Energy Strategy Call for Evidence

Response Template

How to Respond

This template replicates the questions asked in the Call for Evidence found at: https://www.economy-ni.gov.uk/energy-strategy-call-for-evidence

It is recommended that you should read the full consultation document before completing your response. Please note that the text boxes used throughout this template can be expanded to accommodate your response – there is no character limit.

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Early responses are encouraged but all responses should arrive no later than **5pm on 20 March 2020.**

Please send your response to:

energystrategy@economy-ni.gov.uk

Or alternatively by post to:

Energy Strategy
Department for the Economy
Netherleigh
Massey Avenue
Belfast
BT4 2JP

Quote the reference "**Energy Strategy Call for Evidence 2019**"

1. General Information

1. **Name (required)**

[redacted]

2. **Are you responding:**

   ☐ **as an individual (please complete 3 to 5 below)**

   X **on behalf of an organisation / company (please complete 6 to 8 below)**

If you are responding as an individual:

3. **E-mail address**

4. **Address**

5. **If you are responding as an individual, please read the Privacy Notice and tick the statement below as applicable.**

   ☐ **All responses will be published on the Department for the Economy website following completion of the Call for Evidence process. Please tick if you are content for your name to be published alongside your response.**

If you are responding on behalf of an organisation / company:

6. **Organisation / Company**

ABO Wind NI Ltd

7. **Position within Company / Organisation**

[redacted]

8. **Contact details**

   a. **E-mail address**

[redacted]

   b. **Address**

[redacted]

2. Energy in Northern Ireland

Q1. What lessons can we learn from elsewhere in addressing energy within an overarching climate action framework?

Q2. What are the key considerations for decarbonising Northern Ireland's energy sector given existing linkages to other jurisdictions?

Q3. To what extent should Northern Ireland implement the key energy-related recommendations from the CCC 'Reducing Emissions in Northern Ireland' report?

Q4. Do you agree with the 30-year timeframe? If not, please state your preferred approach and reasons.

Q1/2/4. Northern Ireland has made significant headway in decarbonising the power sector in the past 20 years, exceeding more than the planned 40% target by 2020 set by the 2010 SEF. We now operate in an energy policy vacuum however, which is detrimental to building on the solid progress that has been made and impacts heavily on planning, grid and commercial investment decisions as the responsible decision makers have no policy to refer to.

Robust energy policy is a staple of any thriving economy and is required to give certainty to investors. NI is in a unique position whereby it is aligned to the GB market and operates in the I-SEM with Republic of Ireland (ROI). ROI has already committed to a target of 70% by 2030, a target which is likely to be revised upwards shortly. NI is therefore at a significant disadvantage in not having a robust target to work towards.

Furthermore, given that the UK Government has now made a legally binding commitment to Net Zero by 2050, NI will be further disadvantaged if targets are not revised as a matter of urgency. Wales has adopted the same position as ROI with a 70% target by 2030 whilst Scotland has taken a more aggressive approach targeting 100%. We firmly support the NIRIG position therefore that a target of 80% by 2030, 100% by 2035 and Net Zero by 2040 is achievable and appropriate for NI.

Q3. Whilst the recommendations of the CCC report are welcomed, it should be noted that these were made prior to the UK 'net zero' requirement and therefore do not go far enough to support the objective. Nevertheless, we would highlight the following points as particularly welcomed:

1. Phase out coal generation before 2025"
2. Introduce a competitive, long term support mechanism for low carbon generation
3. Continue to support grid flexibility and smart system upgrades

4. Make steps to enable further decarbonisation after 2030

3. The Energy Transition in Northern Ireland

Q5. What are the unique characteristics of Northern Ireland that need to be considered in a net zero carbon energy transition?

Q6. Is your organisation undertaking or planning to undertake projects to support the energy transition? If so, please provide further details.

Q5. NI is heavily reliant on agriculture in comparison to other parts of the UK and is much further behind on the deployment of alternative fuel source transport and heat. As such, it is our view that the power sector must take the lead on reaching net zero in advance of the heat and transport sectors to provide further time for those sectors to catch up. In any event, it is *essential* that the power sector is Net Zero at least 10 years prior to the heat and transport sectors in order to facilitate their total decarbonisation.

Q6. ABO Wind NI Ltd is a subsidiary of ABO Wind AG, a globally successful project developer of renewable energies with more than 600 employees. Originating in Germany, ABO Wind AG has successfully developed, constructed and maintained wind farms for more than 20 years. Up to now, ABO Wind has a portfolio of more than 1021 wind turbines generating in excess of 2415 MW through projects in the UK, Europe and Latin America.

We are currently working on the development of new projects with a total capacity of ten gigawatts. These projects are located in 16 countries on four continents and exceed the capacity of four average nuclear power plants. Two thirds of the projects under development are wind projects and one third are solar projects.

More locally, in Northern Ireland a total of 68.9MW of wind farm projects and 50MW of battery energy storage projects have received planning permission with a further 83.4MW currently in local planning stage. We have a further c. 110MW in the planning system which will help to decarbonise the power sector further. Robust energy policy, prompt planning decisions and timely grid investment are required in order to deliver these projects.

4. Consumers

Q7. How should we ensure that energy remains affordable for domestic consumers? What approach should be taken to eradicate fuel poverty?

Q8. What steps could be taken to improve the relative cost competitiveness of larger non-domestic consumers?

Q9. Is a strategic position of "enable and protect" the correct policy stance?

a) What policies or schemes are needed to enable active consumers?
b) What policies or schemes are needed to protect vulnerable consumers?

Q10. What types of advice and information are required by all consumers and what are the best mechanisms for facilitating this?

Q11. Are there examples of successful citizen energy projects in Northern Ireland and elsewhere that have delivered improved energy efficiency and/or clean energy to local communities?

Q12. What opportunities are there in both urban and rural areas for citizen energy communities in Northern Ireland? What role could government have in facilitating these?

Q13. What evidence can you provide that identifies the challenges and opportunities for NI energy consumers in decarbonising energy?

Q7. As referenced in the NIRIG response, Baringa's *The Wind Dividend*[1] report shows that investment in renewable electricity has resulted in a net £135m benefit to consumers. While investment was required in ROCs to incentivise renewables and in grid to facilitate renewables, these costs were offset by the downward pressure that wind and solar, in particular, have on the wholesale cost of electricity, as well as the avoidance of EU fines.

Even taking out the benefit of avoided fines, the report shows that the net investment in renewables was £1.60 per customer per year. This investment resulted in a 9 million tonne reduction in carbon emissions. This saving is equivalent to turning off all power sector generation for more than two years.

Investment in, and deployment of, renewables also helps to stabilise wholesale prices. We have an excellent wind resource which if utilised to its full potential, will help to hedge against the volatility of world oil and gas prices using an indigenous, zero cost resource.

[1] Baringa, *The Wind Dividend*

5. Energy Efficiency

Q14. What, if any, energy efficiency target or targets should be set for Northern Ireland?

Q15. How should we define, measure and monitor energy efficiency to optimise its potential in our homes, business, economy and environment?

Q16. What are the most important policy levers for government to ensure zero carbon in:

a) New domestic and commercial buildings by 2050?;

b) Existing domestic and commercial buildings by 2050?

Q17. What should the future of energy efficiency support look like and who should be the key delivery bodies?

6. Heat

Q18. What is the appropriate pathway and timeline for the decarbonisation of heat between now and 2030, and subsequently to 2050?

Q19. What are the appropriate ways to measure the progress of decarbonising heat?

Q20. What are the most cost-effective and sustainable steps that government might take to accelerate the reduction of the carbon intensity of heating fuels?

Q21. Is decarbonisation of the gas grid a viable option and what evidence can be provided on both the speed and affordability of decarbonising the gas grid?

Q22. What evidence can you provide on the opportunities for district heating schemes in Northern Ireland and where should responsibility lie for facilitating these?

Q23. Can you provide any evidence or information on the opportunities for geothermal heat supply?

Heat accounts for approx. half of total energy consumption in NI yet currently there are only a very small number of homes and business heated by means of electricity. The vast majority comes from fossil fuels.

We support the decarbonisation of the heat sector and expect that this will come in a variety of ways, not least through electrification and the use of heat pumps. As such, it is important that the power sector is able to respond to increased demand and thus as noted earlier, this supports the need to ensure there is suitable focus on rapid decarbonisation of the power sector in the near term.

7. Power

Q24. What is the appropriate pathway for the decarbonisation of power from now to 2030, and subsequently to 2050?

Q25. What target for electricity consumption generated from renewable sources by 2030 is ambitious, achievable and affordable?

Q26. How can the new infrastructure necessary to meet a new renewable electricity target be delivered in a timely, affordable and acceptable way for consumers and society?

Q27. What innovations and solutions could contribute to meeting a new renewable electricity target?

Q28. What market incentives and support are necessary for investors to deliver the investment in renewable generation assets at a scale that will achieve a new renewable electricity target?

Q29. What steps need to be taken by Government to facilitate investment in offshore and marine renewables for NI?

Q24/25.
We fully support the NIRIG position of 80% renewable electricity by 2030, 100% renewable electricity by 2035 and Net zero power sector by 2040.

Northern Ireland has made significant headway in decarbonising the power sector in the past 20 years, exceeding more than the planned 40% target by 2020 set by the 2010 SEF. We now operate in an energy policy vacuum however, which is detrimental to building on the solid progress that has been made and impacts on planning, grid and commercial investment decisions.

Robust energy policy is the staple of any thriving economy and is required to give certainty to investors. NI is in a unique position were it is aligned to the GB market and operates in the I-SEM alongside ROI. ROI has already committed to a target of 70% by 2030, a target which is likely to be revised upwards shortly. NI is therefore at a significant disadvantage in not having a robust target to work towards.

Furthermore, given that the UK Govt has now made a legally binding commitment to Net Zero by 2050, NI will be further disadvantaged if targets are not revised as a matter of urgency. Wales has adopted the same position as ROI with a 70% target by 2030 whilst Scotland has taken a more aggressive approach targeting 100%.

Q26. Whilst ambitious targets are the corner stone of driving investment for more projects, it is imperative that there is cross-departmental buy-in in order to deliver them on the ground. Recently we have seen a number of planning decisions and local development plan proposals which directly conflict with the UK's commitment to Net Zero and the targets we are proposing. This is not only detrimental to achieving NI's future targets, it will also serve to actively discourage future investment by sending out the signal NI is closed for business.

Strategic Planning Policy Statement (SPPS) and Planning Policy Statement 18 (PPS18) are permissive in nature based on the balancing of the wider socio-economic and environmental benefits. A worrying trend has emerged however, which demonstrates this exercise is not being carried out which is having a devastating effect on projects which could contribute significantly to the targets. It is vital therefore, that policy application is consistent and decisions are timely.

Q27.
Wind power has been, and will continue to be, the main component of the energy mix. Increased efficiency and innovative technological advances mean, alongside solar, wind is the cheapest and most readily deployable technology.

New technology also has a significant role to play moving forward. Storage (in various forms) has already begun to develop in NI. Innovation such as this will assist with meeting the targets by accommodating more renewables coming onto the system which in turn bolsters security of supply. Green hydrogen from wind is also currently being trialled in NI which will be essential in rapid decarbonisation of the transport sector. Emerging technologies should be supported.

Q28.
As noted above, a facilitative and efficient planning system is critical in order to deliver projects in a timely manner. Protracted and inconsistent decision-making is already stifling deployment of renewables and needs to be addressed urgently if NI is to deliver much needed projects. Statutory timelines must be enforced moving forward otherwise NI will struggle to compete for global investment.

A support scheme not unlike the RESS scheme in ROI or the GB CfD would stimulate investment by giving developers a guaranteed return on investment. We would urge DfE to work with counterparts in the other jurisdictions to develop a scheme to support the newly proposed targets as soon as possible.

Regardless of the scheme design which is followed, NI must have its own specific auction. Investment in grid infrastructure to facilitate connection of projects is also vital. It has all but halted since the closure of ROCs. Grid costs also tend to be higher and coupled with the overall smaller scale of projects in NI compared

say with Scotland, it would be difficult for NI Projects to complete within a specific pot.

It is key that a route to market is established with urgency to avoid the emergence of a two-speed market on the island.

8. Transport

Q30. What would be an appropriate pathway to decarbonised energy for transport to 2050?

Q31. What role should active travel have in the decarbonisation of the transport sector and what should government do to support this?

Q32. What energy infrastructure is needed to facilitate the uptake of electric vehicles in line with UK Government's 'Road to Zero' targets?

Q33. How will transport integrate with other energy uses (e.g. homes with solar generation, battery storage, EV charging) and what can government do to optimise the opportunities represented by this integration?

Q34. To what extent can alternative low carbon transport fuels contribute to decarbonisation of the transport sector?

Q35. Do you have any data/research to help inform and reduce the carbon intensity of our transport energy in order to achieve net zero carbon by 2050?

Like the heat sector, the transport sector is one of the key energy consumers and emissions producers accounting for approx. 33% of all energy consumed in NI. The shift to electric cars is already being championed globally and the UK Government is planning to ban the sale of all new on-electric cars by 2035. We would support both the electrification of transport through the use of electric vehicles as well as through alternative fuel sources such as hydrogen.

9. Other Issues:

a. Security of Supply

Q36. What specific risks to security of energy supply are likely to emerge as a result of our changing energy mix, and what actions can be taken to mitigate these?

Q37. What measures or indicators could be adopted or developed to monitor energy security of supply?

As outlined above, subject to having the right targets, planning and grid infrastructure, sufficient generation can be delivered in NI from renewable energy. Interconnection however is essential and delivery of the north/south interconnector must be a priority.

Wider grid investment must also progress rapidly, particularly around Associated Transmission Reinforcements (ATRs). As noted in the NIRIG response, curtailment and constraint are currently costing the industry c. £25mn per year.

Energy storage will play a significant role in assisting with bring more renewables onto the system and delivering valuable system services and which we strongly support. DS3 has been essential in these areas and so we believe it should be extended beyond the current timeline (2023). Unfortunately, no NI projects have been successful in the DS3 auctions. Given the level of constraint and curtailment faced in NI, like the support mechanism, we believe there should be an NI only auction.

b. The Role of Data

Q38. What is the most cost-effective method of capturing consumer energy usage data in electricity and natural gas (where meters are in place)? In heating oil (where there is no metering obligation)?

Q39. What concerns need to be addressed regarding data privacy, security and/or ownership?

Q40. What are your views on applying the key recommendations of the Energy Data Taskforce for NI?

Q41. What organisations or businesses do you see as having a key role in optimising the value of data? How will they do this?

c. Carbon Capture and Storage

Q42. What steps, if any, should NI policy-makers consider with regard to the development or implementation of CCUS in NI?

We would support exploration of this area however it can only be a supplement to wider decarbonisation and is no substitute for whole system decarbonisation.

d. Energy and the Economy

Q43. What specific economic opportunities will arise from the decarbonisation of energy?

Q44. What skills are needed to realise the potential economic benefits of energy in the future?

Q45. What are your views on the future of overall energy demand in NI and how can we ensure that any potential demand growth aligns with our net zero carbon target?

Every wind farm development will deliver significant environmental, social and economic benefits. ABO has successfully achieved planning permission for c.72 MW of wind power across the province since its inception in 2010. Putting this in context, once fully operational, across the lifetime of the projects, this achievement has the ability to:

- **power 72,300 homes** from clean green energy;
- **offset 111,906 tonnes of carbon emissions** per annum (equivalent to taking **c.80,000 cars off the road**);
- generate **business rates of c. £29,500,00** over 25 years;
- **fund local community groups up to c. £5,800,000** over 25 years.

We have a further c. 110MW of wind power are currently in the planning system at various stages which will more than double the figures above and a pipeline of further early stage projects in development. As mentioned throughout this submission, one of the key issues stifling progress is slow and inconsistent planning decisions.

As noted in the NIRIG response, figures from the Department for Economy's *Energy in Northern Ireland 2018*[2] show that low carbon electricity accounted for the following;

- £285m direct and £542.3m total annual turnover (2014-16)
- 1,000 direct and 1,000 indirect full time equivalent jobs (2014-16)
- 375 enterprises (2017)

Current installed capacity of renewable electricity in Northern Ireland is approximately 1,650MW meaning a further 2,050MW is required. The NIRIG publication *Onshore Wind: Economic Benefits in Northern Ireland*[3] reports a total £391,012/MW investment directly in Northern Ireland with £31,705/MW/yr operation and maintenance spend.

e. Delivery Framework for an Energy Strategy

[2] Department for Economy, *Energy in Northern Ireland 2018*

[3] NIRIG, *Onshore Wind: Economic Benefits in Northern Ireland*

Q46. Do the existing division of responsibilities and powers across government enable the most effective approach to the overall aim of decarbonising energy? If not, what are your suggestions for improvement?

Q47. What are the opportunities for local government to contribute to the delivery of the net zero carbon target?

Q48. What are your views on how statutory duties and accompanying legislation and regulatory frameworks would need to change to facilitate the transition to net zero carbon by 2050?

Q49. Is there a need for a dedicated organisation to champion, lead and deliver sustainable energy interventions? If so, what should this look like?

Q46 Cross departmental buy in is essential otherwise the targets are meaningless as they cannot be delivered. The planning process in particular needs to be streamlined with statutory timelines enforced and renewable energy projects and associated infrastructure applications prioritised to ensure timely decisions and certainty for developers.

It is blatantly evident from the Draft Plan Strategies being produced from various Councils in association with the Local Development Plan process that some are contradictory to the aims of the SPPS and PPS18 and take no cognisance of the UK Government commitment to Net Zero. Council's such as Derry and Strabane District Council and Mid Ulster Council aim to impose wide restrictions on high structures, special countryside areas and areas of high landscape importance which sterilise vast swathes of the Council area for renewable and grid development.

The Department for Infrastructure therefore has a key role to play in ensuring Council planning policies align with regional policy. We would also urge DfE to press the issue with DfI.

Q47 This could include energy efficiency measures within buildings, electrified heat electrified/hydrogen fuel transport. Procurement of electricity through Corporate Power Purchase Agreements would also be helpful. We welcome NI Water's 2019 attempt to procure energy in this way albeit acknowledge that the process has halted for now. We would be supportive of similar such schemes coming forward in future.

Q48. As stated in the NIRIG response, it is time to review the requirement of the Energy Order (Northern Ireland) 2003 to "promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern

Ireland". Such a review should consider whether its replacement with a duty to promote the development of the renewables industry would support the achievement of decarbonisation targets.

Q49.

While supportive of the creation of a new body, DfE must remain responsible for the delivery of energy policy at a strategic level and champion the promotion of renewable energy throughout the province.

10. Additional information

Q50. Is there anything else you would like to add in response to this Call for Evidence?

Key points from our response are:

1. New and ambitious targets
2. Cross departmental buy in including streamlining of the planning system
3. Investment in grid infrastructure
4. Prompt Delivery of the N/S Interconnector
5. Support mechanism for renewables