Mr Richard Bruton TD

Minister for Communications, Climate Action

and Environment

29 - 31 Adelaide Road

Dublin 2

D02 X285

5<sup>th</sup> December 2019



McCumiskey House Richview Clonskeagh Road Dublin 14 D14 YR62

Phone: 01 2680180

Email: info@climatecouncil.ie

Dear Minister Bruton,

CC: Department of the Taoiseach, Department of Agriculture

RE: Advice on the implications of the IPCC Special Report on Climate Change and Land in an Irish context.

The Climate Change Advisory Council welcomes the invitation from the Minister for Communication, Climate Action and Environment to provide an assessment of the recent IPCC Special Report on Climate Change and Land and the implications of its findings for Ireland.

The IPCC Special Report on Climate Change and Land is an important contribution to the global assessment of the complex interactions that exists between the terrestrial systems and climate change; and the mitigation and adaptation options for land management and food systems. The report is timely and central to informing the urgency of action to address and reduce emissions from all sectors that are driving climate change

Ireland should take the opportunity at the 25<sup>th</sup> UNFCCC Conference of Parties in Madrid to endorse the report and engage with the international processes to

consider its findings and what future actions may be required to address the issues highlighted within the report.

The report is especially relevant to Ireland with respect to integrated responses to address climate change mitigation, adaptation, improving food security and tackling the loss of natural ecosystems and declining biodiversity. Many actions identified in the report can be implemented at relatively low cost. The report highlights that a move towards sustainable, resilient production of food is necessary. This raises a number of challenges for Ireland.

The Report notes that dietary choices can represent an important route to reduce greenhouse gas emissions and reduce pressure on land. Balanced diets, featuring plant-based and animal-sourced foods produced in resilient, sustainable and low-GHG emission systems can lower total emissions, while also presenting major opportunities for adaptation and health benefits.

The food Ireland produces is predominantly exported, especially with respect to animal-sourced products, while much of the food Ireland consumes is imported. Major global shifts in diet towards reduced consumption of animal products will impact on demand for Irish exports, with markets seeking quality rather than quantity and thus moving towards products with proven environmental sustainability which could also represent an opportunity. Ireland is in a relatively good position with respect to the low emissions intensity of grass-based livestock production on a lifecycle basis and an existing infrastructure with the capacity to provide robust monitoring systems to demonstrate this. However, Ireland is at risk of losing this position due to the observed increasing absolute greenhouse gas emissions and broader environmental sustainability concerns.

The observed recent rate of increase in livestock in Ireland is not sustainable, increasing pressure on the environment including the impact on greenhouse gas emissions. Ireland should take immediate action to ensure livestock numbers are maintained within the carrying capacity of the environment. Agricultural emissions must be reduced in line with the targets set out in the Climate Action Plan. This will require improvements in efficiency and changes in farm practices, as well as limiting the growth in, or reducing, livestock numbers. This requires alternative and sustainable opportunities in the rural economy, reflective of changing demand for

resources, including bioenergy and raw materials and changing dietary choices and consumption patterns. Application and management of nitrogen, linked to intensification of food production, is a driver for climate, air and water pollution.

There are important potential options for win-wins in addressing climate and other environmental issues which are identified in the Teagasc marginal abatement cost curve (MACC). The costs of implementation of mitigation measures should be assessed in the light of the multiple benefits which can accrue. The reform of the Common Agriculture Policy is an important opportunity to refocus supports towards achieving common objectives within food, rural development and environmental policy areas.

The Common Agriculture Policy cannot deliver all the supports and incentives required to achieve transition. Greater diversity in the rural economy will depend on major investment in research and innovation on sustainable circular bioeconomy solutions to ensure a more sustainable and higher value use of land based resources including biomass, food and animal waste streams, grassland and forestry. The wider economy will also need to integrate the principles of circular economy into supply chains, product and systems design. Constructive discourse, planning and community engagement in design of policy and measures are required to enable the diversification of rural economy.

Additional actions on measurement, monitoring and control can be taken to assure a systematic and sector wide trajectory towards improving the environmental integrity of food production in Ireland verified to the highest standards. This would assist both the ongoing management of environmental sustainability and also the development of alternative or enhanced revenue streams for Irish agriculture.

Globally approximately 25%-to 30% of total food produced is lost or wasted. The proportion of food wasted in Ireland is consistent with the global figure. Improved monitoring and understanding food systems in Ireland, and identification of critical points where waste is generated would enable the reduction of food loss and waste and could significantly reduce the associated GHG emissions, improve food security and reduce costs.

The report highlights the importance of terrestrial systems as an ongoing sink for carbon dioxide and as a highly significant existing store of carbon. The report identifies the protection of current, existing carbon stores and moreover the restoration of high carbon ecosystems is of critical concern. In Ireland, the management of peatlands and forests, as existing and potential stores of carbon represents both a responsibility and opportunity in this regard.

Early action to improve management of high carbon ecosystems, and to enhance carbon uptake, is more cost-effective as it avoids continued, on-going loss of carbon stores. Moreover land-based response options often take time to establish their full potential and are often vulnerable to climate change at lower levels of warming. This is especially true of afforestation and peatland rewetting restoration solutions. The agreed flexibilities associated with land use and land management under the EU Energy and Climate Package limits the extent to which actions in land use to reduce emissions and enhance removals can be reflected in national progress in meeting 2030 targets. This should not disincentivise mitigation actions that could contribute in transition both the short and long term. This highlights the importance of focusing on the 2050 objective. When this is taken into account the benefits of early action on land use become apparent.

A key finding of the report was a need to balance competing objectives for land-use. The deployment of bioenergy and forestry needs to be carefully planned and implemented to avoid negative effects on food security and biodiversity. Approaches which can be applied or upscaled in Ireland include improved livestock and pasture management, restoration and re-planting of hedgerows, planting of native woodlands, agroforestry and measures to increase the uptake of carbon in Irish soils, including peatlands. These measures work best when they are integrated into diverse production systems and are located on suitable land. In Ireland, an integrated approach to land use to balance the potentially competing demands for ecosystem services and resources would be useful to ensure national objectives are met while also delivering on local and regional sustainable development needs.

Better land management can play its part in tackling climate change but cannot do it all, there is insufficient capacity for land-based removals to offset significant fossil

fuel emissions. Reducing greenhouse gas emissions from all sectors is essential if we want to keep below 2°C.

Should you wish to clarify any of the points above, please contact myself directly or the Climate Change Advisory Council Secretariat <a href="mailto:info@climatecouncil.ie">info@climatecouncil.ie</a> or phone 01 2680180.

Yours sincerely,

## Prof. John FitzGerald

Chair

Climate Change Advisory Council