ICOS Submission on the Consultation on Ireland's Draft National Climate Change Mitigation Plan
25 April 2017

The Irish Co-operative Organisation Society (ICOS) welcomes the opportunity to contribute to the public consultation launched in preparation of Ireland's first statutory climate change national mitigation plan.

ICOS is a co-operative umbrella organisation that serves and promotes commercial co-operative businesses and enterprise, across multiple sections of the Irish economy. We represent 130 co-operative businesses that collectively have over 150,000 individual members, with a combined turnover of €14 billion and employ more than 12,000 people in Ireland.

The Irish co-operative sector is geographically spread right across rural Ireland with interests across the rural economy. For example, Irish dairy co-operatives are multi-purpose operations with interests in milk processing, liquid milk, consumer foods, agri-trading and feed milling. The Irish dairy sector is predominately farmer owned and controlled, with 10 milk processors and 14 milk purchasing co-ops. Irish dairy products are exported to markets throughout the world, valued at €3.38 billion in 2016. There are also over 60 livestock mart co-ops throughout Ireland, which provide a valuable alternative market outlet for livestock farmers, with a collective turnover of over €1 billion.

ICOS strongly believes that the co-operative ethos can play a central role in achieving the broader objectives of climate change mitigation through the existing support and advisory services provided by co-ops to their member suppliers or by the establishment of new co-operative businesses in the area of renewable energy for example.

ICOS Climate Change Working Group

As the representatives of the farmer owners of these important rural based businesses, ICOS is acutely aware of the strategic challenge of climate change. In April 2016, ICOS set up a working group on climate change. Our principle objective in establishing a working group on climate change is to capture the wide range of information available on climate change mitigation and proposed measures for the livestock sector to reduce its impact on Greenhouse Gas (GHG) emissions.

In 2016-7, the Working Group has met on seven occasions, hearing from 26 external experts. These included specialists in climate change policy, scientists, academics and industry practitioners. The Working Group will report with recommendations to the ICOS Board in mid 2017 following the conclusion of its work.

The Sustainability Credentials of Irish Agriculture

The consultation document correctly attributes Ireland's large proportion of GHG emissions from agriculture due to the significance of our grass based livestock sector and the anomaly of Ireland's

lack of heavy industry compared to other industrialised economies. **Ireland has a unique GHG emission profile, which needs to be understood by all stakeholders and the wider public.**

The National Policy Position on Climate Change adopted by the Irish Government in April 2014 recognises an alternative approach for agriculture based on carbon neutrality in the agriculture and land use sector, including forestry, which does not compromise capacity for sustainable food production.

This is critically important as the World Bank estimates that global agriculture will need to produce at least 50% more food to feed 9 billion people by 2050. However, climate change could cut crop yields by more than 25%. Furthermore, water scarcity is recognised by the UN's Food and Agriculture Organisation as a major global challenge for sustainable development.

The European Commission's Joint Research Centre (JRC) has independently confirmed that Irish dairy produce has the lowest emissions (kg per kg of product), with Irish beef also below the EU average. The JRC Report highlights the sustainability of Ireland's grass based production system. Irish dairy production is also categorised by low average water consumption per litre of milk produced and high animal welfare standards with cows at grass for the majority of the year.

In addition, Ireland has a competitive advantage in biodiversity with each farm containing valuable habitat areas such as hedgerow networks or transitional grassland areas. These important habitat areas should be fully accounted for and taken into consideration under the National Mitigation Plan.

It is therefore essential that policy measures adopted at national and EU level supports food production in regions such as Ireland with the least cost to the environment. This will prevent the risk of carbon leakage arising due to the adoption of flawed policy.

In this context, the Food Wise 2025 strategy identifies the principle of sustainable intensification as a key component. Sustainable intensification is the best approach to achieving Ireland's Food Wise 2025 ambition, while contributing to Ireland's approach to climate neutrality for agriculture without compromising our capacity for sustainable food production.

EU's 2020 and 2030 GHG Reduction Targets

The achievement of Ireland's 2020 and 2030 GHG reduction targets will be extremely difficult[1]. ICOS welcomes the inclusion of credits associated with land use, land use change and forestry (LULUCF) in the proposed 2030 targets[2]. Under the European Commission's proposals for the Effort Sharing Regulation 2021-2030, Member States are allocated reduction targets as well as a once off flexibility to access allowances under the EU's Emissions Trading System and LULULCF Credits. The Commission has confirmed that access to these credits/allowances is higher for Member States with a larger share of emissions from agriculture. **This recognises the commitment made by EU Heads of State/Government in 2014 that there is a lower mitigation potential for GHG emissions from the agriculture sector.**

Carbon Storage in Soils

In light of the decision by the European Commission to include LULUCF in its policy framework post 2020, ICOS believes that there should be a greater focus within the National Mitigation Plan on the potential of carbon sequestration. The initiative by the French Government "4 per 1000" recognises the potential of soils as a sink for carbon. Research funded by the Dairy Research Trust has identified

[1] For 2020, the EPA estimate that non ETS sector emissions in Ireland are projected to be 4-6% below 2005 levels by 2020.
[2] Ireland under the European Commission's proposal for the Effort Sharing Regulation 2021-30 received a GHG reduction target of 30% below 2005 levels with at 4% once off flexibility from the ETS and a 5.6% LULUCF flexibility.

soils in Ireland that show a potential for additional long term carbon storage. Additional research is needed into this area[3].

GHG Mitigation Strategies & Agriculture

The consultation document correctly identifies that farming involves complex natural cycles, and mitigation in agriculture cannot be addressed, as in other sectors, by one off technological fixes. That said, there are a range of mitigation measures that can be adopted at farm level to reduce the levels of GHG emissions. In many respects, these mitigation measures can in turn result in improved profitability for farmers due to efficiency gains.

The effective and widespread knowledge transfer of "win-win" solutions that generate efficiencies at farm level and benefits to the overall environment is the key challenge, which the National Mitigation Plan needs to fully address. ICOS strongly believes that knowledge transfer from the perspective of agriculture is the most critical issue.

Farmers are adopting a range of climate friendly measures supported under the Common Agricultural Policy including the Beef Data and Genomics Programme, the Green, Low Carbon, Agri-Environment Scheme (GLAS) and measures contained in the Targeted Agricultural Modernisation Scheme. **In the context of the forthcoming Reform of the Common Agricultural Policy, it is essential that a strong CAP budget is retained so as to ensure the continuation and expansion of these important measures.**

In addition, the Carbon Navigator Tool is an integral part of the Sustainable Dairy Assurance Scheme, which is nearing full certification. The navigator tool set a target for improvement in practical management areas and assesses the impact of achieving them on the farms carbon footprint, as well as financial performance. The Navigator Tool sets five key measures to measure improvement including the grazing season, EBI, Nitrogen fertilizer, manure management and energy usage.

In this regard, ICOS believes that further improvements or mitigation measures could be achieved across the following areas, with appropriate support from policy makers:

- Improvements in soil fertility and better nutrient management planning will result in less GHG emissions. There is significant room for improvement, with additional benefits for water quality as well as climate change.
- The addition of clover, better utilisation of manure and better timing of fertilizer application to grass growth can also help reduce GHG emissions. A practical example includes shifting from splashplate to trailing shoe will decrease GHG emissions.
- Teagasc research trials has demonstrated that the use of urea stabilised with an inhibitor can reduce GHG emissions, while delivering a similar yield to CAN in kg DM/ha/year. However, ICOS believes that additional research may be required into this area before widespread adoption.
- With grass based systems there is often an oversupply of protein to the cow. GHG emissions could be reduced by increasing the emphasis on the energy value of feeds instead of Crude Protein levels. The lifetime performance of a cow is much better if the age at first calving is 2 years. There is also scope for improvement across the dairy herd.
- In terms of supplementing the diet of a cow, the feeding of lipids can reduce methane emissions without impacting milk yield. However, solutions will have to be tailored to our grass based system before widespread adoption.

[3] Research letter "Exploring Climate Smart Land Management for Atlantic Europe by Rogier Schulte et al.

- It is evident that improved genetic merit results in a reduced carbon footprint. Furthermore, sexed semen should be reflected in reduced finishing times and a reduction in replacement rates on farms. Greater work is required to improve the reliability of sexed seamen.
- ICOS believes that livestock farmers would welcome a worthwhile agro-forestry initiative to increase forestry cover/provide shelter belts and supplement income. The replanting obligation is a major blockage to the promotion of forestry in Ireland.
- An effective incentive is required for farm level renewable energy projects to make sense on a commercial basis before any widespread uptake. ICOS believes that there is untapped potential across rural Ireland including renewable energy options such as solar photovoltaics and anaerobic digestion.

Concluding Remarks

ICOS reiterates its support for the development of a National Mitigation Plan and looks forward to engaging with a cross section of Government Department's on this important matter for Irish agriculture and wider society.

Martin Keane
President
April 2017