



Opening Statement

Regarding the

Future Licences and Contracts to Connect Data Centres to the Gas Network

by Marie Donnelly, Climate Change Advisory Council Chairperson

to the

Joint Committee on Environment and Climate Action, 15th November 2023

Opening Remarks

- 1) Thank you to the Joint Committee on Environment and Climate Action for the opportunity to attend today and speak on the impact of future licences and contracts to connect data centres to the gas network. My name is Marie Donnelly, Chairperson of the Climate Change Advisory Council. The Climate Change Advisory Council is an independent advisory body tasked with assessing and advising on how Ireland can achieve the transition to a climate-resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy.
- 2) I welcome this opportunity to have a discussion on the growth in energy demand from data centres in the context of the decarbonisation of the electricity sector. The electricity sector was set the most ambitious emissions reduction target in terms of its Sectoral Emissions Ceiling (SEC). However, it is currently the sector that is furthest off track in terms of meeting its SEC, with 49% of the SEC for the electricity sector already used 2-years into the 1st 5-year carbon budget period (CB1: 2021-2025).
- 3) EirGrid¹ estimates a 34% increase in demand for electricity by 2030, with the largest growth coming from data centres which are projected to account for 23% of electricity demand by 2030. Over the same time period, the 2023 National Climate Action Plan targets 9 GW of onshore wind, 8 GW of Solar and at least 5 GW of offshore wind by 2030. This additional renewable electricity (using our own indigenous renewable resource) will generate sufficient renewable electricity to meet this forecasted growth in electricity

¹ Median demand forecast for the 2022-2031 Generation Capacity State



demand. However, the Council notes that deployment of onshore renewables is not on track and the current connection rates observed for both onshore wind and solar are significantly lower than required to reach our 2025 and 2030 targets.

- 4) The Council is concerned that **delays** to key actions are jeopardising the achievement of our onshore renewable electricity generation targets, in particular:
 - a. the Renewable Electricity Spatial Policy Framework (due in Q3 2023) which is crucial to provide the necessary spatial planning guidance to support the scaled-up deployment of onshore renewable electricity across the country.
 - b. enabling actions on hybrid technology grid connections, policy on private wires, and new draft wind energy guidelines for onshore wind.
- 5) Further, the Council has concerns about the near absence of onshore wind projects that have received planning approval in the last 12 to 18 months. For example, just 4 onshore wind projects, totalling nearly 70MW, have been approved in the planning system in the past 12 months, with one of these projects currently under appeal. This failure has implications in three important aspects:
 - a. our capacity to meet growing electricity demand,
 - b. the availability of projects for Data Centres to contract with for Corporate Power Purchase Agreements
 - c. a reduction of projects with planning approval will lead to a reduced number of qualifying projects for the RESS 4 Auction in 2024 and a likely increase in the average price that consumers will have to pay in the future.
- 6) The Council has previously stated that accelerated deployment of onshore renewable electricity generation will be crucial for the electricity sector to meet its sectoral emissions ceiling for the first carbon budget period (CB1: 2021–2025). The delay to the expansion of our onshore renewable capacity in line with our 2023 Climate Action Plan targets along with the continued use of coal in electricity generation, means that steeper emissions reductions will be required in future to remain within our carbon budgets.
- 7) The Council has recommended that planning permission for all data centres should require Corporate Power Purchase Agreements for renewable electricity, the volume of which exceeds the maximum electricity demand of the data centre, be connected to the grid in advance of commissioning the data centre, in line with the principle of renewables additionality set out in the Government statement on the role of data



centres in Ireland's enterprise strategy. Also, new data centres and other large energy users should be required to build-in heat export ability at the time of initial construction, for simple potential connection to future district heating networks.

- 8) The Council has considered the Government's Statement on the Role of Data Centres in Ireland's Enterprise Strategy (27th July 2022) in which the Government has stated that 'Islanded' data centre developments, that are not connected to the electricity grid and are powered mainly by on-site fossil fuel generation, would not be in line with national policy. These would run counter to emissions reduction objectives and would not serve the wider efficiency and decarbonisation of our energy system. Growth in 'Islanded' data centres could result in security of supply risk being transferred from electricity to gas supply, which would be a significant challenge given Ireland's reliance on gas importation.
- 9) In this respect the Council recommends that;
 - Under Section 10A of the Gas Act and to reflect the Government Statement, CRU should direct GNI not to sign any more contracts to connect data centres to the gas network where the data centre would be powered mainly by on-site fossil fuel generation. If there is a legislative barrier, the Government should take immediate action to revise the Gas Act in line with national policy and the principles set out in the Government statement.
 - Each system operator should work with large energy users to facilitate accurate hourly emissions reporting, grid carbon-intensity transparency, and allow data centres to optimise computing loads to maximise use of renewables and minimise carbon emissions (as per Action 99 of Climate Action Plan 2021).
 - All relevant public body objectives should be immediately aligned with and support the achievement of the National Climate Objective. Government should review and revise the legal mandate of relevant state agencies and public bodies to ensure these are consistent with delivering Climate Action Plan measures, as well as the legislated Carbon Budgets.
- 10) In order to meet the requirement to have on-site generation and/or battery storage that is sufficient to meet their own demand, data centres are utilising onsite dispatchable fossil fuel generation rather than renewable electricity stored in batteries. Battery storage, using renewable electricity, is key to decarbonising data centres and maximising the available renewables on the system. However, the current regulatory treatment of battery storage



represents a barrier to the entry and participation of battery storage in the wholesale electricity market. The Council is concerned that the delay to DECC's publication of the policy framework for electricity storage (which was due in Q3 2023) will have a knock-on delay to the publication of the regulatory review of the treatment of storage including licensing, charging and market incentives in scheduled for Q4 2023 (EL/23/23). When renewable electricity is not available, it would constrain emissions and be economically more desirable if the backup was provided centrally with a large Open Cycle Gas Turbine. Backup provision through diesel generation should be strongly discouraged.

11) Closing Remarks

- 1) Our indigenous renewable resource is sufficient to meet the forecast growth in electricity demand, but roadblocks must be removed to accelerate the necessary scaled-up rollout of renewable electricity across the country, recognising renewable energy projects as an overriding public interest.
- 2) We are now in Year 3 of the first Carbon Budget. We need to urgently address the delays to the rollout of onshore renewables if we are to stay within our carbon budget and meet increasing demand for electricity. The Council views the recent the growth in 'Islanded' data centres as of particular concern due to their potential to increase gas demand, jeopardise gas security and associated increased carbon emissions.
- 3) The Council is happy to assist this Committee in its deliberations on the decarbonisation of our electricity sector in the context of growth in energy demand and I look forward to our discussions today.