



SMART GRID IRELAND RESPONSE

North-West Regional Energy Strategy



Introduction

The Centre for Competitiveness and Smart Grid Ireland wish to commend the Derry City and Strabane District Council and Donegal County Council on their commitment to collaboration in decarbonization of the North West region of the island of Ireland and their investment towards smart, low carbon economies. The strategy which recommends a whole system approach provides the framework against which real reductions in carbon within the region can be made and measured against the EU and UK and Irish governments targets on net zero legislation.

The major private sector investment in the new Mega-Hub data Centre's in both County Londonderry and Donegal generates an industry need for a decarbonized energy supply and provides a framework for integrating both economic and social initiatives alongside the potential of a Free Port in Derry.

The International Energy Agency Commission's Urgent Action on Energy Efficiency, established in June 2019 at the IEA's Fourth Annual Global Conference on Energy Efficiency in Dublin, Ireland outlined these priorities for a sustainable energy future

- 1. Prioritise cross-cutting energy efficiency action for its economic, social and environmental benefits.** A stronger, all-of-government policy focus will enhance social and economic development, energy security and resilience, decarbonisation, and rapid job creation and economic stimulus
- 2. Act to unlock efficiency's job creation potential.** Energy efficiency can quickly deliver job growth and can become a long-term, sustainable employment sector
- 3. Create greater demand for energy efficiency solutions.** Efficiency action will be most rapidly scaled up through a focus on increasing demand for efficient products and services and enabling greater levels of market activity
- 4. Focus on finance in the wider context of scaling up action.** Mobilising finance is an essential element of efficiency action, and policies to do so will be most effective if they are part of a wide, coherent approach to driving market scale
- 5. Leverage digital innovation to enhance system-wide efficiency.** Policymakers can take advantage of digital innovation's potential to enable smart control, better energy management, and wider energy system optimisation
- 6. The public sector should lead by example.** Governments should lead through investment in public sector efficiency and driving innovation and higher standards throughout its reach
- 7. Engage all parts of society.** Implementation of efficiency action can happen at all levels of society, with cities, businesses, and local communities all playing a particularly important role in its success
- 8. Leverage behavioural insights for more effective policy.** People are at the centre of energy efficiency action, and insights from behavioural science can help design smarter policies
- 9. Strengthen international collaboration.** International collaboration and exchange of best practice allow countries to learn from each other and to harmonise approaches and standards where appropriate
- 10. Raise global energy efficiency ambition.** Governments should be significantly more ambitious in both the short and long-term when setting their efficiency targets, policies and actions

Consultation Response on the Draft North West Regional Energy Strategy

1. Do you agree with our approach to a joint council regional strategy?
YES – A very positive and progressive approach
2. Do you agree that we have covered the 5 main themes in our roadmap toward net zero carbon? Are there any additional themes that we need to cover?

The five themes are satisfactory for the purpose of the overall strategic programme. The transition to a low carbon future means delivering a sustainable, affordable, reliable and resilient electricity network that connects and accommodates far higher levels of renewable generation to enable the electrification of heat, transport and industry. Consideration should be given to new and innovative ways to harness renewable energy production and supply to a smart enabled network.

3. Do you agree that we have covered the 9 main areas of work, as set out within our Flowchart of Smart Energy System work streams? Are there any additional areas that we need to cover?

The nine work areas are fine depending on the scope of work defined within each work area. EG: Digitization should include 5G networks as well as Cyber security systems. Smart Grid Ireland do have concerns about resiliency and robustness of the DSO network in the west of Ireland.

There are many challenges with the level of distributed generation and those planned on the network. Most of the renewable energy is generated in the west of the island, while most of the electricity demand is in the east leading to congestion in the transmission network in the west and this can be a barrier to further roll-out of renewable generation.

Consideration should be given to the Green Region North West (GRNW) draft project proposal as a serious option and a starting point on which to take forward the nine steps. The GRNW proposal will be able to leverage significant private sector funding to support investment in the project.

4. Do you agree that the Regional Energy Strategy should be delivered by an independent body with representation from local government/public sector and industry/commerce? If so, do you consider Council's approach for a North West Regional Energy Hub to be the best solution? If you do not agree, what type of delivery mechanism would you suggest?

Smart Grid Ireland would recommend a Public / Private partnership with the weighting on the private sector with financing enabled by public / EU funds. The North Atlantic Mega-Hub Green Region NW initiative could be a potential delivery mechanism for the strategy with the private sector taking a leading role together with both Councils. A private sector led programme with a supportive Council can speed up development and the implementation of the strategy

5. Do you agree with approach to initially seek funding from the UK Government and the Government of Ireland to kick start the delivery of the Regional Energy strategy, with a view to self-funding longer term?

YES – Led by a not for profit / mutual where excess profits could be redistributed to the local community. This structure with private sector investment secured in partnership with Atlantic Hub and further developing and integration of the Green Region NW project into the Regional Strategy

6. Do you consider 2045 as a reasonable target to achieve a net zero carbon city region? If you do not what do you believe the target year should be and give a brief explanation for your answer.

Set target earlier to 2040 to ensure any slippage would provide some tolerance in the timeline. Leveraging the investment in both councils of the North Atlantic Mega-Hub, we believe a shorter timescale can be achieved considering the size of the Atlantic Hub project with 200MW of storage capacity in both Derry and Donegal with state of the art / new innovative solar and wind generation technology

7. What are the opportunities for the rural and urban communities in the North West City Region to contribute to the successful implementation of the regional Energy Strategy

It had the potential to create a "Jobs Machine." Note International Energy Agency Commission recommendations on shaping a secure and sustainable future for all. Governments have a once-in-a-lifetime opportunity to reboot their

economies and bring a wave of new employment opportunities while accelerating the shift to a more resilient and cleaner energy future

8. What skills and qualifications will be required by the local community to deliver the successful delivery of the Regional Energy strategy? Who should deliver these training courses and qualifications locally?

A typical job / technology skills profile is attached. The range of skills will be such that it will require a broad range of providers from both university, regional colleges and private sector training organisations. University graduate training will have to broaden beyond a focus on STEM to include other skills in Humanities and the social sciences. With regards to apprenticeship training – technicians will need to be able to carry out simple coding instructions and understand basic cyber security protocols, especially with 5G. Smart Grid Ireland are in a position to provide specific applications and industry training through network colleagues. EG: PEV, Solar etc.

9. What are the challenges and opportunities in the delivery of the Regional Energy Strategy?

Challenges:

- Political – Establishing buy-in for the project (Private sector -Atlantic Hub will assist in this greatly).
- Securing Community participation.
- Engagement of the statutory bodies, i.e. Eirgrid / SONI, NIE, local authorities e.g. Roads service, NIEA etc.
- EU / Gov Finance,
- Project Steering Committee with budget approval.
- A Programme Plan that is rigidly adhered to with clear deliverables and key milestone dates.

Opportunities:

- The shift towards a new society and geopolitical uncertainty
- The restructuring to a new economy with increased regulation
- Communications will be a Critical Element (5G)
- The Emergence of innovative New Enterprises
- New Skills for new ways of working / Digital Disruption
- Total Flexibility in supply chains with resource scarcity
- Environmental - Climate Change and Decarbonization

10. Do you believe there should be a selection criteria to identify which projects or initiatives should be introduced first? If you, what do you believe the selection criteria should be based upon?

Yes, build the programme with its foundation on economic need and community benefit. The Green Region NW initiative provides this foundation and it is designed to accommodate such projects/initiatives so as to complement and enhance project delivery.

11. What methodology do you believe we should use to monitor progress towards the 2045 target?

Standard project management approach using a team centric on-line project management tool showing time and track management with workflow management. With good project planning with a proactive team projects can ensure success.

12. What role do you think the Regional Energy Strategy has in shaping the central government's energy policy? Do you think this approach will be different in NI Executive and the Government of Ireland?

The DfE energy policy group are looking for exemplar decarbonisation of energy projects. We should strive to establish the strategy as an exemplar project with respect to a wider geographical domain. Atlantic Hub seeks to establish this with Green Region NW, and we should consider how best to integrate the two projects

13. Do you believe the Regional Energy Strategy should be linked to other initiatives in the region such as Climate Adaptation, Environmental Issues, Waste Reduction? If so, give a brief explanation for your answer.

YES. these should be considered in the context of the wider Innovation , R&D and project operational activities

14. Are there any other issues you would like to raise regarding the Regional Energy Strategy?

I would recommend both Councils engage together with the large Data Mega -Hub investment programmes with the proposed Green Deal NW as soon as possible to agree a potential way forward.