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Climate & Air Roadmap Consultation
Department of Agriculture, Food and the Marine,
Climate Change & Bioenergy Policy Division
Grattan Business Centre,
Dublin Road, Portlaoise,
Co. Laois

14th January 2020

Re: “Ag Climatise” A Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond

Dear Sir/Madam

The Environmental Protection Agency (EPA) welcomes the opportunity to make a submission on the proposed Climate and Air Roadmap for the Agriculture Sector to 2030 and Beyond. The period to 2030 will shape the future direction of agriculture and its response to environmental concerns and adaptation to climate change. It will also provide opportunities to realise the potential that exists to both produce goods and consume goods in an environmentally sustainable way. As you may be aware the EPA has recently prepared submissions to your Department with respect to public consultations

- Recognition of the **relative importance** of agriculture in Ireland for rural and national sustainable development;
- Identification and quantification of the **pressures** placed on Ireland’s natural environment by agricultural and other land management practices which are **causing significant problems** for water quality, air quality, nature and climate change and **risking the reputation** of Ireland as a food producing nation with strong environmental credentials;
- The synergies and antagonistic effects of **one form of emission** to the environment (air and water) and/or reduction in one form of emission to the environment on **another form of emission** (air and water) need to be fully explored and considered.
- Recognising the **opportunities** available for Ireland in getting it right and being able to prove its credentials as a **world leader** in sustainable, low carbon and environmentally friendly agriculture and land management.

and strategic plans regarding the key environmental challenges facing the agricultural sector, namely water quality, air quality and greenhouse gas emission abatement. Recurring themes throughout these reports and submissions are:

The Agency's views and/or recommendations in this response to public consultation should be examined in conjunction with our responses to the [DAFM Public Consultation on the Nitrates Derogation¹](#), the [Proposed Strategy for the Irish Agri-Food Sector to 2030²](#) and the [CAP Strategic Plan SWOT analysis³](#).

There are a number of key strategic points that we wish to make in relation to the Roadmap and we have also provided some additional commentary on specific sections of the roadmap.

Key Points

1. The EPA welcomes the overall structure of the roadmap, the nine high level objectives set out in Parts 1, 2 and 3 and the associated actions. Part 1 should also include a specific reference to the ammonia marginal abatement curve and associated targets for 2030.
2. The scale of the challenge ahead for the agriculture sector is very significant with the environmental sustainability trends for water quality, air quality, greenhouse gasses and biodiversity all going in the wrong direction at present. The overall success of this Roadmap will depend on the ability of the sector to **reverse these trends in a measurable, verifiable and reportable manner**. The sectors sustainability credentials and reputation rely heavily on this. Early, regular and publicly accessible reporting will also be needed to demonstrate progress and the Roadmap would benefit from a clear mechanism for how and when such measurement and reporting will happen.
3. A recurring theme of recent EPA submissions on national plans for agriculture is that any proposed changes in land management or farm practice under this Roadmap or other strategies or plans **should seek to address the multiple benefits** of improved water quality, reductions in greenhouse gas and air pollutant emissions and enhanced biodiversity.
4. The three-legged stool or three pillared model for sustainability applied to Foodwise 2025 did not achieve the necessary focus on environmental issues as evidenced by the continuing deterioration in water quality in agricultural catchments and the increases in both greenhouse gasses and ammonia from agricultural sources. The EPA suggests that a pyramid structure is now required, indicating that social and economic sustainability for the sector are not possible without an evidence-based environmentally sustainable foundation.
5. Whilst acknowledging the scale of the distance to target with respect to greenhouse emission levels at a national level, the document does not provide sufficient detail of the expected growth in emissions levels of greenhouse gas emissions and air pollutants from the sector in the absence of implementation of actions. This is an omission that should be addressed. It is important that stakeholders understand the level of ambition required against a scenario where no actions are implemented. This will result in a more focused discussion on policies targeted at driving down emissions to the environment.

¹<http://www.epa.ie/pubs/epasub/nitratesdirectiveconsultationsubmission.html>

²<http://www.epa.ie/pubs/epasub/subirishagrifoodsectorto2030.html>

³<http://www.epa.ie/pubs/epasub/subcapstrategicplanswotanalysis.html>

Additional Points:

Introduction

1. The EPA notes that the main focus of the roadmap document is aimed at greenhouse gas emissions from the sector, however the effects of the sector on air pollution and air quality, water quality and biodiversity and their inter-connections do not appear to be adequately addressed. The synergies that exist and antagonistic effects of emission reduction measures of one form of emission to the environment (air and water) on another form of emissions (air and water) need to be fully explored and considered. This should be a recurring theme throughout the document. Additionally, the EPA notes that there is a need to also include the role of biodiversity in terms of its loss, improvement and the ongoing ecosystem monitoring required as part of Ireland's commitments under the National Emission Ceilings Directive⁴ and Statutory Instrument No. 232 of 2018⁵.

The Challenge & Our Obligations

1. The EPA identified in its submission on Food Wise 2025 the need to recognise that all parts of the country are not equal in the context of intensification and that some parts of the country are less able to intensify i.e. nutrients behave differently in the landscape depending on the soil type and setting and therefore measures needed to mitigate problems also need to vary depending on the physical context. Not only is this true of releases to water, it can also be applied to emissions of greenhouse gases and air pollutants and enhances the need for actions that have multiple benefits.
2. The EPA welcomes the recognition that *"the achievement of environmental targets may be possible whilst maintaining a stable cattle herd"* and also that *"if actions are not adopted quickly and effectively it will not be possible to deliver on commitments"*. Furthermore, *"radical action may be needed for sectors experiencing growth"* as stated in the document. These are important statements which need to be front and centre of Roadmap development.
3. Recognising that competitor countries such as Denmark, The Netherlands, the United Kingdom and New Zealand have established ambitious climate actions for their agriculture and food sector. To be recognised as a leader, ambitions in this area need to be increased and clearly identified as early as possible. Additionally, a clear distinction is required with respect to the nuances associated with the terms "Climate Neutral" and "Net Zero" emissions in outlining ambitions for the agriculture and food sector.

Draft Climate and Air Roadmap for the Irish Agricultural Sector Part 1 – Implementing Changes Now

1. The EPA welcomes the inclusion of the Teagasc Marginal Abatement Cost Curve for greenhouse gas emission abatement. However, of no lesser importance is the Teagasc Marginal Abatement Cost Curve for ammonia emission abatement. The document would benefit from specific inclusion of the ammonia abatement cost curve given that the Roadmap is being presented for both climate and air. We recommend that the first objective in Part 1 be expanded out to include the 2030 targets for ammonia reductions. Of particular note, Actions 1, 2, 3 and 4 suggest a level

⁴ National Emissions Ceilings Directive (2016/2284/EU)

⁵ S.I. No. 232/2018 – European Union (National Emission Ceilings) Regulation 2018

of ambition above and beyond those presented in the Teagasc MACC for greenhouse gas emission reduction. This is to be welcomed. However, the EPA wishes to highlight the importance of Monitoring, Reporting and Verification of these actions “on the ground”. This is extremely important in terms of the inclusion of policy actions in the estimation of emission inventories and projections of greenhouse gases and air pollutants which are submitted by the EPA to the EU and the United Nations Framework Convention on Climate Change on an annual basis.

2. Action 5 requires the review of the National Forestry programme with the aim of delivering 8,000 ha of afforestation per annum. This is an important national action that requires further additional incentivisation. Current afforestation rates are approximately 4,000 ha, which if continued at this level may place the delivery of 26.8 Mt CO₂ eq of land use credits under the Effort Sharing Regulation (Regulation (EU) 2018/842)⁶ at risk. Every opportunity to increase environmentally sustainable forestry and woodland planting rates should be explored in this regard. Additionally, the identification of measures across all land uses that either reduce emissions or increase sequestration in a manner that is measurable, verifiable and reportable should be explored as a matter of urgency.
3. The targeting of 40,000 ha of peat based agricultural soils for reduced management intensity in Action 6 is an important action that requires implementation. However, the identification of the most appropriate areas and regions would be enhanced significantly with the development of spatially explicit land use mapping. The EPA would welcome the opportunity to discuss this matter further with DAFM in the near future so as to enhance reporting requirements under Regulation (EU) 2018/841⁷.

Draft Climate and Air Roadmap for the Irish Agricultural Sector Part 2 – Acting In Partnership

1. It is clear that a greater role exists for enhanced knowledge transfer and agricultural knowledge and innovation systems. The EPA acknowledges the role of sustainability metrics in this regard as identified, however it wishes to highlight the Smart Farming Initiative⁸ as an important conduit that could be scaled up to facilitate more rapid and widespread transfer of knowledge on the use of best practice to reduce environmental emissions at farm level.
2. The EPA welcomes recognition of the importance of utilising Nature Based Solutions (NbS) for climate resilience in water protection and biodiversity - however this should also consider the role of NbS in flood risk management and their deployment will require guidance and training as well as engagement with all stakeholders. The commitment to embedding climate adaptation planning within the Department’s policies is welcome but should ensure that the resilience of the sector in a range of plausible scenarios is considered. Coherence with the climate adaptation plans and strategies of other sectors and local authorities is also required.
3. The EPA notes in Action 18 the development of a network of demonstration “sign post” farms which will provide on farm experience of the benefits of embracing climate action. The EPA suggests that taking a singular approach may not be the best course of action (see point number

⁶ Regulation (EU) 2018/842 Binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013.

⁷ Regulation (EU) 2018/841 Inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) 5225/2013 and Decision No 529/2013/EU

⁸ <https://smartfarming.ie>

1 above) and that these demonstration farms should also include actions to control air pollutants such as NH₃ and the experience garnered in the Agricultural Catchments programme to date also be adopted with respect to reducing nutrient loss to water.

4. Action 19 states that methane emissions will be monitored with a view to stabilising emissions by 2020. No further information is provided on how this is to be achieved in such a short time frame. The EPA would welcome further information with regard to this action.

Significant challenges exist for the agri-food sector with respect to emissions to air (both greenhouse gases and air pollutants), water and impacts on biodiversity. These challenges have increased due to expansion in recent years (mainly in the dairy sector). An environmentally sustainable foundation must now be put in place to maintain the longstanding importance of agriculture and food production to the Irish economy and rural communities. The EPA will continue to work with the Department of Agriculture, Food and the Marine and its agencies with the objective of developing a clean, healthy and well protected environment, whilst also supporting agriculture and food production and rural communities.

Yours sincerely,

A handwritten signature in cursive script that reads "Eimear Cotten .". The signature is written in black ink on a white background.

Director
Office of Environmental Sustainability