Environmental Pillar
Working for a sustainable future

Response of the Environmental Pillar to the Consultation on the Climate Action Plan 2023

The Environmental Pillar welcomes the opportunity to make a submission to the Climate Action Plan 2023. The Environmental Pillar is a coalition of over 30 national environmental NGOs. Many of the Pillar's members will also make their own submissions on their areas of interest and expertise, which the Pillar hopes will be given real consideration. The submission below highlights a few areas where we wish to make a collective contribution for this consultation.

Framework

Dáil Éireann declared a biodiversity emergency as well as a climate emergency. Therefore, the Climate Action Plan must ensure that it does not impact biodiversity both inside and outside protected areas and including in buildings. The framework would benefit from the inclusion of the following point;

Avoid impacting biodiversity

Require that suitably qualified ecologists inform high level strategic decisions on requirements to avoid impacting biodiversity

- Biodiversity proof climate actions to avoid worsening the biodiversity emergency
- Identify gaps in the knowledge to ensure avoidance of impacts to biodiversity
- Use existing bird survey data identify important areas for breeding and wintering birds both inside and outside protected areas
- Commission new survey work where required to inform high level decision making

Carbon Pricing and Cross-Cutting Issues

1. **Are there any unintended barriers within the planning system that should be addressed at national policy level in order to deliver our climate ambitions?**

Inadequate Wild Bird Survey, Monitoring and Habitat Conservation to support biodiversity within climate plans

All wild birds are protected under national and EU law. The European Court of Justice has ruled that this protected is afforded to individual bird specimens. There are several important requirements to ensure minimal impacts to bird species and their habitats from inappropriate developments that have not been addressed nationally and these require an urgent government response. Pillar members have significant

experience in reviewing and commenting on planning applications including wind farm developments. A national response is needed to improve the quality of bird survey work and monitoring including in the area of the expertise of bird surveyors. Often bird survey methodologies are not adequately adhered to and surveyors do not have the appropriate qualifications or experience. These issues need to be addressed so that confidence can be built into the system of survey work underpinning the important decisions of whether or not a wind farm development will have significant effects on important sites for birds, on Annex 1 species and on red or amber listed birds of conservation concern. With this in mind we make the following recommendations:

1.1 *Requirement for standard survey guidelines for priority species*

BirdWatch Ireland has developed survey guidelines for Barn Owl and Merlin. There is a requirement to have standard survey guidelines in place for other species (including breeding waders, raptors etc.) which are difficult to detect and may be under-recorded. At present, surveyors often use or refer to Scottish survey guidelines and there is a need for Irish specific survey standards to ensure best practice survey methodologies and recording. These survey standards should be adopted nationally and it should be ensured they are a requirement for survey work etc.

1.2 *Survey data should be collated centrally*

A huge amount of information is collected through surveys to inform planning and development and this data is primarily kept confidential by the ecological consultant/developer/client. This data can have significant conservation merit and also help to better understand the cumulative effects of developments on a broader scale. This data should be released after a specific period and housed centrally by government (e.g NPWS) and used appropriately.

1.*3 Enhanced post construction monitoring to inform impacts*

Post-construction monitoring of the effects of wind energy developments must be improved. In the first instance it is very difficult to find post-construction monitoring reports. An assessment of the whole area of post-construction monitoring and how information/monitoring reports are checked should be undertaken including a review of the best practice in carcass searching in order to inform the exact impacts of wind farm developments. Post construction monitoring reports should also be submitted to a national accessible database so that they can be reviewed by the public.

1.4 *Database of Surveyors Qualifications and Experience*

There is also a requirement to establish minimum threshold criteria that surveyors have to meet in order to undertake surveys. This could be as simple as the setting up of a database held by government (e.g. NPWS) that surveyors would sign up to and detail the level of their skills/experience and the species which they are qualified to survey for etc. This is necessary in order to ensure that qualified personnel are undertaking surveys.

1.5 Robust national guidelines on assessment of cumulative impacts

In addition, there are insufficient ecologists working at all levels of the planning system (departmental level (DECC, DAFM/Forest Service, Department of Housing), regional assembly processes, local authorities, An Bord Pleanála) to inform on ecological impacts of ideas, plans and projects. Several court

cases have been taken against planning decisions that impact biodiversity because of the failure of the planning authorities to have the proper regard for protected species. Most of these cases have won in national and EU Court of Justice because the State does not have proper regard for protected species and sites.

Another barrier in the planning system is the State's failure to properly transpose EU environmental law into national environmental law. For example, the WildLife Act is in breach of the Birds Directive in that it is failing to adequately protect bird species especially breeding birds. Its review and revision is listed in the draft National Biodiversity Action Plan with a completion date of 2027. This must be speeded up and acted upon as a matter of urgency. There is no reason why this should be delayed except staffing and resourcing at NPWS. The failure to update the Wildlife Act means a risk of additional court cases over failure to protect birds and their nest sites. There are other legislative reviews that require immediate attention including the DAFM review of the EIA regulations in agriculture which is leading to loss of hedgerows and other habitats. Again a lengthy review process out to 2025 in the draft National Biodiversity Action Plan threatens biodiversity further.

Irish afforestation plans are a significant pressure and threat to Red Listed Birds of Conservation Concern in Ireland including breeding wader species like Curlew, Snipe, Lapwing, Redshank, Golden Plover and more because afforestation by either native or non-native species or a mix effectively eliminates the semi-natural grasslands these species require to live. These breeding waders and other ground nesting birds are the most threatened bird group in Ireland. Curlew are on the brink of extinction but there are inadequate safeguards to protect them in the forestry planning system. Planning where forestry can go in the first instance in a strategic way would allow these species the space they need to thrive, avoid further impacts and support population restoration.

High level planning is needed to avoid pitting nature against modal shifts in transport. Greenway development is hugely important but too often greenways are proposed in areas important for birds. Not only are hopes raised with the public that these greenways will go ahead but significant funds are invested in proposals which may end up in the courts. A current example is the proposal to allow 2.5km of boardwalk inside a highly sensitive Special Protection Area for birds on the Boyne estuary. Several of the bird species at this site are declining already and the risks posed by disturbance of in excess of 200,000 additional users annually are catastrophic.

Destruction of designated areas is occurring because the planning system and decision makers are taking a pragmatic approach, rather than a precautionary approach at the expense of wild birds. Government should ensure that local authorities have the correct level of ecological expertise in order to be able to adequately assess planning applications. There is too much variation across the country with some counties quite literally flaunting the EU legislation.

The 2021 Climate Action Plan Action "Supporting Climate and Biodiversity progress through relevant strategic advice to enhance evidence-based decision-making" deserves evaluation as it is not clear who would be giving the strategic advice and how biodiversity impacts are avoided.

2. What further opportunities exist within our taxation system, beyond measures already implemented and planned, to promote emissions reductions, either on an economy-wide basis, or in specific sectors?

Evidence suggests that emissions reduction targets will become far easier to achieve if taxation supports a 'growth-neutral' or 'growth-agnostic' economy which can function adequately regardless of whether or not economic activity is expanding in the aggregate[1].

Taxation can provide this support by:

- encouraging the efficient use of resources
- discouraging 'rent-seeking' activity, such as speculation on property values or currencies, which drains funds, energy and time from the real economy
- supporting employment in the real economy

Taxation which meets these requirements includes land value tax and financial transactions tax. By contrast, three forms of taxation which are currently imposed in Ireland need to be modified or, in some cases, abolished: Local Property Tax (LPT), some aspects of VAT, and income/employment taxation.

The current local property tax (LPT) is problematic for two reasons:

- It penalises property owners who retrofit their homes to make them more energy efficient. (This is because improvements in the building's quality increase its sale value, which in turn influences the LPT rate.)
- It does little or nothing to discourage hoarding of land and speculation on property values. These activities contribute to the current severe housing shortage in Ireland. Paying for accommodation - whether as a homeowner or tenant - is a significant drain on many Irish people's income, and therefore restricts their ability to support the green economy, both in terms of their spending and the time they have available.

The LPT should therefore be replaced by a Land Value Tax (LVT) which applies to the land on which the building is located rather than the quality of the building itself.

Another currently-existing problematic tax is VAT that applies to materials and labour for certain energy efficiency measures. Similarly to the LPT, it discourages retrofitting[2]. This form of VAT should therefore be abolished.

Polluter Pays

The Polluter Pays Principle underpins the role of the carbon tax. However, both the principle and the efficiency of the tax are undermined by the continued existence of significant subsidies for fossil fuel use. [3] The Pillar welcomes the commitment in the Climate Action Plan (2021) to "***develop roadmap for review and transition away from fossil fuel tax subsidies in transport sector"[4].*** However, this has yet to be published and the Pillar is also concerned it is confined to fossil fuel subsidies in the transport sector. The Climate Change Advisory Council (CCAC) has called for the "rapid phasing out of such subsidies" [5], a call the Pillar endorses. The CCAC also identified the VAT exemption on nitrogen fertilisers[6] as damaging to both climate and the environment in general, in particular water quality. The 0% VAT rating for nitrogen fertiliser should be reviewed and planned for removal.

The **aviation industry** continued to be one of the largest beneficiaries from fossil fuel subsidies across the globe[7]. The Pillar welcomes measures to address this at a European level as part of the *Fit for 55* package, however, we are concerned that these measures will not be applied to extra-EU flights. A number of EU countries have introduced a tax/duty on passengers/tickets to address the lack of excise duty on fuel and most also charge VAT on domestic flights (Ireland does not). This situation means that domestic flights continue to be subsided at a time when private car users are being encouraged to purchase expensive electric vehicles

The treatment examine of aviation should be examined in is review of fossil fuel subsidies, including the removal of the exemption on VAT for domestic flights and the introduction of a tax/duty on extra-EU flights should the EU proposals on aviation continue to neglect the reduction in subsidies for flights leaving the EU.[8]

3. Further to recent reforms to Ireland's green budgeting and public procurement policies, are there any additional measures that could be taken to integrate climate considerations into these policy frameworks?

Procurement policies which include 'Community Wealth Building' measures that privilege local businesses have the potential to shorten supply chains, lessening climate impact, and making enterprises more resilient to economic shocks[9] (which can include climate-related economic disruption).

4. Are there any significant cross-cutting gaps not previously discussed in Climate Action Plan 21 that need to be addressed?

Carbon taxation which relies solely on price to limit emissions cannot guarantee that the needed emissions reductions will take place within a short enough time-frame[10]. The pricing of carbon therefore needs to be accompanied by a 'safety net': a quantitative limit on fossil fuel extraction and imports. Many climate scientists are increasingly emphasising the need for a managed fossil fuel phase-out, and their opinion is shared by over 350,000 fellow signatories of the Fossil Fuel Non-Proliferation Treaty [11].

A managed fossil fuel supply phase-out could include a system of licence allocation (in a limited quantity) and fee charging for the import or extraction of fossil fuels. In this way State revenue would be

generated from the use of fossil fuels in the short to medium term (as with the current carbon tax) while simultaneously guaranteeing that the use of fossil fuels would be limited.

In addition to the positive and reliable impact that this would have on emissions, there are also strong economic and political rationales for this approach[12].

Ireland can and should advocate for a managed phase-out of fossil fuel imports and extraction at EU level. If this phase-out was carried out in partnership with a group of Global South countries then the revenue generated could provide reliable climate finance to the partner countries, while also supporting those who are hardest hit by energy price increases within the EU[13].

5. Are there any other cross-cutting issues that should be considered in the development of the 2023 Climate Action Plan?

Given the rising cost of energy and its impact on the cost of living and low-income households, the issue of energy poverty and deprivation cannot be siloed from climate policy. The rising energy prices across the globe threaten to undermine progress towards GHG emissions reductions and biodiversity protection. It is imperative that the cost of living crisis be tackled in a way which does not compromise our climate and biodiversity goals and protects vulnerable households, **through social policy levers should as higher social protection payments and the benchmarking of all social protection payments in order to ensure income adequacy.**

Of prime importance is the maintenance of the carbon tax and its price trajectory towards 2030 as laid out in the Climate Action Plan 2021. Coupled with this is ensuring progress towards the systematic removal of all fossil fuel supports from the taxation system, which serve to undermine the efficiency of environmental taxes. Support for these policies will waver in a time of energy and economic crisis, **it is therefore imperative that revenue from the carbon tax is hypothecated to fund policies which address any hardship that may arise, such as retrofitting for lower-income households.**

Ensuring that climate action does not worsen the biodiversity crisis is a critical cross cutting issue that is not addressed at all within the consultation document. Clear information about how government plans to ensure that there are no further losses of biodiversity as a result of renewable energy development, afforestation and planned modal shifts (ie. greenways) must be provided. This should be accompanied by a joint strategy on ramping up nature restoration. The Climate Action plan should be biodiversity proofed as the potential scale of the impacts could be devastating.

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Electricity

We need ambitious roll out of renewable energy in Ireland to cut our dependence on fossil fuels but it is very concerning to see not a single reference in the consultation doc for the need to ensure that

marine and terrestrial biodiversity is also protected within this roll out and that populations are restored. Wind energy is one more pressure and threat to wild bird species. On land these threats include loss of habitat from agriculture intensification, afforestation, peat cutting, and development. Offshore these pressures and threats include overfishing including bottom trawling, impacts of disturbance at bird breeding colonies (which are on coastal and cliff sites) as well as warming seas. Twenty-three of the twenty four Irish breeding seabirds are Red or Amber Listed Birds of Conservation Concern. A holistic approach to ramping up actual conservation efforts on land and sea is essential if the state is going to add another pressure and threat to biodiversity. Birdwatch ireland has documented the impacts of onshore and offshore renewables here and here.

Enterprise

6. What other opportunities exist to drive the decarbonisation of the enterprise sector?

Measures which can help to drive decarbonisation in enterprises include:

- the implementation of a government programme for supporting social enterprises and 'purpose-led' business which have explicit social and environmental missions. We recommend that DECC joins with the Department of Enterprise and the Department of Rural and Community Development on this initiative, and that it include the establishment of a Business Purpose Commission (as has been done in Scotland)

- the development of a thriving community banking sector throughout Ireland to ensure that Irish enterprises have dependable access to finance from not-for-profit public and/or mutual banks that deliver essential services for the public. This is vital for the development of a post-growth wellbeing economy.

- Support for Community Wealth Building (CWB) measures throughout Ireland, drawing on existing CWB initiatives in the UK and USA.

- collaboration by the Department of Enterprise with fellow members of the EU Competitiveness Council and the international trade organisations to promote the implementation of strong, clear, consistent and enforceable international environmental regulations that include strengthened circular economy measures, the rigorous application of existing biodiversity protection laws along with further protective measures, and hard limits or phase-outs of the use of certain resources, including fossil fuels.

7. What measures should be taken to address the risks that climate change poses for enterprise?

The measures listed above would also help to strengthen the resilience of Irish enterprises when faced with extreme weather events and supply chain shocks brought about by climate disruption.

Transport

Sustainable Mobility and Demand Management

2. What changes should be considered in relation to the management of Ireland's road network (e.g. reducing speed limits, parking policy, road user/congestion charging) to reduce congestion and support the prioritisation of more sustainable modes?

Reduction of emissions in the transport sector will require a mix of both the take-up of electric vehicles and a model shift to active travel and public transport. While the take-up of electric vehicles will be an important part of the solution in the transport sector, private road transport is also responsible for other negative externalities including traffic congestion and use of public space.[14] It has been estimated by the Department of Transport that cost of 'aggravated congestion' was approximately €358 million in 2012 and would rise to €2.08 billion per year in 2023.[15] As argued by the CCAC, technological change will not be sufficient in this sector, real behavioral change will also be required.[16] A way of doing this is through the introduction of road and/or congestion charging, accompanied by parking charges in key urban areas. [17] [18]

The Environmental Pillar recommends for a mixture of parking and road pricing/congestion charges to be introduced in our cities, starting with Dublin.

3. What additional measures should be considered to improve the quality or attractiveness of public transport or active mobility solutions as an alternative to private car use? (e.g. dedicated lanes, secure bike parking, rest areas).

A substantial increase in number of journeys taken by public transport will also be vital to decreasing emissions from the private car. The Pillar welcomes recent reductions in fares, in particular for young people, and believes there is scope to make further reductions. The waiving of fees for school transport for those who qualify in the coming year are particularly welcome. The Pillar believes that consideration should be given to expanding both the level of reductions for public transport fares and criteria for qualifying for free school transport over the coming years, increasing the number of children who are eligible. Consideration could be given to piloting free public transport for all school children in an area with a view to assessing the impact on both emissions and traffic.

4. What policies or measures can be considered to further incentivise the use of more sustainable modes of transport for education and leisure-related journeys?

See above

Agriculture, Land Use and Forestry

Introduction

Both Ireland's agricultural sector and the Land Use Land Use Change and Forestry (LULUCF) sectors are a net emissions source. In order to achieve the targets of Ireland's Climate Action Bill of a 51% reduction in national emissions by 2030 will require significant changes to the size of the national cattle herd (dairy and beef), changes to farming practices, rewetting and rehabilitation of wetlands and grasslands and a new approach to afforestation and forest management.

Agriculture is by far the most significant pressure on Ireland's nature, water and air, and greenhouse gas emissions and there has been a long-standing failure by society to ensure that farming operates within safe ecological limits. It is deeply concerning to us that scenarios and proposed policies to reduce emissions in the Agriculture, Forestry and Other Land Use (AFOLU) sector have so far been heavily biased in favour of ongoing dairy intensification and a ramped-up version of business as usual afforestation, despite both sectors being leading drivers of biodiversity loss. These market driven policies are myopic and will inevitably exacerbate our biodiversity and climate emergency and regional inequalities. Policies which are designed to drive fundamental changes in our society and our landscape must be underpinned by core values such as environmental sustainability, food security, family farm viability, climate justice and a just transition in burden sharing.

We believe that farming is essential to the future of rural Ireland and that many farmers help to support a multitude of our most beloved plants, wild birds and other animals and habitats that are dependent on sustainable farming practices. We believe that the biodiversity and climate emergencies are inextricably intertwined and that the solutions to both will be found in empowering farmers, foresters, landowners and rural communities through capacity building and innovation, and incentivising the delivery of ecosystem services and regulating polluting activities.

Agriculture

According to the Environmental Protection Agency (EPA) agriculture remains the largest contributor to Ireland's overall emissions at 37.5% of the total. On a per capita basis Ireland has the third highest emissions in the EU 27, mainly due to exceptionally high CH4 and N20 footprint emanating mainly from Agriculture.

Total emissions from the agriculture sector in 2021 were 23.1 Mt CO2eq an increase of 3.0% on 2020. The most significant drivers for the increased emissions in 2021 were increased use of synthetic nitrogen fertiliser of 5.2% and higher dairy cow numbers of 2.8% with an increase in milk production of 5.5%. According to the CCAC 85% of Ireland's agricultural GHG emissions are associated directly or indirectly with bovine agriculture and that changes in agricultural emissions over and above those delivered by mitigation measures are driven by changes in bovine agricultural activity levels. This is further supported

by scenario modelling research for Irish agriculture, forestry and other land use (AFOLU) which found that "*in the absence of technical solutions to dramatically reduce the emissions intensity of bovine production, national milk and beef output will need to be substantially curtailed to achieve net-zero emissions*."

For Ireland to meet our legal obligations under the Paris agreement significant cuts in agricultural emissions must be achieved and in our view the efforts of the agricultural sector should focus on addressing the main drivers of emissions at source, namely reduced synthetic nitrogen fertiliser use and decreased dairy cow numbers and decreased milk production.

Recommendations:

1. ***Reduce Synthetic Nitrogen Fertiliser Use***

In Ireland we have already seen that efficiency measures in the absence of total limits on production and nitrogen usage have failed to reduce total green-house gas emissions. Synthetic nitrogen fertiliser use grew 28% after 2010 to 408,000 tonnes a year. It's fallen this year due to the input crisis driven by the skyrocketing price of fossil fuels. The Government must ensure that chemical fertiliser use does not rise again in 2023 or 2024 and falls to 2010 levels no later than 2025, and continues to decline steadily to less than 200,000 tonnes by 2030.

There is a need for more accurate nitrogen budgeting at both farm and catchment scale, with a view to eliminating excess nitrogen use. Reduced nitrogen use would also improve water and air quality while reducing greenhouse gas emission. The EPA has stated "The next Nitrates Action Programme (NAP) must deliver reductions in nitrogen losses to water."

- The Government should continue to support interventions such as the Multi Species Swards (MSS). Research has shown positive results on low nitrogen input plots due to enhanced biological nitrogen fixation by clover. These swards could provide a more environmentally friendly production system allowing for increased Carbon sequestration while at the same time reducing emissions of nitrous oxide which is a potent greenhouse gas.

- According to Teagasc the use of protected urea can help to reduce agricultural greenhouse gas emissions and ammonia emissions while maintaining yield and reducing cost.

2. ***Reduce Dairy Production***

According to the EPA this is the 11th consecutive year of increases in dairy cow numbers. Milk output per cow also increased (2.5%), therefore increased production was driven by an increase in

livestock numbers in conjunction with an increase in milk yield per cow. In 2021, total cattle numbers increased by 0.8%. The methane efficiency of both Dairy Cows and other Cattle (kg Methane per animal) has gotten worse since the 1990s. Intensification within the Dairy sector is a leading driver of climate, water and air pollution. Reducing stocking densities in suckler farms elsewhere in the country will not address the multitude of pressures that dairy intensification is exerting on our environment.

- Options to limit agricultural emissions and pollution include the reintroduction of a milk quota at a national or EU level.
- Targeted reductions in stocking densities at farm level, prioritising farms where stocking rates are identified as exceeding the environments carrying capacity (e.g. water pollution), would deliver wider environmental benefits and provide a socially justifiable rationale to underpin burden sharing.
- Work with the tillage sector to reduce competition with the dairy sector for land and devise incentives to encourage dairy farmers into tillage. This would reduce emissions and benefit national food and fodder security; an important objective in itself given Ireland's overdependence on imported food and fodder.
- Diversification opportunities such as the existing improved financial support for organic farming or the introduction of low/zero-interest loans for dairy farmers for solar panels; may help to ease the transition to lower stocking rates.

Land Use Land Use Change and Forestry (LULUCF)

According to the EPA the LULUCF sector is made up of six land use categories (Forest Land, Cropland, Grassland, Wetlands, Settlements, and Other Land) and Harvested Wood Products. This sector accounts for 11.2% of national total emissions. The sector is a net source of CO2 eq emissions in all years 1990-2021.

The main source of emissions is the drainage of grasslands on organic soils and the exploitation of wetlands for peat extraction. Forest land and Harvested wood products are a carbon sink (CO2 removal) for all years 1990-2021. However forestry is transitioning from a sink to an emission source. The most recent projections published by the EPA are that net emissions for the sector will increase from 4.5 Mt CO2eq in 2019 to 7.1Mt CO2eq in 2030. The CCAC proposes that in order for net emissions for LULUCF to achieve a 51% reduction, this projected trend in sectoral emissions will need to be reversed.

It is our view that in order to change the land use sector from a net source to a sink, will require wide ranging changes to how we manage our landscape with varying socio-economic and environmental impacts. Given the scale of the challenges posed it is important that there is transparency around how different policy options are prioritised. It is essential that any options are consistent with Ireland's broader national and international legal commitments and Ireland declared biodiversity and climate emergency. Wherever possible win-win scenarios should be prioritised such as rehabilitating and restoring habitats that are known carbon sinks such as peatlands, wetlands, wet grasslands and native woodlands.

Given that land use change is such a highly emotive issue for many people, any policies should be shaped through early and sustained engagement with landowners, stakeholders and affected communities. Policies should be consistent with the principles of a just transition and should look to balance equity of opportunities with equity in burden sharing. Policies which exacerbate existing regional socio-economic inequalities should be avoided. This can best be achieved by rewarding farmers for the public goods and services they provide and targeting pollution at source in line with the polluter pays principle.

3. *A National Land Use Strategy*

- Ireland needs a National Land Use Strategy (NLUS) that is holistic and consistent with our existing environmental obligations at a national and international level. The NLUS should prioritise policies that maximise the environmental benefits of improving carbon sinks through habitat restoration and sustainable management, while also helping to identify regions and catchments where intervention is needed to address important sources of climate, air and water pollution. We would like to see more targeted supports that recognise that many extensive farmers support High Nature Value farmland, which already delivers a range of ecosystem and cultural services including carbon sequestration, flood attenuation, biodiversity and recreational space and important cultural landscapes which are not captured in overly simplistic economic indicators. The NLUS should support farmers and landowners who provide the greatest public goods and services to society.

4. Grasslands

Grassland is the largest net source of emissions within the LULUCF sector, estimated at 7.0Mt CO2eq, in 2018. The main source of emissions is the drainage of an estimated 337kha of organic soils, which emit 8.3Mt CO2eq. This is partially balanced by a reported removal by mineral soils of 2.0Mt CO2. The CCAC illustrative scenario area of land use change or change in land management consistent with a 51% reduction in net emissions assumes rewetting of over 110,000 ha of drained organic soils; while the Climate Action Plan has a target of 80,000 ha to be targeted for reduced management intensity or rewetting.

Recommendations

- Reduced management intensity or rewetting of grasslands on organic soils has the potential to deliver positive benefits for climate, biodiversity, water quality and flood attenuation. The state should therefore adopt a target of 80,000ha to 110,000ha of grasslands for intervention. Interventions should be prioritised in areas where there are win-wins in the same way that FarmPEAT (Farm Payments for Ecological and Agricultural Transitions) Project is developing a

locally-led, innovative, results-based farm scheme for farmers to manage peatlands to deliver multiple environmental benefits at a landscape level.

- Rewetting should be facilitated by an urgent review of the Arterial Drainage Act which is no longer fit for purpose.

- Given that extensification of grassland management may be a highly emotive issue for many farmers it is essential that there is early and sustained engagement with farmers and other stakeholders. Management options should be informed by the best available science and best practice.

Other Farmland Habitats

Other farmland habitats such as hedgerows and scrub can sequester significant amounts of carbon at a landscape level if supported by actions such as enhanced hedgerow planting and sustainable management. In Ireland hedgerows, scrub and emergent woodland have in the past been afforded little protection and indeed their destruction has been actively incentivised through the Common Agricultural Policy (CAP). However, under the next CAP up to 50% of a land parcel can be made up of ineligible features such as scrub, trees or woodland, without a reduction in the eligible area for payment. There is therefore a great opportunity to enhance the sequestration capacity of farmland habitats over the coming years.

Recommendations

- To maximise the potential benefits of the new eligibility rules for climate and biodiversity greater efforts should be made to ensure that farmers are aware of the new rules.

  More knowledge transfer initiates should focus on providing farmers guidance on improving the sequestration capacity of farmland habitats.

- Farmland habitats and farmland biodiversity in general should be offered greater protection.

Wetlands

Wetlands are a net source of emissions within the LULUCF sector, estimated at 2.5Mt CO2eq, in 2018. The main source of emissions is the drainage of an estimated 75.6kha of peatland for peat extraction. The CCAC illustrative scenario assumes 90% of peatlands currently used for peat extraction are rewetted. We would be strongly supportive of any measures targeting peatland and wetland restoration. Wetland restoration would be a clear win-win from an environmental perspective, reducing emissions, enhancing carbon sequestration and delivering positive biodiversity and water quality benefits. Having said that, there are significant barriers to achieving the goals outlined by the CCAC. The state has actively failed to protect peatlands for decades and has actively worked on the behalf of the peat industry and domestic users to undermine the regulation of the sector. To go from a position where turf-cutting is ongoing within Special Areas of Conservation to a position where 90% of peatlands currently used for peat extraction are rewetted will require a significant shift in government policy and societal attitudes. This will require significant investment in conservation, regulation and stakeholder engagement. This investment can't come soon enough.

Recent EPA research on peatland properties influencing GHG emissions and removals highlight key areas where urgent intervention is needed to secure carbon sinks and enhance sequestration. The EPA estimated that the carbon stocks held in natural and managed peatlands in Ireland at 2216Mt of carbon, with c.42% in raised bogs, c.42% in lowland blanket bogs and c.15% in mountain blanket bogs. Natural and cutover peatlands together contain just under half of the national peatland carbon stock. National emissions are estimated at around 860,000t of carbon per year (or 3.15MtCO2 y–1). Importantly, GHG emissions from domestic (residential) peat extraction are suggested as being strongly underestimated, highlighting the need for enhanced engagement, regulation and enforcement.

Natural and cutover bogs hold just over half of all of the Soil Organic Carbon stored in Irish peatlands, which represent two-thirds of the national soil carbon stock. This has major implications for policy decisions (Renou-Wilson et al 2022).

Recommendations

- There is an urgent need for both better incentives and better regulation to protect and rehabilitate natural and cutover bogs.

- The UK government recently announced that the sale of peat for use in the amateur gardening sector will be banned by 2024 to protect peatlands and the natural environment. Ireland should

follow suit with an initial deadline for a ban on the use of peat in the amateur gardening sector followed by timelines for the end of the use of peat across the horticultural sector.

Forestry

While forestry is currently a net carbon sink the sector is transitioning to a net emission source. The most recent projections published by the EPA are that net emissions for the sector will increase from 4.5 Mt CO2eq in 2019 to 7.1Mt CO2eq in 2030.

Ireland's current Forestry Programme has a target to increase Ireland's forest cover area from its current level to 18%, requiring an additional 46,000 ha. However current afforested area has declined from 6,947 hectares in 2007 to 2,016 hectares in 2021. This is despite lucrative premiums and tax incentives that mean that forestry would be a more profitable enterprise for the majority of farmers.

It is our view that the Irish forestry sector has lost its social licence and that root and branch reform is needed, of where afforestation occurs and how forestry is managed before landowners and communities can embrace commercial forestry as a sustainable land use option.

Ireland's forestry sector is also highly intensive with plantation forests dominating total forest cover in Ireland. 60% of the national forest estate is made up of non-native conifers, with 44.6% of forestry being made up of just one species, Sitka spruce (*Picea sitchensis*) Ireland's unnatural and industrial model of forestry is very unusual in a European context. For example, Ireland has over 85% plantation forest share, one of the highest levels in Europe and the highest share of forest area dominated by introduced tree species (>60%). This is in stark contrast to Europe as a whole where the forest area is dominated by semi-natural forest cover (Fig. 8)[44].

Afforestation and forestry activities is documented and proven to be a significant negative pressure and threat on a wide range of species, including fish, molluscs, wild birds many of whom are Red and Amber Listed Birds of Conservation Concern, terrestrial mammals and vascular plants because of the wide sphere of influence of some activities for example through water quality impacts. The habitats which have been most negatively impacted by afforestation in the wrong places are peatlands, grasslands, wetlands and coastal habitats. The absence of safeguards for the environment especially biodiversity and water quality has been documented in a report by BirdWatch Ireland. These safeguards are still not built in. Considering the scale of the government's plans to afforest land, the threat to biodiversity and failure to adhere to EU environmental law is a significant risk to afforestation plans.

Commercial forestry is also a significant pressure on water quality and freshwater biodiversity at a national level and is a critical pressure nationally impacting on ecologically important water bodies. Poor regulation of the sector has resulted in a situation where 450,940 ha of peatlands in Ireland have been inappropriately afforested, 60% of which is State owned. These legacy issues include protected sites such as the six Special Protection Areas designated for Hen harrier (a protected bird of prey reliant on open upland and extensive farming habitats), in which forest cover has reached 53%. Forestry has been the main driver of habitat loss within these sites which have seen a 25% breeding population decline

between 2005. The population within these protected sites is not self-sustaining. The failure of the State to address these legacy issues or act to protect 'High Nature Value' farmland and high carbon soils and peatlands is a serious ongoing issue and is indicative of the true roll the sector is playing in Ireland's biodiversity and climate emergency.

Given the reluctance of the sector to address either legacy or ongoing impacts on biodiversity the expansion of forestry, particularly across Ireland's High Nature Value farmland, would have a major negative impact on biodiversity. Claims that business as usual afforestation is a win-win for biodiversity and climate are therefore extremely dubious. There is also a growing body of international research which highlights that using overly simplistic targets for land-use change, such as the number of trees planted or annual afforestation rates can be misleading, contributing to policy failure, misuse of carbon offsets and even increased greenhouse gas emissions.

There is a growing body of research which highlights that the use of overly simplistic targets for land use change such as the number of trees planted or annual afforestation rates can be misleading, potentially contributing to policy failure and misuse of carbon offsets. To maximise GHG reductions a more nuanced approach is required to land use management which recognises spatial and temporal variability as well as the complexity required to deliver across a multitude of interconnected environmental and socio-economic policy objectives.

A number of Scottish studies have highlighted the limitations of area-based afforestation targets as an indicator of carbon sequestration outcomes and the potential for area based targets to unintentionally generate undesirable outcomes such as net emissions resulting from the afforestation of high carbon soils, stating "a combination of land manager preferences, budgetary limitations, and the unintended consequences of other land use or agricultural policies can lead to the afforestation of less productive land, on soils with higher organic matter contents, that in the worst cases results in net emissions of carbon for decades." The heterogeneity of soil types and local conditions means that afforestation policies must take eco-system-level biogeochemistry and C fluxes and pre-existing SOC stocks into account or risk unintended policy and climate outcomes. It is also of concern to us that current approaches to forestry carbon accounting fail to take into account the albedo effect of dark conifer plantations. Recent research has highlighted that the expansion of coniferous forests across Europe has changed the albedo and evapotranspiration of those forests, leading to warming.

When it comes to the role that forest cover and forestry can play in sequestering carbon, the type of tree, where it is planted and how it is managed is extremely important. The level of complexity involved in maximising the positive environmental benefits of forestry and avoiding the negative effects is not currently present in Irish forestry policy. The Irish forestry model has failed to evolve in response to changing societal objectives. In a business as usual scenario we expect the ongoing afforestation of marginal farmland, including high carbon soils and we anticipate significant negative biodiversity, water quality and climate impacts.

Recommendations:

- Utilise BirdWatch Ireland's farmland bird hotspot mapping to avoid afforestation on important areas for wild birds.
- The National Land Use Strategy should ensure that high carbon soils, peatlands and High Nature Value farmland are safeguarded from inappropriate afforestation. Forestry Sensitivity Mapping is one such tool that should be adopted to ensure that afforestation does not negatively impact on biodiversity.

Plantations of even aged stands of monocultures that are harvested using clear-cuts are particularly vulnerable to the projected increase in climate driven biotic and abiotic pressures such as disease, pests, wind throw and fire. Plantations are also unlikely to match the stability–and hence reliability–of C capture exhibited by more natural forests, particularly in the face of increasing droughts and other climatic perturbations. We have already seen the impact that tree diseases such as Phytophthora ramorum and Ash Dieback (Hymenoscyphus fraxineus), wind throw and forest fires have had on Irish forestry in recent decades. Internationally new approaches are being adopted to transition plantation forestry to forests that are more resilient to the effects of a changing climate. These changes in forest management also present new opportunities to improve biodiversity values within existing and new plantation forests. Increasing species diversity within forests is one common approach to improving the biodiversity value and climate change reliance of commercial forestry. The predominance of clearcut forestry has also contributed to the current 'carbon cliff' where the sector will transition to a net source of emissions. This is projected to continue to occur even within scenarios where Ireland hits afforestation targets.

Recommendations

- Ireland should transition away from clear cut forestry to continuous cover and close to nature forestry systems. These sustainable forestry models will be more resilient to climate change and will ensure a more stable carbon sink.
- Plantations on deep peat need to be urgently restored from forestry to peatland, so that they can deliver multiple benefits for the climate and the broader environment. Given the majority of forestry on peat is in State ownership, Coillte should lead from the front in peatland restoration. Research has confirmed the multiple benefits of forest removal on deep peats, highlighting the removal of trees from areas where yields are particularly low as a clear win-win scenario

Q: What can be done to maximise the use of manure and silage as feedstock for biomethane generation in closed digesters and inject into the gas grid to offset natural gas?

Any national drive towards the use of silage in anaerobic digesters needs to be reviewed in the context of the ongoing normalisation of fodder crises in Irish agriculture. This year marks the fourth time in the

last decade when Ireland has experienced moderate to extreme fodder shortages, culminating in acute hunger and starvation of livestock, and severe hardship for farmers. Ireland is in an even more vulnerable position now given that our self-sufficiency in feed grain has decreased from 41% (2014) to 21% (2018). Ireland's vulnerability to this and future fodder shortages is symptomatic of the failure of successive agricultural policies to take into account the risks posed by climate change and geo-political instability, or the need to achieve greater social and environmental sustainability.

Buildings

National Retrofit Plan implementation must be guided by expert advice to ensure that home and building owners do not unwittingly impact nesting birds such as cavity-nesting species like the Red Listed migratory species Swifts aswell as Swallows and House Martins. BirdWatch Ireland has produced a Wildlife in Buildings report to assist and raise awareness of the dangers but additional actions are needed by the State to support guidance and adherence to EU environmental law in this regard. There are ways to avoid and mitigate impacts e.g. Swift boxes can be built into the fabric of buildings. **Recognition of the risks to wild birds and the need to avoid negative impacts must be built into plans from the start and at a strategic level with practical solutions on how to avoid impacts.** Bats also utilise buildings at critical moments of their lifecycles and likewise need strong conservation measures built into the national retrofitting plans.

Waste and the Circular Economy

Introduction

Pillar member the Rediscovery Centre defines the circular economy as follow: "The circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems[19]". The development of the circular economy is an important action in climate mitigation.

1. It should be recognised that a shift to a circular economy will achieve significant GHG savings. This shift should be better examined, quantified and valued.
2. The GHG savings associated with the circular economy are often accrued along the supply chain in ways that are not confined to particular sectors or national territories (e.g. textile production). There are two main problems here that must be addressed:
    1. Currently there is no systematic way to measure carbon savings achieved through reuse.
    2. The emissions savings associated with reuse are distributed throughout the supply chain;
3. A focus on behavioural change is needed. We advocate four main approaches;
    1. End-users of policy programmes should be involved in the design of those same programmes;

2. Community based social marketing should be explored further as a method for affecting behavioural change;
3. Trust in public institutions and leadership must be fostered if the public are to adopt recommended behaviours; and,
4. Ongoing support for the implementation of ReMark - the Reuse Quality Assurance Mark.

1. What are the main barriers to consumers embracing the Circular Economy, e.g. lack of awareness, increased costs compared to disposable products, lack of access to circular goods and services?

The circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems[20]. A pathway to developing a more circular economy is set out in the EU Circular Economy Action Plan 2.0 (CEAP 2.0), adopted as one of the main blocks of the European Green Deal as Europe's new agenda for sustainable growth. A full implementation of the Whole of Government Circular Economy Strategy, the Waste Action Plan for a Circular Economy, and the now legally ratified Circular Economy Act will aid in this transition. Even still, more stringent implementation is needed, particularly in relation to setting and achieving sectoral Greenhouse Gas[21] (GHG) emissions targets, affecting behavioural change among private and public organisations, and supporting and legislating for a circular economy. In relation to this final element, establishing binding sectoral reuse targets is particularly pressing.

As asserted in the EU's circular economy action plan, a transition to a circular economy will represent significant savings in overall GHG emissions[22]. This pathways of action for achieving GHG emissions savings is supported by the annual Circularity Gap Report produced by Circle Economy[23]. 2020 figures highlight that switching to a circular economy could reduce global GHG emissions by 39%[24]. These savings relate to the reduced need for upstream material extraction, manufacturing, transport. Manufacturing and transport accounted for 7.5% and 17.7% respectively of Ireland's emissions in 2021[25]. Transitioning to a circular economy would also reduce emissions associated with end-of-life management of materials which typically accounts for 3-4% of total GHG emissions in OECD countries. It is therefore imperative that the targets of the Whole of Government Circular Economy Strategy, the Waste Action Plan for a Circular Economy, and the now legally ratified Circular Economy Act are met and built upon in years to come. This includes achieving national and sectoral reuse targets. Targets play an essential role where the markets fail to ensure the right environmental or social outcome, due to a failure to recognise externalities. For example, renewable energy and recycling have been widely subsidised through different schemes to ensure that Ireland meets its respective targets and as a result, both activities could now be considered mainstream.

We must move away from a focus on waste and recycling and look towards initiatives that futureproof the design of sustainable products and developing circularity in key value product chains. Circularity is

a prerequisite for climate neutrality as nearly 50% of all GHG emissions come from making and consuming stuff. [26]

Lack of Awareness

Public awareness of the 'circular economy' is quite low, however, many businesses and individuals participate in the circular economy (buying pre-owned items, repairing phones/shoes/cars, taking out a Dublin Bike or sharing a drill with a neighbour), without knowing that these actions are part of a circular economy movement. Creating a central portal highlighting actions around the country will broaden the message, but key to this is linking local reuse/repair/lease actions with the higher task of increasing participation and closing the circularity gap.

In terms of businesses, which have the most to gain and have the largest impact on resource use, there is a lot of work to do. IBEC conducted a survey of its members to understand how aware they were of the circular economy and only half knew what the 'circular economy' was.[27] IBEC represents the largest businesses in Ireland, and we would estimate that the knowledge and benefits of the circular economy within the SME sector would be quite low. There is much work to be done in this sector, especially among the HORECA (hotel, retail and catering) sector.

Awareness of a programme or objective is not enough without effective action to turn awareness into action. For example, everyone knows that we shouldn't drink and drive and there have been and still are many public awareness campaigns about the possible outcomes from drunk driving. However, awareness didn't turn into action until there were strict laws and enforcement supported by an effective campaign that made it a social taboo to drink and drive. Slowly social norms are shifting. Here is our suggested change for behaviour change:

- Raise awareness amongst households, business and individuals about the circular economy and how it can improve their lives and to implement actions that support and lead to effective, ambitious and long-lasting behaviour change;
- We call on the government to invest in and adopt a Community Based Social Marketing (CBSM) Approach.[28]. We cannot continue the current expensive and ineffective large-scale information campaigns using advertising, social media and other general outlets to encourage individuals to adopt sustainable behaviour. Knowledge and awareness of an issue or behaviour often do not equate to long-standing behaviour change. We need a more active and immersive approach by getting into the community, understanding the barriers and benefits of adopting a certain behaviour and finding a strategy to reduce barriers and enhancing the perceived benefits and then piloting the strategy. This may cost a bit more at the outset and be more time and resource intensive, but the desired outcomes will be achieved at a higher level than that achieved through a pure education/public awareness campaign. The Food Waste Pilot Programme[29] recently conducted by the Waste Regions, Cré and the Irish Waste Management Association is a great example of this type of work with the potential for a fuller roll out of the findings from the pilot programme. Additionally, the Recycling Ambassadors Programme, conducted by VOICE, is another good example of CBSM where we ran 700 workshops to 25,000 people.[30]

The involvement of end-users in the development of specific policy interventions: A vast body of research has highlighted the benefits of participative approaches to policy design and implementation. Participation helps to validate policy as legitimate and democratic[31]. Moreover, such approaches can foster a sense of ownership among citizens and those who ultimately end up being governed by the end-product[32]. More than this, research carried out by Runhaar (2017)[33] argues that participation is important because it produces what he refers to as "useful knowledge". Useful knowledge is produced when experts, such as scientists, are brought into meaningful dialogue with practitioners. Such practitioners include farmers in the case of agriculture, store managers in the case of retail, and private householders in the case of domestic consumption. The chief benefit lies in combining formal scientific knowledge with the everyday knowledge of how people carry out their lives and work in specific settings.

The European Innovation Partnerships (EIP) Initiative introduced by the Department of Agriculture Food and the Marine (DAFM) beginning in 2017 offers an excellent example of the kind of approach that could be rolled out in other sectors[34]. In practice, this initiative invited different kinds of stakeholders to form groups, develop a proposal to address an environmental challenge in their local area, and compete for funding to implement their proposed project. Though still in its implementation phase, and while there are limitations[35], this initiative fostered engagement among a range of stakeholders working in specific agricultural contexts and addressing specific agricultural sustainability challenges they had observed through their professional work[36]. This approach offers a working example of a policy initiative that fostered high levels of engagement in a participative policy design and implementation process.

Policy and Regulation

Industry will not change their practices unless it is more economic, brings in more money or is required by law. Shifting to a new way of consuming that provides services rather than products or packaging will require foresight and investment. Therefore, it is incumbent on the government to put in place ambitious policy to curb resource use, keep products in use as long as possible and change how we consume. Some of this work has been done in the Circular Economy bill framework, but the details must be ironed out through future regulations.

We need binding targets for reusable/refillable packaging, which other countries have adopted. For instance, France passed an anti-waste law February 2020[37] which set a national target of 5% refillables packaging units in 2023 and 10% refillables packaging units in 2027 on the total number of packaging units placed on the national market. The law also creates a national observatory for reuse which will collect data and monitor progress as well as a provision that requires 20% of the floor surface of shops larger than 400 square metres must be fitted with refill systems by 2030.

In Romania, as of 1 January 2020, market operators who place packaged products on the Romanian market are required to sell a minimum of 5 percent of their goods in reusable packaging, but not less than the average percentage achieved between 2018 and 2019, with an annual increase by 5 percent until 2025. Consequently, by 2025, at least 30 percent of consumer packaging on the Romanian market will be reusable. Retailers (with the exclusion of retailers with a small sales area) will be required to give consumers the opportunity to choose reusable packaging and return it to the point of sale.[38]

Germany has a beverage container refill target of 70%. According to a German study, "For beverage packaging, setting ambitious European reuse targets of at least 70 percent by 2030 offers great potential for waste prevention, since it accounts for 10 percent of overall packaging waste. Many countries already have a small percentage of refillable beverage packaging on the market, with the necessary infrastructure in place. The mere need to expand these existing systems makes beverage packaging a truly low hanging fruit. Beyond beverage packaging, a reuse target of 25 percent by 2025 and 40 percent by 2030 should be set for sales packaging. For transport packaging, a reuse rate of 70 percent should apply from 2025. These targets should be attributed to all market participants along the entire value chain (producers and retailers) as it has been the case in Romania since 1 January 2020 and member states should be obligated to link them to effective sanctioning mechanisms in case of non-compliance."[39]

We need to create a consumer's 'Right to Reuse' and remove any liability associated with reusable packaging, which will require engagement with the Food Safety Authority of Ireland.

Extended Producer Responsibility – Polluter Pays

One sure way to push businesses to adopt circular economy principals is to tax the bads and incentivise the good. For instance, Italy has placed a tax on virgin plastic resins used for packaging and other items to encourage the take up of recycled plastic. On the other hand, Ireland could also offer VAT relief and tax credits for the purchase and use of refurbished items or items made from recycled material.

Under the EU Single Use Plastic Directive (SUP), EPR schemes, such as REPAK, in Member States must adopt an eco-modulation approach when assessing fees on packaging materials with producers placing easy to recycle packaging on the marketplace paying a much lower rate than those placing hard to recycle packaging on the market This will hopefully put economic pressure on producers to change to more sustainable packaging. We anticipate that this will also bring in more money to REPAK which should be invested in promoting and helping businesses to adopt reusable/refillable packaging systems.

The SUP also calls for enhanced EPR so that producers placing plastic packaging onto the market must pay for the associated costs of litter picking, street sweeping and street bin collection.

We call for:

- **VAT relief and tax credits for refurbished/repairs items** – to encourage the take up of repaired items. According to a European Commission Eurobarometer report,[40] 77% of European citizens

would be willing to have their goods repaired but hardly ever do because it is too expensive for them to do so. Re-use and repair activities need to be made cheaper in order for Europe to keep the value of products and prevent the wastage of resources.

- **Tax on virgin plastic**

- **A Required 2% investment into Reuse Packaging initiatives and infrastructure development** – We call for the investment of 2% of REPAK's annual turnover to be invested in reuse systems each year to assist its members to shift from single use packaging to reuse/refill options. France adopted this level of investment in their waste law passed in February 2020.[41] Some of this money should be invested in developing reuse infrastructure, including regional container washing facilities (for reusable food and drink containers) and logistics development.

- **Expanded EPR clean-up requirement** – We call for the responsibility for financing the clean-up of litter and managing street bins to fall not only on producers/food services using plastic packaging, but also on other disposable on the go packaging. We are seeing a wholescale switch from single use plastic to single use compostable packaging, which is just as damaging to the environment if not collected in the proper organic bins for treatment in an industrial composting facility. Additionally, some of this packaging looks like it can be composted or recycled, but there is no labelling. This is very confusing for the consumer. As we have seen over the last few weeks, litter has increased exponentially with the opening up of the economy and businesses offering food in single use, disposable take-away containers/cups must be responsible for the clean-up and street bin collection costs.

  In Howth, during our Return for Change campaign launch, we noted that most of the generated waste came from single-use cardboard packaging and paper bags, which were collected in residual waste bins. We must encourage businesses to change their business model towards a reuse/refill system.

- **Economic Incentives** – We call for the imposition of levies on disposable on-the-go packaging (including the latte levy) and expanding the plastic bag levy to encompass all single use bags to discourage the switch from plastic to paper bags, which have significant environmental implications and are a waste of natural resources.

Material Transparency

We must 'design out waste'. We also must ensure that in addition to moving towards more repair and reuse, that whatever material used in a product must also be easily recyclable at the end of life and that producers design out hazardous materials to ensure a clean material stream for future use.

We must design out waste and hazardous substances to make circularity easier and more transparent. For instance, it has come to our attention that some of our paper/card/compostable packaging is imbued with PFAS (Forever Chemicals) to create a waterproof and greaseproof barrier. The

presence of these chemicals will affect the safe and effective composability and recyclability of such products.[42]

We call for a ban of PFAS use in food containers. This was done in Denmark and can be done here to protect public health without compromising the effectiveness of food packaging.[43]

Tackle Green Washing Claims and Labelling Practices

When then Minister Naughton announced the adoption of a latte levy a few years ago, many cafes and coffee shops panicked and raced to buy compostable or recyclable coffee cups to avoid the levy. As we know, this levy was never implemented, but the impact was fully felt. Now cafes and shops believe that they are doing the best thing environmentally by investing in biodegradable, degradable, compostable or recyclable packaging. These businesses are being misled by the packaging industry, not knowing that they might be buying packaging that doesn't meet the EU EN13432 standard or not knowing that these items must be disposed of properly in order to compost.

For example, anecdotally, we spoke with a café in Dingle who shifted all their packaging to compostable items. When they contacted their waste collection provider where to put this material, they anticipated that the response would be 'in the organic bin'. However, they were directed to place these items in the residual bin because their industrial composting facility did not accept compostable packaging. This café, which believed that it was doing the 'environmentally friendly' thing by investing in compostable packaging found out that this expensive investment didn't work. We need joined up thinking and a push towards truly 'green' options.

We call for a:

- **Ban on confusing claims/labels on packaging** – All packaging should clearly state in what bin it should be placed. Additionally, packaging that meets the EN13432 standard must say that it is compostable and use the symbol agreed to by Cré. No other terminology, such as degradable or biodegradable, should be used as it is too confusing for the consumer and is misleading. Additionally, there are many food-on-the-go containers that look compostable, but have no label. These too must be labelled as to how to dispose of such items.
- **Required compostable infrastructure** – If a commercial business opts for compostable packaging, it must provide organic collection infrastructure and clearly visible communications to collect such items.
- **Disposal information on Bioplastic** – some of the packaging states that it is made of bioplastic and is better for the planet: This is a confusing claim. Many consumers believe that bioplastic is compostable and will place this in the compost bin; they do not know that bioplastic is often the same polymer as the fossil-based plastic, only made from plant-based sources. Any label espousing the environmental advantages of using bioplastic must also state in what bin the material should go.
- **Adopt ambitious and enforceable reuse/refill targets** for each commercial sector
- **Invest in reuse infrastructure** – reusable containers, easy collection infrastructure, cleaning facilities, logistics and reverse logistics. Cal Poly, a third level institution in the US adopted a reusable container programme with collection bins for reusables, which were then washed and redistributed.[44] This type of reuse model could be adopted in closed loop systems or small towns.

- **Get complete buy-in from government departments for green public procurement.** This purchasing power can positively impact the marketplace and move companies to adopt more sustainable products, practices and operations. In Italy all public authorities are required to apply waste prevention criteria into calls for tenders and contracts. The Italian Code for Public Contracts (Legislative Decree 50/2016, as modified by legislative decree n. 57/2017) in Article 34, sets mandatory environmental sustainability criteria that must be applied by public authorities in public procurement. We would like to see something similar introduced in Ireland.

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[3] OECD (2021), *Environmental Performance of Ireland* https://www.dfa.ie/media/missions/prepparis/OECD-Environmental-Performance-of-Ireland.pdf. The CSO estimated that in 2020 total fossil fuel subsidies amounted to €2.2bn, of which 13% were direct and 87% were indirect subsidies https://www.cso.ie/en/releasesandpublications/ep/p-ffes/fossilfuelsubsidies2020/keyfindings/
[4] DECC (2020), *Climate Action Plan 2021*, p.151
[5] Climate Change Advisory Council (2020), *Annual review 2020,* p.8
[6] Morganrath, Murphy and Moore (2018), 'The Environmental Impact Of Fiscal Instruments', criticised the 0% rating for fertiliser while also highlighting the possible impact on small farmers and proposed the following: "Also, the heterogeneity of farms in Ireland means that this change in the tax system could disproportionally affect small, struggling farmers, who are likely to be low-intensity users of fertiliser. Perhaps an appropriate solution in Ireland would be to charge a normal rate of VAT on fertiliser, thus removing the effective subsidy, but to refund this on the basis of farm size and type. Thus farmers would only be refunded for using the correct amount of nitrogen used, penalising them for excess usage and rewarding them if they use a lower amount than their allocation." P.22, https://www.esri.ie/publications/the-environmental-impacts-of-fiscal-instruments
[7] Including in the ETS
[8] See Morganrath, Murphy and Moore *op.cit.*, for proposals on taxes and duties in aviation.
[9] https://cles.org.uk/what-is-community-wealth-building/the-principles-of-community-wealth-building/progressive-procurement-of-goods-and-services/
[10] https://www.sciencedirect.com/science/article/pii/S0301421518304063
[11] https://fossilfueltreaty.org
[12] https://link.springer.com/article/10.1007/s10584-018-2162-x
[13] For a proposal regarding such a partnership, see https://www.feasta.org/2020/10/15/balancing-with-a-doughnut-feasta-position-paper-on-the-revision-of-the-european-commissions-energy-taxation-directive/
https://www.feasta.org/2020/10/29/position-paper-on-the-eus-carbon-border-adjustment-mechanism/
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[15] Economic and Financial Evaluation Unit (2017) *THE COSTS OF CONGESTION: An Analysis of the Greater Dublin Area*
[16] The report gives a good outline of the various congestion charging schemes in a number of cities, e.g. London, Milan and Stockholm, each of which recoded emissions reductions in CO2 between 14% and 15% and NOX reductions of between 13% and 19%.The paper also gives the example of Vancouver where a mixture of parking charges and road pricing led to a bigger reduction in single occupancy trips than any other measure.
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