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Climate Action Plan 2024 Public Consultation
Climate Action Plan and the Public Sector Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2

Sent by email to: ClimateActionPlan@decc.gov.ie

5th April 2024

Re. Climate Action Plan 2024

A Chara,

An Taisce welcomes the opportunity to contribute to the consultation on the Climate Action Plan 2024 (CAP24) and wishes to make the following submission.

1. Context of this Consultation

This consultation on the 2024 Climate Action Plan is concluding at the end of the first quarter of 2024. Therefore, the finalised CAP24 will likely not be published until approximately five to six months into the year. Moreover, we are already building up a significant implementation gap - 35% of the actions from the Climate Action Plan 2023 are incomplete. Further complicating the timing problem, the EPA's annual publication of emissions data will not be available until May or June, meaning that the most up to date data from 2023 on progress, or lack thereof, towards meeting the carbon budgets cannot be factored into the Plan. These issues raise serious concerns about the overall efficacy of the Plan and the feasibility of implementing the Plan's actions, particularly given the scale of the response needed to bring Ireland back on track to meet its first carbon budget obligations.

2. Meeting Ireland's Legal Obligations

Emissions in Ireland are subject to two sets of legal obligations:

- Compliance with two carbon budgets: 295Mt (2021-2025) and 200Mt (2026-2030) based on a 2018 baseline per the Climate Action and Low Carbon Development (Amendment) Act 2021 (hereafter referred to as the Climate Act); and

- A 42% reduction in national Emission Sharing Regulation (ESR) emissions by 2030 based on a 2005 baseline (EU Climate Law).

We submit that the Climate Action Plan 2024 entirely fails to set out adequate pathways to achieve compliance with both of these.

2.1 Climate Action and Low Carbon Development (Amendment) Act 2021

The EPA 2023 Greenhouse Gas Emission Projections report[1] states that Ireland's first two carbon budgets (2021-2025 and 2026-2030) are projected to be exceeded by a significant margin of between 24% and 34%. With regard to the 2021-2025 budget, CAP24 does not provide assurance that adequate corrective measures will be implemented to achieve compliance with that first budget. Page 10 of the Plan claims that it will enable Ireland to meet its 2030 targets. It does not make a similar claim for the first carbon budget other than a general claim of alignment with government decisions in July 2022:

> *"This Climate Action Plan sets out the roadmap to deliver on Ireland's climate ambition. It aligns with the legally binding economy-wide carbon budgets and sectoral ceilings that were agreed by Government in July 2022. This will enable Ireland to meet 2030 targets and be well placed to meet mid-century decarbonisation objectives."*

Per the Climate Act, it is on-time compliance with all carbon budget tonnages that is legally binding, not 2030 targets. In the absence of immediate course adjustment and urgent measures, both the Climate Change Advisory Council (CCAC) and the Environmental Protection Agency project a failure to comply with the first budget and indeed with the second as well. Taking corrective action to position Ireland back on course for compliance is a fundamental requirement of the Climate Action Plans and the basis on which the annual revisions are required to be made.

However, An Taisce's analysis shows that Ireland's carbon budgeting situation is even further off track than the EPA report indicates (see the Appendix to this submission). The Climate Act is very clear in its requirement that any overshoot of the first five-year budget (to the end of 2025) must be carried forward to reduce the following five-year budget for 2026–2030 (per s.6(D)(5) of the Climate Act). This critical analysis, which is essential for decision-makers and in the formulation of the Climate Action Plan 2024, is missing from the EPA Projections report and has not been considered in the Plan.

The EPA report provides two emissions projection scenarios, called WEM (With Existing Measures) and WAM (With Additional Measures), respectively, based on data for existing and projected additional government policies. These projected emission pathways over time are then compared with the legally binding carbon budgets approved by the Oireachtas. In the EPA report, Budget 1 is exceeded by 45 MtCO2eq for WEM and 37 MtCO2eq for WAM. Budget 2 is exceeded by 125 MtCO2eq for WEM and 80 MtCO2eq for WAM.

By contrast, in An Taisce's analysis correcting Budget 2 for the prior overshoot of Budget 1, the exceedance as per the Act is substantially greater: 170 MtCO2eq or 110% for WEM; and 117 MtCO2eq or 72%, for WAM. An Taisce's revised analysis (see Appendix) shows that there

[1] EPA 2023 Greenhouse Gas Emission Projections: https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-GHG-Projections-2022-2040_Finalv2.pdf

is a basic budget maths issue in that the EPA emissions report (Sections 4.1 and 4.2) omits the carry-forward of the 2021-2025 overshoot that, under the Act, must result in a corresponding reduction in the subsequent carbon budget.

For the period 2021-2025, CAP24 repeats the EPA projection of a 37Mt overshoot (With Additional Measures assumptions) without addressing the implications such an overshoot has on subsequent budgets. Should this overshoot be realised, the amount of 37Mt is required to be subtracted from the 2026-2030 budget, leaving 163Mt for the second budget period. An overshoot of 80Mt (WAM scenario) is projected by the EPA for this period. Cumulatively, this leaves a 2030-2035 budget of 34Mt.

The basis for the Average Annual Reductions stated in Table 3.1 is therefore false and does not take into account carryover of projected excess from the first to the second budget period. If the EPA figures are used for this purpose, the required reduction in the second carbon budget period is of the order of 20% per annum, not 8.3% per annum as listed.

The reality of the current emissions trajectory toward the end of 2025 means the carbon budget overshoot that will need to be removed from the 2026-2030 budget is so significant that it will require much more stringent and disruptive actions in 2026-2030, and it will be much more difficult to remain within the legally binding limits. **An Taisce submits that highly effective emergency course-correction measures must be immediately enacted in CAP24 to limit the overshoot.**

Since such effective measures to meet the initial carbon budget allowance are not evident in the Plan, CAP24 therefore does not align with the legally binding economy-wide carbon budgets as required by the Climate Act.

2.1.1 Land Use, Land Use Change & Forestry

Furthermore, the full enactment of the Climate Act has not been achieved over the past three years due to the failure to incorporate Land Use, Land Use Change and Forestry (LULUCF) into the sectoral emission ceilings (SECs). Pending the publication of Phase 2 of the Land Use review (likely not until sometime in 2025) reliance on the phrase "as soon as maybe" in the Climate Act remains a poor justification for non-completion of the Sectoral Limits requirements. A pathway for LULUCF remains absent from the SECs depicted in Appendix 1 of the CAP24. It is not acceptable that this delay to completion of the budgets now appears to be extending for the duration of the present Government.

It is accepted that the volatility of LULUCF emissions makes for difficulties in setting a percentage reduction target along similar lines to other sectors. However, until 2025 the existing regulations apply and how LULUCF is being factored into the 2021-2025 carbon budget is not clear. Furthermore, the absence of a SEC for one sector raises questions about the finality of the SECs for all other sectors, since the total carbon budget is set and the individual SECs must aggregate to these totals.

Currently, the only sensible interpretation of first two carbon budgets combined with the Government's September 2022 SECs[2] is that the LULUCF SECs are effectively set at 20 $MtCO_2e$

[2] https://www.gov.ie/en/publication/76864-sectoral-emissions-ceilings/

for 2021-2025 and 13 $MtCO_2e$ for 2026-2030[3]. The respective EPA Projections for LULUCF are: WEM, 40 and 47 $MtCO_2e$; WAM 39 $MtCO_2e$. In other words, the likely LULUCF outcomes are far in excess of the effective LULUCF SECs – primarily due to the upward revision of forest emissions from organic soils and an ongoing governance failure to restrict forest harvest given continued low afforestation rates[4].

2.1.2 Unallocated Emissions Savings & "Emerging Technologies"

The inclusion of 26Mt of Unallocated Emission Savings in the second carbon budget remains unresolved. Potential options to allocate these emissions are expressed only in an aspirational manner e.g. "examples of additional measures could include…" Continuous reference is made throughout the document to emerging technologies, but no such deployment is indicated: *"new, and as yet unknown technologies and solutions will be required as we transition to climate neutrality".*

More specifically, section 3.3.3 of the Plan states:

> "*CAP24 also sets out an approach to deal with unallocated savings no later than 2025. The proposed approach is focused on exploring emerging technologies where there is now greater evidence of technical/commercial readiness, and on the deployment of carbon removal technologies.*"

With such technologies remaining uncertain in terms of the feasibility and timing of their widespread deployment, particularly in the period to 2025 and then to 2030, relying on them creates an unacceptably ambiguous roadmap towards achieving climate targets. Until their technical and commercial readiness to be deployed is verified, disproportionate emphasis on them as a mitigation measure should be avoided. Instead, more specific, measurable, actionable, relevant and time-bound emissions reduction measures should be articulated.

On Carbon Capture Utilisation and Storage (CCUS), the plan does not quantify annual emissions that can be captured, nor any geological CO_2 storage capacity. As such, the additional mitigation measures that might be required prior to the commencement of the second carbon budget 21 months from now are not seriously considered in the plan. A reliance on CCUS as a measure to address unallocated savings is highly ambitious, given the probable late rollout of this technology well beyond the timeframe of the second and third carbon budgets, and its questionable ability to scale up. For example, there is a consistent display of uncertainty about its ability to be effective for the second carbon budget period: *"[CCUS] can potentially address a portion of unallocated savings in Ireland between 2026-2030 across industry, electricity and waste treatment."*

There is noticeably increased hydrogen ambition throughout the CAP24 with aims to enact a Green Hydrogen Strategy. The green hydrogen production process requires electricity for the electrolysis of water. This electricity demand would require the scaling up of renewables first. Failure to do this risks not having enough renewable capacity to power electrolysis, thereby causing a reversion to fossil fuel reliance which is totally incompatible with Ireland's

[3] For each five year period, the LULUCF SEC equals the relevant carbon budget minus the sum of the Government's non-LULUCF SECs minus the unallocated emissions.

[4] See:Revision of Forest emissions makes meeting Ireland's carbon budgets more difficult and Projected reduction in forest carbon removals to 2030 requires greater climate action policy focus

decarbonisation obligations. Cremonese et al. (2023)[5] effectively highlight this conflict potential between the deployment of renewable energy for decarbonising local power grids versus using renewable energy to produce green hydrogen, which would be likely to be exported also. The increased hydrogen ambition throughout the CAP24 omits any consideration of this issue.

Furthermore, we would highlight that the potential future production and use of hydrogen at scale is highly uncertain and cannot reasonably be used as an action in CAP24. If proposed for grid injection, it is crucial to note that the transition of a gas network to hydrogen use is very complex technically and procedurally and is unlikely to occur in Ireland for many years, if ever.

Climate science makes it clear that "*Uncertainty is not our friend, and there is simply too much at stake for us to resign and accept failure*"[6]. Therefore, it is crucial that the Climate Action Plan and Government acknowledge this stark reality and they set out the necessary allocation of the Unallocated Emission Savings without delay, including all additional increases in savings required to cancel 2021-2025 exceedance.

Moreover, science makes clear that uncertainty increases mitigation costs[7], therefore by emphasising continued uncertainty and failing to clarify the necessary allocation of Unallocated Emissions Savings the Government is failing to act cost-effectively, as is required under the Act.

2.2 EU Climate Law Compliance

As regards compliance with the EU Climate Law, in its recent correspondence regarding the National Energy and Climate Plan, the European Commission has concluded that Ireland's target for 2030 adds up to an emission reduction of 10.2%. Compliance requires a reduction of 42% on 2005 levels. **CAP24 does not provide a pathway for compliance with EU requirements.** Indeed, it fails to provide satisfactory information on what national progress is or is not being made towards compliance with the 42% reduction requirement for 2030. The most recent data shows Ireland (before use of flexibilities) is exceeding its annual Effort Sharing Regulation limit by 3.72Mt.

2.3 International Responsibilities

It is submitted that CAP24 also fails to address Ireland's international responsibilities - there is no mention of the dwindling *global* carbon budget and what Ireland's responsibilities are in respect of this. In particular, despite extolling Ireland's financial contributions to Adaptation and Loss and Damage, and its support of the Sustainable Development Goals, the Plan does not address what Ireland's fair share of the remaining global carbon budget should be. The

[5] Cremonese et al. 2023. The sustainability of green hydrogen: An uncertain proposition. https://doi.org/10.1016/j.ijhydene.2023.01.350

[6] Knutti, R., Rogelj, J., 2015. The legacy of our CO2 emissions: a clash of scientific facts, politics and ethics. Climatic Change 133, 361–373. https://doi.org/10.1007/s10584-015-1340-3

[7] Lewandowsky, S., Risbey, J.S., Smithson, M., Newell, B.R., 2014. Scientific uncertainty and climate change: Part II. Uncertainty and mitigation. Climatic Change 124, 39–52. https://doi.org/10.1007/s10584-014-1083-6

national carbon budgets required under the Climate Act were assessed by the CCAC as being in line with Ireland's commitments under the Paris Agreement. If the Climate Action Plan does not deliver a credible pathway to carbon budget compliance, as CAP24 fails to, this entails that the State will also fail to meet its Paris commitments.

3. Sectoral Actions

Overall, the actions proposed in CAP24 are over-reliant on technological fixes such as unproven carbon removal technologies while not focusing enough on demand reduction, particularly in sectors such as electricity and transport. Similarly, we consider that too many of the proposed measures rely on significant amounts of renewable electricity coming on-stream. This is problematic because:

A. sufficient quantities of renewable energy are highly unlikely to be developed in time to meet the demand needed to comply with the 2021-2025 budget; and
B. progress towards renewables penetration targets is being significantly diluted by the ongoing proliferation of high energy demand developments, in particular data centres - the higher the total electricity demand, the more renewables capacity needed. Therefore, as more energy intensive developments, like data centres, come onstream, less renewable energy is available for other uses.

There is also no timeline or plan discussed in CAP24 for the phase-out of fossil fuel use.

3.1 Electricity

While electricity generation has so far achieved better emission reductions than most sectors, growth of demand has outpaced energy efficiency gains and renewable energy penetration of the market. CAP24 essentially gives up on achieving the 2021-25 carbon budget targets in this sector. Seeking a reduced demand from consumers to facilitate increased consumption from data centres and other large energy users lies behind this failing. The Plan does not address this issue other than seeking flexibility.

The practice of connecting data centres to the gas grid represents a medium term commitment to fossil fuel emissions that is not compatible with Ireland's climate obligations. No further permissions should be granted for data centres to establish fossil fuel powered generating systems in support of their activities. We submit that CAP24 should provide for a national review of data centre energy demand and that this should inform a new national policy on the level of future data centre development that can be accommodated in compliance with our national, European and international emissions reduction obligations. A moratorium on all further data centre development should be put in place until such a policy is enacted.

No specific time scale for the phasing out of fossil fuel boilers is presented, despite commitments to do so in CAP24. The end date for new purchases and maintenance should be clarified as a preliminary matter. The continued inclusion of fossil fuel boiler upgrades and installations in schemes such as SEAI's Fully Funded Energy Upgrades (Warmer Homes Scheme) and the Housing Aid for Older People Grant must be evaluated. Lock-in to fossil fuels needs to be avoided while ensuring the provision of effective deep retrofit options at no cost to eligible households. We submit that the final version of the CAP24 should address these concerns.

3.2 Residential

The abatement figure of 0.3Mt relating to Standards and Regulations in Table 14.5 refers to abatement relative to Business-As Usual projections. They are therefore hypothetical, potentially masking an absolute increase, and should not be used as inputs to the overall reduction budget.

0.4TWh of heating is to be supplied by agriculture-based supply chains by 2025. This refers to biomethane/AD. Since the National Biomethane Strategy has only just concluded a public consultation stage, it is difficult to reconcile this output with the time scale proposed (see also section 3.4 of this submission).

Similar concerns exist for the District Heating schemes to provide 0.1TWh. The Plan might have provided for a requirement that such schemes should be mandatory in new residential developments, failing which a contribution to the local authority by way of development levy should be incorporated at planning stage. The requirement that industrial facilities supply waste heat to district heating where feasible is to be welcomed. Similarly, in the absence of a moratorium on new data centre development (see section 3.1 above), any new data centre should be required to incorporate district heating networks to use their residual heat. This has already been implemented in the Tallaght District Heating Scheme which could serve as a model for other projects. CAP24 fails to acknowledge this innovation potential.

Given that Ireland is a renewable and district heating laggard, other jurisdictions such as Denmark serve as an exemplar of the possibilities for decarbonising the heating system, creating energy efficiency and tackling energy poverty. A crucial mechanism for achieving this is the Building Regulations which could be amended to mandate district heating where possible over the individual heating solutions per household, which exist currently in Ireland.

There also appears to be no mention of progress towards achieving the goals of the National Retrofit Plan to accelerate the pace of retrofitting and heat pump deployment within residential and commercial buildings. Given the goals of achieving a B2 BER rating for 500,000 homes and the installation of 400,000 heat pumps in existing dwellings, and 280,000 in new dwellings by 2030, an action plan outlining progress thus far and the measures to be taken by the SEAI and other stakeholders to realistically achieve these targets should be specified in CAP24.

3.3 Transport

We welcome the prioritisation of the Sustainable Mobility Policy, the proposed Demand Management Strategy, the Avoid-Shift-Improve approach, the expansion of Bike Share schemes, the concept of Mobility Hubs and the proposals for a Citizen Engagement strategy. We also welcome the Cycle Connects and the National Cycling Network Plans. However, we consider that the Plan would be greatly improved by having a more robust integrated strategy for multi-modal transport, by accelerating the roll-out of the bus shelter programme and by expanding the Local Authority Winter Maintenance Programme to include bus routes served by Local Link. Regarding the Avoid-Shift-Improve framework in this CAP24, it would be beneficial to outline how this framework will be communicated more effectively to the public via a media campaign or other forms of public engagement. The CCAC recommendations as they relate to the transport sector are welcome and should form the basis for active implementation in the sector. In particular, the taxation and planning recommendations are urgently required, but under-emphasised in CAP24.

3.3.1 Electric Vehicles & Lock-in to Private Car Use

We maintain that there is an excessive focus in CAP24 on electric vehicles which exacerbates lock-in to private car use and all of the negative externalities created by them (congestion in built-up areas, demand for car parking spaces, road traffic casualties, material resource requirements, further pressures on / costs associated with roads policing). Fleet electrification and biofuels are heralded as the main means towards emissions abatement for transport in the medium-term. This overlooks the need for significant further investment in modal shifts towards active modes of travel (walking, cycling), as well as increased public transport - particularly in the context of an inflationary economic environment where the €360M per annum allocated for active travel modes is not now going as far as it did several years ago. The CAP24 fails to address these as urgent emissions mitigation measures for the end of this first carbon budget period, and going forward into the second and third periods.

Fiscal measures e.g taxation of heavy private vehicles are also needed. It is noted that no KPIs for reduction in vehicle kms or fuel usage are offered for the first carbon budget period in Table 15.5.

3.3.2 Local Authority Weaknesses

There is a sense in which some Local Authorities are citing national policy on sustainable transport but are not treating the necessary implementation plans with sufficient urgency. Local Authorities have now completed their own Climate Action Plans and submitted them to the Department of Environment, Climate and Communications, but there appears to be huge variance in the sustainable transport measures and targets. With respect to Active Travel, the original announcement in January 2021 about the setting up of Active Travel Teams stated: "*The new staff will be dedicated to delivering and promoting active travel in Ireland and will work across design, communication/community liaison and construction oversight functions.*" However, outside of the cities, as far as we can ascertain, Active Travel Teams comprise almost exclusively engineers with some technicians or administration personnel. This means that the teams do not have the expertise for the essential work of communicating with communities and "selling" sustainable schemes. It also means schemes may not be optimal in terms of enhancing liveability. Our experience is that Local Authorities are still falling back on online consultations as their main means of community engagement and this is unlikely to result in community buy-in. CAP24 should include measures to begin addressing these issues.

3.3.3 Emissions from Aviation and Shipping

Aviation and shipping emissions remain left out of the 2021-2025 and 2026-2030 carbon budgets and the SECs. Despite the fact that Dublin Airport is the greatest emitter of CO_2 in the State, no significant mitigation measures (other than those imposed internationally) are proposed for the aviation sector. It is unacceptable that the major emitter should be encouraged to expand its emissions while controls are tightened on transport emissions elsewhere. No aviation KPIs are indicated for the aviation and marine sector to chart their progress towards decarbonisation. We would also note that the development and use of sustainable aviation fuels (SAFs) is included in the Plan, despite the fact that aviation emissions are not included in the carbon budgets. The development of effective SAFs is highly uncertain and highly unlikely to occur, at least at scale, by 2030, let alone by 2025.

3.3.4 Additional Issues

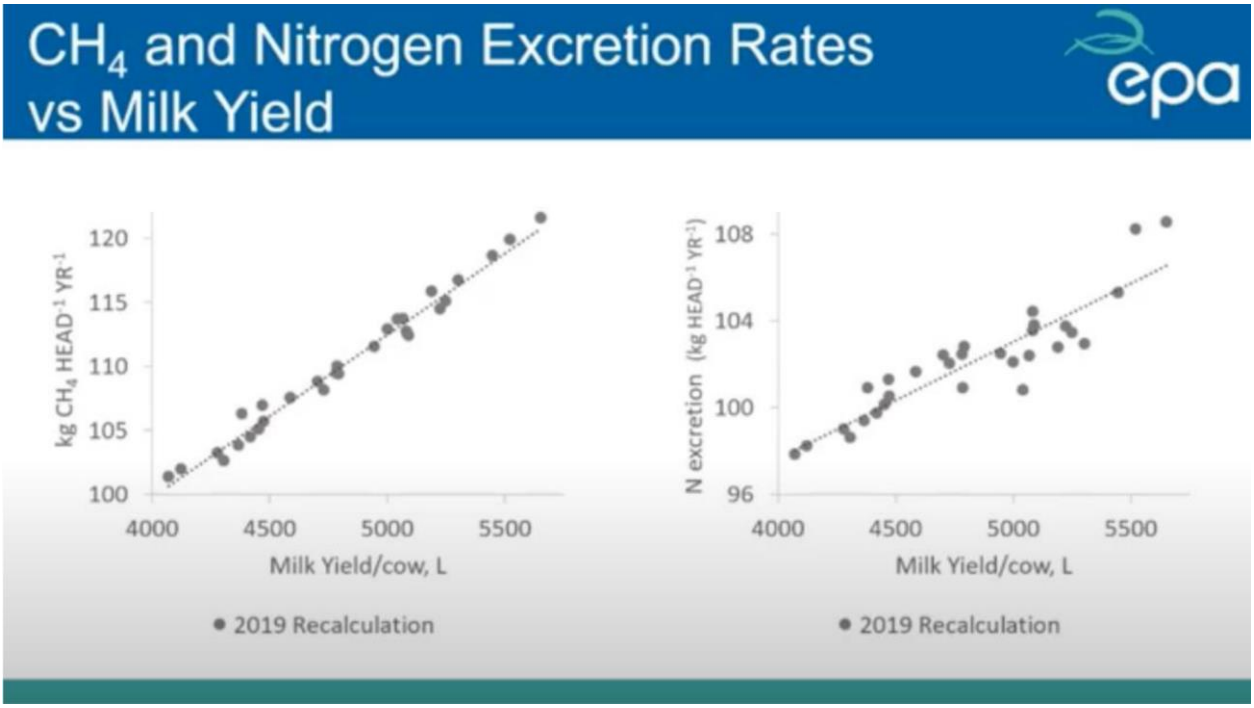
The proposals on car parking for new residential developments close to public transport are welcome. However, removal of private car park facilities in city centres is also needed. Though a long standing policy, little progress has been apparent in this area and more active 'benefit in kind' penalties are required.

An Taisce works closely with schools to encourage active travel and reduced use of cars. We propose that all school-going children beyond a certain distance from their school be given free travel passes to encourage them out of cars and into the habit of using public travel, if suitable for the child or young person. This would be additional to the school transport scheme.

In recognition of the volumes of carbon emissions generated by the tourism sector and mindful of the benefits of sustainable tourism to rural communities, we recommend a section on Transport and Tourism be added to the Plan.

3.4 Agriculture

We consider that the proposed mitigation measures for the agriculture sector are grossly inadequate. They fail to register the well-evidenced reality that agricultural methane and nitrogen pollution in Ireland are strongly coupled with total milk and meat production. The EPA figure below shows methane and nitrogen excretion being tightly related to milk yield.



Correlations of methane (L) and nitrogen (R) relative to milk yield. Analysis presented by the EPA toward their 2019 emissions inventory reporting.

Until it was eased from 2010 and then removed in 2015, Ireland's EU milk quota effectively limited and slowly reduced climate and environmental pollution up to 2010. By removing it and through policy supporting dairy sector expansion, the resulting increase in fertiliser and

feed nitrogen inputs has driven up methane and nitrogen pollution, contrary to climate and air/water pollution limiting commitments.

It is our view that policy-set, annually declining quotas on total milk and meat production – nationally and by catchment area – aligned with climate targets, and air (ammonia) and water (N and P) pollution limits, would be effective in guaranteeing that near-term carbon budgets, the ammonia ceiling, and water quality improvement would be achieved.

Such *preventive* guardrail quota measures, to limit total nutrient input and/or total meat and milk output, would be far more effective in achieving climate and pollution mitigation objectives and more certain for the agri-food sector, than relying on voluntary *curative* efficiency measures recommended by the Teagasc MACC [8] [9].

Page 306 repeats the falsehood that "*Food Vision 2030 is Ireland's shared stakeholder-led strategy*". Though repeated publicly in international arenas such as COP28, this statement is simply incorrect, the strategy was not endorsed by all key stakeholders, so it must be removed. After extensive attempted engagement, the Environmental Pillar, – representing the Stop Climate Chaos coalition and the Sustainable Water Network (SWAN), all key stakeholders, withdrew from the industry-dominated agri-strategy 2030 committee prior to its recommendations becoming policy in protest at the failure of Food Vision 2030 to address evident failures to limit climate, air, and water pollution in line with Ireland's commitments.

The third iteration of the Teagasc MACC is cited as a key tool for policymakers. This, however, is simply a cost-benefit guide for agricultural efficiency measures and it is purely voluntary. This means that the efficiencies liable to be adopted increase profits resulting in greater investment in the emitting activity. As Teagasc's 2023 MACC report itself points out, such a 'backfire' effect "*has occurred in the dairy sector*" as a consequence of the MACC measure implementation[10]. As the EPA GHG emissions, ammonia, and water pollution data amply attest there have been no beneficial effects from the first two MACCs on agricultural emissions.

Therefore, agricultural policy since 2010 and the MACC in particular have been an abject failure: agricultural emissions and pollution have increased, efficiency gains have been minimal, system nitrogen use efficiency is the worst in Europe[11], and Ireland's negative impact on global food security[12] has undoubtedly risen further. An urgent policy course correction is urgently required to re-align Ireland's agricultural sector and the well-being of farmers with a future *within* agreed climate action and pollution limits while increasing food security. This is

[8] Stern et al, 2022. The economics of immense risk, urgent action and radical change: towards new approaches to the economics of climate change. Journal of Economic Methodology 29, 181–216. https://doi.org/10.1080/1350178X.2022.2040740

[9] Garnier, et al, 2014. Curative vs. preventive management of nitrogen transfers in rural areas: Lessons from the case of the Orgeval watershed (Seine River basin, France). Journal of Environmental Management 144, 125–134. https://doi.org/10.1016/j.jenvman.2014.04.030

[10] See page 36 in Lanigan et al. 2023. Updated Analysis, https://www.teagasc.ie/media/website/environment/climate-action/climate-centre/MACC-2023.pdf

[11] Price, P.R., 2023. Carbon Budgets to Inform Climate Action: A society-wide, integrated GHG quota and accounting perspective (Working Paper No. 19). https://www.climatecouncil.ie/councilpublications/councilworkingpaperseries/Paul%20R%20Price%20Working%20Paper%20No%2019.pdf

[12] Doyle, C., 2016. Feeding the World Sustainably? – analysis of Irish and EU food nutrition trade balances. Whitaker Institute, NUI Galway and An Taisce, Galway, Ireland. http://www.antaisce.org/sites/antaisce.org/files/colin_doyle_feeding_the_world_sustainably.pdf

certainly possible as Ireland's agri-food system has become even more nutrient-wasteful and polluting over the past decade through its increased over-reliance on fertiliser and feed imports to provide meat and dairy production for export.

The Teagasc MACC analysis is based on misleading and highly risky, business-as-usual assumptions of continued growth in global dairy and meat demand, while ignoring uncosted pollution, escalating climate impact damage, and the reality that reducing cattle and sheep production is crucial to cutting methane.

Recent research points to far better guidelines to assess future pathways for Ireland's farmers and food production. Contrary to Ireland's current emphasis on "sustainable intensification" of an unsustainably polluting system, this research[13] shows that agro-ecological measures focused on crop food (not feed) production combined with strong local nitrogen cycling, producing food aligned with the necessary dietary change toward less animal products globally, can enable a more food secure and far less wasteful future for farmers and society.

Other research and recent events (repeated fodder crises, the Russian invasion of Ukraine) indicate that Irish agriculture has fallen into an 'energy trap' by increasing its reliance on imported fertilisers and feeds. As this research concludes:

> *"overcoming the energy trap requires nature-based solutions to reduce current dependence on fossil-fueled external industrial inputs and increase the circularity and complexity of agroecosystems to provide healthier diets with less animal products."*[14]

Table 16.5 in CAP24 indicates similar abatement potential for Protected Urea and fertiliser. It is not clear what effect Protected Urea has on methane emissions.

Table 16.5 also does not include any timeline of quantified absolute emission reduction for low emission cattle despite the Plan claiming major reductions in methane are possible. This would be desirable as the Plan indicates the advantages only exist for beef cattle, and not for the 1.6 million higher-methane producing dairy cows.

An Taisce does not agree that the creation of a carbon farming framework (Action AG/24/26) is a useful or meaningful mitigation measure. Rather, it is an ill-defined distraction from the primary requirement to cut GHG emissions steadily and deeply as a matter of urgency[15].

Similarly, the plan to plant 40,000 km of new hedgerows conflicts with the reality that current hedgerow surveys indicate substantial losses are occurring. Any plan to protect and restore hedgerows is welcome but any carbon storage will only be restocking past hedgerow carbon losses, it will not in any way offset other ongoing agricultural or land emissions.

[13] Billen et al., 2021. Reshaping the European agro-food system and closing its nitrogen cycle: The potential of combining dietary change, agroecology, and circularity. One Earth 4, 839–850. https://doi.org/10.1016/j.oneear.2021.05.008

[14] Tello et al., 2023. Assessing the energy trap of industrial agriculture in North America and Europe: 82 balances from 1830 to 2012. Agron. Sustain. Dev. 43, 75. https://doi.org/10.1007/s13593-023-00925-5

[15] CAN Europe, 2022, Letter on council conclusions to carbon farming

The Plan fails to address livestock methane sources on the scale required to contribute a fair share to the Global Methane Pledge[16], to which Ireland signed up, to reduce methane emissions by 30% by 2030. A recently published peer-reviewed analysis[17] of the Climate Change Advisory Council's "Paris Test" of Ireland's carbon budgets, demonstrates that aligning methane reduction with Ireland's fair share Paris Agreement climate commitments now requires early, deep and sustained reductions in methane emissions from the agricultural sector, of the order of a 40% cut by 2030 relative to 2018.

With regard to Actions AG/24/16 and 18 on technological methane mitigation measures, An Taisce is publishing research on 'Agricultural Methane in Irish Climate Action' on 9th April, which provides critiques of such approaches. We would refer the Department to that research.

CAP24 also promotes the development of the biomethane industry (Actions AG/24/22 and 24). We would direct the Department to An Taisce's submission on the Draft National Biomethane Strategy[18], which provides an in-depth critique of the proposed scale-up of biomethane production in Ireland. The Strategy failed to fully evaluate the ample scientific evidence on the potentially serious climate and environmental pitfalls of biomethane production including the impacts of feedstocks and feedstock production, fugitive emissions, impacts of the use of digestate as fertiliser, transport emissions, and fossil gas lock-in if biomethane is injected into the gas grid.

With regard to the composition of the proposed Biomethane Coordination Group, we would highlight that no eNGOs or academic experts are included as stakeholders. An Taisce wrote to both the Department of Environment, Climate and Communications and the Department of Agriculture, Food and the Marine in December 2023 on a very similar issue regarding the development of the Draft National Biomethane Strategy, noting that "*[s]uch bias seriously risks the appearance of regulatory capture of NBS [National Biomethane Strategy] development by vested interests*"[19]. Critical perspectives, like those of eNGOs and academic experts, are needed to help ensure that environmental and climate issues, such as those mentioned above, are thoroughly addressed at all stages in any plan to scale up biomethane production.

4. Additional Considerations

4.1 Government and Public Sector Accountability

The proposed revision to Ministerial Responsibility is welcomed. However, accountability for Departments exceeding their Sectoral Emission Ceilings is not clear. The role of the Department of Public Expenditure, NDP Delivery and Reform in applying methodologies to apportion compliance costs to sectors failing to meet their sectoral emissions ceilings is vague and should have been developed before the first carbon budget period, which is now almost

[16] Nations that signed up to the Global Methane Pledge also committed to moving towards using the highest tier IPCC good practice inventory methodologies, as well as working to continuously improve the accuracy, transparency, consistency, comparability, and completeness of national greenhouse gas inventory reporting under the UNFCCC and Paris Agreement, and to provide greater transparency in key sectors.

[17] McMullin et al. 2024. Defining a "Paris test" of national contribution to global climate mitigation: the Irish exemplar. ERL. https://iopscience.iop.org/article/10.1088/1748-9326/ad3660

[18] https://www.antaisce.org/Handlers/Download.ashx?IDMF=53ff5e4f-4685-4245-bd1f-bfc609c2c979

[19] https://www.antaisce.org/letter-on-lack-of-consultation-for-national-biomethane-strategy

over. It is not clear whether responsibility will be allocated within Departments, or what effect potential future reorganisation of Departments might have.

The Public Sector Climate Action Mandate does not apply to Commercial Semi-State Bodies (CSB), the School Sector, or Local Authorities. The Plan should make clear that these entities fall under the Ministerial responsibility appropriate to their activities.

Separately, CAP24 should provide for full training and resourcing for all bodies subject to the obligations of s.15(1) of the Climate Act to facilitate their compliance with those obligations[20].

4.2 Local Government

In relation to local authority climate action plans, there is no indication that the Baseline Emissions Inventory exercise already undertaken in each local authority area and for each Decarbonisation Zone (DZ) for 2018 or 2019, will be undertaken between now and 2030. Such an exercise, or a similar one, should be undertaken at intervals up to 2030 so that the progress on emissions reduction in each local authority area and DZ is monitored and is clearly evident.

In order to increase momentum on climate action at local level there needs to be a coordinated approach between the Department of Climate Action, Climate Actions Regional Offices (CAROs) and local authority climate action teams in relation to a public awareness programme regarding the implementation of local authority climate action plans. Given the significant lack of public awareness in relation to DZs there should be a particular focus on awareness raising initiatives relating to climate action in DZs.

4.3 Fossil Fuel Subsidies

The Central Statistics Office estimates that fossil fuel subsidies are in the region of €3 billion annually in Ireland. It is incompatible with the objectives of CAP24 that these persist and undermine emission savings elsewhere. It appears that only provisional steps towards identifying, tracking and reporting on these are currently being undertaken. However, despite undertakings signed at COP27 and COP28, no date, timeline or commitment to phase out fossil fuel subsidies are apparent in the Plan.

4.4 Demand Reduction/Management

A greater focus on demand management and reduction is needed throughout CAP24. For instance, Section 4.3.2.3 'Social and Behavioural Research' misses an opportunity to allow for further research into demand management strategies across sectors which can inform and refine already established measures.

[20] S. 15(1) of the Climate Action and Low Carbon Development (Amendment) Act 2021: *(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with— (a) the most recent approved climate action plan, (b) the most recent approved national long term climate action strategy, (c) the most recent approved national adaptation framework and approved sectoral adaptation plans, (d) the furtherance of the national climate objective, and (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.*

4.5 Climate Delivery Task Forces

We note the creation of climate delivery task forces, which the government heralds as an all-encompassing multi-stakeholder collaboration with government agencies/departments, as a means to implement climate actions. However, we submit that such collaboration is incomplete without the full inclusion of eNGOs and climate academics who are a crucial source of climate and environmental expertise and experience, beyond the confines of government and industry perspectives alone.

Given the abundance of these sectoral task forces and working groups, the presence of eNGO and academic input is essential to ensure balanced action plans for adhering to the carbon budgets and sectoral emissions ceilings. The absence of such perspectives decreases the efficacy of working groups and may risk the perception of regulatory capture of government climate objectives by the interests of industry, as was evidenced in the development of the Draft National Biomethane Strategy as previously discussed.[21]

5. Moving Forward

Ultimately, CAP24 as drafted represents the continuation of an incrementalist approach to climate action when what we need is major leaps. By kicking the can down the road as CAP24 does, it leaves more and more work to subsequent carbon budget periods, making the job of budget alignment even more challenging and much more socially and economically difficult than it will already be.

The change needed in any credible strategy for getting back on track to stay within the 2021-2025 carbon budget will inevitably be disruptive. Therefore, what is needed now is a significant increase in political courage to deliver ambitious Climate Action Plans, now in 2024 and in future years, that will get Ireland back on track to meet our emissions reduction legal obligations in an urgent and equitable way.

Is mise le meas,

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[21] https://www.antaisce.org/letter-on-lack-of-consultation-for-national-biomethane-strategy

Appendix:
Comparison of EPA projections with the agreed carbon budgets

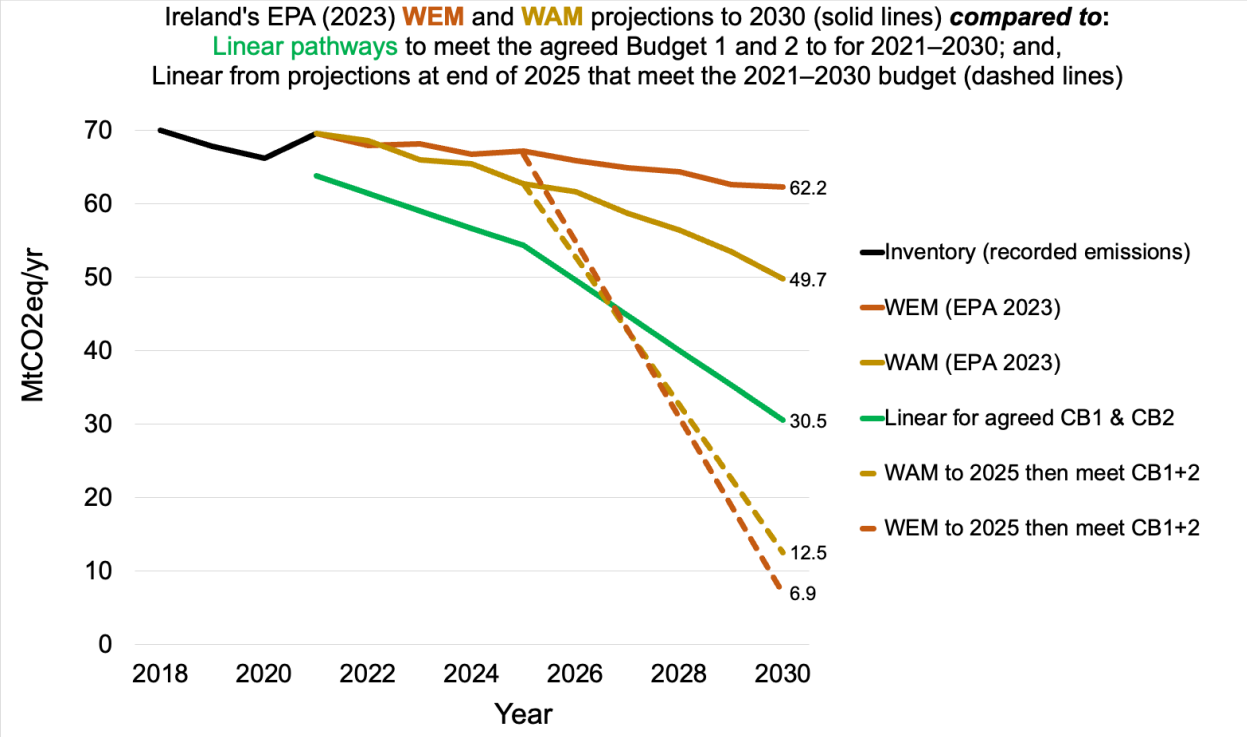
The two tables below, for WEM and WAM projections, set out the agreed carbon budgets, the EPA 2023 projection, and the resulting exceedance (to be carried forward), with a comparison to the exceedance stated by the EPA.

Carbon budgeting based on WEM (With Existing Measures) Projection	**(legally binding) Budget 1**	**(legally binding) Budget 2**	**(provisional) Budget 3**	**Not yet defined Budget 4**	**CB1+CB2**
	2021–2025	**2026–2030**	**2031–2035**	**2036–2040**	**2021–2030**
5-year Carbon budget	**295**	**200**	151	Not yet defined	**495**
Carry forward prior overshoot	–	-45	-170	-325	
Corrected carbon budget	**295**	**155**	**-19**	**?**	
WEM Projected emissions	340	325	306	294	665
Overshoot	**45**	**170**	**325**	**–**	**170**
EPA exceedence value (Projections p.11)	45	125	160	–	170
Percent exceedence of corrected budget	*15%*	*110%*	*1809%*	–	*34%*

Carbon budgeting based on WAM (With Additional Measures) Projections	**(legally binding) Budget 1**	**(legally binding) Budget 2**	**(provisional) Budget 3**	**Not yet defined Budget 4**	**CB1+CB2**
	2021–2025	**2026–2030**	**2031–2035**	**2036–2040**	**2021–2030**
5-year Carbon budget	**295**	**200**	**151**	**Not yet defined**	**495**
Carry forward prior overshoot	–	-37	-117	-214	
Corrected carbon budget	**295**	**163**	**34**	**?**	
WAM Projected emissions	332	280	248	244	612
Overshoot	**37**	**117**	**214**	**–**	**117**
EPA exceedence value (Projections p.11)	37	80	93	–	117
Percent exceedence of corrected budget	*13%*	*72%*	*625%*	–	*24%*

The tables show why early course corrective action is essential. The apparently small percentage overshoot of Budget 1 results in a very serious reduction in the smaller Budget 2 and an increased overshoot. This effect becomes ever greater in following budgets unless deep emission reductions are made early to get back to the trajectory defined by the agreed budgets.

The chart below shows: EPA 2023 Projections WEM and WAM (solid lines); a two-part linear pathway (green) with the parts meeting the CB1 and CB2 budgets respectively; and also WEM and WAM to 2025, followed by a linear path to meet the combined CB1+2 budget by 2030. The agreed budgets of 295 MtCO2eq (Budget 1 = CB1) and 200 MtCO2eq (Budget 2 = CB2) result in the green linear pathway seen in the chart.



The table below shows emissions in 2025 and 2030 for the different scenarios and the respective percentage reduction in annual emissions compared to 2018. As shown, the 2030 value in this pathway is 56% below the 2018 inventory value. This shows how all ongoing references to a target of 51% reduction by 2030, as commonly seen in the EPA reporting and in government documents are no longer meaningful. The 51% by 2030 target ceased to be relevant to climate action once the five-year carbon budgets were set by the Oireachtas, and the required percent reductions by 2030 depend on the emissions trajectory actually projected or taken.

Pathway	2025 emissions incl. LULUCF	*Percent below 2018 value*	2030 emissions incl. LULUCF	*Percent below 2018 value*
WEM from 2023 EPA Projections	66.7	*5%*	62.6	*11%*
WAM from 2023 EPA Projections	62.7	*10%*	49.7	*29%*
Linear pathways meeting the set 10-year budget to 2030	54.2	*22%*	30.5	*56%*
WAM to end of 2025, then linear to meet 10-year set budget	62.7	*10%*	12.5	*82%*
WEM to end of 2025, then linear to meet 10-year set budget	66.7	*5%*	6.9	*90%*

Under the Climate Act it is meeting the carbon budget tonnages that matters, not a 2030 percent reduction. Failure to meet a five-year budget means that any excess results in a corresponding correction to the subsequent budget, as a result the percentage reduction by 2030 relative to 2018 becomes correspondingly larger.