

Mr. Eamonn Confrey
Electricity Policy Division
Department of Communications, Climate Action and Environment
29-31 Adelaide Rd
Dublin 2
D02 X285

09 May 2019

Dear Mr. Confrey,

RE: Draft Electricity and Gas Networks Sectoral Adaptation Plan

In line with Section 6 and Section 11 of the Climate Action and Low Carbon Development Act 2015 (the Climate Act), it is a function of the Climate Change Advisory Council to provide advice and make recommendations in relation to adaptation policy and Ministers are required to consult with the Council in the preparation of their sectoral adaptation plans.

The Council welcomes the publication of the draft electricity and gas networks adaptation plan and believes that the sectoral adaptation planning process offers a valuable opportunity for sectors to build resilience to the impacts of climate change by identifying vulnerabilities, adaptive capacity, risks and opportunities, and developing adaptation plans to address them.

The Council has agreed criteria of assessment for sectoral adaptation plans and the draft electricity and gas networks plan has been considered by the Climate Change Advisory Council and its Adaptation Committee with reference to these.

The Council wishes to outline the following observations on the draft.

General Comments

- The plan provides a useful description of the sector, its constituent parts and the context within which it operates. Some of the examples and photographs used to illustrate points are particularly useful. However, the further use of recent extreme events to explore the vulnerability of the electricity and gas networks would have improved the assessment. For example, using examples to demonstrate how recent events could impact on the level of degradation or disruption of critical assets or the network, and if any actions taken have been effective would have been useful. These examples could also make reference to existing thresholds or measures of sensitivity for different assets or elements of the network, further rationalising the need for action.
- The Council provided comments in November 2017 on the draft non-statutory plan for the sector which remain relevant. More information should be provided on how the non-statutory plan has been reviewed, monitored and implemented and the final plan should show that there will be learning from this cycle of sectoral adaptation plans reflected in the next cycle.

- For the most part, the identified actions are generic in nature and should be more specific on the extent they deliver, or progress towards delivering, the required adaptation benefits.
- It would have been helpful to identify indicators for each of the actions that could be used to monitor and evaluate progress (or success), i.e. performance indicators for the presented actions and overall plan. For example, it would have been useful to relate each identified action to a specific impact or capacity gap (i.e. provide a rationale for the actions, and how those actions are part of a learning and continuous improvement process). More information should be provided on how and when specific vulnerabilities/risks are to be identified and addressed.
- Some references used are out of date and while the sectoral adaptation guidelines have been used it may be useful for the reader if text from the guidelines is not restated unnecessarily. A statement at the beginning of the plan demonstrating how the Climate Act, National Adaptation Framework and the relevant adaptation guidelines have been considered would be useful.
- It is unclear to what extent projected changes in climate (or other drivers of change) have been considered in the draft adaptation plan and it is not clear if all energy companies considered within the sector are using the same projections.

Future Network

- The draft plan has limited assessment of the vulnerabilities of the future grid, the effect of climate change on current and future renewable energy sites and technologies and the associated interdependencies with other sectors.
- There is a need to focus not only on the adaptation of the existing network to present, observed climate change, but also on adaptation of the existing assets and networks under projected future conditions. In addition, more specifics on how adaptation and resilience will be built into future developments and with changing technologies should be considered. These elements could have been strengthened with specific reference to the timeframe for implementation that is being considered within this plan.
- The draft plan does not provide sufficient information on how planning for, and ensuring the resilience of, transboundary infrastructure will be achieved.
- The final plan should be more focused on the capacity for resilience to projected climate change, including under different system/network development scenarios, based on some level of stress testing reflecting the projected changes in climate and associated levels of acceptable risk, this testing to demonstrate resilience is critical in the context of attracting inward investment. While the draft plan notes that adaptation in the area could boost future economic growth, more information should be provided here.

Projections and Risk

- It is unclear as to how the draft plan would allow for prioritisation of actions that would provide sufficient protection of assets and the network, or if and how sequencing actions would be undertaken at different locations, recognising differentiated vulnerabilities and risks. The section on prioritisation requires much more detail to confirm its robustness.
- Further information is required to demonstrate how the risk assessment was the basis for the identification of priorities. Based on the information provided, including that in tables 3 and 4, the plan appears to be based on a qualitative risk assessment (based on expert judgement and the literature). It is clearly indicated that this plan is seen as the first step, but how and when this would be taken forward in the future should be part of the final plan. This should consider how the identified risks can be quantified. These must be linked to a comprehensive impact assessment based on existing assets and planned developments.
- More detail is required on the need to enhance the knowledge and evidence bases and capacities in order to improve the risk assessments and adaptation planning. Reference to these would have provided confidence that subsequent plans would move from the generic to consider specific vulnerabilities. The final plan should show specific reference to the research and evidence needed to support the required risk assessment and adaptation planning process (e.g. research and innovations into climate services needed to support vulnerability, impacts and adaptation assessments). Such a review could help in identifying research priorities and in engaging the research community.
- The final plan should consider the potential impacts of climate change, particularly extremes, for maintenance and servicing during disruptions.
- Further information is required on how climate change is considered in the Gas Electricity Emergency Planning process and in energy network companies' business continuity and emergency plans referenced in the draft.

Mainstreaming and Cross Sectoral Issues

- The final plan should reflect broader stakeholder engagement in the assessment and delivery of actions, including in the context of the need to address cross sectoral interdependencies. Further information should be provided on how it is intended to work with the Office of Public Works (OPW) and Local Authorities and how the OPW and Local Authorities are to work with the sector on identifying/protecting critical sites.
- This level of engagement would have also enabled a more considered assessment of interdependencies both in terms of risks, but also adaptation measures. Evidence suggests that these interdependencies can be critical to system and service security. More detail of these aspects, including in terms of actions needed is required. The intended role (if any) of the regulator should also be made more explicit.

- Further work should be undertaken to identify critical assets where risk due to location or other factors or interdependencies may be particularly high. Critical locations of economic activity are noted but how these are defined and how they interact with other sectors' definitions and will ensure the overall resilience of critical infrastructure needs further consideration.

The Council looks forward to the publication of the final statutory sectoral adaptation plan in the coming months.

Yours sincerely,

Prof. John FitzGerald
Chair
Climate Change Advisory Council

Cc. John O'Neill, Department of Communications, Climate Action and Environment