## Statement by Marie Donnelly, Chairperson of the Climate Change Advisory Council, to the Joint Oireachtas Committee on Environment and Climate Action on Carbon Budgets

I wish to thank the Committee for the opportunity to discuss the Climate Change Advisory Council's proposal for a Carbon Budget programme for the periods 2021 to 2025; 2026 to 2030; and a provisional budget for 2031 to 2035.

The Climate Action and Low Carbon Development (Amendment) Act requires that the Council propose all of economy carbon budgets to the Minister of Environment Climate and Communications "as soon as may be" after the commencement of Section 9 of the Act. The Act was commenced in its entirety on 7<sup>th</sup> September and the Regulation foreseen in Section 6A of the Act as amended, was signed on 13<sup>th</sup> October 2021. The Council immediately thereafter concluded its work and made proposals to the Minister on October 25<sup>th</sup> 2021.

The proposed Carbon budgets are expressed as a total amount of emissions that can occur over a specific time period. The Council has proposed these at 295 Mt CO2eq for the period 2021-2025, 200 Mt CO2eq for the period 2026-2030 and provisionally 151 Mt CO2eq for the period 2031-2035. These limits require the rate of emission reduction to accelerate in the second half of the decade (from an average of 4.8% per annum in the first budget period to 8.3% per annum in the second budget period). The Council has stressed that the carbon budget programme for the decade requires immediate and urgent action and investment in the first period in order to deliver the accelerated reductions in the second carbon budget period which are required to meet the 2030 target of a 51% reduction relative to 2018.

The proposed budget is based on the best available science and takes into consideration a range of criteria (the deliberations, reasoning and evidence behind the Council's carbon budget proposals are set out in the Technical Report and accompanying background documents on the Council's website), some of which I would like to mention:

The task of decarbonising Ireland is a major challenge, and it will affect all aspects of our lives.

In preparing its proposals, the Council was conscious that the necessary economic changes will have implications for households, communities and businesses, and has therefore emphasised the essential role of public policy to ensure a just transition, ensuring that the burdens and benefits of the transformation in our economy and society are shared fairly. Whilst a sustainable economy will bring overall benefits to individuals, society and households, both through energy cost savings, enhanced health and comfort, and job opportunities, the negative impacts on vulnerable households and communities need be mitigated by appropriate policies and supportive infrastructures.

The scale of change will require a strong level of social acceptance and engagement. All of us need to be convinced that climate action benefits us in order to rally support for changes on the ground. This requires leadership and the projection of a positive vision for a better society and natural environment alongside clarity on how climate action can strengthen social cohesion. On this climate journey, everyone must be empowered to have a say and be involved in shaping climate actions and their delivery. For example, payment for microgeneration of electricity on our homes, farm buildings and schools sends a strong signal and opens active participation to consumers.

Given the prominence of non-CO2 greenhouse gases and Land use, Land use Change and Forestry (LULUCF) in Ireland's emissions profile, and their close association with agriculture in Ireland, the role of agriculture and land use in carbon budgets was considered in great detail by the Council.

Teagasc research has identified emission reduction pathways in agriculture through measures such as enhanced genetics, changed grazing practices, the use of protected urea fertilizer and low emission slurry spreading,. In addition many of the carbon budget scenarios modelled for the agriculture sector use a change in output, primarily in the livestock sector, as a tool to meet mitigation goals. The Council has stressed that the different scenarios modelled are not prescriptive, rather illustrate that different combinations of reductions in dairy and suckler numbers could deliver emissions reductions in the various scenarios. The Council pointed out the importance of opportunities for diversification of agricultural income streams and activities as a part of transition and development of the broader green and circular economy, including in forestry, renewable energy and niche premium market development.

LULUCF is a source of emissions. In the LULUCF sector, grassland is the largest net source of emissions (c. 7.0Mt CO2eq,) along with wetlands (c. 2.5Mt CO2eq,), whilst Forest Land category was reported as a net removal (c. 4.0Mt CO2eq) in the base year for Carbon Budgets, 2018. However, Forest Land is projected to switch from a net removal to a net source of emission in the period to 2030. This is due to a policy failure. Targeted afforestation rates have not been achieved in recent decades. Since afforestation peaked in 1995 at 23.7 kha it has fallen steadily to only 2.39 kha in 2020. This trend needs to be urgently reversed. The Council has highlighted the important role of farmers in the management of carbon stocks such as wetlands, grasslands and forestry and recommended that farmers should be incentivised to adopt measurable and verifiable practices that sequester carbon whilst considering the risk to soil carbon stocks and sinks in any land-use change.

Ambitious mitigation leading to net zero by 2050 entails a significant shift away from fossil fuels towards renewable energy i.e. reducing CO2 emissions to net zero. For Ireland this brings a significant reduction in imported fossil fuel costs and brings the benefits associated with the use of natural resources such as wind, solar, hydro and marine in the generation of electricity. The electricity sector requires large-scale deployment of enabling infrastructure, including offshore wind and grid upgrades, to deliver ambitious mitigation. Supports that are urgently needed include legislation that enables planning and licensing for offshore wind. It is essential to consider the upfront costs of investments in renewable energies like wind, in the context of the long-term benefits of avoided emissions and it is clear that these developments will give rise to significant employment opportunities.

Greater reliance on electricity as the energy vector for transport and heating, along with growing electricity demand from population growth and data centres illustrates the importance of continuing to push energy efficiency alongside technological solutions (e.g. demand response, system services) and behaviour change as a means to reduce the cost of transition. The analysis done for the Council indicates that the greatest reduction of overall costs of transition would be seen with the reduction in the level of energy service demand (i.e. heat, light, transport).

The case for significantly enhanced levels of climate leadership backed by meaningful mitigation and adaptation actions is clear. Beyond a focus on employment, they need to create future-proof regions with diversified, resilient economies and high quality of life. More rapid reductions and structural changes are required to meet our targets. Local Government will play an important role here alongside a 'joined up' and targeted effort from central Government in delivering transition.

Concluding, I wish to thank the Committee for inviting me here today to discuss these issues and welcome any questions on the recent proposals.

Appendix – 2018 Baseline Emissions for the Calculation of Carbon Budgets (based on IPCC AR5 values for  $GWP_{100}$  as specified in S.I. No. 531 of 2021)

2018	Mt CO2eq		l –
Energy			37.0
Industrial Processes			3.2
Agriculture			22.3
Land Use, Land Use Change and Forestry			
	Emissions	9.6	
	Removals	-4.8	
	Net LULUCF		4.8
Waste			1.0
Total Emissions			68.3