

Opening Statement

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Global mean temperatures during the last decade have warmed by 0.94-1.03°C relative to the pre-industrial level. For the land area of Europe the corresponding figure is 1.7-1.9°C. The commitment which Ireland has signed up to under the Paris international treaty to limit warming to 2°C above pre-industrial levels, and to aim to limit the increase to 1.5°C, is now in serious danger of not being achieved and without radical reductions in emissions exceedance is likely well before 2050.

For the 1980-2010 period everywhere in Ireland is 0.5°C warmer than the previous 1961-90 period with this figure likely to increase when the 1991-2020 figures become available early next year. Apart from changes in growing season and frost frequency, the main changes associated with this have been rainfall related. Annual increases of 5% in rainfall have occurred with an increase in the number of very wet days observed. In the last 7 years, the wettest winter on record over most of the island, the stormiest winter for 143 years, and two major droughts have occurred, the most recent in spring 2020 producing the driest spring in parts of eastern Ireland since 1837. Two Atlantic hurricanes in the past 3 years came close to maintaining hurricane status over Ireland (Ophelia, Lorenzo). Winter flooding and storm damage have resulted in considerable hardship and insurance cost difficulties. The extent of attribution of extreme events to human induced climate change has become increasingly quantifiable such that events such as the French heatwave of 2019 was made 10-100 times more likely as a result of greenhouse gas loading of the atmosphere.

Observations on the Proposed Climate and Low Carbon Development (Amendment) Bill 2020

1. **Language** to pursue emission reductions rather than defend against potential litigation should be prioritised. It is important that the language be changed from aspiration to commitment throughout e.g. *“The State shall achieve the transition to a climate resilient and climate neutral economy by the end of the year 2050, or at an earlier date agreed by government.”*
2. **Interim targets** are essential to ensure the roadmap intended is being followed. These currently exist for our EU 2020 and 2030 targets and a ‘glide path’ should exist along the lines of that specified in the Scottish Act. Annual targets are specified in the Scottish case.
3. **Carbon Budgets**. This needs a stronger commitment and accountability. E.g.
(4) For the purposes of performing their functions under Sections 6B and 6D the Minister and the Government shall adopt a carbon budget only if it is consistent with the matters specified in paragraphs (a) to (d) of subsection (3).

Solely ‘having regard’ to current Government policy, a 7% per annum reduction pathway over the period 2021-2030 equates to a 10-year cumulative carbon budget

of about **429** million tonnes of CO₂ equivalent (MtCO₂eq). Current emissions are approximately 60 (MtCO₂eq) per annum. This equates to a 51% reduction over the period and may not be sufficient to comply with future EU targets for 2030. It also may not reflect what Ireland's "fair Share" of the remaining global carbon budget is.

4. **Carbon leakage.** It is unwise to include this since carbon leakage operates both ways. The environmental burden not accounted for in the exports of other countries are properly dealt with under trade law or by the Border Adjustments suggested at EU level. Any unilateral action by Ireland is irrelevant in this context since emissions are only counted at national level. Another implication is the risk of reverse leakage. Countries with stricter climate laws than Ireland are currently seeking to locate in Ireland where their environmental and climate obligations are less onerous. This displaces their environmental burden to Ireland, and competing organisations in the country concerned can potentially accuse Ireland of facilitating carbon leakage as a result.
5. **Biogenic methane.** Methane emissions are currently equated to CO₂ emissions in terms of their warming effect over 100 years (GWP₁₀₀). The required IPCC methodology counts a tonne of methane as equivalent to 25 tonnes of CO₂. Were a shorter period (to 2040) be used the equivalent figure would be 86. Recent research suggests alternative methods of equating methane to CO₂ based on its shorter residence time in the atmosphere (approximately 10 years) (GWP*). This does not provide any relief for agricultural emissions and, if interpreted properly using the EU base year of 2005, indicates that the current flow of Irish agricultural methane is responsible for an ongoing contribution to global warming that has the equivalent warming to over 1,300 MtCO₂, a level equivalent to 30 years of Ireland's current energy CO₂ emissions. Both methods show a reduction in Irish agricultural emissions of methane up to 2011 and then a sharp and continuing reversal due to a government policy of agricultural intensification. Sustained reductions of agricultural methane is demonstrably essential, under either measuring system, for Ireland to achieve Paris compliance and in furtherance of the State's commitment to the UN SDGs.
It is open to any State to measure different gases in whatever manner they please. However, reporting of greenhouse gas emissions is only done using the GWP₁₀₀ criteria as laid down in the IPCC methodology approved by the UNFCCC. As signatory to both bodies, Ireland is obliged to conform to this for the foreseeable future. Separate budgets for individual gases (CH₄, SF₆, N₂O etc.) will have no relevance for reporting for EU or UNFCCC compliance therefore.
6. **Overshoot and undershoot (6D (4 & 5))**
Where the carbon budget is not exceeded, the Minister may bank the difference and increase the next budget period by the corresponding amount. This is the only use of the word "may" that is justified in the Bill!
Where overshoot occurs the language is highly ambiguous. Whether borrowing from the 'middle' carbon budget or the 'future provisional' carbon budget the limitation of 1% makes no appreciable difference and leaves 99% of the overshoot to be 'forgotten'. Modelled on the UK Act the correction obligation contained in the UK Act is omitted. An obligation to recover the overshoot in the next 5-year budget should be specified. Otherwise this creates a serious risk of non-compliance over the 3 budget periods.

7. **Sectoral budgets.** No role for the CCAC is envisaged and no specific compliance with the national budget is required. What are the acceptable differences between the minimum and maximum 'decarbonisation ranges' specified? (+/- 1%?!). The CCAC should be required to advise on whether the ranges add up to their recommended national figure and, if not, propose amendments for the Minister to consider. An amendment to this section might read:
"In the event that decarbonisation target ranges are approved by Government, the summation of all the upper ranges proposed for individual sectors of the economy shall not exceed the national carbon budget for the corresponding period by more than 1% of the total carbon budget for the corresponding period."
8. **Voting on CCAC by public officials.** Three public bodies are represented on the CCAC by their Directors. Section 9 (1) specifies 9-11 members in the CCAC. Section 9(14B) allows all members to vote. Public servants can have inhibitions regarding their ability to be critical of government policy in the event that the CCAC chooses to do so, and allowing the semi states to provide up to 33% of the vote compromises the independence of the CCAC. Consideration should be given to only allowing the independent members to have a vote.
9. **Accountability.** It is not clear who or what body bears responsibility for exceeding a sectoral budget target. Consequences, such as the relevant Government department being forced to buy quota on the open market from Departmental funds, offers one possibility to incentivise sectoral compliance. The current carbon price is €25 per tonne.