

**Joint Oireachtas Committee on Climate Action 15<sup>th</sup> June 2021**

**Opening statement by Sadhbh O' Neill**

**Policy Coordinator, Stop Climate Chaos Coalition**

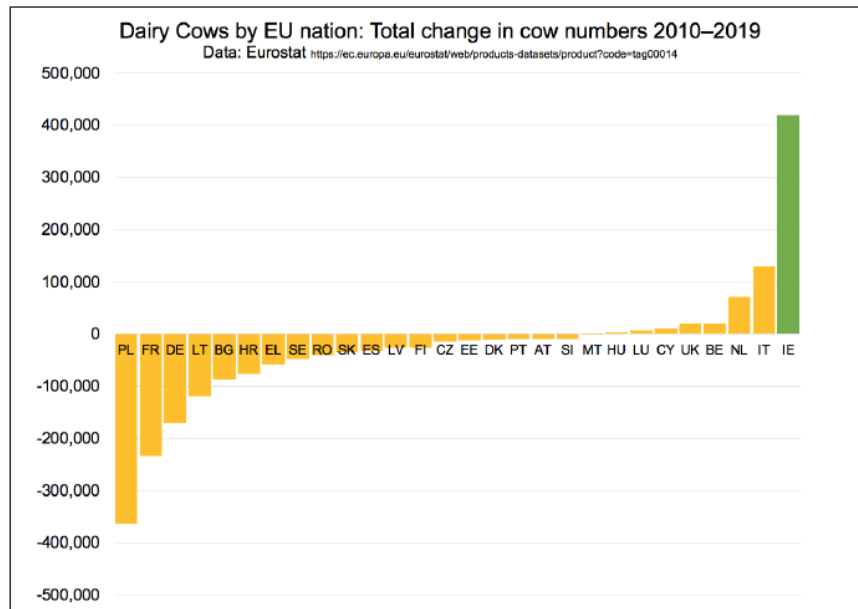


Thank you Chairman and committee members for the invitation to address you today. My name is Sadhbh O' Neill and I am the policy coordinator of Stop Climate Chaos, which is an advocacy coalition for faster and fairer climate action representing faith-based, development, environmental, social justice and community groups in Ireland.

We welcome the initiative of the Committee to discuss the role of agriculture in climate action. Agriculture is responsible for 35% of Ireland's annual greenhouse gas emissions and is the single largest sectoral contributor to Ireland's overall climate impact. The EPA states in its most recent emission projection reports that emissions from the sector are increasing, and that they are driven by rising dairy cattle numbers and associated nitrogen inputs.

The dairy sector currently contributes half of all of Ireland's agricultural greenhouse gas emissions and has been driving the increase in agricultural emissions in recent

years. Recent CSO data shows that there was a 41% increase in dairy cows from 2010 to 2019, making Ireland an outlier in comparison to other EU member states.<sup>1</sup>



**Figure 1.** Total change in dairy cow numbers 2010–2019 by EU Member State, with Ireland shown in green. Chart by An Taisce, data from Eurostat<sup>3</sup>.

It is worrying to note that the Teagasc dairy strategy to 2027 envisages yet further growth in herd numbers, a goal that is totally incompatible with climate policy.<sup>2</sup> If current projections for the sector are realised in terms of animal numbers and milk and beef output, there will be an inevitable increase in absolute greenhouse gas emissions, regardless of whether on-farm efficiencies are implemented.

<sup>1</sup> Eurostat (2020) <https://ec.europa.eu/eurostat/web/products-datasets/product?code=tag00014>

<sup>2</sup> Launched in late 2020, the Teagasc dairy strategy for 2027 envisages an increase in the dairy herd to 1.65 million dairy cows which, in conjunction with increases in milk output, will lead to additional methane and nitrous oxide emissions. The N20 emissions are also likely to increase further if the dairy sector remains reliant upon imported feed and additional grazing land, and this dependency could increase further if climate change attributes to more droughts. See: Teagasc (2020). 2027 Sectoral road map: Dairy. <https://www.teagasc.ie/publications/2020/2027-sectoral-road-map-dairy.php>

On-farm efficiency measures do not in themselves reduce total climate impacts.

Total – absolute - emissions of greenhouse gases and nitrate/ammonia impacts must be reduced, which is almost impossible to envisage without a reduction in livestock numbers. However, reliance on the uptake of voluntary efficiency measures drawn up by Teagasc and the more recent *AgClimatise Roadmap* (published in late 2020), fail to adequately address the underlying drivers of emissions: cattle numbers and nitrogen inputs (fertiliser and animal feed). Nor is the *AgClimatise* roadmap consistent with the Programme for Government commitment to reduce emissions by on average 7% per annum or 51% by 2030, as it assumes a stabilisation as opposed to an absolute reduction of methane emissions by 2030.<sup>3</sup>

Climate action policies for the agricultural sector have to date been based on assumptions about farmers' responses to theoretical cost savings from voluntary mitigation and efficiency measures as promoted by Teagasc. However, even if fully implemented, these measures will not address the multiple environmental impacts of the sector, nor can they be scaled up quickly enough to deliver the required emission reductions in a timely fashion.<sup>4,5</sup> This approach does not consider the effect of

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<sup>3</sup> The AgClimatise roadmap was developed in the context of the Climate Action Plan 2019, and meeting national targets under the 2030 Effort Sharing Decision and LULUCF decision.

<sup>4</sup> Bowles, N., Alexander, S., Hadjikakoub, M. (2019). The livestock sector and planetary boundaries: A 'limits to growth' perspective with dietary implications. *Ecological Economics* 160. <https://doi.org/10.1016/j.ecolecon.2019.01.033>

<sup>5</sup> Nitrous oxide and methane emissions have been increasing steadily since the ending of milk quotas in 2015, and are projected to grow over the next decade in line with an increase in animal numbers and fertilizer usage. See: Environmental Protection Agency (2020) *Ireland's Environment – An Integrated Assessment 2020*.

policies to expand agricultural output, or consider rebound and interaction effects, and is thus somewhat skewed towards business as usual. Without an overarching mitigation policy, measures are merely cost savings for farming that rebound to increase emissions, as we have seen. Moreover, the focus on cost efficiency falsely assumes that if farms are 'efficient' in the sense of maximising outputs per unit of input (feed and fertiliser), they are environmentally sustainable.

In fact, the only important measure of climate and air pollution action is *absolute*, instead of *relative*, annual emissions as reported in the National Inventory of GHGs published annually by the EPA, therefore efficiency measures in the absence of legally binding targets or a cap are a distraction. Agricultural emissions of methane, nitrous oxide and ammonia have been increasing steadily since 2011 due to dairy expansion and greatly increased nitrogen inputs, with only a minimal reduction in beef cattle numbers.

Requiring herd reductions from beef farmers will not by itself address the water and biodiversity impacts from the dairy sector that we highlighted in our report, jointly published with the Environmental Pillar and SWAN, and may even lead to rebound effects as more land becomes available for silage production for dairy cows.

The Climate Change Advisory Council undertook a special review of agriculture, forestry and land-use in 2019, but assumed in its scenarios that no herd reductions

would take place in the dairy sector, thus ignoring the growing ecological burden of intensive dairy farming in many areas of the country. Farmers must be supported with policies that provide both stable incomes through diversification, and that facilitate reduced stocking rates with decreased inputs.

Without substantial and sustained reductions in agricultural methane over the next decade it will not be possible to meet current national and EU climate targets. It is not expected that agricultural emissions will fall as fast as emissions in other sectors of the economy over the next decade. It is expected however, that there must be substantial year-on-year reductions in absolute emissions from agriculture. For the Government to allow one economic sector in society — a sector which represents one-third of Ireland's emissions — to simply continue business-as-usual, and insist that the rest of the economy reduce its emissions by two-thirds to achieve the overall 51% target for 2030 is highly unfair and impractical. Dr. Paul Deane of UCC has estimated that if agriculture only achieved 10% emission reductions, the buildings, energy and transport sectors would have to do more than 70%. Steadily and permanently reducing agricultural methane in the near-term with annual reductions in the order of 3-5% from 2022 to 2030 will be necessary to limit overshoot of Ireland's

national 'fair share' of the remaining global carbon budget aligned with meeting the Paris Agreement commitments.<sup>6</sup>

Policies that support carbon sequestration, though highly important for carbon storage in trees, soils, hedgerows and wetlands, are neither reliable nor permanent methods to offset greenhouse gas emissions from agriculture or fossil fuel combustion. Furthermore, biomethane production at a large scale involve risks, uncertainties and high costs.<sup>7</sup>

Changing the types and quantities of foods we consume could also have a significant impact on emission reductions. Shifting diets in line with health recommendations would have the positive benefit of reducing GHG emissions and freeing up land for other uses.<sup>8</sup> However it needs to be acknowledged that while there is potential for emissions reductions from a shift towards plant-based diets among Irish consumers, a reduction in the consumption of animal-sourced food in Ireland is unlikely to have a significant impact on Ireland's total agricultural

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<sup>6</sup> McMullin, B. and Price, P. (2020). *Synthesis of Literature and Preliminary Modelling Relevant to Society-wide Scenarios for Effective Climate Change Mitigation in Ireland*. Environmental Protection Agency, Ireland.

[www.epa.ie/researchandeducation/research/researchpublications/researchreports/Research\\_Report\\_352.pdf](https://www.epa.ie/researchandeducation/research/researchpublications/researchreports/Research_Report_352.pdf)

<sup>7</sup> Rather than waiting until the need to impose top-down strict regulations, with a shift in policy direction now, decision makers can enable a smoother, farmer-led transition to a more sustainable sector. To illustrate the potential for challenges arising from introducing regulation, it is worth noting the example of the Netherlands, where protests were held by farmers dissatisfied with regulation introduced to curb nitrogen emissions. See: Stokstad, E., 2019. Nitrogen crisis from jam-packed livestock operations has 'paralyzed' Dutch economy. *Science*, 366, pp.1180-1181.

<sup>8</sup> Centre for Alternative Technology (2018) People, Plate and Planet report [https://www.cat.org.uk/app/uploads/dlm\\_uploads/2018/11/People-Plate-and-Planet.pdf](https://www.cat.org.uk/app/uploads/dlm_uploads/2018/11/People-Plate-and-Planet.pdf)

greenhouse emissions. This is because most agricultural commodities are produced for export markets. For this reason, the Government, in its approach to agriculture and food production, must address the total impacts of all food production in Ireland on a territorial basis regardless of where the food is eventually consumed.

**We recommend:**

- **Publish a revised roadmap for agri-related greenhouse gas emissions reductions that sets out a time scale to achieve, as a minimum, compliance with EU and national law.<sup>9</sup>**
- **Put in place a declining cap on total national reactive nitrogen (and phosphorus) usage.<sup>10</sup>**
- **Consult with stakeholders and implement measures based on international best practice to limit and reverse recent expansion in the dairy sector by rapidly bringing sectoral greenhouse gas emissions back to 2011 levels by 2025 or as soon as feasible thereafter with immediate priority given to farms in sensitive catchment areas.**
- **Put in place compensatory measures to facilitate and incentivise herd reductions and diversification in the beef suckler and finishing sectors.**

See full report at: [https://environmentalpillar.ie/wp/wp-content/uploads/2021/04/EnvironmentalPillar\\_SWAN\\_SCC\\_Agricultural\\_Food\\_Policy.pdf](https://environmentalpillar.ie/wp/wp-content/uploads/2021/04/EnvironmentalPillar_SWAN_SCC_Agricultural_Food_Policy.pdf)

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<sup>9</sup> The latter is required as part of the two five-year carbon budget periods committed to by the present Government, incorporating an overall 7% per annum national reduction in greenhouse gas emissions up to 2030.

<sup>10</sup> For a detailed account of the policy drivers of agricultural emissions in Ireland, and possible interventions to reduce emissions, see: Stop Climate Chaos Coalition (2020). *Agricultural emissions in Irish climate change mitigation policy: Science and Solutions*. [www.stopclimatechaos.ie/assets/files/pdf/agricultural\\_emissions\\_science\\_and\\_solutions.pdf](http://www.stopclimatechaos.ie/assets/files/pdf/agricultural_emissions_science_and_solutions.pdf)