



Climate & Air Roadmap Consultation  
Department of Agriculture, Food and the Marine,  
Climate Change & Bioenergy Policy Division  
Grattan Business Centre,  
Dublin road,  
Portlaoise,  
Co. Laois  
Ireland  
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Sent by Post & Email

10<sup>th</sup> of January 2020

**Re: Climate and Air Roadmap Consultation**

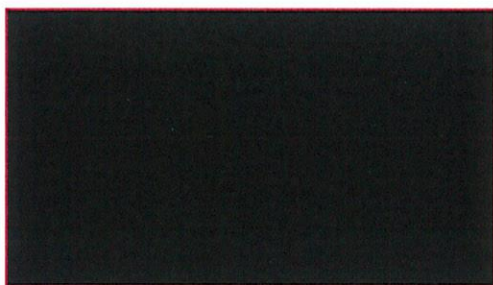
To whom it may concern,

The Irish Co-operative Organisation Society (ICOS) is pleased to respond to the public consultation on a draft national climate and air roadmap for the agriculture sector to 2030 and beyond.

ICOS is the umbrella body for over 130 co-operatives in Ireland – including the Irish dairy processing & milk purchasing co-operatives, livestock marts and other rural based enterprises – whose associated businesses have a combined turnover in the region of €14 billion, with some 150,000 individual members, employing 12,000 people in Ireland, and a further 24,000 people overseas.

We look forward to engaging constructively and positively with the Department of Agriculture, Food and the Marine on these important issues.

Yours sincerely,



**'Ag-Climate' A Draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and Beyond**

**Submission by the Irish Co-operative Organisation Society (ICOS).**

- 1. Are there other actions that could be considered for inclusion to further enhance progress and credibility of agricultural actions? Is there more that farmers and the food industry itself can do?**
- 2. Have you any feedback on how uptake of these actions can be encouraged and facilitated?**
  - ICOS welcomes the publication of the Draft 'Ag Climate' Roadmap, which aims to progress the agriculture measures identified in the All of Government Climate Action Plan published in June 2019 and to respond to the ammonia reduction targets assigned to Ireland.
  - The All of Government Climate Action Plan has established a 10-15% greenhouse gas reduction target for the agriculture sector and Ireland must reduce its ammonia emissions by 1% by 2020 and 5% by 2030. Achieving these targets will be very demanding for the sector due to the limited mitigation potential from farm-based emissions.
  - ICOS is broadly supportive of the list of measures and targets outlined in Actions 1 to 4. These proposals are largely based on the Teagasc Marginal Abatement Cost Curve and seem reasonable. The two most practical and cost-effective measures include switching from CAN to protected urea and from splash-plate to low emission slurry spreading.
  - The range of measures illustrate that there is no silver bullet for agricultural emissions and demonstrate the need for added investment in extension and advisory services.
  - The proposed changes will result in significant change at farm and food industry level, but are achievable, if the appropriate resources and structures are put in place to oversee the implementation of the Roadmap.
  - The delivery of the 'Ag Climate' Roadmap will be challenging but it will also present opportunities, which must be communicated to farmers and reinforced through the provision of appropriate levels of support e.g. grant aid or advisory supports.
  - The agri-food sector has a proven track record in mobilising and responding to national strategies, highlighted by the strategic and co-ordinated approach of Food Harvest 2020 and Food Wise 2025.
  - However, the availability of resources that will underpin the Roadmap (e.g. grant aid and advisory supports) have not been identified. The potential reduction in the CAP budget and the delay in the implementation of the CAP post 2020 is a concern.

- ICOS would like to make the following observations on Actions 1-4:
  - The Roadmap sets out ambitious targets for 2022, 2025 and in the longer term related to low emission slurry spreading (LESS). DAFM has established separate requirements for farmers availing of the Nitrates derogation including mandatory use of LESS by 2021. It is important that grant aid remains available to all farmers including those in derogation once the requirement becomes mandatory to ensure these targets are fully met.
  - A move to LESS may necessitate additional slurry storage capacity on farms, which should be supported through TAMS.
  - The Roadmap will establish a so-called blueprint for zero/near zero nitrogen use and carbon neutral production. This approach is worth exploring so long as the productive capacity of Irish agriculture is not affected.
  - The achievement of the targets related to protected urea is critical, as to whether agriculture can realise its targets under the All of Government Climate Action Plan. Protected urea grows the same amount of grass as CAN, while being cost effective. However, there is an urgent requirement for greater clarity and the need to avoid mixed messaging related to 1.) the potential residue risk in milk (although the available literature indicates that this is a very low risk, additionally DAFM funded research will provide initial results in late 2020), 2.) chemical handling and 3.) shelf-life concerns.
  - The Roadmap identifies specific targets for dairy breeding, bearing in mind the need to take calf welfare considerations into account. Sexed Semen is a mitigation measure identified in the Teagasc MACC. The use of sexed semen will also increase the value of the beef output from the dairy herd. The lack of a sexed semen laboratory is a barrier to the usage of sexed semen, as bull selection and availability is limited without a lab. As such, the establishment of a permanent lab should be a defined target in the 'Ag Climatise' Roadmap.
  - The level of milk recording increased in 2019, assisted by positive incentives offered by the co-op sector including Dairygold Co-op and Kerry Agribusiness. However, the level of milk recording remains below 50% of dairy herds. The new Veterinary Medicines Regulation will require the use of selective dry cow therapy from January 2022, in view of AMR concerns. The 'Ag Climatise' target for milk recording should be reconsidered in light of this requirement. Furthermore, ICOS calls on DAFM to include milk recording as a supported measure under the new eco-schemes in the CAP post 2020.
- In relation to the second part of Question 1, Actions 1-4 does not include recommendations or targets related to slurry amendments or adding fatty acids to dairy diets. Both measures are identified as mitigation options under the Teagasc MACC.
- The co-operative movement is supportive of the All of Government Climate Action Plan. It is willing to work with all stakeholders in a collaborative approach to progress the various actions and to demonstrate leadership in the area of climate action. This was evident in 2018, when ICOS published a detailed report called "Positive steps towards a



low carbon future for the Irish dairy sector. The ICOS report includes many of the measures and recommendations outlined in the Teagasc MACC and 'Ag Climatise' Roadmap.

- 3. Are there other actions that could be considered to maximise the contribution of sustainable land management? Is there more that farmers and the food industry itself can do?**
- 4. Have you any feedback on how uptake of these actions can be encouraged and facilitated?**
  - Hedgerows are widely recognised as an important carbon sink, as well as providing co-benefits related to biodiversity habitats. The Climate Change Advisory Council estimates that hedgerows in Ireland cover 276,460 ha, extend for 689,000 km and with other semi-natural habitat, cover up to 13% of farmland area.
  - Improved management of existing hedgerows and incentives to encourage additional hedgerows should be looked at in the context of low afforestation numbers. Furthermore, the development of inventory accounting for hedgerows is required urgently to measure and to secure the carbon sequestration benefit provided by hedgerows.
  - Additionally, it is also important to note that farmers applying for the derogation to the Nitrates Derogation will have to complete a biodiversity measure as part of the recent review.
  - ICOS would also support measures that will encourage and incentivise farmers under the BPS to maintain a habitat management plan on their farm incorporating hedgerow networks, transitional grassland areas and greenways, whereas currently such land is deemed ineligible.
  - The Roadmap includes a target of 450,000ha with optimised soil pH. There is room for improvement and a national lime promotion campaign should be prioritised under the 'Ag Climatise' Roadmap to increase application rates, improve soil pH and maximise grass utilisation.
  - Forestry is a key element in the All of Government Climate Action Plan. However, there are ongoing problems associated with forestry, represented by the steep decline in annual afforestation rates. The 'Ag Climatise' Roadmap needs to urgently address this situation.
  - Forestry is an effective measure to help tackle climate change, as well as creating jobs in rural Ireland and export income. However, if the appropriate steps are not taken, these targets cannot be considered realistic and we will fall short of what is required.
  - There needs to be immediate engagement by the DAFM with all stakeholders to find solutions to the barriers preventing the wider uptake of forestry. There are ongoing



issues related to felling licences, forest roads, planning permissions, the replanting obligation and environmental concerns.

- Other forms of forestry should be examined including agroforestry and small-scale native woodland plantations. However, any scheme targeted at livestock farmers should avoid the reclassification of farmland to encourage uptake.
- In this context, ICOS would support the development of an appropriately designed measure for livestock farmers using native broadleaf trees to increase forestry cover, provide shelter belts, offset emissions and increase biodiversity.
- The Roadmap includes a target to reduce the management intensity of 40,000 ha of peat based agricultural soils. A considered approach is required as these soils in many cases are farmed productively supporting farm families and livelihoods. An approach can only be acceptable if the measure is voluntary and supported with an appropriate incentive through the CAP that compensates farmers for reduced productivity.

**5. Are these actions sufficient, or are there others you would suggest? Is there more that farmers and the food industry itself can do?**

**6. Have you any feedback on how uptake of these actions can be encouraged and facilitated? DAFM would also like to hear your views on the barriers and challenges to deployment of energy efficiency and renewable technology and also the types of supports and incentives that could increase deployment and wide spread adoption.**

- The proposal for community engagement and microgeneration are to be welcomed. ICOS believes there is a real opportunity for the co-operative movement to be involved, as the co-op structure is a good fit for a number of the different green energy options as farmers understand and trust the co-operative model.
- The Report by the Joint Oireachtas Committee on Climate Action recommends the establishment of AD/Biogas Co-ops. It recommends that the installation of anaerobic digesters could be facilitated by low interest loans or grants overseen by DAFM. This recommendation requires specific focus under the 'Ag Climatise' Roadmap.
- ICOS supports the provision of a biomethane support scheme from Government with €40 million required in its initial phase. This will support 400 new jobs and abate 500,000 tonnes of CO<sub>2</sub>.
- It is essential that the development of AD/Biogas Co-ops complements rather than competes with mainstream food production. The provision of a grass-based feedstock can come from increased production and efficiency rather than existing production levels, whilst providing an additional income stream for livestock farmers.

- The SSRH scheme for renewable heat from biogas is a step in the right direction. However, if a sustainable Biogas industry is to take root in Ireland, like in other EU countries such as Germany, similar levels of financial support will be necessary.
- Due to the significant economic costs involved in establishing an AD plant, a holistic approach is needed related to capital investment, SSRH tariff and planning issues. The use of standardised plant design parameters and consistent planning policy would be essential.
- We have had in the past the failure of willow and miscanthus schemes. There is a serious need to rebuild trust with farmers, with the improved SSRH biomass tariff a welcome development. The involvement of the co-operative model in the biomass production and supply chain will help to rebuild confidence in the sector.
- District heating systems (derived from renewable sources) are a realistic option through a co-operative model and should be supported.
- Existing dairy co-ops and marts have a significant footprint across Rural Ireland. These businesses have an existing infrastructure and supplier base that could readily support the development of bioenergy. The mart co-op structure could be used to complement their existing business interests through operating trading centres for biomass. However, capital investment and support will be required.
- Solar panels are a very effective system to engage with small and larger operators countrywide. It is important that community ownership through a co-operative approach is centrally involved in the RESS process. In addition, farm level electricity generation urgently requires a feed-in-tariff. In this regard, the co-op sector is active in this arena with Glanbia Ireland launching a solar PV scheme in 2019, partnering with SSE Airtricity and Activ8 Solar Energies. The provision of TAMS grant aid to support on farm solar is a welcome development.
- ICOS supports the continuation of the dairy farm grant provided by the SEAI for investing in energy efficient vacuum and milk pump technology.

**7. Are there other actions which the State could consider, particularly in partnering with Industry?**

- ICOS welcomes the proposal to develop a sustainability charter. This will be an important step in communicating the actions and commitment of the sector to a low carbon future to society and consumers of Ireland's agri-food products.
- Origin Green has helped the Irish agri-food sector to develop as a partner of choice globally for sustainably produced dairy and beef products. We are committed to strengthening the quality assurance schemes to ensure our position in the marketplace is maintained and increased.



- ICOS is actively participating in the CAP Consultative Committee and welcomes the commitment to discuss with all stakeholders through this process the design and shape of the new CAP Strategic Plan including climate action and other environmental measures.
  - Capital Investment including low interest loans (Strategic Banking Corporation of Ireland, the European Investment Bank) will be needed to support farmers and industry to deliver the scale of change required.
8. **Are these actions sufficient, or are there others you think that Industry should pursue?**
  9. **Given that the State and policies such as the CAP can't finance or deliver all of the actions required, which actions or measures could Industry fund?**
  10. **Do you have views on how the market could better incentivise and/or reward primary producers for adopting and implementing the necessary actions?**
- ICOS welcomes the setting up of a network of demonstration 'sign post' farms that will highlight to farmers the 'win-win' opportunities that exist from embracing greater efficiency measures and new approaches that will also reduce farm level greenhouse gas and ammonia emissions. The dairy co-op sector with Teagasc have several joint programmes providing an existing organisation structure to roll out the 'sign post' farm initiative in an efficient manner.
  - The Agricultural Sustainability and Support Programme (ASSAP) is another positive example of an industry led approach, working collaboratively and in partnership with Government through Teagasc and the local authorities to deliver improvements in water quality across 190 Priority Areas of Action.
  - Farmers and their co-operatives can help deliver environmental goals through the following actions:
    - Existing joint programmes between dairy co-ops and Teagasc.
    - Existing advisory and support programmes such as the ASSAP programme.
    - Provision of incentives and supports such as the Dairygold Milk Supplier Sustainability Bonus and support for soil testing provided by several co-ops.
    - Provision of low-cost loans to support sustainability actions through MilkFlex.
    - The development of innovative programmes such as the Glanbia Ireland Solar PV scheme.
    - Providing a joined-up approach. For example, Irish dairy co-ops are multi-purpose businesses with interests beyond milk processing, including agri trading, feed milling etc
    - Farmers trust and have confidence in their co-ops. This is important in terms of delivering fundamental change.
    - The establishment of new and existing co-ops have significant potential to support the successful development of a sustainable bioenergy/renewable sector.



- Direct communications and messaging to their shareholders through organised events, newsletters, text messages etc
  - ICOS welcomes in particular action 17, as a key approach to delivering emission reductions from agriculture. Key is greater N-use efficiency through the use of protected urea, low emission slurry spreading, use of clover, optimising soil pH and timing of slurry spreading. Adhering to these measures will require a new focus on improving N-use efficiency supported by an inclusive advisory strategy involving Teagasc, private advisors and the co-op network.
  - The approach to methane will be supported through improvements in dairy and beef breeding programmes. The development of new technologies including feed additives will be pursued but must be proven to work on pasture based grazing systems and accounted for within the national inventories. As this work is underdevelopment, ICOS questions the inclusion of the goal to stabilise methane emissions by 2020.
  - In relation to action 23, the development of horticulture, protein crop production, together with organic farming, agro-forestry and alternative economic opportunities should be examined as a means of lower carbon and more extensive land use. However, there must be a financial return from these activities.
  - ICOS welcomes the focus on animal health strategies to support climate ambitions. This approach will also have important co-benefits for animal welfare and responding to the challenge of antimicrobial resistance.
  - ICOS strongly recommends a reference to supporting the co-operative model under action 25 as a means to support supply chain developments especially related to renewable energy and bioeconomy opportunities.
- 11. What are your views on these six guiding principles in preparing for the future? Are they sufficiently comprehensive or are there others you would add?**
- 12. Innovation is now widely recognised as a key driver of long-term growth and sustainable development and addressing of challenges such as Climate Change. What type of approaches and processes could assist the Irish agri-food innovation system to address economic and societal challenges and facilitate increased networking, collaboration and investment?**
- ICOS fully supports the six guiding principles as set out in the 'Ag Climatise' Roadmap and commits to working with all stakeholders to implement the measures on the ground in a timely manner. The early adoption of these measures will be important as actions adopted in 2021 will contribute 10 times more than measures introduced in 2030.
  - The proposals look good on paper but all stakeholders need to participate in a coordinated process where real change can be made. This requires a lead agency that

will deliver results, monitor progress, supported by financial resources. The Government will need to have a central role if the result they require is to be achieved. A weakness is that the 'Ag Climatise' Roadmap does not assign responsibility for the achievement of the various actions nor does it specify the level of resources needed to implement the Roadmap. The allocation of responsibilities and resources will provide greater credibility from the point of view of farmers, industry and the wider public.

- There is a need for all actors including Government Departments (DAFM, DCCAE), State Agencies (Teagasc, Bord Bia, Enterprise Ireland, the Sustainable Energy Authority of Ireland), EU agencies such as the European Investment Bank, industry representatives, farm bodies and wider society to support the implementation of the Roadmap by working in a collaborative and coordinated manner.
- The agri-food sector has shown in the past the ability to deliver results, playing a critical role in the economic recovery of the Irish economy in the aftermath of the financial crash and recession. The sector has the capacity to deliver again in relation to climate action. The co-op movement and farmers can deliver once the Roadmap is in place, providing a clear direction for all stakeholders to follow with a realistic plan for the way ahead.
- Innovation and change will be part of the wider response to climate change. Funding is required to support new research into new technologies that will reduce greenhouse gas and ammonia emissions. The MACC curve is an important resource for the agri-food sector, which will require updating based on the latest science and research findings.

**ENDS**

10<sup>th</sup> of January 2020



Climate and Air Roadmap Consultation,  
Dept of Agriculture, Food and the Marine (DAFM),  
Climate Change & Bioenergy Policy Division,  
Grattan Business Centre, Dublin Road,  
Portlaoise, Co Laois, R32 K857.

January 7, 2020.

**Re: "Ag-Climate" Public Consultation**

Dear Sir/Madam,

The ICSF wishes to make a brief but important submission on this consultation. Our mission is to disseminate objective climate science, which science has particular relevance to the future of Irish agriculture.

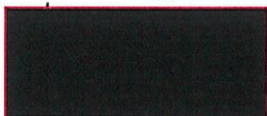
The ICSF position is that, while there is some GHG-influence, the observed rate of warming does not present any immediate threat. Put simply, the IPCC models, on which national policy is unquestioningly placed, are "overheated" by a factor of two or three. This science is documented, based on peer-reviewed research and observations, in the attached "*Overview of the Latest Climate Science for Policymakers*". Regrettably, that objective science was locked out of the Citizens' Assembly and the Joint Oireachtas Committee, just as it is now precluded in the advice from the EPA and CCAC.

Satellite temperature data confirms that the Earth is warming by around 0.1°C per decade, which by extrapolation would indicate less than 1°C further increase by 2100. Observations of the Arctic, Greenland and Antarctic provide no evidence of a crisis; global sea level since 1870 continues to rise at about 3mm/year, pointing to about 25cm rise by 2100. Neither do "extreme" weather events, when dispassionately analysed in their historical context, point to a climate crisis or emergency. These conclusions are echoed in the attached CLINTEL document "*There is no Climate Emergency*".

In particular, the IPCC estimation of the warming potential of Methane and Nitrous Oxide, the principal agricultural emissions, is highly questionable. The emerging research by Professors Will Happer and William van Wijngaarden, of the Universities of Princeton and York respectively, demonstrates an almost negligible influence of these emissions. Research by Professor Allan and others at Oxford University is also demonstrating a low impact of agricultural emissions.

In short, the latest objective climate science provides no basis for now seeking to curtail sustainable Irish agriculture; on the contrary, in view of the 800m people undernourished on the planet, the further growth of Irish agriculture should be stimulated.

We would be pleased to provide any further clarification or to meet with your advisors.  
Yours sincerely,



([www.ICSF.ie](http://www.ICSF.ie)); Email: [Redacted]

CC: Minister Michael Creed, TD, Agriculture House, Kildare St. Dublin 2.  
CC: Minister Richard Bruton, TD, DCCAE, 29-31 Adelaide Road, Dublin 2.  
CC: An Taoiseach Leo Varadkar, TD, Dept of the Taoiseach, Merrion St Upr, Dublin 2.





# IRISH FORUM ON NATURAL CAPITAL

## **Irish Forum on Natural Capital Submission to 'Ag Climatise' consultation - A Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond**

### **About the Irish Forum on Natural Capital**

The Irish Forum on Natural Capital (IFNC) is a special interest group that brings together a diverse range of organisations and individuals from academic, public, private and NGO sectors who are interested in the development and application of the natural capital agenda in Ireland.

**Our vision** is for an Ireland in which natural capital and ecosystem goods and services are valued, protected and restored.

**Our mission** is, through the collaboration and leadership of our diverse members, to help to value, protect and restore Ireland's natural capital and ecosystem services. We will do this by supporting the adoption of natural capital concepts in public policy and corporate

The IFNC has over 600 members and a Steering Committee that includes senior representatives from Coillte, Business in the Community, the SEAI, Trinity College Dublin, the Department of Culture, Heritage and the Gaeltacht, UCD, Brown Thomas Arnotts, Bord Iascaigh Mhara, Business in the Community Northern Ireland, NUIG, Maynooth University and the Department of Communications, Climate Action and the Environment.

### **Introduction to natural capital**

The natural capital approach is a way of making environmental risk and opportunity visible in economic systems. Natural capital is defined as the planet's stocks of renewable and non-renewable resources (e.g. plants, animals, air, water, minerals, soils) that work together to yield a flow of benefits to people. This flow of benefits is delivered by ecosystem services, which are commonly divided into three types:

1. *Provisioning services*, which are goods obtained directly from nature, such as food, fuel and fibre;
2. *Regulating services*, which are indirect benefits from nature, such as mitigation of climate change as carbon is sequestered in vegetation, water filtration by wetlands, erosion control and protection from storm surges by vegetation and crop pollination by insects;

3. *Cultural services*, which are intangible benefits from nature, such as outdoor recreation, spiritual inspiration, mental health and education.

These three types of ecosystem service are all underpinned by *Supporting services*, which are the life-support systems on the planet, including primary production, oxygen provision, soil formation. A conservative estimate in 2008 found Ireland's natural capital to be worth at least €2.6 billion per annum, though experts suggest that the true figure is significantly higher.

Throughout human history, natural capital has benefitted people in the most fundamental ways: giving us life and health, and providing the raw materials and enabling environment for social and economic development. However, in Ireland and all over the world, the modern economic system fails to account for the degradation and depletion of natural capital, with the result that we are blind to both the risks this presents and the opportunities that can come from enhancing it.

Regarding climate change, this failure to account properly for the costs and benefits of our actions results in incoherent and contradictory policy decisions at every level, with potentially disastrous results. For example, the proposed expansion of our dairy and beef herds under FoodWise 2025 only accounts for the estimated financial profits generated. The losses that will be incurred by farmers and society as a result of the increased greenhouse gases that are an inevitable consequence of this policy do not appear on our national planning balance sheets. The impacts of our activities on the environment that sustains all economic activity urgently needs to be made visible through comprehensive natural capital accounting.

Other countries have recognised the risks associated with the mismanagement of natural capital and have taken steps to address it. In 2016, for instance, Scotland made 'increased natural capital' a national performance indicator and incorporated it into national economic strategy.

Natural capital is already well embedded in EU policy and is beginning to be integrated in Irish national policies. The 2020 EU Biodiversity Strategy and Ireland's National Biodiversity Action Plan call for natural capital to be valued and accounted for at the national level alongside national accounts. Work is underway to achieve this in Ireland through the Mapping and Assessment of Ecosystem Services project (MAES). Furthermore, for the first time in Ireland, the Irish Natural Capital for Sustainable Environments (INCASE) project will apply Natural Capital Accounting (NCA) principles to four river catchments across Ireland. Finally, the National Policy Statement on the Bioeconomy states that "much of Ireland's advantage in the bioeconomy sphere can be attributed to its natural capital."

#### **Overarching recommendations for DAFM**

- By valuing our natural capital, using a combination of qualitative, quantitative and monetary values, we can begin to account for nature and make its worth visible in both public and private sector decision-making.
- Furthermore, we can use natural capital assessments to reveal the value of specific ecosystems to the economy and generate national or regional natural capital accounts to inform economic policy and national performance indicators, support urban and regional land use planning, develop financial mechanisms to enhance and restore ecosystem services and improve private sector sustainability.
- By considering the full value of nature and the true cost of its degradation, we are better positioned to make more informed decisions about how we can use our natural capital to deliver the resilience and facilitate the mitigation required for society to continue to thrive in a climate-changed world, and reduce and reverse our climate impacts over time.

We appreciate this opportunity to submit to the Department of Agriculture, Food and the Marine on this issue, and would welcome an opportunity to present to the Department with further information.



## **Responses to specific Actions as outlined in the consultation document**

*Action 1: Enhance soil fertility and nutrient efficiency to reduce nutrient loss to the environment.*

- The IFNC submits that the natural capital approach can greatly support the pursuit of soil fertility and the reduction of nutrient loss. Protecting and maintaining soil quality, including soil biodiversity, has multiple benefits including carbon sequestration, the efficiency of nutrient cycling, improved above-ground biodiversity and improved ecosystem service provision. The natural capital approach can help articulate these benefits to aid decision making.

*Action 5: Review the National Forestry programme with the aim of delivering 8,000 ha of newly planted forestry, including agroforestry per annum.*

- The IFNC welcomes the review of the National Forestry Programme, but urges a natural capital approach to this review, whereby the full ecological potential of the proposed 8,000ha of forestry is accounted for and realised, including potential trade-offs in GHG reduction and biodiversity conservation. The full suite of services delivered by forests and alternative land-use needs to be considered, and a natural-capital accounting approach could help inform spatial planning of forest planting. Planting the right trees in the right places is critical for environmental, social and economic sustainability.

*Action 11: We will double biomass production from forestry by 2030 and ensuring mobilisation for heat production*

- The IFNC is concerned that without a natural capital approach to this target, the *regulating* and *cultural* services that forests provide will not be accounted for in full. We recommend that a natural capital approach is taken in the pursuit of this action.

*Action 16: We will develop a charter with industry forging a sustainability partnership to support farmers in achieving market demands.*

- The IFNC welcomes this action as the sustainability goals of the agrifood industry are likely to become ever more ambitious. To achieve these goals, companies will need to cooperate and communicate effectively with farmers.

*Action 14: We will use the reform of the CAP for the period 2021-2027 to help the agri-food sector achieve the maximum possible progress in climate change mitigation and adaptation, and greenhouse gas emissions reduction, consistent with commitments at EU level.*

AND

*Action 15: We will actively engage with all stakeholders, through the CAP Consultative Committee to consider the most appropriate means of mainstreaming climate action in Ireland's strategic plan which maximise synergies for nature-based solutions for water protection and biodiversity enhancement.*

AND

*Action 20: Promote the engagement with land diversification options and ecological focus area to enhance opportunities from nature-based solutions such as hedgerows farm woodlands and peatlands, to building climate resilience in the landscape and in food systems*

- The Department should consider the recommendations of the [CAP4Nature](#) group when pursuing these Actions. The work of this group of scientists was funded by the Department for Culture, Heritage and the Gaeltacht.
- They found that “Farming has the capacity to solve the climate and biodiversity crises that undermine food security. In doing so, we can enhance farmer livelihoods. By farming with nature, we secure a future for our children and the landscapes on which we depend. These landscapes provide priceless ecosystem services that are consistently undervalued.” The Department, and the new CAP 2021-2027 should incentivise farming that produces high quality food and enhances habitats, sequesters carbon, improves water quality, maintains soil health and alleviates flooding. This kind of farming has the potential to deliver landscapes that improve our own health and wellbeing, and nourish generations to come.
- Nature has limits. Priority Irish species and habitats are also threatened, in poor condition and declining. Declines in biodiversity impact on the critical ecosystem services provided to people. Nature can resist some threats and given the right circumstances can recover from impacts of intensive land-use, land-use change and pollution. However, nature is being pushed beyond its limits and some habitats may collapse entirely or require substantial investment for successful restoration. It is cheaper and more effective to keep what you have than pay to restore what you have lost.
- Ecosystem type, condition and extent determine the services that are delivered in any one area. A particular ecosystem type, such as a blanket bog or semi-natural grassland, can vary from low to high quality. Quality is assessed as the diversity, richness and identity of species within the ecosystem, and consequent ability of that ecosystem to provide services. High ecosystem quality depends on appropriate management. Landscape-scale connectivity increases habitat quality for species, and enhances the resilience of populations to threats. Monitoring of ecosystem quantity, quality and connectivity is essential to ensure expected outcomes are realised. Effective maintenance and enhancement of ecosystem quality needs to be evidence-based, and can also be incentivised by results-based payments.
- Targeted interventions are essential to ensure ecosystem service delivery across the Irish landscape. We need local-level solutions for landscape-level challenges because the Irish agricultural landscape is diverse. These solutions should be informed by the best possible evidence and knowledge that is appropriate for the local environment. Good examples already exist - many have been co-created by farmers, advisors and scientists working together, and have been demonstrated across Ireland. For effective and efficient administration, a national framework is needed for implementation of local-level solutions throughout the country.

*Action 29: Explore the cost effectiveness and sustainability of growing crops such as grass, potatoes, sugar beet or maize to meet opportunities in the bioeconomy or as materials for energy generation.*

- By taking a natural capital approach to assess the impacts and dependencies of bioeconomy products on natural assets throughout their lifecycle, we could articulate a fuller range of their environmental costs and benefits and account for them, thereby informing decision making, providing an evidence-base for the bioeconomy's contribution to long-term sustainable development, and avoiding greenwash. Thus, we would recommend that any bioeconomy policy should require producers of bioeconomy products to undergo life cycle assessment (LCA) or risk assessment that includes information on product impact and dependency on natural capital as a matter of course, in order for the "green" credentials of products to be demonstrated and appropriately marketed.





# **Irish Natura & Hill Farmers Association**

## **Submission to DAFM**

ON

### **“Ag-Climatise”**

## **Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond**

Date: 10-01-2020



## **Introduction**

The INHFA was established in February 2015 to represent farmers in hill designated and environmentally valuable land. The organisation strives to keep the family farm viable and ensure the farming way of life that has evolved in regions like ours is valued from an Agricultural and environmental point of view. The INHFA is a nationwide organisation and highlights the challenges faced by farmers in the more marginalised areas of the country. We currently have a membership base of over 5,000 and growing.

The organisation was formed because many of these farmers felt they were not being represented. This lack of representation was clearly evident in the last CAP program which created barriers to entry into GLAS and farmers payments under the Basic Payment Scheme.

We are currently looking for a fairer distribution of the new CAP budget and have come forward with very positive ideas how the land we farm can make a huge positive to climate change debate.

It is vital that the Government recognises the strategic importance of the uplands and the huge array of positives that farming in these regions delivers to the whole Climate Change debate. Yes, there is a CAP budget- which ensures a guaranteed supply of cheap food within Europe - but don't forget that €5 is generated in the local economy for every euro in payments farmers receive and this is vital for rural communities that depend hugely on this.

Do we want to have a country that has 5 or 6 heavily populated centres and forget the rest? It might be worth noting that our capital is gridlocked constantly, Issues with water supply and pollution from sewerage systems and quality of life for its inhabitants.

## **Carbon Storage**

Just 3% of the world's soil is peatland and 20% of this is in Ireland. However, this 3% sequesters more carbon than all the trees in the world. Does this figure not tell us that we should change our focus from planting large tracts of lands with Sitka spruce and firs and protect our bog land's instead? Large amounts of carbon, fixed from the atmosphere into plant tissues through photosynthesis, are locked away in peat soils, representing a valuable global carbon store. It is estimated that peatlands contain on average 5,000 tonnes of carbon per hectare and absorb carbon from the air at 0.7 tonnes per hectare per year.





Globally, peat bogs contain more carbon than the world's entire tropical rainforests. Ireland is unique from an international perspective because our small island contains roughly 8% of the world's blanket bogs, which are protected under international and EU legislation. According to the Irish Peatland Conservation Council (IPCC), intact Irish peatlands are estimated to store 1,085 Mega tonnes (Mt) of carbon. This corresponds to 53% of all soil carbon stored in the island of Ireland.

What is the value of this?

One carbon credit (or carbon 'offset') is a closely regulated certificate representing a reduction of one metric ton of carbon dioxide being released into the atmosphere. Currently, carbon credits are trading for around €26 per tonne.

### **Water Quality**

Almost 82% of Ireland's drinking water comes from surface water, (i.e. rivers and lakes), which in turn have their origin in upland areas. The upland farmer plays a key role in delivering clean water by proactively keeping this land in a good state and protecting the grasses and heathers and habitats that naturally filters the water. This saves water schemes and local government millions of euro as fewer chemicals are needed to remove sediment and bacteria from water supplies.

### **Biodiversity Attributes**

Efforts by farmers to protect upland habitats are ongoing through sustainable grazing, avoiding erosion, and managing wildfire risk. All of these actions also help protect the carbon locked in peat soils. Heather is a great source of forage for sheep and cattle in winter offering a feed source when other species are not growing. Heather's nectar and pollen offer nourishment for bees, flies and moths – the country's undervalued pollinators.

When you drive along the Wild Atlantic Way or Ireland's Ancient East, or walk the Glen of Aherlow, make sure that you appreciate all the attributes that this pristine countryside is giving back to society from an agricultural viewpoint. And don't forget the huge benefits delivered from an environmental and biodiversity standpoint.





## **Enhancing the development of sustainable land management practices**

Just as farmers are supported through CAP for the delivery of high-quality low-cost food to European consumers, the delivery of climate change mitigation must be similarly supported if a National Climate & Air Roadmap for the agriculture sector is to successfully implement.

### *Question 1*

*Are there other actions that could be considered for inclusion to further enhance progress and credibility of agricultural actions? Is there more that farmers and the food industry itself can do?*

### **INHFA response**

The current proposals for farm eco-scheme payments based on costs incurred and future income foregone is unfair, inequitable and discriminates against those farmers who have farmed in an environmentally friendly, low carbon manner for decades. *We cannot, as is now being proposed, reward future carbon reduction initiatives while ignoring the ongoing benefits being delivered by many Irish farmers through their current farming systems.*

*The principle of reward for benefits delivered must be a cornerstone of any new Ag Climate plan.*

All current and future DAFM schemes need to be environment-proofed i.e. we need to ensure that they are rewarding and promoting good environmental practice. A simple example of where this is not the case is the current Beef Exceptional Aid Measure (BEAM) which seeks to reduce bovine stock numbers on hill farms while Teagasc research shows that to maintain favourable conservation status, hills need to be grazed by cattle. The INHFA has already highlighted to Minister Creed and the Beef Taskforce Chairman that recent DAFM schemes have discriminated unfairly against smaller suckler herds who have not participated because of the complex nature and conditionality attached to BDGP, BEEP and BEAM.

On average the three current support measures in place have approximately an uptake level of just 25% or 15,000 suckler farmers out of a total of close on 60,000 farmers deemed to be eligible for support.



### *Question 3*

*Are there other actions that could be considered to maximise the contribution of sustainable land management? Is there more that farmers and the food industry itself can do?*

#### **INHFA response**

If we are serious about carbon sequestration through afforestation, a fit for purpose farm afforestation programme must be put in place. The current afforestation programme, which uses Irish exchequer funds to encourage what are often non-Irish, and indeed often non-European, pension funds to buy agricultural land and plant Sitka Spruce forestry is little short of madness. It is immoral that this money is leaving our economy while it could instead be used to fund a farmer-centred scheme which would enable farmers to plant a portion of their lands with sustainable, environmentally friendly forests. Such an approach would see forestry become a desirable farm practice, resulting in an exponential increase in level of afforestation and the consequential sequestration of carbon. In addition to providing these environmental and societal benefits it would also provide a guaranteed source of income for participating farmers, enabling them to continue to farm the remainder of their land and to live on the family farm.

The current agro-forestry scheme also needs to be redesigned particularly since the planting of ash trees is no longer an option

### *Question 4*

*Have you any feedback on how uptake of these actions can be encouraged and facilitated?*

#### **INHFA response**

We have to get real here and we have to **apply a polluter pay principle**. If we have a sector within Agriculture that is not as carbon friendly as another sector then that sector has to pay the price of it not meeting its climate change obligations. A carte blanche approach cannot be taken. We as a nation have to reward the farmer that is meeting his climate change targets.

The facts show that we have 137,000 farmers in Ireland. Of this we have 80,000 farms that have our best asset for beef production from a suckler cow herd of 1.1 million. 18,000 dairy farmers with 1.5 million head of cows and 35,000 sheep flocks. Its vitally important to recognise that from the last census of 2016 that 80% of farm holdings and 56% of the total farmed area were farmed by the very small, small and medium size holder.





Agriculture typically has an ageing workforce. In 2016, around a quarter of farm holders in Ireland were aged 65 years and over. Just 5% of people were aged less than 35 years.

If we don't look after the farmers on the land now on the low income threshold with meaningful and thought out ways of helping both financially and with the appropriate research then we will have widespread land abandonment and if we think we have a climate change issue now then wait until we cannot control large wildfires and habitat erosion along with the non-production of our organic and carbon free produce.

#### *Question 6*

*Have you any feedback on how uptake of these actions can be encouraged and facilitated? DAFM would also like to hear your views on the barriers and challenges to deployment of energy efficiency and renewable technology and also the types of supports and incentives that could increase deployment and wide spread adoption.*

#### **INHFA response**

The major barrier to the uptake of on-farm electricity generation is the unwillingness of the utility companies to meaningfully engage in the process and in particular to facilitate net billing. Grant schemes must be put in place to make the installation of micro-generation economically feasible for farmers.

The opportunity is there for Ireland, but we need both the feed-in tariff and a deliberate push from government to both the CER in regulation and ESB networks to implement smart distribution grids to enable this transition to be cost-effective without large amounts of red tape and disincentives for the smaller producer. Large multinational-owned, foreign-funded solar farms without the opportunity for citizens and farmers to participate in the energy transition first, will repeat the mistakes of the wind industry that has caused huge divisive in the past.

Grants to be provided to farmers for small scale Solar Farming.

Areas to be identified for wind energy so as community's and farmers and farming can all work together





Consortiums of farmers that own suitable Mountains that Hydro energy can be harnessed and fed back into the national grid. This has to be done with all farmers' consent. This can also be done in joint ventures with an established company.

The use of slurries, agri wastes and energy crops to produce bio-gas through anaerobic digesters. Gas Networks Ireland is supporting a number of pilot projects that use the gas directly for injection into the gas grid and for transport.

### **A greater role for producers, farm advisors and processors**

#### *Question 7*

*Are there other actions which the State could consider, particularly in partnering with Industry?*

The EU Common Agricultural Policy 2021-2027 Agriculture, forestry and other rural sectors are particularly vulnerable to the effects of climate change. The Common Agricultural Policy (CAP) has therefore a key role to play in promoting climate mitigation and supporting these sectors to adapt to climate change and ensuring coherence between climate and food production objectives.

#### **INHFA response**

This is all well and good but all farmers are not the same the same, as all engineers are not the same. There are major differences in farming enterprises and huge differences in their impact on the environment also.

An example of this would be a farmer farming 150 dairy cows in the golden vale on 150 acres of land and a farmer farming 150 ewes and 5 cows on 200 acres of farmland in Connemara. They are both producing at their maximum capability as the quality of land dictates that. The farmer farming in Tipperary has no restrictions placed on his land or his enterprise but the farmer in Connemara has designations imposed on him from the Wildlife and habitats directive and is farming subject to 39 notifiable actions requiring consent from various state agencies.

The farmer in Connemara has restrictions on spreading fertiliser, spraying, fencing, opening drains, ploughing, reseeding, building sheds whilst the farmer in Tipperary has not to deal with this.

From an environment point of view, the Connemara farmer is protecting lands that are sequestering huge amounts of Carbon, providing filtration for water on the hill, protecting the wildlife habitats



and he has had his flock destocked in 1998 and cannot increase his numbers where the dairy farmer in Tipperary can increase his stock to whatever he wants and is sequestering no carbon and has a higher carbon footprint through the method of farming he is carrying out.

Both of those farmers produce a quality product but for different markets – one is from an extensive grazing system reared in a natural grown vegetation and the other produce is from an intensive system using non carbon friendly nutrients and feedstuffs.

Therefore, from the CAP restructuring it is vitally important that the farming doing all the environmentally good work is recognised and that a polluter pay principle should be applied. After all it was every farmer's choice to increase stock numbers but farmers farming in designated lands did have to abide by a directive that was imposed upon them.

Currently proposals under the Climate Action Plan suggest rewilding and rewetting of 200,000 hectares of peatlands which risks abandonment of these lands as agricultural areas and will over time become a massive wildfire ecological catastrophe waiting to happen. History shows that the only way to manage these areas ecologically is by farming them, (Shepherds and Sheep). Lessons need to be learned from the Australian Wildfires which illuminates the absolute need to retain traditional farming practices as a management tool in these areas.

### **The next CAP Programme**

Payments will have to be made to farmers farming our natural asset of Designated lands and for the major benefit they are delivering for our eco systems and environment.

More research by Teagasc to support the 13,000 farmers farming marginal and hill land on best practices and more trials on the importance of this sustainable way of farming from how grazing this land can enhance its flora and thus adding to the positives of its carbon footprint from the quality of the product it produces. Also, the various ways that this carbon can be sequestered and how we can have 2 positive outputs from a production point of view and a climate change point of view.

More promotion by Bord Bia for our livestock reared on grass and mountain reared livestock. e.g. our heather reared lamb, naturally reared weanling, our bee farming, cottage industries, aligning likeminded industries.





High value lines in beef and sheep meat with zero to low carbon footprint that has a huge marketing potential.

Have farmer led discussion groups so the monies are going to the farmer facilitator as this way data would be shared more easily.

There needs to be more practical research on typical Irish farms especially upland farms. There needs to be a mechanism to support farmers and local communities to trial innovations which may work for their particular circumstances. A fairer distribution of payments would support all farmers better which in turn would sustain rural communities. There needs to be innovative ways to reward farmers who provide climate change mitigation by their farming systems and actions on the farm. There is an opportunity for farmers to collaborate with other agencies to deliver environmental goals relating to water quality, flood mitigation etc. which can give financial returns for all parties involved.

**Points of note on "Climate Document" that INHFA as an Organisation have to highlight from the members we represent:**

1. How can farmers afford to implement the measures discussed with their current place in the food supply chain?
2. This document is really "more of the same" with no innovation or **will** to change the current industrial type farming system.
3. There is a constant message in this document that production has to increase- It does not and farmers are not benefitting from increased production.
4. The 400,000 tonnes of Nitrogen fertiliser imported into Ireland each year is treated as a fact of life in this document with no plan to reduce it and its associated huge carbon footprint.
5. Nitrous oxide - not really dealt with at all even though it has huge implications for climate change

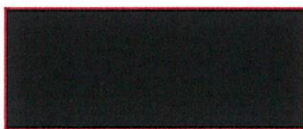
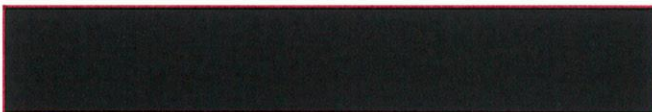




6. Carbon sequestration achieved in extensive farming systems is not accounted for which in many cases would leave this farming system at least carbon neutral.
7. Nitrogen derogations which are totally unsustainable are allowed to continue- should be stopped immediately.
8. High Nature Value (HNV) farming barely gets a mention - until the last page. Ignoring a huge segment of Irish farming which leads the way in sustainability and climate change mitigation.
9. The millions of tonnes of imported feed used in Ireland is not mentioned. The carbon footprint of the production and transport of this feed is huge and its contents of dubious origins and yet it is making the production of grain in Ireland unprofitable and driving tillage farmers in Ireland out of business. Why can't we support our Tillage farmers in this country?

As a farming Organisation we feel that our members are contributing in a proactive way on Climate change. We are a proactive organisation that is open to new ideas and initiatives. We have identified some new ways of thinking and hopefully our concerns and ideas will be taken on board. We look forward to some meaningful dialogue in the months ahead

Thanking You



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*Irish Rural Link*  
*Nasc Tuaithe na hÉireann*

# **Submission to Climate and Air Roadmap for the Agriculture Sector**

**10<sup>th</sup> January 2020**



Irish Rural Link is core funded by the Scheme to Support National Organisations (SSNO) funded by the Department of Rural and Community Development through Pobal



Rialtas na hÉireann  
Government of Ireland



## Overview

Irish Rural Link (IRL) is the national network of rural community groups, representing over 600 groups and thousands of individuals committed to socially, environmentally and economically sustainable rural communities.

We welcome the opportunity to make a submission to the Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond. While the Agricultural sector is one of the main contributor to Green House Gas (GHG) emissions, it can also provide many of the solutions to reducing such emissions and for a more sustainable food supply. Engaging with farmers, food producers, especially small farm holders and smaller food producers, who are often the hardest to engage with, they can become the innovators of new, cleaner and more sustainable ways to adapting to climate change and having reduced emissions in the atmosphere.

Ensuring that a just transition approach is included in this Roadmap is crucial. No farmer, food producer or land owner can be made worse off or penalised if the changes needed to be made are unaffordable to them. There must also be whole of Government support and policy cohesion within the Roadmap.

## Part 1: Implementing Changes Now

The majority of the actions outlined in Part 1 on the consultation paper are measures that are in place in the current Rural Development Programme (RDP) and Irish Rural Link are in agreement that these actions should continue.

***Q1. Are there other actions that could be considered for inclusion to further enhance progress and credibility of agricultural actions? Is there more that farmers and the food industry itself can do?***

- Engaging more with farmers, especially small farm holders is needed and some education and awareness raising is still needed to inform them of how making these changes are not only beneficial to the environment and contribute to reduction of emissions but can also improve the quality of their farm and farm produce – hence improving their livelihood. By educating them more, there is also the potential of encouraging family members to take over the family farm and gain an interest in the sector.
- As technology improves, new and innovative ways of farming can also make it more attractive and less laborious. Again, this can help better take up of inheritance of farms but also attract others from non-farming backgrounds into the sector.

- Better selection of bulls should be included in Action 3 as part of the enhanced dairy and beef breeding programs as this is also a key factor for improved beef production.

***Q2. Have you any feedback on how uptake of these actions can be encouraged and facilitated?***

- The knowledge transfer programme that is currently in place has helped farmers to upskill and encourage efficiency and continuous improvement of their farm and in turn the agri-food sector. This should be extended, simplifying participation of the scheme is also needed to engage the hardest to reach or small farm holders.
- Mentoring programme between local farmers may also help farmers make adaptations. If a neighbouring farmer has made changes, it can be an informal way of encouraging others to make the changes – if they can see the benefits that the neighbouring farm has gained by making these changes, it can be an incentive for others to make changes.

**2. Enhance the development of sustainable land management practices for delivering 26.8 Mt CO<sub>2</sub>eq abatement through LULUCF actions over the period 2021 to 2030.**

***Q3. Are there other actions that could be considered to maximise the contribution of sustainable land management? Is there more that farmers and the food industry itself can do?***

- High Nature Value Farming (HNV) is a practice of sustainable land management that protects biodiversity and species. With over a third of farms in Ireland vulnerable, there is an opportunity that HNV farming could be practiced on such farms.
- Restored peatlands not only store two to three times more carbon than forestry, they also improve water and air quality and protect both plant and animal species that are important for soil quality. The DAFM must collaborate with DCHG and National Parks and Wildlife, where restoration and conservation measures are taking place on raised bogs. There is also an opportunity to engage with private peat landowners that are not designated areas of conservation to encourage restoration and conservation of this land and use it for carbon sequestration.

***Q4. Have you any feedback on how uptake of these actions can be encouraged and facilitated?***

- **Carbon Credits** for uncut bog/restoration of bogland and forestry. Landowners are encouraged to plant forestry with grants etc, but carbon credits must also be introduced. At present private peat landowners and those with turbary rights that are not cutting their bog or wish to restore it, should receive carbon credits.



### **MoorFutures**

IRL and Community Wetlands Forum have continued to call on the introduction of a MoorFutures style carbon credit.

MoorFutures are a way to raise funds for the rewetting and restoration of peatlands and wetlands. Essentially, they are a type of carbon credit used as an instrument for financing peatland protection, ecosystem services and biodiversity, through private investment. MoorFutures offer corporations an opportunity to offset their carbon emissions while investing in the biological diversity and the multiple benefits of peatlands and wetlands. MoorFutures create trust because projects are carried out in the local community and the buyer can visit the site easily; supplier and buyer are in direct personal contact. They started in Brandesburg state in Germany in 2012 with other states following suit. With the amount of peatland and wetland across Ireland, there is an opportunity now to explore such a scheme to help Ireland achieve its climate targets<sup>1</sup>.

- Continuation of the GLAS Scheme is needed and engaging with farmers to take up the scheme. Also supporting farmers and food producers who wish to diversify to organic farming, HVN farming or diversify the land for other uses is needed.

### **3. Contribute to sustainable energy and decarbonisation of energy systems**

The agricultural sector is well placed to greatly contribute to sustainable energy and move away from dependency on fossil fuels. As outlined in the consultation paper, increasing biomass from forestry and biomethane will play key roles as well as pv panels. This is where agriculture can play a key role.

### ***Q5. Are these actions sufficient, or are there others you would suggest? Is there more that farmers and the food industry itself can do?***

- While IRL welcome the development of anaerobic digesters and the use of grass and possibly food waste in these to produce bio-gas, the Department and indeed Government must take into consideration, that not every household or area of the country is connected to the natural gas grid, so other alternative energy sources need to be explored. Anaerobic digesters could also allow farms and food producer reduce waste and produce their own energy.
- Decarbonising of fossil fuels also needs to be explored further and examples of such are happening across the country, with Arigna fuels being one such example.<sup>2</sup> The use of grass etc for anaerobic digesters however, as gas is not available to many homes in Ireland, especially in rural homes, this needs to be improved.

<sup>1</sup> <https://www.moorfutures.de/>

<sup>2</sup> <https://www.arignafuels.ie/2019/11/wdc-investment-fund-supports-arigna-fuels-and-its-move-towards-a-renewable-future/>



- Farm buildings are a prime location for solar panels. It would also allow the farmer produce their own energy. However, they need to be encouraged to take this up by allowing any excess produced be sold back to the grid.

**Q6. *How uptake of these actions can be encouraged and facilitated?***

- The initial cost to the farmer making a change will always be a problem but there also needs a shift in mind-set to make the changes away from fossil fuel burning. There needs to be an element of trust in alternative fuels, meaning there is still a need for education and awareness raising on climate change and the adaptations needed in the agricultural sector to reduce emissions. What financial gains can be made by the farmer by making the changes and realising the importance of making the changes should be highlighted.
- Supports to install Solar Panels or anaerobic digesters could encourage individual take up of these, but more important is being able to sell excess energy back to the national grids.

## **Part 2: Acting in Partnership**

Collaborating with a wide range of stakeholders will ensure more engagement from all the necessary stakeholders. While the consultation papers mentions some of the organisations that will be consulted, farmers and food producers on the ground must be engaged with also.

Action 24 states that the Roadmap will engage with farmers and communities to address behavioural barriers and ensure a just transition to land use change. While farm advisors are in a good position to do this but also a mentoring programme as outlined in previous sector could also help with behavioural change and change in mind-set.

## **Part 3: Preparing for the Future**

**Q11. *What are your views on these six guiding principles in preparing for the future? Are they sufficiently comprehensive or are there others you would add?***

**Just Transition** must be included as one of the guiding principles in preparing for the future. The agriculture sector can play a prominent role and provide many of the solutions in reducing GHG emissions. However, with the average farm income at approx. €23,000 and with one-third of farms vulnerable (Teagasc, 2019)<sup>3</sup>, no farmer can be made worse off by adapting to climate change. Supports, including advice and mentoring must be put in place.

<sup>3</sup> Teagasc (2019) 'National Farm Income Survey 2018'  
[https://www.teagasc.ie/media/website/publications/2019/NFS-2018\\_final\\_web.pdf](https://www.teagasc.ie/media/website/publications/2019/NFS-2018_final_web.pdf)

**Guideline 6: Continuing to invest in R&D and knowledge transfer services to drive innovation and adoption of best practice.**

There is an opportunity for a more collaborate approach to this and making better use of not only agricultural colleges but also Institutes of Technologies on how new and innovative technologies can be used in the agricultural sector. There is at least one IT college in every region of the country and linking farmers and farm groups in with these could help to identify the best practice of farming for an area, which benefits both the farmer, landowner and the environment.

***Q12. Innovation is now widely recognised as a key driver of long-term growth and sustainable development and addressing of challenges such as Climate Change. What type of approaches and processes could assist the Irish agri-food innovation system to address economic and societal challenges and facilitate increased networking, collaboration and investment?***

Taking a regional approach to this should be explored, especially in terms of networking and collaboration and again including IT colleges in how new and innovative technologies can be used in the agri-food sector.

There also needs to be a piece included on the quality of the food produced in the agri-food sector and education around the importance of dairy and beef in a healthy and balanced diet.

## **Irish Rural Link the Organisation**

Irish Rural Link (IRL), formed in 1991, is a national network of organisations and individuals campaigning for sustainable rural development in Ireland and Europe. IRL, a non-profit organisation, has grown significantly since its inception and now directly represents over 600 community groups with a combined membership of 25,000.

The network provides a structure through which rural groups and individuals, representing disadvantaged rural communities, can articulate their common needs and priorities, share their experiences and present their case to policy-makers at local, national and European Level.

Irish Rural Link is the only group represented at the national social partnership talks solely representing rural communities' interests.

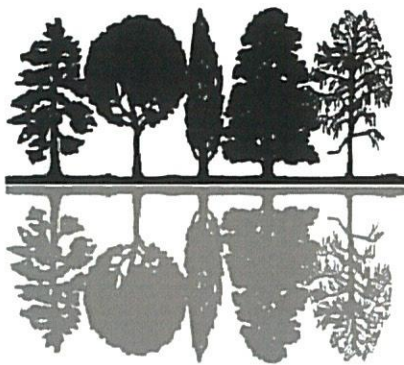
***'Our vision is of vibrant, inclusive and sustainable rural communities that contribute to an equitable and just society'***

Irish Rural Link's aims are:

- To articulate and facilitate the voices of rural communities in local, regional, national and European policy arenas, especially those experiencing poverty, social exclusion and the challenge of change in the 21<sup>st</sup> century.
- To promote local and community development in rural communities in order to strengthen and build the capacity of rural community groups to act as primary movers through practical assistance and advice.
- To research, critique and disseminate policies relating to rural communities including issues such as sustainability, social exclusion, equality and poverty
- To facilitate cross-border networking between rural communities

***'Our mission is to influence and inform local, regional, national and European development policies and programmes in favour of rural communities especially those who are marginalised as a result of poverty and social exclusion in rural areas.'***





# IRISH TIMBER GROWERS ASSOCIATION

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## **Irish Timber Growers Association submission on the draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and Beyond**

8<sup>th</sup> January 2020

The Irish Timber Growers Association (ITGA) was established in 1977 and is the national representative body of private woodland owners in Ireland. The membership of the Association mirrors the wide range of different timber growers in the country and current membership includes farm forest owners, forestry co-operative members, private woodland estates, forestry investors and forestry pension funds. This wide range of membership allows the Association to take a broad view of the industry and issues facing the sector.

The Irish Timber Growers Association welcomes the opportunity to make this submission on the draft National Climate and Air Roadmap for the Agriculture Sector.

There are significant opportunities for the forestry sector to play a major role in the transition to a low carbon, climate resilient economy and society for the future. Forestry's role in the Climate and Air Roadmap for the agriculture and land use sector should be prioritised given its carbon sequestration potential and ability to displace emissions from other farming systems.

### **Afforestation and creation of new woodlands**

From various studies, it has been estimated by COFORD that there is a need to continue afforestation at a level of 15,000 hectares per annum for the next two decades to sustain the ability of our national forest estate to remove carbon dioxide from the atmosphere in the longer term. Achieving this aim will also provide a renewable energy resource into the future by facilitating the replacement of fossil fuels as a source of energy through the utilisation of forest residues as biomass. In addition, an afforestation programme of 15,000 hectares per annum will also ensure sustainable raw material for construction and a range of other uses with knock on benefits for the longer term storage of carbon. Expansion of the national forest estate should therefore be a key component of Ireland's National Climate Change and Land Use Policy. This objective must therefore be given priority in the National Climate and Air Roadmap for the Agriculture Sector to 2030 and beyond.

It should also be noted that in the current Forestry Programme 2014 – 2020, the afforestation targets are a little over half of the targets set in *Forests, products and people - Ireland's forest policy – a renewed vision*, the forest policy which was adopted by the Department of Agriculture Food and the Marine (DAFM) in 2014. The afforestation figures quoted in the draft National Climate and Air Roadmap for the Agriculture Sector (P.24) of 8,000 hectares per annum are therefore significantly below those recommended in the '*Forest Policy Review: Forests, products and people – Ireland's forest policy – a renewed vision*'. Ireland's forest policy has an annual planting target of 15,000 per annum from 2016 to 2046. In 2018, only 4025 hectares were afforested which represents only 26.8% of the planting target as set out in the Policy document. It should also be noted that in the Food Wise 2025 Implementation Plan Action 370 includes, '*an increase in annual afforestation level to 15,000 hectares from 2021*'.

If the current low afforestation rate continues into the future, it will have significant repercussions on Ireland's ability to meet its international climate change targets in addition to its negative effect on related renewable energy targets given forests are a source of biomass. Also, the current low planting level will have repercussions on the industry's future supply of timber for processing into long lived carbon storage products and also ultimately affecting exports, employment and the rural economy.

As can be seen from research literature and from the COFORD *Forestry 2030 Papers* (see <http://www.coford.ie/publications/forestry2030/>), the sector has much to offer our economy, environment, in climate change mitigation, biodiversity, renewable energy and recreation. Ireland possesses the climate and soils to grow forests at a faster rate than most of the developed world, yet only 11% of our land area is under forest compared with almost 40% for the rest of Europe.

The recent Fact Sheet on Irish Agriculture (July 2019) outlines that, '*Total public expenditure by Department of Agriculture, Food and the Marine was over €3 billion in 2018.*' Of this €3 billion Department of Agriculture spend, forestry received less than €98 million or c. 3% of the total Department budget. However, the Irish forestry and timber sector has an annual economic output valued at c. €2.3 billion without considering its climate change and carbon sequestration benefits which are considerable.

The recent (2019) Report on the Socio-Economic Impact of Forestry in Co. Leitrim by Dr. Áine Ní Dhubháin<sup>1</sup>, Ms. Evelyn Stoettner<sup>1</sup>, Dr. Julie Ballweg<sup>1</sup> and Dr. Serge Garcia<sup>2</sup> which was commissioned by the Department of Agriculture, Food and the Marine highlighted, '*A suitable modelling approach is provided by O'Donoghue et al. (forthcoming) who use a micro-simulation model, SMILE21, and apply it to the NFS data from 2014 and the CSO data on small farms to generate a modelled micro-dataset from which statistics on agricultural returns are derived for the entire population of farms nationally and for county Leitrim. Micro-simulation modelling is a simulation-based tool that can be used for ex-ante analysis. The methodology is of particular use where there is a dearth of data, data are not complete, or to assess the ex-ante impacts of policy changes. It is a micro-based methodology, utilising micro-units of analysis such as individuals, households, firms and farms, using surveys or administrative datasets (O'Donoghue, 2014).*'



See <https://www.agriculture.gov.ie/media/migration/forestry/publications/The%20Socio-Economic%20Impact%20of%20Forestry%20in%20Co.%20Leitrim%20Final%20Report.pdf>

This modelling approach showed that, *'The estimated percentage of farms in Co. Leitrim where the return from forestry (on a per hectare basis) would be higher than that from agriculture is 67%, while in 74% of the cattle rearing farms the returns from forestry would be higher'*.

However, the Report also highlighted the significant percentage of farms where the return from forestry would be higher than from the following agriculture systems over all counties;

For Cattle Rearing 56.8% of farms nationally would return more from forestry.

For Cattle Other 57% of farms nationally would return more from forestry.

For Sheep 56.3% of farms nationally would return more from forestry.

*[Source: Report on the Socio-Economic Impact of Forestry in Co. Leitrim (2019)]*

### **Potential wider role for forestry in National Climate and Air Roadmap**

The forestry sector provides a range of opportunities to mitigate rises in greenhouse gas levels, including:

- afforestation/reforestation;
- active forest management;
- reduced deforestation (land use change from forest to non-forest);
- increased use of wood products;
- use of forest products for bioenergy to replace fossil fuel use.

The following must be encouraged and prioritised in the National Climate and Air Roadmap for the Agriculture Sector by including specific actions in the roadmap to ensure our national forest's role is maximised in climate change mitigation:

- Increasing significantly the afforestation rate to achieve stated Forest Policy targets.
- Fostering and supporting active forest management
- Encouraging roundwood and also forest residue mobilisation
- Increasing the use of wood products
- Utilising a wider range of forest products for bioenergy to replace fossil fuels
- Knowledge Transfer and innovative forest technology to facilitate lower emissions from the supply chain.



The draft National Climate and Air Roadmap for the Agriculture Sector refers to ammonia (NH<sub>3</sub>) emissions where the agriculture sector accounts for virtually all (99.1%) of ammonia emissions in Ireland. Recent increases in cattle numbers and fertiliser use have seen NH<sub>3</sub> emissions increase for the last five years. The roadmap, however, does not address other air pollution issues or how the agriculture and forestry sector can help reduce such emissions. Maintaining our standard of air quality in Ireland is a growing challenge and is taking on an increased importance with further understanding of the links between poor air quality and human health. The roadmap should highlight how forestry as a land use can make a valuable contribution in mitigating negative effects of poor air quality, regardless of its source. The European Environment Agency (EEA) have estimated a figure of 1,510 premature deaths in Ireland in 2014 (EEA 2017) directly attributable to air quality. World Health Organisation (WHO) guideline values were exceeded at a number of monitoring sites in Ireland for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), ozone, SO<sub>2</sub> and NO<sub>2</sub>: Forests remove harmful pollution from the environment and this is becoming increasingly well recognised. In the UK Environmental Accounts for woodland ecosystems for example (not available in Ireland), it is estimated that UK woodlands removed more harmful pollution (and carbon dioxide) from the atmosphere than any other habitat, valued at £1.8 billion in 2015. This positive role of forestry and trees in removing harmful emissions and improving air quality should be referenced in the National Climate and Air Roadmap for the Agriculture Sector.

Overall, the potential contribution of forestry and woodland creation is not adequately reflected in the current draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and beyond for the reasons outlined above. It should also be noted that in the Teagasc study entitled, 'An Analysis of Abatement Potential of Greenhouse Gas Emissions in Irish Agriculture 2021-2030 Prepared by the Teagasc Greenhouse Gas Working Group Gary J. Lanigan & Trevor Donnellan (June 2018), under the heading (P.30) 3.7. 2050 Towards Carbon Neutrality: The Role of Land-use and Functional Soil use, states that, *'Under the pathways analysed, increased sequestration from forests and grasslands and increased fossil fuel displacement were seen as likely pathways.'*

Given the sequestration potential of forestry in addition to the positive returns to farmers from forestry on competing marginal lands as highlighted above, the current draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and beyond requires rebalancing in regard to the potential contribution of forestry.

“Ag-climatise”

# A Draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and beyond

Submission from the Irish Uplands Forum



**Irish Uplands Forum**  
Promotes Sustainable Economic and  
Ecological Development in the Uplands

[www.irishuplandsforum.org](http://www.irishuplandsforum.org)

January 8<sup>th</sup> 2020

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## **Background**

The Irish Uplands Forum is an all Ireland non-governmental organization supporting sustainable development in upland areas north and south of the border. It was established in 1995 following a conference in UCG. Its principal role is to provide good evidence and a forum to discuss upland interests with the people who live, work and recreate in the uplands.

See our website [www.irishuplandsforum.org](http://www.irishuplandsforum.org) for details of a recent socio economic profile of upland areas and a report of a workshop on upland EIP-Agri projects.

The board currently includes farmers, environmentalists and representatives of recreational and tourism interests and its current Chairperson is Frank Nugent, mountaineer and historian.

Farmers in upland areas generally farm upland peatland and much of their land is within Natura sites of high environmental quality. These peatlands have been sequestering carbon for thousands of years. The farmers use little nitrogen fertilizer and due to environmental standards they have been reducing their herd numbers over the last twenty years. The potential of this land and farming practices contrast markedly with those of farmers in lowland areas.

A recent socio-economic profile of upland communities (O'Keefe and Crowley, 2019 on our website) highlighted the poor economic returns from upland hill sheep farming and poor prospects for their future. While initiatives in the past led to unsustainable development (through headage payments which led to overgrazing) the current agri environmental schemes (EIPs on freshwater pearl mussel, hen harrier and habitats) and focus on climate change have potential to deliver long term social and environmental benefits to those areas and communities.

Thus we welcome this report and its emphasis to support sustainable use of soils and ecosystems, and its recognition of the value of HNV farmland. Our comments are offered to support the Dept. to produce a road map, recognizing that we will need to make massive changes to the way we operate as a society and economy.

## **Response: Comments on the Draft Document**

### **Rationale**

We particularly support the objective to support reduced management intensity in 40,000 ha of peat based soils. Extensive hill sheep farming in the most sustainable form of land use on peat based soils. This is an obvious nature based solution to addressing the issue of climate change in the Irish uplands.

However farmers will need particular advice to ensure that their farming practices are compatible with improving the capacity of their peat based land to sequester carbon.

While forestry (using native species) is an obvious alternative land use which could also sequester carbon, forestry development in upland areas needs careful planning. Neither is it currently possible to get grant aid to plant forestry in uplands as land is generally owned in commonage.

Wind turbines offer an obvious opportunity to generate renewable energy. In rural areas community owned wind turbines need to be promoted to spread the benefits of this form of land use and increase its potential for public support.

While farmers are currently all receiving basic payments based on their land holding a review of the area based basic support payments should be carried out to provide recognition for the provision and maintenance of ecosystem services such as carbon sequestration by hill farmers

### **Our recommendations**

Every upland area should have a locally led agri-environmental scheme (all island EIP for uplands) which would focus on maximizing carbon sequestration, biodiversity and water quality. EIP's have potential to engage with all landowners. An all island upland EIP would build on the success of the current habitat and species EIP's.

The Native Woodland Scheme should be expanded to allow land held in commonage to be eligible for grant support for woodland establishment. This initiative should be piloted through established local upland partnership groups.

Research could be carried out by Bord Bia to develop a food labeling system which will indicate which food comes from farming operations which are sequestering and not releasing GHG.

Enhanced promotion of sustainable tourism/recreation initiatives in upland areas. As well as economic benefits this type of tourism has the capacity to inform wider society of the links between traditional extensive farming practices and the management of climate change.



## **Conclusions**

IUF welcomes this draft road map and is keen to assist the department. The initiatives described in this submission are suggested to maximize the potential of upland farming to support carbon sequestration, provide extra income to these farmers and thus develop genuine sustainable food production systems. We would welcome an opportunity for further discussion on these issues and opportunities.

*Submission on “Ag-climatise”*



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09/01/2020

**RE: The Ag Climatise roadmap 'Ag-Climatise' – A Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond**

A chara,

Irish Water welcomes the opportunity to comment on the Department of Agriculture, Food and Marines Ag-Climatise Roadmap for the agricultural sector to 2030 and beyond. In the coming years Irish Water will invest nearly €5billion in the continued improvement of our water and wastewater services. This investment will ensure secure and sustainable water and wastewater services, essential for health, our communities, the economy and the environment.

Irish Water seeks to support national policy objectives including those relating to the DAFM roadmap for the agriculture and land use sector which will ensure that its future development will be built on environmental sustainability and climate resilience, and contribute fairly to Ireland's climate, air and energy targets. We welcome the actions outlined in the roadmap to deliver on the DAFMs climate commitments. In particular, we recognise the following actions which also contribute to the protection of Ireland's water resources and have made suggestions on how these actions could be enhanced to ensure further protection of Ireland's water resources.

**Action 6: To deliver the balance of agriculture commitments under carbon sequestration and through the better management of peatlands and soils**

Reducing the management intensity of peat based agricultural soils will be beneficial to reducing inputs of nutrients, and the application of pesticides in areas of higher runoff risk. We would suggest that consideration be given to priority drinking water catchments and critical source areas identified by the Environmental Protection Agency (EPA) and LAWPRO (Local Authority Water Programme) when targeting the 40,000ha.

**Action 20: Promote the engagement with land diversification options and ecological focus area to enhance opportunities from nature-based solutions such as hedgerows farm woodlands and peatlands, to building climate resilience in the landscape and in food systems**



Hedgerows can also act as barriers to pollutant pathways if sited appropriately. Other nature-based solutions that protect water quality or reduce flooding could also be highlighted here e.g. buffer zones, integrated wetlands etc.

**Action 22: Explore options with stakeholders and land owners for the development of a land use framework which optimises the opportunity for coherent balancing of productivity, climate and ecosystems service objectives of land use.**

Irish Water welcomes this action as this would also have the added benefit of protecting drinking water sources both in terms of water quality and water availability. Irish Waters vision detailed in the Water Services Strategic Plan is that *"Through responsible stewardship, efficient management and strong partnerships, Ireland has a world class water infrastructure that ensures secure and sustainable water services, essential for our health, our communities, the economy and the environment"*. Irish Water prepares Drinking Water Safety Plans (DWSP) which seek to protect human health by managing risks to water quality, taking a whole catchment approach to manage risks from source through to the tap. Both the World Health Organisation (WHO) and the EPA strongly endorse the Drinking Water Safety Plan approach to managing drinking water supplies effectively in the interests of public health.

As detailed in the Department of Housing, Planning and Local Governments **Draft Climate Change Sectoral Adaptation Plan: Water Quality and Water Services Infrastructure**, Integrated Catchment Management can *"provide a cost-effective, sustainable means to reduce the sources of pollutants, and to slow, limit or restrict pathways of pollutants to waterbodies."* These pollutants can include nutrients, pathogens, sediments and pesticides. DAFM have been working with Irish Water as part of the National Pesticides and Drinking Water Action Group (NPDWAG) to promote the use of Integrated Pest management and to follow best practice when using any pesticide product, especially in the vicinity of a drinking water source. Irish Water look forward to collaborating with DAFM further to address climate challenges and achieve resilient water services.

Irish Water is also currently in the process of developing its first National Water Resources Plan (NWRP). The NWRP is Irish Waters strategic plan that sets out how we will move towards an environmentally sustainable, secure and reliable drinking water supply over the next 25 years. The plan, involves assessing the external factors that will impact on our water supplies, including changing environmental legislation, government policy on growth, spatial planning, water usage patterns and **climate change**, and developing a plan to ensure that existing water resources are managed in the best possible way to ensure security of water supply to all sectors and minimize any impacts including potential impacts for the agriculture sector. The plan also provides the framework for developing new water supply assets that will improve the reliability, sustainability and resilience of the water supply. Consideration should be given to proactive multi-stakeholder resource planning at a catchment level, to ensure that these future challenges can be met.

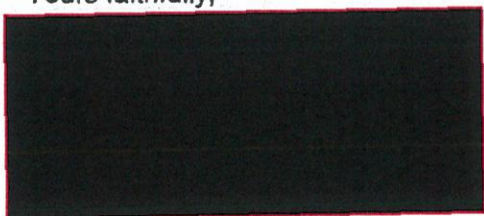
## **Conclusion**

Irish Water would welcome consideration of the key areas identified above in the DAFM roadmap and look forward to continued collaboration with the department to ensure a safe and secure water supply and the sustainable growth of the agri food, forestry and the marine.



Kind regards

Yours faithfully,



Organic farming should be our priority. Why is it being ignored?  
[REDACTED]