



**Rialtas na hÉireann**  
Government of Ireland

# **Call for Expert Evidence**

## Climate Action Plan 2024

Prepared by the Department of  
the Environment, Climate & Communications  
[gov.ie](https://www.gov.ie)

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## Introduction

This decade will be critical if we are to address the climate and biodiversity crisis threatening our safe future on this planet. The Programme for Government commits to an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade), and to achieving net zero emissions by no later than 2050.

These targets have been made legally binding by the [Climate Action and Low Carbon Development \(Amendment\) Act 2021](#). The Act also provides for a strengthened climate governance framework, including the introduction of carbon budgets and sectoral emission ceilings.

The first two Carbon Budgets were adopted by the Oireachtas and came into effect on 6 April 2022, setting us on a path to achieving our required emission reduction targets. Following on from the adoption of the Carbon Budgets, the Irish Government approved Sectoral Emission Ceilings in July 2022. These ceilings set maximum limits on greenhouse gas emissions for each sector of the Irish economy. These ceilings must operate within the parameters of Ireland's Carbon Budgets, setting out a pathway for Ireland to meet its 2030 and 2050 emission targets.

Achieving these targets will be challenging and will require fundamental changes in many parts of Irish life. In rising to the challenge, we will be able to improve the health, welfare and security of all our people, while also protecting our environment and delivering new opportunities in terms of employment and competitiveness.

In December 2022, Climate Action Plan 2023 (CAP23) was approved by Government and published. This latest update to the Climate Action Plan reflected the Carbon Budgets and Sectoral Emission Ceilings by providing a roadmap of actions and measures to support the achievement of the emission reduction targets set out in the Budgets and Ceilings. CAP23 also included actions, measures, policies and plans for a number of areas central to our climate action that are not directly linked to the Sectoral Emission Ceilings, this includes Adaptation, Research, Governance, Just Transition and International Climate Action.

As required by the 2021 Climate Act, the Government is now beginning to prepare the next annual update to the Climate Action Plan, which will be published later this year and will seek to further develop and refine the actions, measures, policies and plans set out in CAP23; in order to support the achievement of our legally binding 2030 targets, prepare for climate neutrality no later than 2050, and make Ireland a leader in responding to climate change.

As with Climate Action Plan 2023, the new Climate Action Plan will have a strong focus on implementation, including actions with specific timelines and steps needed to achieve each action, assigning clear lines of responsibility for delivery. It will be informed by successful approaches in other countries, where such approaches could be adapted for implementation in Ireland.

As part of this consultation, you are invited to consider the cross-sectoral and sector-specific implications of the overall increase in climate ambition set out above, and to set out proposals for additional policies and measures across sectoral areas, including estimations of the associated greenhouse gas emissions reductions and/or increased resilience to the locked-in climate change impacts.

In addition to completing our consultation questionnaire, we would also like to hear your evidence-based views grounded in a comprehensive cross-sectoral perspective on the changes required to meet Ireland's Carbon Budgets, Sectoral Emission Ceilings and 2030 and 2050 climate ambition, including in relation to key systemic choices.

This consultation is open until 17:30 on Friday 14 July 2023 and submissions can be made online through our consultation platform. If you have difficulties submitting a response online, or would like to make a submission by post, email or through Irish please email us at [CallforEvidence@decc.gov.ie](mailto:CallforEvidence@decc.gov.ie)

Please note that responses to this consultation are subject to the provisions of the Freedom of Information Act 2014 (FOI), Access to Information on the Environment Regulations 2007-2014 (AIE) and the Data Protection Act 2018.

The Department may publish the contents of all submissions received to this consultation on its website, the Department will redact personal data prior to publication. In responding to this consultation, parties should clearly indicate where their responses contain personal information, commercially sensitive information or confidential information which they would not wish to be released under FOI, AIE or otherwise published.

We would like to draw your attention to the [Department's Data Privacy Notice](#) which explains how and when we collect personal data, why we do so and how we treat this information. It also explains your rights in relation to the collection of personal information and how you can exercise those rights.

# Sectoral Emission Ceilings

## Introduction

On 28 July 2022, the Irish Government approved Sectoral Emission Ceilings which set maximum limits on greenhouse gas emissions for each sector of the Irish economy to the end of the decade.

These ceilings will operate within the parameters of Ireland's carbon budgets, which set out a pathway for Ireland to meet its 2030 target of reducing emissions by 51%, relative to 2018 levels, and becoming net zero by no later than 2050.

The ceilings have been set for sectors such as Agriculture, Built Environment (Commercial and Residential), Electricity, Industry and Transport. The below table lists these sectors and the emissions reductions required out to 2030 to meet their respective ceilings.

Finalising the Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF) sector was temporarily deferred. CAP23 includes commitments to finalise the ceiling by the end of 2023.

Sectoral Emission Ceilings in the second Carbon Budget period (2026-2030) include unallocated emission savings, reflecting that, in setting the second carbon budget for 2026-2030, it was not possible to fully identify all the emerging technologies, changing scientific consensus or policies to meet our full ambition. CAP23 includes commitments to undertake analysis and distribute the unallocated emission savings by the end of 2023.

Further information on the Sectoral Emissions Ceilings is available at <https://www.gov.ie/en/publication/76864-sectoral-emissions-ceilings/>

## Consultation Questions

1. What do you view as the key actions required to ensure the emission reduction targets set out in the Sectoral Emission Ceilings are met?
2. What do you view as the main challenges/obstacles to the Sectoral Emission Ceilings being met?

# Carbon Pricing and Cross-Cutting Issues

## Introduction

The society-wide change that is required to reach our goal of climate neutrality can only be achieved if it is fully supported by a broader national policy framework, including our fiscal policies, sustainable finance and spatial policy, and the bioeconomy. While these policies may not have an immediate or direct emissions mitigation impact, they act as foundations that will support change, and create the environment that will allow for the successful implementation of other initiatives. It is essential that they remain coherent with Ireland's climate action policies.

## Carbon pricing and cross-cutting policies in Climate Action Plan 2023

The actions associated with the carbon pricing and cross-cutting policies emphasise the importance of these policies as enablers of effective climate action. Key cross-cutting policies identified in the previous Plan included:

- Taxation policies, such as carbon tax and taxation of motor vehicles, that will promote sustainable outcomes
- Implementation of the National Planning Framework;
- Reform of the Public Spending Code to ensure that the shadow price of carbon in public sector project appraisal appropriately reflects Ireland's climate ambitions;
- Development of a sustainable finance sector in Ireland; and
- Promotion of digital transformation, including through the National Broadband Plan establishment of remote working hubs;
- Development of a National Bioeconomy Action Plan.

## 2024 Climate Action Plan

The 2024 Climate Action Plan will sustain our high level of climate ambition, as Ireland continues to strive for carbon neutrality by 2050. The actions identified in the 2024 Climate Action Plan can only be successfully implemented if the necessary cross-cutting and taxation supports are in place.



## Consultation Questions

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?
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?
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?
4. What additional opportunities exist to further promote the digital transformation of our economy and society to support Ireland in its transition to a carbon neutral society?
5. What regulatory and administrative supports can be provided to organisations to help them carry out their business in a manner that aligns with the National Climate Objective?
6. What regulatory or administrative supports can be provided to ensure bioeconomy activities accelerate across all sectors?
7. What role can gender equality play in achieving our climate action goals? Are there any significant cross-cutting gaps not previously discussed in previous Climate Action Plans that need to be addressed? Are there any other cross-cutting issues that should be considered in the development of the 2024 Climate Action Plan?

## Electricity

Emissions from the electricity sector remained relatively static between the period 2010 to 2016 as a rising demand for power offset the increase in generation from renewables. Emissions from electricity have fallen annually from 2017, with further increases in the level of renewable generation. The Climate Action Plan 2023 recognises the importance of decarbonising the electricity sector by taking advantage of our significant renewable energy resources. The Climate Action Plan sets a target for 80% renewable electricity by 2030.

The Sustainable Energy Authority Ireland (SEAI) published their Energy in Ireland 2022 report in December 2022. The report shows that the share of electricity generated by renewables was 36.4% in 2021, down from 39.1% in 2020. 84% of all renewable electricity came from wind, with the remaining 16% split across hydroelectricity and bioenergy sources.

Under Climate Action Plan 2023, the following targets were set for the electricity sector by 2030:

- Reduce CO<sub>2</sub>eq. emissions from the sector by 3 MtCO<sub>2</sub>ep. per annum by 2030
- Carry out a work programme to identify a route to deliver 1-3 TWh of zero emissions gas (including green hydrogen) by 2030, potentially equivalent to 0.2-0.4 MtCO<sub>2</sub>eq abatement.

Our climate targets will be delivered through a set of enabling targets by 2030:

- Increasing the share of electricity demand generated from renewable sources to 50% by 2025 and 80% by 2030 where achievable and cost effective, without compromising security of electricity supply.
- Deliver 6 GW of onshore wind and up to 5 GW of solar PV by 2025
- Deliver 9 GW of onshore wind, at least 5 GW of offshore wind, and 8 GW solar PV by 2030.
- At least 500 MW of these renewables will be delivered through local community-based projects, subject to competition as appropriate
- Deliver at least 2 GW of new flexible gas-fired power stations in support of a high variable renewable electricity system
- Delivery of three new transmission grid connections or interconnectors to Northern Ireland, Great Britain, and the EU
- Explore further interconnection, including hybrid interconnectors (combined cross border transmission network with offshore renewable generation), to other countries

- Expand and reinforce the grid – through the addition of lines, substations, and new technologies
- Complete the phase-out of coal and peat-fired electricity generation
- Ensure that 20-30% of system demand is flexible by 2030

## **Carbon Budgets and Sectoral Ceilings**

Following the adoption of the carbon budgets, sectoral emission ceilings, prepared by the Minister within the limits of the carbon budget, have been approved by the Government. These sectoral ceilings determine the maximum amount of greenhouse gas emissions that are permitted in different sectors of the economy during a carbon budget period.

**The agreed sectoral emission ceiling for the Electricity sector is a 75% reduction by 2030, relative to 2018 levels**

## **Consultation Questions (see also The Marine Environment)**

1. What options are available to increase the penetration of renewable electricity beyond the 80% committed to in Climate Action Plan 2023?
2. What can be done to accelerate/facilitate the delivery/deployment of offshore wind and solar PV in particular, in the context of Climate Action Plan 2023 and the REPowerEU ambition?
3. What role does renewable gas have in the power generation sector?
4. What role could carbon, capture and storage have in decarbonising our power sector?
5. What other opportunities exist to support the decarbonisation of the electricity sector?
6. What measures might be taken to improve the resilience of the electricity system to the impacts of climate change?
7. What role do you see for electricity storage and demand-side response in providing flexibility to a system comprised of high renewable penetration and in supporting the decarbonisation of the electricity sector?
8. What financial incentives are needed to increase renewable generation capacity?
  - a. To incentivise commercial scale production.
  - b. To incentivise microgeneration.
9. What are the regulatory challenges for reaching the renewable energy share targets?

- 10.** What measures can ensure the security of electricity supply sustainably in a system with a high amount of variable renewables?
- 11.** What behavioural measures and incentives can be put in place to ensure that 15-20% of demand is flexible by 2025?
- 12.** What are the planning and permitting barriers to infrastructure development to support 80% renewables; such as new generation capacity, grid reinforcements and system services? How best can these barriers be removed or mitigated against?
- 13.** How can the upfront costs of securing the transition to an 80% renewable electricity system best be balanced across society?
- 14.** How can the State ensure long-term sustainable funding and resources for research needed to optimise the delivery of offshore renewable energy?
- 15.** How can the State better harness research insights for public communications around offshore renewable energy policy?

# Industry

## Introduction

Industry will play a pivotal role in our ability to meet our 2030 and 2050 targets. It shapes the way materials are managed, from raw states to final consumption and disposal.

Beyond the emissions from its primary operating activities, it can also influence the wider economy as it shapes the way materials are managed, manages large transport flows, builds and uses a large share of our buildings and it influences a vast supply chain by the priorities it sets. Emissions from the industry sector reduced by approximately one third between 2005 and 2011. However, they rebounded by over 25% up to 2018, with a slight reduction seen in 2019. This demonstrates how correlated emissions in this sector are to economic growth. While the economic recovery did see some switch to renewable energy sources, the increase in emissions has shown that the link between emissions and economic growth has not been broken.

GHG emissions increased by 0.9% in Manufacturing Combustion in 2021 while the industrial processes sector was responsible for 4.0% and F-Gases 1.2% of Ireland's total greenhouse gas (GHG) emissions in 2021.

There were decreases in combustion emissions from major sub sectors including chemical and the food processing, beverages and tobacco sector, i.e., 3.2% and 4.4% respectively. However, combustion emissions from non-metallic minerals (including cement) increased significantly by 10.5% and 0.12 Mt CO<sub>2</sub>eq.

Emissions from the industrial processes sector increased by 16.8% (0.35 Mt CO<sub>2</sub>eq.) in 2021 when compared to 2020. Total process emissions from the mineral products subsector (including cement) increased by 18.1% in 2021 compared to 2020 emissions.

## Industry targets set in the 2023 Climate Action Plan

Under Climate Action Plan 2023, the following measures were set out to meet the level of emissions required by 2025:

- Expand and enhance supports from the Sustainable Energy Authority of Ireland (SEAI), IDA Ireland and Enterprise Ireland (EI) with a focus on achieving energy efficiency, electrification and biomass adoption in industry aligned with the above KPIs;
- Develop and deliver policies to ensure increased supply of zero-emission gases aligned with the above KPIs;
- Actively deliver a series of measures to reduce embodied carbon in construction materials; promote the swapping to lower embodied carbon construction materials wherever possible; and reduce emissions from cement production aligned with the above KPIs;

- Promote alternative construction materials through robust carbon lifecycle assessment of construction projects. Switching from high global warming potential (GWP) materials to low GWP materials, as well as reducing the GWP of individual materials;
- Reduce Ireland's annual industry emissions from 7 MtCO<sub>2</sub>eq. in 2021 to 5.7 MtCO<sub>2</sub>eq. annually by the end of the period 2023 to 2025;
- Reduce Ireland's annual industry emissions to meet carbon budget for 2025 to 2030. To meet the level of emissions required by 2030 we will:
- Expand and enhance supports from the SEAI, IDA Ireland and EI with a focus on achieving energy efficiency, electrification and biomass adoption in industry aligned with the above KPIs;
- Develop and deliver policies to ensure increased supply of zero-emission gases aligned with the above KPIs;
- Actively deliver a series of measures to reduce embodied carbon in construction materials, and emissions from cement production.

## 2024 Climate Action Plan

Climate Action Plan 2024 represents a sustained high-level of ambition, as Ireland continues to strive for carbon neutrality by 2050. Ireland must now focus on the implementation of direct emission reduction actions outlined in CAP23. DECC has carried out some research on how the new target could be met and listed below are some questions that have arisen out of that research. The following consultation questions relate to areas that the DECC is considering as it identifies actions that will form part of the forthcoming Climate Action Plan.

## Consultation Questions

1. What measures can be taken to facilitate the achievement of carbon-neutral low temperature heating targets set out in CAP23 in manufacturing sector?
2. What measures can be taken to decarbonise high temperature heating in industry?
3. What role could Carbon Capture and Storage (CCS) have in industry, and what steps would encourage its deployment?
4. What other opportunities exist to drive the decarbonisation of the industry sector?
5. What measures should be taken to address the risks that climate change poses for industry?
6. Are the measures that can be taken to assist businesses sustain the additional operating costs associated with moving to new, low-carbon technology?
7. Are there areas of industry that Ireland should develop in response to climate change?

# Built Environment

## Introduction

Emissions data published by the EPA in April 2023 indicates that emissions from the Built Environment decreased by almost 6% in 2021. The decrease in emissions is primarily a result of a reduction in remote working, a mild winter and increased fuel prices. However, despite this reduction emissions from the Built Environment remain greater than pre-Covid (i.e. 2019) data. Therefore, it is important that we continue to improve the energy efficiency and construction quality of our buildings. This will improve our living standards by making our buildings more comfortable, healthier, safer and less costly to heat.

## Climate Action Plan 2023

The Built Environment chapter of the 2023 Climate Action included 39 actions that intended to reduce emissions from the sector and allow the sectoral ceilings to be achieved.

These actions included:

- Phase out of fossil fuels for space and water heating in all buildings;
- Retrofit 500,000 dwellings to BER B2 or cost optimal equivalent under the National Residential Retrofit Plan including the installation of 400,000 heat pumps in existing dwellings;
- Deployment of zero-carbon heating to 50,000 commercial buildings;
- Development of district heating with initial capacity of 2.7TWh;
- Installation of 280,000 heat pumps in new homes
- Construction of all new buildings to NZEB standard;
- Introduction of new regulations for construction, retrofit and renewable energy installations in buildings in line with forthcoming EU legislation

A full list of the actions and details on progress to date in achieving them can be found online.

## Sectoral Emission Ceiling

Emissions from the Built Environment have been sub-divided into two categories from a sectoral ceilings perspective. These categories are Residential, and Commercial/Public. The agreed reduction in emissions by 2030 for the two categories ceilings have been set out below.

	Baseline (Mt CO <sub>2</sub> eq.)	Sectoral Ceilings for each 5-year carbon budget period (Mt CO <sub>2</sub> eq.)		Indicative Reduction in Emissions in Final Year of 2021-2025 carbon budget period (Mt CO <sub>2</sub> eq.)	Indicative Reduction in Emissions in Final Year of 2026-2030 budget period compared to 2018
		2021-2025	2026-2031	2025	2030
Residential	7	29	23	~20%	~40%
Commercial/Public	2	7	5	~20%	~45%

Emissions from public sector buildings are included in the commercial/public sectoral ceiling and consequently Climate Action Plan 2023 contained actions to reduce emissions from those buildings in the Built Environment chapter for the first time. In previous Plans those actions were set out in the “Public Sector Leading by Example” chapter. Future Climate Action Plans will follow this layout.



## National Heat Policy Statement

Following from the publication of the SEAI's National Heat Study in February 2022 a draft National Heat Policy Statement has been prepared and is due for publication in the near future.

## Built Environment/Heat Delivery Taskforce

A Heat & Built Environment Delivery Taskforce has been established to drive the decarbonisation of the built environment. Its work includes the following areas:

- Residential Retrofit;
- Renewable Heat;
- District Heating;
- Decarbonisation of commercial buildings; and,
- Decarbonisation of public sector buildings

## 2024 Climate Action Plan

The forthcoming Climate Action Plan will sustain our existing level of ambition to reducing greenhouse gas emissions from the built environment, as Ireland continues to strive for carbon neutrality by 2050. Ireland must now focus on the implementation of our emission reduction polices and consider what further improvements can be made to our measures already in place.

The following consultation questions relate to areas that the Department of the Environment, Climate and Communications is considering for the development of actions for the forthcoming Climate Action Plan 2023.

1. What further supports can be put in place to address the split incentive when retrofitting rental properties (residential and commercial)?
2. How can we encourage SMEs to upgrade the energy efficiency of the buildings they own?
3. What immediate actions can we take to address the skills shortage in the construction sector, to facilitate meeting our annual retrofitting targets?
4. How can we ensure that necessary skills will be available to support district heating projects?

5. How can we ensure that the opportunities presented by the decarbonisation of the Built Environment will benefit all genders?
6. How can we further support local authorities to deliver on social housing retrofit targets?
7. In addition to the existing financial supports and policy measures, are there any other incentives/assistance needed to help homeowners upgrade the energy efficiency of their homes?
8. How could the roll-out of district heating be accelerated and what needs to be done to expand its coverage in Ireland?
9. Are there any specific obstacles in the planning system that is impeding the rollout of district heating and the national retrofit plan? How can we overcome these barriers?
10. What policy levers are needed to encourage and support the retrofitting of shared properties e.g. apartments?
11. What specific actions can the public sector take to improve the efficiency of its building stock?
12. What supports are required for the retrofit of traditional (pre-1940s) and heritage buildings?
13. Further to the existing supports financed by carbon tax revenues, how can we protect those who are currently experiencing fuel poverty and those who are at risk?
14. What specific measures can be implemented to improve the efficiency of rolling out the National Retrofit Programme?
15. Further to those technologies identified in previous iterations of the Climate Action Plan, what other additional measures could be used to reach our emission reduction target in this sector?
16. What specific measures would incentivise a greater rate of oil boiler replacement?
17. What is the next step for geothermal energy application to the built environment?

# Transport

## Introduction

The transport sector accounted for 17.7% of greenhouse gas emissions in 2021.<sup>1</sup>

The constraints on travel in 2020 as a result of COVID-19 resulted in transport sector emissions levels falling to 10.3 Mt CO<sub>2</sub>eq., relative to its 12.2 Mt CO<sub>2</sub>eq. emissions baseline. 2021 saw an increase in emissions to 10.9Mt CO<sub>2</sub>eq, largely driven by the cessation of public health restrictions that had artificially reduced transport demand. The SEAI interim energy balance for 2022 show a 6.5% increase in national transport emissions over 2021, to 11.4 Mt CO<sub>2</sub>. The continued increase in transport fuel usage is largely due to a rebound in transport activity post-pandemic.

Cyclical increases in economic activity have always been reflected in a growth in demand for transport. When this historical trend is coupled with our projected population growth, to 5.7 million by 2040, it is vital to consider how we can provide a sustainable transport system that can meet that anticipated demand. We need to consider how shifting from private passenger cars to sustainable modes of transport can be achieved; in particular, how can walking, cycling and other forms of active mobility be part of our daily lives whether that be for commuting or leisure purposes.

## Transport targets set in the 2023 Climate Action Plan

The Transport chapter of Climate Action Plan 2023 brings a real, new focus on the need for systemic action, at all levels of Government, in order to better integrate our planning and transport systems so that we can achieve the 50% emissions abatement target for the sector. Our new 'Avoid-Shift-Improve' approach to the classification of actions, and focus on high-impact measures, such as through roadspace reallocation, focus on communication and engagement strategies, and the promotion of viable alternatives to private car use, was informed by the OECD Report, commissioned by the Climate Change Advisory Council, on the Irish transport system – [\*Redesigning transport: Towards Irish transport systems that work for people and the planet.\*](#)

New indicators have been introduced, and certain CAP21 indicators have been reframed, to make very clear just how transformative the level of system change required will be.

These revised indicators include:

- a reduction in total kilometres driven of 20%,

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<sup>1</sup> Source: [EPA](#).

- to reduce our fuel use in transport by 50%,
- to have nearly 1 in 3 cars on the road as a battery electric vehicle; and
- to reduce the modal share of daily car journeys from over 70% to c. 50% by 2030.

## Sectoral Emission Ceiling

The Transport sector's sectoral emission ceiling for the first carbon budget period (2021-2025) reflects a 20% reduction in emissions and a 50% reduction in the second budget period (2026- - 2030), relative to 2018 levels.

## Consultation Questions

### *Avoid Measures*

1. What improvements should be made to ensure transport-oriented planning and development (commercial and residential) is realised on a consistent basis to avoid further forced car dependency or lock-in of unsustainable practices?
2. What changes should be considered in relation to the management of roads in urban centres to reduce congestion and support the prioritisation of more sustainable modes? (e.g. reducing speed limits, parking policy, higher parking charges, low-emission zones)
3. What changes should be considered in relation to the management of Ireland's road network? (e.g. to charge motorists for distance or time spent travelling on the network)
4. What potential do blended working policies or remote working hubs have to help reduce commuting travel and transport emissions?
5. What potential do digitalization, innovation and efficiency improvements in the commercial sector have to deliver further emissions abatement in transport? What are the barriers to delivery of each?

### *Shift Measures*

6. How can the delivery of physical infrastructure, such as public transport projects, cycle lanes and urban roadspace reallocation be more effectively accelerated?
7. What measures and supports are needed to ensure the effective development of shared mobility options and hubs?
8. 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?
9. What expectation or level of public transport service is appropriate in rural communities and what other key measures can support a transition to sustainable modes?
10. What policies or measures can be considered to further incentivise the use of more sustainable modes of transport for education and leisure-related journeys?

### *Improve Measures*

- 11.** What specific measures should be applied to deliver additional emissions reduction and improved energy efficiency in the transition of our vehicle fleet from fossil-fuels?
- 12.** What specific measures should be applied in the commercial transport sector to encourage or accelerate a change to EVs or to other zero carbon alternatives?
- 13.** What specific actions can government take to help create a robust second-hand market for electric vehicles?

### *Open*

- 14.** How important is the role of public engagement and communications in encouraging individual behavioural change, and what forms of engagement are considered most effective? What more can be done to demonstrate the benefits of modal shift?
- 15.** What are the key elements of a just transition in transport? Are there certain cohorts that should be insulated from potential increased costs or how best can we address distributional impacts in a more equitable manner?
- 16.** What other opportunities exist to support the decarbonisation of the Transport sector?

# Agriculture

## Introduction

Greenhouse gas emissions from the agriculture sector increased by 2.9% to 23.09 Mt CO<sub>2</sub>eq. in 2021, compared to 2020. Irish agriculture has a positive international reputation in terms of producing high quality, sustainable produce. The long-term challenge for the sector is to meet the national policy objective of climate neutrality, while not compromising our capacity for sustainable food production. The Government is committed to finding the balance between environmental, climate and biodiversity needs, and supports for farmers.

Climate Action Plan 2023 outlines measures to meet our national targets. This is underpinned by actions aimed at: reducing emissions on our farms by vigorously adopting the abatement opportunities identified by Teagasc; promoting diversification of land use as part of a gradual transition; harnessing opportunities in the bioeconomy; realising the potential of sustainable bioenergy supply opportunities; better management of our peatlands and soils; and developing clusters of exemplar practice.

## Agriculture targets set in the 2023 Climate Action Plan

The following targets were set for the sector by 2030:

**Carbon Budget 1:** 106 MtCO<sub>2</sub>eq.

**Carbon Budget 2:** 96 MtCO<sub>2</sub>eq.

**Emissions Abatement (on 2018):** -25% (17.25 MtCO<sub>2</sub>eq. per annum by 2030)

## Consultation Questions

1. What are the opportunities to increase take-up of measures identified in AgClimatise and encourage adoption of other practices which reduce emissions?
2. What policies and measures would be needed to support farmers diversify their farm activities to include opportunities such as bioenergy, vegetable growth, forestry, organic farming, etc.?
3. What can be done to maximise the use of grass, manure, and silage as feedstock for biomethane generation or for processing through biorefineries?
4. What other opportunities exist to support the decarbonisation of the agriculture sector?
5. What specific measures can be taken in agriculture to adapt to climate change?

# Land Use and Forestry

## Introduction

### LULUCF Targets in Climate Action Plan 2023

Pending the finalisation of a sectoral emissions ceiling for the LULUCF sector by the end of 2023, this Climate Action Plan commits to measures and actions to achieve accelerated emissions reductions in the sector through LULUCF actions out to 2025 comprised of:

- **Forest Land:** Increase our annual afforestation rates from approximately 2,000 hectares (ha) per annum in 2021 and 2022 to 8,000 ha per annum from 2023 onwards, to deliver an additional 28,000 ha of afforestation across the first carbon budget period
- Develop, assess, and adopt as appropriate the new Forestry Programme and Coillte's Strategic Vision
- Promote forest management initiatives in both public and private forests to increase carbon sinks and stores
- **Cropland:** Increase the use of cover crops to 25,000 ha and 35,000 ha of cereal area to incorporate straw directly into soil
- **Grassland:** Improve our management for carbon sequestration of 200,000 ha of grasslands on mineral soils
- Reduce the management intensity of grasslands on 25,000 ha of drained organic soils
- **Wetlands:** Rehabilitate 33,000 ha of peatlands as part of the Bord na Móna Enhanced Decommissioning, Rehabilitation and Restoration Scheme and LIFE People and Peatlands programmes.

[Phase 1 of the Land Use Review](#), identified the percentage area of land in public ownership in Ireland as approximately 8% and private ownership as approximately 78%, with the remaining 14% likely to be mostly in private residential ownership; and action at scale is needed across both public and private lands across many of the measures outlined above.

## Consultation Questions

1. What can be done to increase sequestration through forestry (afforestation, extended rotations, and improved forest management)? How can landowners/land managers be supported to take up these practices?

2. What opportunities are there to rehabilitate our peatlands and wetlands, and what can be done to realize these opportunities? How can landowners/land managers be supported to take up these practices?
3. What measures would support increased sustainable management of grasslands, including those areas on drained organic soils? How can landowners/land managers be supported to take up these practices?
4. What opportunities exist for increased use of cover crops, incorporating straw into tillage and for the application of regenerative agriculture practices? How can landowners/land managers be supported to take up these practices?
5. What specific measures can be taken in forestry and land use to adapt to climate change? How can landowners/land managers be supported to take up these practices?



# The Marine Environment

## Introduction

Significant developments are currently under way in the planning and consenting regime for the marine environment to support our ambitions for decarbonising our energy sector through the development of offshore renewable energy. Alongside this, work is being undertaken to designate further marine Special Areas of Conservation and Special Protection Areas in the marine environment and to allow for the designation and management of Marine Protected Areas. This will facilitate the development of offshore renewable energy to progress at pace alongside the conservation, protection, and recovery of marine biodiversity.

## Consultation Questions (see also Electricity)

1. What sort of role could Ireland's marine environment have in delivering climate mitigation? What are the building blocks that need to be put in place to support the role of the marine environment in climate mitigation (e.g. a regulatory framework, measurement and accounting rules)?
2. What specific measures can be taken in the marine environment to adapt to climate change?
3. What other opportunities exist to support the decarbonisation of the marine sector?
4. How can public understanding of the impacts of climate change on our seas and oceans be improved?
5. How can research and innovation contribute the development of the plan-led approach to offshore renewable energy to maximise the economic and social benefits for all?
6. How can the State build its marine environment and biodiversity evidence base and identifying priority areas for research?
7. How can the State build its marine environment and biodiversity research skills base?
8. How can the State best coordinate a plan of work across bodies/agencies with the relevant expertise on marine environment and biodiversity? What are lead Departments/agencies and appropriate structures to ensure this is effectively managed?

# The Circular Economy and Other Emissions

## Introduction

Our current linear production and consumption model (based on produce, use and dispose) is significantly carbon and resource intensive. We need to move to a more sustainable production and consumption model by changing how we consume materials and resources; how we design the products that households and businesses use and how we extend the productive life of all goods and products in our society and economy.

With a circularity rate of 1.8%, Ireland lags well behind the EU average of 12.8%. Improving this rate will yield savings not only in tonnes of materials wasted, but also in carbon emitted. The Whole-of-Government Circular Economy Strategy provides an overall national policy framework for the circular transition to significantly improve Ireland's circularity performance above the EU average by 2030. These measures will make provision for Circular Economy Sectoral Roadmaps which will, in turn, develop targets in sectors where increasing circularity will have a significant impact, such as construction, transport, agri-food and consumer goods, and sustainable product innovation.

The 'Other Emissions' accounted for in this section include F-Gases, Waste and Petroleum refinement. These sources accounted for 2.8% of Ireland's GHG emissions in 2021, down from 3% in 2020. Waste is the largest of the three emission sources in the sector, accounting for 1.4% of Ireland's GHG emissions in 2021, down from 1.5% in 2020. The Actions to reduce emissions from these activities include implementing and monitoring F-gas regulations, rapidly increasing the levels of recycling of materials and overall reducing waste sent to landfill and improving process efficiencies of petroleum refining.

## Circular Economy and Other Emissions targets set in Climate Action Plan 2023

### Landfill Reliance Target:

- Limit diversion of biodegradable municipal waste to landfill to maximum limit of 427k tonnes ; and
- Reduce diversion of municipal waste to 10% by 2035.

### **Recycling:**

- Recycle 65% of municipal waste by 2035;
- Recycle 70% of packaging waste by 2030;
- Recycle 55% of plastic packaging waste by 2030; and
- Separate collection obligations extended to include hazardous household waste (by end 2024), bio-waste (by end 2023), and textiles (by end 2024).

### **Food Waste:**

- Reduce food waste by 50% by 2030.

### **Plastic Single-Use Items:**

- Provide for 90% collection of plastic drinks containers by 2029;
- Achieve the waste reduction targets through prescribed measures no later than 2026;
- Ensure all plastic packaging is reusable or recyclable by 2030.

### **Reduce Emissions from Petroleum Refining**

- Encourage the use of renewables in the petroleum refining process
- Investigate applicability of use of biomethane in the petroleum refining process.
- Reduce use of petroleum-based fuel

## **Consultation Questions**

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?
2. What other opportunities exist to support decarbonisation through the acceleration of a transition to the circular economy?

# Public Sector Leading by Example

## Introduction

Engaged and empowered public bodies can achieve more than just reduce their own emissions; they can stimulate and inspire action across wider society. Public bodies are now leading in taking early action on climate change, which is fundamental to achieving our decarbonisation goals. To demonstrate leadership, inspire innovation, stimulate supply chains, and highlight practical applications, it is essential that the public sector continues to lead by example in the transition to a climate neutral economy and society. This includes ongoing practical emissions reduction, by retrofitting public buildings and electrifying public sector fleets, as well as embedding climate considerations in all public sector decision-making, particularly in relation to investment.

## Public Sector targets under Climate Action Plan 2023

### The Climate Action Plan 2023 committed to the following targets:

- By 2025
  - Achieve our buildings and retrofitting targets
  - Procure only zero emission vehicles from 1st Jan 2023 onwards, unless the vehicle is exempt under the European Communities (Clean and Energy-Efficient Road Transport Vehicles) (Amendment) Regulations (S.I. 381 of 2021)
  - Implement and review the Public Sector Climate Action Mandate annually
  - Develop a new Green Public Procurement Strategy and implementation action plan, based on a review of Green Tenders
  - Public Bodies leading by example, shall specify low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023
- By 2030
  - Reduce GHG emissions from the sector by 51%
  - Increase the improvement in energy efficiency in the public sector from the 33% target in 2020 to 50% by 2030

## Consultation Questions

1. What sort of climate reporting would you like to see from the public sector in the future?
2. How visible has public sector climate leadership been to date? Do you think it has been successful in inspiring wider climate action? Can you identify other opportunities for the public sector to show climate leadership?
3. If you were designing climate action training for public sector employees, what elements would you consider essential?
4. How would you recommend approaching the retrofitting and decarbonisation of the public sector's building stock?
5. What other opportunities exist to support decarbonisation of the public sector?
6. How might the public sector best report on green public procurement?
7. What approach could be taken to measuring scope 3 emissions for the public sector?
8. How can the public sector optimise investment in climate action to deliver its climate objectives?

# Just Transition

## Introduction

Climate Action Plan 23 identifies that delivering a just transition is based on recognising the transformational level of change required to meet these targets and having a shared understanding that the transition is fair, just, and that the costs are shared equitably. Our climate policies should, therefore, seek to protect the most vulnerable.

The Climate Action and Low Carbon Development (Amendment) Act 2021 situates a just transition to a climate neutral economy as a process, within the wider statutory framework of climate action, which endeavours, in so far as is practicable, to maximise employment opportunities, and support persons and communities that may be negatively affected by the transition.

Climate Action Plan 2023 sets out a Just Transition Framework to guide our approach to implementing climate action policies. The framework consists of four principles:

1. An integrated, structured, and evidence-based approach to identify and plan our response to just transition requirements.
2. People are equipped with the right skills to be able to participate in and benefit from the future net zero economy.
3. The costs are shared so that the impact is equitable and existing inequalities are not exacerbated.
4. Social dialogue to ensure impacted citizens and communities are empowered and are core to the transition process.'

The instruments, policies and regulations deployed in the delivery of our climate policy will need to align with these four principles, and ensure they are taken into account in their design and implementation. Ministers and Departments will therefore be asked to ensure consideration is given to this Just Transition Framework in the implementation of their climate action policies. Examples of where we are already integrating just transition considerations into our policy development through CAP23 include:

- Integration of community participation mechanisms in the Renewable Electricity Support Scheme, a package of enabling support (including technical, financial, and legal services) that has been rolled out to assist communities in navigating renewable electricity challenges;
- Provision of 100% grant funding for retrofitting to lower income households under the Warmer Homes Scheme;
- The Connecting Ireland Rural Mobility Programme, which aims to enhance existing services and introduce new public transport services to improve the alternatives to private car use.

The Government has also committed to the establishment of a Just Transition Commission to provide advice in this area and to ensure that there is an integrated approach that fully embeds the just transition principles into the delivery of climate policy.

It is proposed that Commission be tasked with four related functions, considering the key elements of the Just Transition framework:

- Monitoring progress in relation to the implementation of the just transition framework and preparing reports and recommendations to Government and the Oireachtas.
- Commissioning research, to examine which sectors of the economy are most likely to experience disruption as a result of the transition, as well as exploring solutions to mitigate against these challenges |.
- Providing advice and support to the Minister and Government in relation to social dialogue in a manner which effectively integrate just transition considerations.
- Examining specific just transition issues, providing recommendations to Government on potential solutions to mitigate against these challenges.

## **Consultation Questions**

1. Are there any emerging areas of vulnerability in specific sectors of the economy as a direct result of the implementation of Ireland's climate action policies?
2. What additional supporting interventions should be considered by the Government to address the four principles of our Just Transition Framework within individual sectors?
3. How should Local Authorities seek to integrate just transition considerations into the preparation of their statutory Climate Action Plans?
4. Are the proposed functions for the Just Transition Commission appropriate?



# Research and Innovation

## Introduction

Research and Innovation are important enablers in meeting our goals. High-quality research is vital in providing a robust, timely and effective evidence-base for policy across all activities and in providing the basis for the product, process, behavioural change and organisational innovation required in the transformation to a climate neutral and sustainable Ireland. Addressing climate change is a fundamental, complex and multi-faceted issue for society. It is intrinsically linked to a range of environmental and sustainability challenges and commitments including transforming our energy and food systems, creating a circular economy and bioeconomy, ensuring we have clean air, water and soils, protecting and restoring our biodiversity and adapting our society and infrastructure to climate change impacts. Research and Innovation will also be a key element across all sectors and disciplines in identifying solutions to climate change and wider environment and sustainability challenges.

## Climate Action Plan 2023

CAP 23 included a dedicated Chapter on Research and Innovation. Several areas of strategic importance for climate related research and innovation were identified. These included: Expertise, Knowledge and Evidence; Climate Science and Research Infrastructures; Systems Research and Modelling; Technology and Innovation; Supporting Delivery at Local Level and Ensuring a Just Transition; Policy Monitoring and Evaluation; Research Networks and Co-ordination; Climate Finance and Climate Communications. A number of key actions were also set out in the Plan.

## 2024 Climate Action Plan

Climate Action Plan 2024 will set out a comprehensive and ambitious whole-of-Government agenda. It is important to ensure that the best scientific evidence and advice continues to be available to underpin Government climate policy and action. In doing so, the collective impact of research and innovation in meeting climate targets needs to be maximised. The following consultation questions relate to areas that the Department of the Environment, Climate and Communications is considering as it identifies actions that will form part of the forthcoming Climate Action Plan 2024.

## Consultation Questions

1. Are the required research and innovation programmes and structures in place to support our climate ambitions; including in relation to the areas of strategic importance identified in Chapter 4 of CAP23?
2. Are the required mechanisms and structures in place to ensure the provision of the evidence needed to underpin policy in a timely manner? How can this be improved?
3. Have you identified any research and innovation gaps which need to be addressed? If so, how can these gaps best be addressed?
4. Are there important areas of research and innovation, where Ireland currently does not have sufficient capability, that need to be developed? If so, what are these areas?
5. Is the research and innovation system developing and retaining the skills needed to deliver on our climate ambitions?