

Joint Committee on Environment and Climate Action

**Consideration of carbon budgets proposed by
the Climate Change Advisory Council**

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Written statement of

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For meeting on 12 January 2022
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1. My apologies to the Committee for being unable to give oral evidence today. I would like to focus here on two points: the Climate Change Advisory Council's (CCAC) legal obligations in preparing and proposing carbon budgets; and the Minister and Government's obligations in considering, amending, finalising, and approving carbon budgets.
2. In my opinion, CCAC has not complied with its legal obligations in preparing and proposing carbon budgets under s.6A of the Climate Action and Low Carbon Development Act 2015 (as amended)(the Climate Act). As detailed below, the Minister and Government are under similar obligations, via s.3(3), in considering, amending, finalising, and approving carbon budgets and sectoral emissions ceilings. The Minister and Government should not make the same mistake as CCAC here and may comply with their legal obligations by approving carbon budgets (and within this overall ceiling, sectoral emissions ceilings) that are significantly smaller than those proposed by CCAC.

CCAC

3. Under s.6A(9)(a) of the Climate Act, CCAC must carry out its functions under s.6A (Preparation of carbon budgets) in a manner that is consistent with the ultimate objective specified in Article 2 of the UNFCCC and the matters specified in subparagraphs (i) and (ii) of section 3(3)(a). Subparagraph (ii) of

section 3(3)(a) refers to *"the steps specified in Articles 2 and 4(1)"* of the Paris Agreement.

4. The ultimate objective specified in Article 2 of the UNFCCC is *"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"*.
5. The Paris Agreement (per its Article 2) aims to enhance the implementation of this UNFCCC objective. Article 2 of the Paris Agreement contains the following steps of relevance:
 - a. Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; and
 - b. Implementing the Paris Agreement *"to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."*
6. In turn, Article 4(1) of the Paris Agreement requires Parties to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.
7. The Committee will note that both Articles 2 and 4(1) of the Paris Agreement refer to the need for action to be taken based on *equity*. Elsewhere, the Paris Agreement specifically obliges developed country Parties such as Ireland to *take the lead* by undertaking economy-wide absolute emission reduction targets (Article 4(4)).
8. In addition to the obligations on CCAC to perform its functions consistently with equity, common but differentiated responsibilities, etc., CCAC must separately, under s.6A(9)(b), have regard to climate justice in performing its functions under s.6A. There is clearly some overlap between s.6A(9)(a) and (b),

with the obligation to perform functions consistently with various matters under s.6A(9)(a) representing a stronger obligation than the "have regard to" obligation under s.6A(9)(b).

9. In its Technical Report on Carbon Budgets of October 2021, CCAC states (at p.8) that "An appropriate contribution to the Paris Agreement is an appropriate response to international climate justice." On the question of what this appropriate contribution should be for Ireland, CCAC states (at p.72; emphasis added):

*"In its deliberations, the Committee considered the question of what Ireland's appropriate contribution would be to the global effort to reduce greenhouse gas emissions. Any such determination has implicit or explicit implications around climate justice, historical responsibility, equity and equality. **It is not the job of the Council or the Carbon Budget Committee to make such value judgements.** The Committee concluded that Ireland's carbon budgets for the periods 2021- 2025, 2026-2030 and 2031-2035 must at least be consistent with the temperature goals of the Paris Agreement; the 'Paris Test', developed by the Secretariat under the guidance of the Carbon Budget Committee. This approach makes the lowest number possible of implicit assumptions."*

10. Contrary to the words in bold/underlined above, CCAC is specifically required by law (s.6A(9)(a) of the Climate Act) to carry out its functions in a manner consistent with implementation of the Paris Agreement "to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances." Explicitly excluding such considerations is, in my view, a fundamental legal flaw in CCAC's approach. CCAC is obliged by s.6A(9)(a) to act consistently with, inter alia, all of Article 2 of the Paris Agreement. In focusing solely on the temperature goals of the Paris Agreement (Article 2(1)), while excluding consideration of equity and the principle of common but differentiated responsibilities and respective capabilities (Article 2(2)), CCAC's 'Paris Test' is not a 'Paris Compliant Test'.
11. Having thus abandoned consideration of equity and historical responsibility on the ground that such consideration is not its job, CCAC summarises its process (at p.75) as follows:

22. Focusing just on agriculture and land use emissions, based on historic and projected emissions from these sectors from the EPA, CCAC stated in its recent Annual Review 2021 that “By 2050, carbon dioxide removals of 26 Mt CO₂ eq balance the projected residual emissions. Land-use in Ireland is currently a net source of emissions. Significant progress in the implementation of action to reduce or eliminate emissions and to enhance removals, including afforestation, is required in the near term in order to realise removals in the longer term. It is not clear how removals at this scale would be achieved, and would almost certainly involve the deployment of novel technologies.” Figure 6.2 of the Annual Review illustrates the scale:

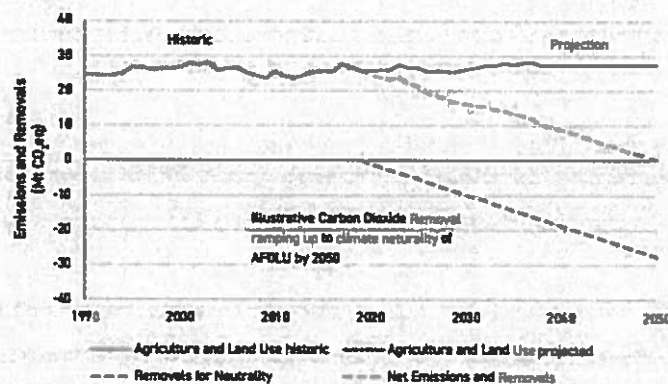


Figure 6.2: GHG emissions from agriculture and LULUCF including an illustrative pathway for removals to achieve neutrality by 2050⁴⁷

23. Note that this figure of 26 MtCO₂ eq to be removed *each year* (by 2050, just 28 years from now) to achieve climate neutrality from the agriculture and land use sectors alone is equivalent to about 40% of Ireland’s total emissions in 2018. How (even broadly) would this be achieved? In its Technical Report on carbon budgets, CCAC concludes “it is clear that forest plantation rates need to significantly increase and that preparations need to be made for negative emissions technologies.” But how does one prepare for technologies that do not exist or do not exist at scale? The Committee surely needs an answer to these sorts of questions as part of its current work. While not all of the required removals are to be delivered over the life of the first three carbon budgets, these budgets nevertheless assume that very large-scale negative emissions will be achieved by Ireland in time. How?

24. CCAC’s Technical Report (at p.86) cites Price (2021) to the effect that a cumulative total of 200 MtCO₂ by way of removals “would represent a challenging

but feasible assessment for planning and budgeting purposes" in Ireland,³ with the ability of land use removals reportedly saturating at 100 MtCO₂, the other 100 MtCO₂ presumably to be achieved by unknown "negative emissions technologies" (which will (need to) become "more prominent in the long term" according to CCAC). Note that a need to remove 26 MtCO₂ eq per annum on an ongoing basis to achieve carbon neutrality in the agriculture and land use sectors in Ireland, as envisaged in the figure above, is incompatible with an available cumulative total of 200 MtCO₂ in removals potential. That is, the removals needed to balance (or 'net zero') the projected level of agricultural and land use emissions from 2050 onwards would use up Ireland's entire carbon removals potential within 8 years. These sorts of discrepancies or mismatches between the amounts of carbon needing to be removed and the amounts it will be practically possible to remove led McMullin et al (2020) to conclude that "much more ambitious, near-term reduction of gross CO₂ emissions remains the most urgent policy priority." Conforming with the cumulative removals ceiling of 200 Mt CO₂ cited by CCAC would, according to McMullin et al, "imply the achievement of national net-zero territorial CO₂ emissions by about 2035–2040, i.e. much earlier than the currently "most ambitious" net-zero target of about 2050."

25. In summary, if we do not have good answers *now* as to:

- a. how much the Government is planning to achieve by way of CO₂ removals (NB. as noted above, the State has not produced the required Long-term climate strategy that would reveal this, despite an EU law deadline of 1 January 2020);
- b. whether this exceeds the amount assumed to be achievable;
- c. how and when the required scale of removals can and will be achieved; and
- d. how in practical terms the Government is planning for this *now*,

in my view the Government/Oireachtas cannot fairly burden younger and future generations with achieving such removals by approving the carbon budgets proposed by CCAC (or anything like them). In terms of Climate Act obligations, approval in such circumstances would appear inconsistent with the principle of (intergenerational) equity.

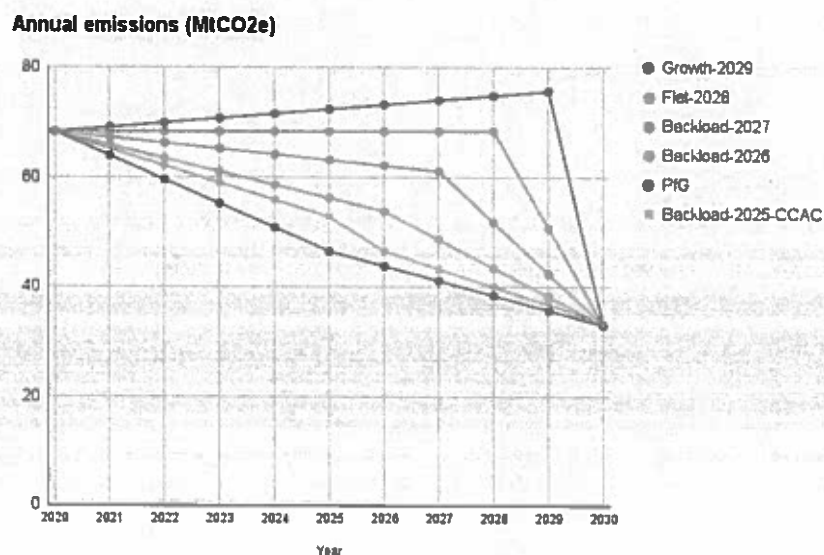
³ See McMullin et al (2020), which makes it clear that 200 MtCO₂ is a cumulative total.

26. To my mind it is vital that people know now that vast carbon dioxide removal, including from “*novel technologies*”, is ‘priced in’ to our targets and proposed budgets. Understanding this makes it clear why we cannot delay very deep and rapid emissions reductions now in the hope that future technologies will somehow magically save us later – the Programme for Government’s 7% per annum target to 2030 is *already counting on this magic happening later*. As Naomi Klein puts it in her book *This Changes Everything*, “*we are literally betting the habitability of the planet on the faint hope of a miracle cure.*”
27. It is worth noting that using removals in other countries to offset Irish emissions will not prove a viable or equitable solution. In their recent report “*Not Zero: how ‘net zero’ targets disguise inaction*”, a coalition of international climate justice organisations states that “*There is simply not enough available land on the planet to accommodate all of the combined corporate and government ‘net zero’ plans for offsets and Bioenergy with Carbon Capture and Storage (BECCS) tree plantations.... By putting the burden for carbon sequestration onto land and tree plantations in global South countries [...], most ‘net zero’ climate targets are effectively driving a form of carbon colonialism.*”
28. As Professor Kevin Anderson et al noted in a recent peer-reviewed paper, ‘*If...the mitigation agenda of ‘developed country Parties’ is determined without reliance on [highly speculative] planetary scale [negative emission technologies]⁴ and with genuine regard for equity and ‘common but differentiated responsibilities and respective capabilities’, the necessary rates of mitigation increase markedly.*’ In Ireland’s case, Professor Anderson emphasised in earlier evidence before this Committee the need for Ireland to achieve at least an 80% cut in CO₂ emissions by 2030 (compared with 2018); the need to reach full decarbonisation of Ireland’s entire energy system (including aviation and shipping) by 2035-40; and the need to cut total agricultural methane and nitrous oxide emissions by at least 3%, year on year. Yet even this is based on a global carbon budget that gives only a 33% chance of staying below 1.5°C,⁵ and our Climate Act does not aim to achieve anything like these reductions. Nevertheless, in my view the principle of equity points towards calculating Ireland’s carbon budgets in the manner Professor Anderson suggests: that is, without reference to speculative future carbon removals/negative emissions technologies.

⁴ Which the authors define to include *inter alia* removals by way of BECCS.

⁵ See Anderson et al (2020) A factor of two: how the mitigation plans of ‘climate progressive’ nations fall far short of Paris-compliant pathways, *Climate Policy* 20(10): 1290-1304.

29. In summary, a 7% per annum (average) reduction in emissions (amounting to a 51% reduction in annual emissions by 2030 compared to the 2018 level) is clearly insufficient for Ireland on the basis of equity (being lower than UNEP's suggested global average), and assumes very large-scale speculative negative emissions (infringing the principle of intergenerational equity). However, as noted elsewhere by Professors Barry McMullin, John Sweeney and the present author, the Climate Act did not in fact require the achievement of an average 7% reduction per year by 2030, despite the Programme for Government commitment. Instead, the Act sets no upper limit on the carbon budgets that CCAC can propose to 2030. And indeed, CCAC has in fact proposed budgets that amount to an average reduction of just less than 6% per annum. All pathways on the figure below (courtesy of Professor Barry McMullin) are notionally consistent with s.6A(5) of the Climate Act because annual emissions in 2030 are -51% vs annual emissions in 2018. However, the associated carbon budgets (the area 'under the line' in each case) vary widely. The light blue line (Backload-2025-CCAC) equates to the budgets proposed by CCAC; the orange line (PfG) equates to the budgets implied by the Programme for Government commitment. The first two proposed budgets (to 2030) would need to be reduced by a combined amount of at least 27 MtCO₂ eq to meet the Programme for Government commitment.



30. The Committee may have seen claims that Ireland's 2030 target is amongst the most ambitious in the world, and may perhaps be tempted to view the

proposed carbon budgets in this light. However, it is important to avoid falling into the trap of shifting baselines. Starting from Ireland's 2020 (or 2018) level of emissions, the 2030 target indeed looks ambitious. But using the UNFCCC's standard 1990 baseline puts the ambition in better context: we are aiming to reduce our emissions by 44.5% in 2030 compared to the 1990 level (that is, from 60.37 Mt CO₂ eq in 1990 to 33.5 Mt CO₂ eq in 2030);⁶ the EU collectively is aiming for a 55% reduction over the same period.

31. It is interesting to note in this regard that Germany's highest court - the Federal Constitutional Court - recently held in the *Neubauer case* that Germany's target of a 55% reduction by 2030 compared to 1990 infringed fundamental rights in the absence of a pathway to net zero in 2050. As the Court put it, "*one generation must not be allowed to consume large portions of the CO₂ budget while bearing a relatively minor share of the reduction effort, if this would involve leaving subsequent generations with a drastic reduction burden and expose their lives to serious losses of freedom.*" Germany has since increased its target to a 65% reduction by 2030 compared to 1990, while Denmark has enshrined the highest target of all in the EU, at 70% between 1990 and 2030. Claiming that our 2030 target is amongst the most ambitious in the world (from 2018 or 2020 levels) is open to obvious criticism because it neglects the deep emission reductions others have made since 1990, while we have allowed our emissions to rise. To use a crude metaphor, picture a marathon runner joining a race three-quarters of the way through, then sprinting into the leading pack. Those who had been in the race since the start would justifiably regard the late-joiner's shouts of "look, I'm in second place"⁷ with scepticism. (There are of course obvious limitations to this metaphor, including the fact that we are here discussing paper targets, while CCAC emphasised in its recent Annual Review that Ireland's climate targets are not yet translating into the necessary action.)

32. Legally, the Government is of course not bound to agree with CCAC's proposal of carbon budgets amounting to less than a 6% (average) reduction per year to 2030. The Government could and should approve budgets that are significantly smaller than this, reflecting considerations of equity and common but

⁶ The stated figure for 1990 was obtained applying the same methodology as CCAC used to calculate the 2018 emissions baseline cited in its Technical Report; with thanks to Professor Barry McMullin for calculating the 1990 figure.

⁷ Having already reduced its emissions by >30% between 1990 and 2018, Denmark has set a target for 2030 (relative to a 2018 baseline) that is higher than Ireland's 51%.

differentiated responsibilities and respective capabilities, and ignoring speculative removals/negative emissions, for example. In respect of emissions from international aviation and shipping, which are said to be outside the scope of the Climate Act, the Minister and Government (and CCAC before them) must nevertheless be able to justify, pursuant to s.3(3), how their approval (and proposal) of carbon budgets remains consistent with the objective of the UNFCCC and Articles 2 and 4(1) of the Paris Agreement (including equity and common but differentiated responsibilities and respective capabilities), absent inclusion of such aviation and shipping emissions.

33. I would note finally that the Climate Act is not the only relevant legal consideration in respect of the carbon budgeting process. Section 3(1) of the European Convention on Human Rights Act 2003 requires every organ of the State to perform its functions in a manner compatible with the State's obligations under the ECHR. Equally, constitutional rights are in play. If the Government were to approve the carbon budgets proposed by CCAC, this would amount to approving budgets for Ireland that:

- a. aim to achieve less than 6% per annum (average) emissions reductions by 2030, where UNEP has advised that a global average reduction of 7.6% per annum from 2020 to 2030 is necessary (assuming massive negative emissions);
- b. do not reflect Ireland's fair share contribution, where the Dutch Supreme Court in *Urgenda* has held that every country must do "its part" to comply with ECHR obligations (an interpretation that seems likely to be confirmed in one or more of the climate cases pending before the European Court of Human Rights); and
- c. are based on a 44.5% reduction in emissions in 2030 (compared to the 1990 level), in the absence of a pathway of reductions to carbon neutrality in 2050, in circumstances where Germany's highest court has recently found an infringement of fundamental rights based on a (higher) 55% target for 2030 (compared to 1990) and similarly no pathway to net zero by 2050.

In my view, significantly smaller carbon budgets than those proposed by CCAC are required to protect and vindicate fundamental rights and to comply with the Climate Act.