approximately 35,000 dwellings required per year). Rebuilding Ireland established ambitious targets for house completions; it is essential that these targets are surpassed, emphasising new builds and bringing vacant houses back into productive use.

As housing supply increases, focus should be placed on compact growth of urban areas, increasing population density and encouraging infill where possible. More varied house types should also be built which will allow people to transition to suitable homes at different stages in their life. We are therefore supportive of RPOs which seek to implement the NPF's compact growth goal, such as RPOs 4.3, 5.4, 5.5, 9.3, 9.9 and 9.11.

### **Dublin**

The continuous expansion of the (car-dependent) Dublin commuter belt is unsustainable, is undermining the competitiveness of the city, is straining public services and is seriously impacting the health and wellbeing of the population of the Region. Future residential development in Dublin must be smart and compact – strategic investments should seek to 'unlock' development lands close to the city and to regenerate the city (and other urban areas in the Region). Population, employment and amenities must be aligned more efficiently to reduce congestion and emissions from commuting.

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<sup>1</sup> Engineers Ireland (2018). Policy Brief: Infrastructure investment and policy reform. Available at: <http://engineersireland.ie/communications/policy.aspx>

We agree that Dublin is a Global City Region (RSO 14, Vision p66):

*Over the years to 2031 and with a 2040 horizon, the Dublin metropolitan area will build on our strengths to become a smart, climate resilient and global city region, expanding access to social and economic opportunities and improved housing choice, travel options and quality of life for people who live, work, study in or visit the metropolitan area.*

As with the overall RSES vision, this vision could be more holistic by referencing other forms of infrastructure which are referred to as 'enabling infrastructure' in section 5.5.

Dublin is facing critical capacity constraints in water, public transport and the road network (especially the M50). The EMRA must plan for continued population and economic growth in the Dublin Metropolitan Area by increasing capacity in these and other sectors through strategic infrastructural investment (see Section 4 of this submission) and effective asset management. Consideration should be given to expanding RPO 5.1 to include a list of priority infrastructure projects necessary to enable Dublin's compact and sustainable growth. This could be achieved by referring to a table as done in section 10.

Furthermore, to reduce the stress placed on the road network by people commuting to Dublin City, more sources of employment should be located at the periphery of the city and in other urban centres in the region. Shared office centres and remote work centres should be introduced in a new RPO: Support the provision of a greater diversity of office types, including shared office space and other models, and the promotion of new office space at the periphery of Dublin City located optimally around population settlements.

In general, rather than artificially constraining Dublin's growth, we would like to see smart, compact development within Dublin as well as the development of attractive city-regions elsewhere in Ireland. We strongly believe that concentrated population and employment growth in Ireland's other four cities will relieve pressure on Dublin and improve Ireland's competitiveness and the quality of life of all citizens.

#### **All-Island Cohesion & Dublin-Belfast Economic Corridor**

Engineers Ireland is strongly supportive of an all-island approach to connectivity and growth. We are glad to note section 11 of the RSES which outlines collaboration in support of an all-island approach. However, there is insufficient detail provided on this collaboration and RPO 11.1 is very broad statement. This RPO should be expanded to include areas for practical co-operation such as industrial development and access to employment, ports, airports, road infrastructure, greenways, education, communications and energy interconnection.

In particular, Engineers Ireland would like to see significantly improved connectivity on corridors such as Dublin-Dundalk-Belfast and Dublin-Derry/Letterkenny. Such connectivity would enhance the attractiveness of all of these centres, providing focal points for growth throughout and between the regions. This recommendation is in line with RPO 6.4. More detail on the Dublin-Belfast Corridor could be provided in this RPO, drawing on for example the growth enablers for the corridor such as road and rail services as listed on p72 and in section 8 Connectivity. Further information on the

development of the Dublin-Belfast Economic Corridor can be found in a publication by the Irish Academy of Engineering<sup>2</sup>.

While the full implications of Brexit still remain unknown, the EMRA must seriously consider the potential impacts on the Region and County Louth, in particular. The EMRA should collaborate with the Northern & Western Regional Assembly to identify risks and opportunities for the implementation of the RSES and other regional activities including but not limited to areas of cross-border co-operation.

### 3. Environment

The latest greenhouse gas emissions accounts show that, in the last 3 years, national greenhouse gas emissions increased by 6.4% or 3.65 Mt CO<sub>2</sub>e<sup>3</sup>. It is unlikely that Ireland will achieve 2020 climate targets and this will make the achievement of 2030 targets all the more difficult. Engineers Ireland believes that each of us have our part to play in the transition to a low carbon economy.

Engineers Ireland agrees that significant potential exists for climate action in the Eastern & Midland Region and we favourably note climate action embedded in RPOs such as:

- Adoption of the principles of the circular economy (RPO 6.20)
- Sustainable land use and management strategies (RPO 7.39)
- Transition to a low-carbon energy system through the development of clean technologies (RPO 7.34)
- Sustainable use of marine resources (such as offshore wind) (RPO 6.19)
- Ensuring clean air and water quality (RPOs 7.7, 7.10 & 7.11)
- Addressing flood risk and coastal erosion (RPO 7.14)
- Promotion of low to zero energy structural material in the construction industry (RPO 7.40)
- EV facilities (RPO 7.41)

Generally, regional policy must combat fragmented and sprawling development with compact and sustainable growth and strong climate action.

#### Water quality and flooding

Engineers Ireland agrees that water quality (p116) and flood risk management (p118) should be environmental priorities for the RSES. These were core topics of our *The State of Ireland 2018: A review of infrastructure in Ireland* report<sup>4</sup>. Based on this report, we have two recommendations:

- RPO 7.10 / RPO 7.11 should consider Drinking Water Safety Plan risk assessments and the implementation of mitigation measures to address all high and very high-risk hazardous events to protect public health. In general, the EMRA should assist other State bodies in working towards a safe and secure drinking water supply for the entire country.

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<sup>2</sup> Irish Academy of Engineering (2016). Dublin-Belfast Economic Corridor: A European growth hub on the island. Available at: <http://iae.ie/wp-content/uploads/2018/01/Dublin-Belfast-Economic-Corridor.pdf>

<sup>3</sup> Environmental Protection Agency (2018). Ireland's Provisional Greenhouse Gas Emissions 1990-2017. Available at: <http://www.epa.ie/pubs/reports/air/airemissions/ghgemissions2017/>

<sup>4</sup> Engineers Ireland (2018). The State of Ireland 2018: Special focus on Water/Wastewater and Flooding. Available at: <http://engineersireland.ie/communications/policy.aspx>

- Regarding the Flood Risk Management Plans (FRMPs), RPO 7.14 should consider how the EMRA and local authorities could assist the Office of Public Works in developing a strategic plan for the efficient delivery of schemes identified in the FRMPs and smaller schemes, drawing on international best practice.

Please refer to *The State of Ireland 2018* report for more information.

### **Electricity generation**

Some attention is given to the emissions caused by fossil-fuel-based electricity generation stations, including peat-fired stations in Edenderry, Lough Ree and West Offaly: “Peat use for power generation is expected to decrease in the short to medium term and the draft RSES seeks to ensure that alternative energy sources can be facilitated”. In this context, we would welcome more detail on plans for onshore renewable energy generation and sustainable job creation, particularly in the Midland Region.

### **Interconnection**

The Republic of Ireland’s energy future is inextricably linked with Northern Ireland as part of the all-island Single Electricity Market (SEM), which may or may not be affected by Brexit. Nevertheless, it is essential that work on the North–South Interconnector continues to further bolster security of supply and reduce cost to the consumer. Regional policy should consider additional interconnection options, such as the Celtic Interconnector, which will further connect Ireland to the European electricity market. We are glad to see these issues included in RPO 10.16 and RPO 10.17.

### **Building standards and energy efficiency**

Engineers Ireland is strongly supportive of building standards other measures to enforce/promote energy efficiency. Highly effective energy efficiency policies must be implemented across a range of sectors, including transport, residential, public, manufacturing and services. In particular, the deep retrofit of Ireland’s domestic and public buildings towards nearly zero-energy building (nZEB) standards should be an immediate priority. All new buildings must also achieve nZEB standard. Changes in energy practices and attitudes will be pivotal. Community education programmes, awareness campaigns and grant schemes and supports should be referenced in RPO 7.39.

### **Climate resilience**

Climate change will have major impacts throughout the Eastern & Midland Region, particularly coastal areas. For example, changing prevailing winds will influence coastal erosion and flooding patterns. Development decisions, such as along the Dublin-Belfast Corridor, should therefore be informed by risk assessments. More generally, we are supportive of RPO 7.31 which states: “Local Authorities shall develop, adopt and implement local climate action strategies which shall assess local vulnerability to climate risks, quantify the emissions produced within their jurisdictions, and identify, cost and prioritise adaptation actions in accordance with the guiding principles of the National Adaptation Framework.”

## **4. Connectivity & Infrastructure**

The membership of Engineers Ireland has a wealth of experience in designing, planning and delivering capital projects spanning many decades. Over the past decade, we have reviewed and

campaigned on the acute underinvestment in infrastructure and we welcome recent increases in capital investment and, in particular, the move towards long-term investment planning.

We agree that “high-quality infrastructure is an important element of a modern society and economy, it provides essential functions and services that support societal, economic and environmental systems at local, regional and national levels” (p174). Each year, Engineers Ireland prepares *The State of Ireland* report an independent assessment of infrastructure, recommending two-year and five-year actions in transport, communications, energy, water, wastewater, flooding and waste<sup>5,6,7</sup>.

We favourably note that many of the priority projects which we have identified in *The State of Ireland* reports are included within RPOs. These include but are not limited to:

- Implementation of the NTA Transport Strategy for the GDA 2016-35, including:
  - Metro North, Rail electrification, DART Expansion Programme (RPO 8.6 / Table 8.2)
  - BusConnects (RPO 8.7 / Table 8.3)
- Construction of a second main runway at Dublin Airport and the development of high capacity transport from Dublin Airport (RPOs 8.15, 8.16, 8.17, 8.18)
- Water Supply Project for the Eastern and Midland Region (RPO 10.2 / Table 10.1)
- Wastewater treatment as outlined in the Irish Water Business Plan (RPO 10.5 / Table 10.2)
- Implementation of the National Broadband Plan (RPO 8.23 and RPO 8.24)
- Infrastructure to support 5G information and communications technology (RPO 8.23)
- North-South Interconnector to bolster security of supply and reduce cost (RPO 10.17)
- Implementation of Flood Risk Management Plans (RPO 7.12, 7.13, 7.14 & 7.15)
- Specific planning measures to support renewable energy technologies (RPO 7.34).

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<sup>5</sup> Engineers Ireland (2016). *The State of Ireland 2017: Special focus on Transport and Communications*. Available at: <http://engineersireland.ie/communications/policy.aspx>

<sup>6</sup> Engineers Ireland (2017). *The State of Ireland 2016: Special focus on Energy*. Available at: <http://engineersireland.ie/communications/policy.aspx>

<sup>7</sup> Engineers Ireland (2018). *The State of Ireland 2018: Special focus on Water/Wastewater and Flooding*. Available at: <http://engineersireland.ie/communications/policy.aspx>

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### **Background to Engineers Ireland**

With over 25,000 members from every discipline of engineering, Engineers Ireland is the voice of the engineering profession in Ireland. Engineers Ireland was established in 1835 making us one of the oldest and largest professional bodies in the country. Members come from every discipline of engineering, and range from engineering students to fellows of the profession.

### **Our responsibility is to**

- Promote knowledge of engineering
- Establish and maintain standards of professional engineering and engineering education
- Provide opportunities for Continuing Professional Development (CPD)
- Maintain standards of professional ethics and conduct
- Ensure that professional titles are granted to qualified candidates
- Act as the authoritative voice of the engineering profession in Ireland

### **Our Vision Statement**

Engineers Ireland: a community of creative professionals delivering solutions for society.

### **Our Mission Statement**

Engineers Ireland is an organisation that enables the engineering community to progress their professional development, make an impact on society and encourage and educate the future generations of engineers.