Rialtas na hÉireann
Government of Ireland

Climate Action Plan

Progress Report

Q3 2023

Prepared by the Department of the Taoiseach, November 2023
gov.ie/ClimateAction

Table of Contents

1 Executive Summary

This is the third Progress Report on Climate Action Plan (CAP) 2023. It details progress on the 42 actions due for implementation in Q3 2023. A **delivery rate of 29%** is reported, with 12 of the Q3 actions completing on time. A considerable number of delayed actions report minor delays and are expected to complete shortly.

The progress of actions delayed from Q1 and Q2 2023 is also included in this report, with 50% of overdue actions completing in 2023 (12 of 24 actions). Combining delivery from Q1, Q2 and Q3 2023 results in an implementation rate of **67% for CAP23 to date** (87 of 129 actions delivered so far).

As with previous progress reports and reflecting the six high impact areas identified in CAP23, this report is organised into sectoral chapters in order of emissions impact (Agriculture, Transport, Electricity, Buildings, LULUCF, and Industry). Attention is given to Key Performance Indicators (KPIs) in each sector, the most recent state of play on emissions estimates and projections published by the EPA[1], sectoral recommendations published this quarter by the Climate Change Advisory Council (CCAC) in its Annual Review and action case studies.

Progress reporting by the Department of the Taoiseach on CAP23 remains largely confined to new initiatives or significant steps towards achieving the Government's climate ambitions. As such, the continued implementation of lower impact and/or already established activities ('non-reportable' actions from the CAP23 Annex of Actions) is assumed and do not fall for centralised reporting. High-impact activity is thus detailed in this Q3 2023 Progress Report, with information on every reportable action due this quarter contained at **Appendix 1**.

1.1 Climate change news and activity in Q3 2023

"The era of global boiling has arrived". This stark and timely quote from António Guterres, UN secretary general, summed up the record-breaking weather and its impacts seen in Q3 2023. The trend of extreme weather has worsened, and July was recorded as the warmest month on record globally. This was also the fourth consecutive month of record-high global

[1] This includes the Q2 published EPA emissions projections under WEM (with existing measures) and WAM (with additional measures) scenarios. The WEM scenario includes policies and measures committed to and being implemented by the end of 2021. WAM assumes implementation of planned policies and models their predicted impact on GHGs (e.g. some ambitious measures from CAP23).

ocean surface temperatures, with potential for disruptive consequences. In fact, a new study released this quarter found that the Atlantic meridional overturning circulation (AMOC), a recognised global tipping element in Earth's climate system, has been weakened to the point of potential collapse around mid-century under the current trend of emissions.

On land, heatwaves impacted populations across the world as the El Niño effect merged with the climate crisis. Fires, floods, drought, and extreme temperatures impacted Europe, Africa, India, China, Japan, and America. The implications were felt heavily, with upticks in heat-related hospitalisations in Italy, disastrous floods in New York, increased heat-related deaths and food insecurity in Africa, wildfires all over the Northern Hemisphere and more.

In addition to the short-term consequences of extreme weather, longer-term outcomes are becoming more apparent, such as increased costs of fresh food and reduced fishing catches. A report released by the European Commission further brought climate change and environmental degradation to the forefront of current and future risks to international peace and security. Of the 20 countries that are most vulnerable to climate change, 12 were reported in conflict in 2020. This is anticipated to increase in the coming decades.

While the rest of the world was experiencing extreme heat, Ireland experienced record-breaking levels of rain in July, with 215% of its long-term average expected rainfall and four times that seen in July 2022. This followed the hottest June recorded, demonstrating the impact of climate change and unpredictable weather patterns on a national level.

Domestically, in July, the CCAC released its Annual Review for 2023. The report states that *"at the current rate of policy implementation, Ireland will not meet the targets set in the first and second carbon budget periods unless urgent action is taken immediately and emissions begin to fall much more rapidly"*. Specific sectoral recommendations from the CCAC to advance climate action are elaborated in the chapters below. Under the Climate Action and Low Carbon Development (Amendment) Act 2021, CCAC recommendations must be considered in the development of annual CAPs.

The Annual Report Card on climate, carried out by independent experts, similarly ranked the delivery of Government commitments on climate action. A C+ was given overall which, according to the report, gives cause for hope but not for celebration as *"Ireland is still well behind where we need to be with respect to climate and environmental action"*.

In more positive climate action news internationally, progress was made in renewable energy and nature restoration. Germany closed the world's largest-ever offshore wind

auction, which will double the country's offshore wind capacity. Meanwhile, the Nature Restoration Law was passed in the European Parliament, allowing it to progress to trilogue negotiations. This landmark law aims to bring healthy ecosystems back to Europe, with potential for significant co-benefits for climate action. Domestically, in addition to the actions highlighted in this report, new funds were announced in Q3, such as the €5.8million Creative Climate Action Fund, and €10million for the Bioeconomy Demonstration Initiative.

Overall, events witnessed in Q3 2023 reiterate that climate change cannot be ignored. While there has been some progress nationally and internationally, the pace and urgency of mitigation and adaptation action needs to catch-up to reduce further consequences of our current fossil-fuelled global economy.

1.2 Overview of delivery in Q3 2023

In total, 42 actions were scheduled for delivery and reporting in Q3 2023. An implementation rate of 29% was achieved, with 12 actions completed on time. Delivery rates by responsible Department for actions due this quarter are detailed in Table 1. Table 2 outlines delivery rates by sector to date (combining delivery from Q1, Q2 and Q3), reflective of the whole-of-government effort required to reduce emissions across our economy and society.

Table 1 Delivery rate by Department on Q3 2023 measures

Department	No. of Q3 actions due	Complete	Delayed	Delivery Rate
DECC	25	6	19	24%
DAFM	4	2	2	50%
D/Transport	4	1	3	25%
DETE	2	1	1	50%
DHLGH	4	1	3	25%
DPENDR	3	1	2	33%
TOTAL	**42**	**12**	**30**	**29%**

Table 2 Sectoral Delivery to date under CAP23 (combining Q1, Q2 and Q3)

CAP23 Sector	No. of Q1, Q2 & Q3 actions due	Complete	Delayed	Delivery Rate
Agriculture	10	7	3	70%
Transport	7	3	4	43%
Electricity	14	12	2	86%
LULUCF	14	14	0	100%
Buildings	23	14	9	61%
Industry	5	2	3	40%
Cross-Cutting	56	35	21	63%
TOTAL	**129**	**87**	**42**	**67%**

Overall CAP23 implementation stands at 67% to date (87 of 129 actions completed so far). The breakdown of delivery by quarter is contained in Table 3. The 42 delayed actions will roll over for monitoring and reporting in Q4 to maintain accountability to their completion.

Table 3 CAP23 Implementation to end of Q3 2023

	Measures Completed in the Quarter	Measures Subsequently Delivered	Total Measures Delivered to Date	Measures still Delayed	Delivery Rate
Q1 2023	27	7	34	2	94%
Q2 2023	32	9	41	10	80%
Q3 2023	12	N/A	12	30	29%
TOTAL	**71**	**16**	**87**	**42**	**67%**

1.2.1 Sectoral actions completed and delayed in Q3 2023

Examples of high impact sectoral actions completed and delayed in Q3 2023 are detailed in Tables 4 and 5. With significant potential for direct emissions reduction, they are further expanded upon in sectoral chapters throughout this progress report. Information on every reportable action is detailed at Appendix 1.

Table 4 Examples of high impact sectoral actions and sub-actions completed in Q3 2023

Sector	Action / sub-action completed in Q3 2023
Agriculture	AG/23/1: Introduce a National Fertiliser Database (from Q2)
Transport	TR/23/63: Publish the updated Renewable Fuels for Transport policy statement for 2023-2025
Electricity	EL/23/10A: Deliver the Onshore RESS Auction
	EL/23/16: Publish an updated Interconnection Policy (from Q2)
	MA/23/1: Establish the new Maritime Area Regulatory Authority (MARA) (from Q2)
Buildings	BE/23/28: Finalise District Heating Steering Report (from Q1)
LULUCF	LU/23/1: Launch the Forestry Programme

Table 5 Examples of high impact sectoral actions and sub-actions delayed in Q3 2023

Sector	Action / sub-action delayed in Q3 2023
Agriculture	AG/23/13: Deliver the National Biomethane Strategy
Transport	TR/23/51: Enact regulations to permit safe use of personal powered transporters
	TR/23/30: Publish National Cycle and Greenway Network (from Q2)
Electricity	EL/23/2: Publish the Renewable Electricity Spatial Policy Framework
	EL/23/22: Publish a policy framework for electricity storage
Buildings	BE/23/26: Publish a National Heat Policy Statement
	BE/23/31: Develop a detailed roadmap for the long-term decarbonisation of the commercial sector
Industry	EN/23/12: Specify low carbon construction methods and low carbon cement material as far as practicable for directly procured or supported construction projects from 2023

1.2.2 Cross-cutting actions completed and delayed in Q3 2023

High impact cross-cutting actions support the delivery of sectoral climate action through improvements in governance, finance, planning, research, engagement, resilience, and leadership. Multiple and diverse Departments and Agencies contribute to their completion, providing an important whole-of-Government enabling framework for national climate action.

Examples of high impact cross-cutting actions completed and delayed in Q3 are detailed in Tables 6 and 7. Information on all cross-cutting actions due for reporting are contained in Appendix 1.

Table 6 Examples of high impact cross-cutting actions and sub-actions completed in Q3 2023

Cross-Cutting Policy Area	Action / sub-action completed in Q3 2023
Governance	GV/23/2: Establish taskforces or similar appropriate structures which focus on specific areas or initiatives of climate delivery that requires cross-Government collaboration (from Q2)
Carbon Pricing	CP/23/4/B: Complete a review of how we assess the emissions impact of infrastructure investment (from Q1)
Engagement	CZ/23/3/B: Publish report from National Youth Assembly on Climate (from Q2)

Table 7 Examples of high impact cross-cutting actions and sub-actions delayed in Q3 2023

Cross-Cutting Policy Area	Action / sub-action delayed in Q3 2023
Just Transition	JT/23/1: Establish a Just Transition Commission (from Q2)
Planning	CP/23/11: Publish LDA Sustainable Design Strategy publication and design approach for key schemes supporting modal shift
Carbon Pricing	CP/23/4: Update the shadow price of carbon (from Q1)
Public Sector Lead	PS/23/1/B: All relevant public sector bodies to update their Roadmap to implement CAP23 Mandate
	PS/23/11: Review and update Green Tenders: an Action Plan on Green Public Procurement
Circular Economy	CE/23/7: Publish Regional Waste Management Plans
	CE/23/11: Separate collection obligations to include bio-waste

1.3 Overcoming delays to climate action delivery

While the low quantity of new actions due this quarter (42) can skew the delivery rate somewhat, persisting challenges to climate action implementation remain evident across the system. The most common reasons reported by Departments for delivery delays in Q3 include:

- The layers and scheduling of administrative clearance often required for measures to complete at working group, Departmental, Ministerial, Government and EU levels;
- Capacity constraints, including resourcing, competing priorities and ownership issues;
- Additional time required for necessary stakeholder consultation;
- Procurement issues, signalling a system reliance on external expertise; and
- Legislative delays, including the time needed to draft regulations.

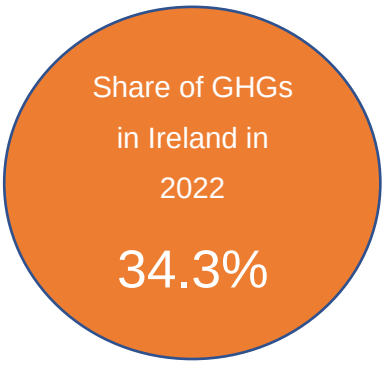
Other, more discrete, reasons for delay include a lack of consensus on action approach; sequencing for alignment with other policies and publications; and requirements for SEA/AA.

Of the 42 total delayed actions reported, approximately half signal short delays, with expectations of completion in Q4 2023. The need for final Government approval and/or concluding preparations towards the publication of reports were the most cited reasons for these more modest delays, with these actions reported as substantially complete.

Delays in climate action delivery must be overcome to meet pressing legally binding emissions reduction targets at EU and national levels. The 42 delayed actions from Q3 will carry forward for delivery and reporting in Q4 to maintain commitment to their completion.

Further detail on the high impact actions due in Q3 2023 is provided next through sectoral chapters. Detail on all reportable actions completed and delayed this quarter is contained at Appendix 1 for full transparency on commitments.

2 Agriculture



Agriculture is the largest GHG emitting sector in Ireland, directly responsible for 34.3% of national emissions. Methane from raising livestock is the biggest sectoral source, accounting for c.68% of these GHGs. When combined with additional agriculture-related emissions from organic soils drained for farming uses (grasslands) currently accounted for in LULUCF, agricultural activity combined accounts for c.45% of Irish emissions.

In the most recent EPA projections, emissions from agriculture are projected to decrease by 4 - 20% between 2021 and 2030 (Figure 1) depending on the level of policies and interventions implemented. Emissions reductions are projected from the likes of fertiliser switching, limits on fertiliser use and bovine feed additives. Sectoral targets for 2030 and the agriculture SEC are nevertheless expected to be breached, even with full implementation of current planned measures.

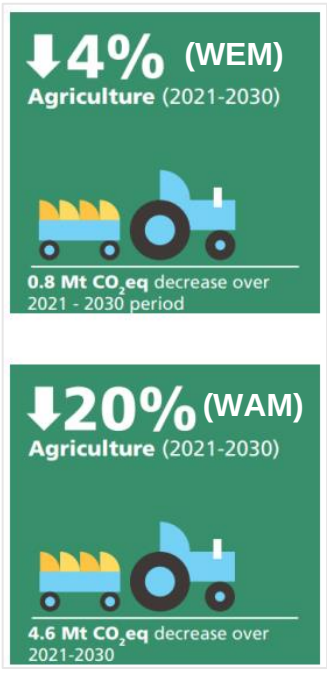


Figure 1 Projected Agriculture emissions to 2030 (EPA, 2023)

Livestock diversification measures proposed in CAP23 were not included in the recent EPA analysis due to a lack of a clear implementation pathway, signalling an urgency for policy elaboration in this area.

There is also a need, as with all sectors, to move measures from currently 'planned' (WAM) to 'being implemented' (WEM) to ensure their impact as quickly as possible as part of carbon budget considerations. This can be achieved by firming up policy delivery pathways and providing relevant support and clarity to farmers (e.g. timelines, resourcing, incentives, disincentives etc).

In its Annual Review published in Q3, the CCAC placed emphasis on Government actively supporting income diversification opportunities for farmers, including payments for ecosystem services. The rapid uptake of proven and effective mitigation measures from the Teagasc 2023 MACC is also recommended across the sector. Government is also advised to ensure sufficient supplies of greener forms of fertiliser and to communicate to farmers as such. Finally, the CCAC recommend urgent consideration of the roll out of feed additives for dairy farms to reduce methane emissions from cattle.

Making Family Farms More Sustainable

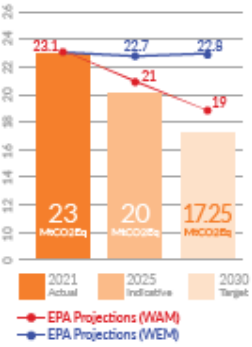
Key Performance Indicators / 2030 Targets

348,689 Currently
400,000ha for tillage by 2030

200,000 Currently
450,000ha for organic farming by 2030

343,193 Currently
Fertiliser use reduced to max 300,000 tonnes by 2030

Gap to Target



Q1

- Open Agri-Climate Rural Environment Scheme (ACRES)
- TAMS II Scheme for Low Emissions Slurry Spreading
- Launch grant scheme for on-farm solar panels

Q2

- Publish information to increase adoption of protected urea
- Introduce a national fertiliser database

Q3

- **Build national soils database – encourage farmers to take soil samples**
- **Deliver National Biomethane Strategy**
- **Establish implementation group for NESC recommendations on Just Transition in Agriculture**

Q4

- Support production of legumes through Protein Aid Scheme
- Provide funding for multispecies and clover swards
- Launch Suckler Carbon Efficiency Programme
- Launch research call focused on slurry additives to reduce manure methane
- Launch research call on feed additives to reduce methane emissions
- €10m Tillage Incentive Scheme
- Establish Anaerobic Digestion pilot plant
- Financial support for farmers who convert to Organic Farming
- Encourage extensive livestock farming practices through eco-schemes
- Proposal for a cow reduction or an exit scheme

High Impact Action Completed in Q3 2023: Agriculture

Did You Know? Reduced nitrogen fertiliser use and fertiliser switching represent key actions for emissions reductions in agriculture under CAP23. A National Fertiliser Database can work to track fertiliser sales more accurately, helping to monitor the impact and success of any interventions implemented.

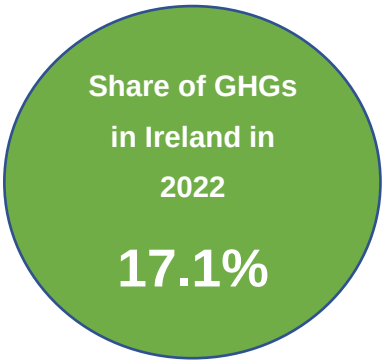
What's new? While originally due in Q2, a National Fertiliser Database has since been established under Action AG/23/1 in Q3 2023. It is now a requirement, under recently established legislation, to be registered with DAFM and placed on the Database to sell or purchase fertiliser in Ireland. This requirement will help to provide a more realistic picture of where fertiliser is applied to land, minimise reporting requirements for farmers and facilitate timely farmer payments under established eco-schemes. Over 110,000 farmers have registered to date. For more information, please see here.

High Impact Action Delayed in Q3 2023: Agriculture

Did You Know? Under Action AG/23/13, DAFM were due to deliver Ireland's first National Biomethane Strategy. A dedicated working group has been meeting monthly to progress this action, but it failed to complete on time in Q3. Through extensive consultation, the Strategy aims to identity actionable recommendations to stimulate a biomethane industry in Ireland and mobilise the 5.7 TWh target established in CAP23. The Strategy is close to finalisation and is expected to publish in Q4.

Why is it needed? Biomethane provides an income and land use diversification opportunity for farmers by using grass and other farm wastes (e.g. slurry) to produce renewable gas. The development of anaerobic digestion and a biomethane industry in Ireland is an essential part of the diversification package proposed for livestock farmers in CAP23, with the intention of leading to voluntary reductions in herd numbers. The renewable energy produced will, in turn, provide for emissions reductions in the transport and industry sectors as fossil fuels are displaced. This highlights the valued contribution that farmers can make not only to emissions reduction in agriculture, but in the decarbonisation of Ireland's energy system.

3 Transport



At 17.1%, transport is the second biggest greenhouse gas emitting sector in Ireland in 2022. Transport emissions overall have had the largest increase of all sectors since 1990.

In its emissions projections, the EPA estimates that emissions from transport will reduce by 1 - 35% between 2021 and 2030 depending on the range of measures implemented (Figure 2). As per the targets in CAP23, the upper level of achievement includes almost 1 million electric vehicles, biofuel blends of 10% for petrol and 20% for diesel, as well as a 20% reduction in total kilometres travelled through better land use planning and shift from private fossil-fuelled cars to public transport, walking and cycling.

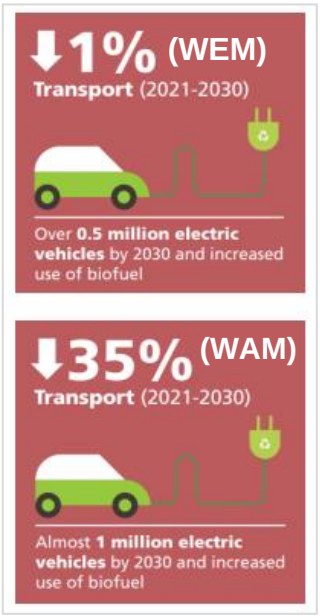


Figure 2 Projected transport emissions to 2030 (EPA, 2023)

Transport in Ireland will require a multi-facetted approach to reduce emissions sufficiently to 2030 and 2050. This will be challenging, as there will be increased pressures from a growing population as well as the potential for fluctuating fossil fuel prices. Transport is also still closely coupled with economic growth, with the EPA foreseeing increased freight emissions in the future without effective action now.

The EPA was able to model all proposed decarbonisation measures for Transport, though sectoral targets and the transport SEC are still expected to be breached. The focus remains on the rapid implementation of high-impact actions to bank emissions savings as early as possible in cumulative carbon budgets.

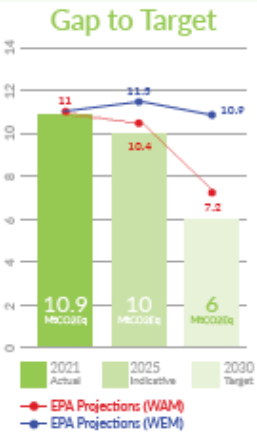
Recommendations from the CCAC Annual Review 2023 this quarter for enhanced climate action in transport echo the “Avoid Shift Improve” framework established in CAP23. This includes recommendations to redesign of motor tax to promote energy efficient vehicles, increase investment in public transport, build more park and ride schemes, increase targets for commercial EVs, support freight decarbonisation and promote public transport services to commuters through updating the Taxsaver commuter ticket and the introduction of workplace parking levies.

The CCAC also recommends that the ongoing update of the National Planning Framework better reflects national climate ambitions and the need to avoid future unnecessary emissions in the Transport sector e.g., by locating homes nearer businesses and services to reduce dependency on private cars.

Transforming How We Travel

Key Performance Indicators / 2030 Targets

105,076 Currently	E10/B7 Currently	3.6% * Currently
940,000 EVs by 2030	E10/B20 biofuel blend rates by 2030	50% reduction in Transport fuel usage



Q1

No reportable actions for delivery this quarter

Q2

- National Sustainable Mobility Stakeholder Forum
- Publish National Cycle and Greenway Networks
- Continue implementation of biofuel blending

Q3

- Progress Metropolitan Area Transport Strategies; public consultation on draft Galway Strategy
- Publish regulations on safe use of personal powered transporters
- Updated Renewable Fuels for Transport Policy Statement

Q4

- Establish Road Freight Forum and advance Road Haulage Strategy
- National Demand Management Strategy
- Advance rollout of 1,000km walking/cycling infrastructure by 2025
- Accelerate implementation of Safe Routes to School programme
- Advance BusConnects across Irish cities
- New town public transport services through NTA's 'Connecting Ireland' programme
- Advance Destination Charge Point Scheme for EVs
- Advance Local Authority Residential Charging Scheme
- Increase electric bus fleet procurement, including depot charging upgrades

* Based on Fuel Excise Clearances data which provide a proxy for sales and the associated level of consumption

High Impact Action Completed in Q3 2023: Transport

Did You Know? A variety of measures have been introduced in CAP23 to reduce emissions from the transport sector. Among them is the greater use of renewable energy, including renewable transport fuels (RTF), across the sector. Examples include biofuels, biogas, biomethane and green hydrogen.

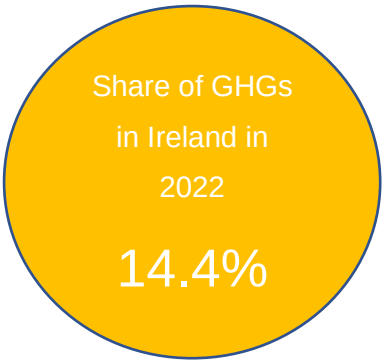
What's new? Under Action TR/23/63, the Minister for Transport published the Renewable Transport Fuel Policy Statement 2023-2025 in June 2023. The policy sets out a pathway to incentivise the supply of renewable transport fuel through annual increases in the renewable transport fuel obligation rate to 2030. It will also ensure European sustainability and greenhouse gas reduction criteria are adhered to and provide policy certainty for commercial operators who are responsible for implementing the changes.

High Impact Action Delayed in Q3 2023: Transport

Did You Know? Under action TR/23/51 in CAP23, regulations setting down technical standards for the use of personal powered transporters on public roads were due to be published in Q3. The new Road Traffic and Roads Act 2023 under which these regulations will be made was enacted in June 2023. These regulations are required to be notified to the European Commission for review under Directive 2015/1535 for at least 12 weeks and thus experienced delays in completing in Q3.

Why is it needed? New and affordable alternatives to fossil-fuelled vehicles will help reduce transport emissions and provide modern and safe modes of travel for people across Ireland. Such options could include personal powered transporters, such as e-scooters and e-bikes. Until now, there has been no updated development of regulations for these transport options to make them legal and safer for use on Irish roads. Pending approval by the Commission, it is anticipated that the new required regulations will be in place before the end of 2023.

4 Electricity



Energy industries (primarily power generation) accounted for 14.4% of national emissions in 2022. Renewables accounted for 37% of electricity generated in 2022.

In its projections released last quarter, the EPA report that increased renewable energy generation from wind and solar, if delivered as rapidly as planned, can reduce energy industry emissions by 50-60% by 2030 and achieve over 80% renewable electricity generation (Figure 3).

Increased interconnection, storage and biomethane are also envisaged to contribute to reduced emissions, though the sector is still predicted to breach its sectoral targets and SEC.

Continued dependency on coal use due to the unavailability of sufficient gas-fired generation creates risks to targets, along with energy security risks arising from recent geopolitical events and the potential for slow implementation of required renewable electricity infrastructure.

The EPA was unable to model the full 2GW target for new flexible gas fired generation targeted in CAP23, though report that the targeted 80% renewables share could be achieved with lesser GW targets across key renewables areas. Hydrogen generation post-2030 and demand side measures to mitigate growth from large energy users were not included in the projections due to a lack of clear implementation pathways.

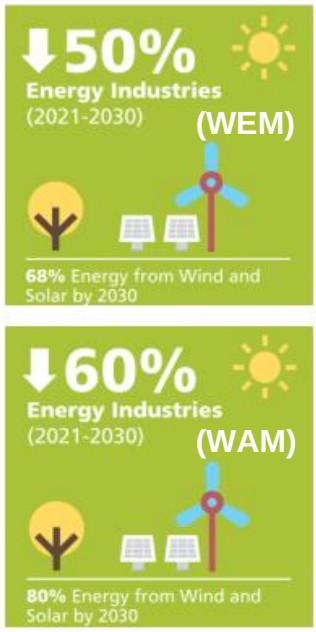


Figure 3 Projected energy industry emissions to 2030 (EPA, 2023)

Recommendations from the CCAC Annual Review 2023 this quarter include the need to accelerate renewable energy generation, including by putting in place the necessary spatial planning guidance and laying out where and what type of onshore wind should be located across the country. Sufficient resources, including in Local Authorities, to ensure planning applications and associated grid infrastructure can be put in place are also considered key. The Council also looked at accelerating flexibilities, with recommendations to phase out the use of coal in electricity generation as soon as possible and ensure that 2GW of new flexible gas-fired generation (which is green hydrogen ready) is delivered on time. The swift implementation of the Electricity Demand Side Strategy is also recommended.

Powering Renewables

Key Performance Indicators / 2030 Targets

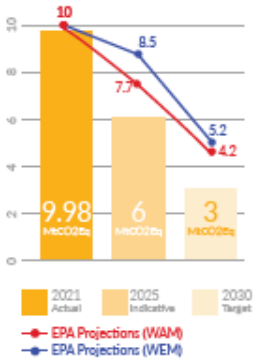
37% Currently

80% electricity from renewable sources by 2030

4.7GW Currently

9GW onshore wind by 2030

Gap to Target



Q1

- Publish System Services Future Arrangements Phase III

Q2

- Small-scale generation scheme design
- Plan for the delivery of Offshore Renewable Energy
- Irish Ports ORE Delivery Framework
- Updated interconnection policy
- Supports for community participation in electricity demand flexibility

Q3

- **Renewable Electricity Spatial Policy Framework**
- **MARA start consenting processes**
- **Policy framework for electricity storage**
- **Onshore and offshore RESS auctions**

Q4

- Clean Export Premium feed-in tariff implementation plan
- New draft onshore wind energy guidelines
- Regular connection offers for renewable electricity
- Regional Renewable Electricity Roadmap
- Private wires public consultation
- Regulatory review of storage (licensing/charging/market incentives)
- Electricity Demand Side strategy and action plan
- Enhanced reporting framework for large energy users

High Impact Action Completed in Q3 2023: Electricity

Did You Know? CAP23 commits to increasing the share of electricity demand generated from renewable sources in Ireland to 80% and reaching 8GW of solar and 9GW of onshore wind by 2030. Renewable energy projects will help to protect Irish households and businesses from high fossil fuel prices and increase energy security, while enabling us to achieve our climate targets. The Renewable Electricity Support Scheme (RESS) 3 is the third of a minimum of five envisaged onshore auctions to occur between 2020 and 2025 to deliver 2030 targets. These auctions will provide pathways for renewable developers, including solar and onshore wind projects.

What's new? Provisional results of the recent RESS 3 auction were announced on 26 September. The auction design was intended to maximise the volume of renewables connecting to the electricity grid, whilst shielding consumers from high prices. RESS 3 targeted mature, shovel-ready projects that all have planning permissions and grid connection offers and are expected to deliver by early 2027 at the latest. The successful projects, most of which are Solar PV, represent a 12% increase in Ireland's renewable energy capacity. Please see here for more information.

High Impact Action Completed in Q3 2023: Electricity

Did You Know? Under CAP23, Ireland has set out to increase the proportion of renewable electricity to 80% by 2030, including at least 5 GW of offshore wind energy. A new state agency to support this objective was envisioned to implement a new streamlined consenting system for the maritime area which is vital to establishing an offshore wind energy industry in Ireland.

What's new? The Maritime Area Regulatory Authority (MARA) was established on 17 July 2023. This significant announcement marks the transition to the new and enabling maritime consenting regime. The new agency is responsible for assessing applications for Maritime Area Consents (MACs) which will be required before offshore renewable developers can make a planning application. Please see https://www.maritimeregulator.ie/ for more information.

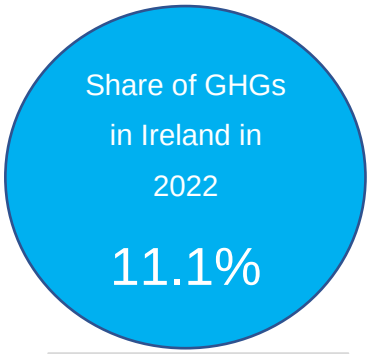
High Impact Action Delayed in Q3 2023: Electricity

Did You Know? Electricity storage refers to a broad array of technologies that capture energy and store it for use when required. It will play an essential role in the decarbonisation of the electricity sector. The Programme for Government 2020 included a commitment to strengthen the policy framework to incentivise electricity storage. This policy framework should explore the deployment of electricity storage technologies and examine the role that various forms of storage can play in supporting the transition.

What's new? The publication of the policy framework for electricity storage was initially scheduled for Q3 2023 but did not complete on time. A consultation paper was published in November 2022 and a report summarising the extensive response was published in May of this year. Work on the policy framework has been slower than planned due to resource constraints in DECC. These are being resolved through recruitment and the policy framework is now expected to publish in Q1 2024.

5 Buildings

Emissions from all buildings made up 11.1% of Ireland's emissions in 2022. Most of this (9%) was from residential buildings. Energy prices, average yearly temperatures, energy efficiency measures, fuel switching, and remote working have all influenced emissions from buildings in recent times.



In the EPA projections published earlier this year, emissions from residential buildings are set to decrease by 36 - 47% between 2021 and 2030 (Figure 4). The higher reduction level assumes, among other actions, a ban on oil and gas boilers in new dwellings, the installation of 680,000 heat pumps, continued household retrofit activity including 500,000 B2 retrofits/cost optimal equivalents, and the implementation of full district heating and biomethane targets to decarbonise heating sources.

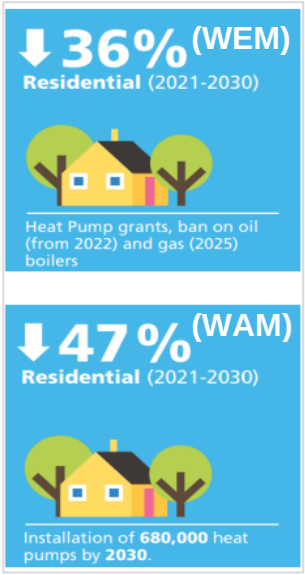


Figure 4 Projected emissions from Residential sector (EPA, 2023)

With full implementation of ambitious CAP23 measures, residential and commercial buildings are the only sectors expected to meet emissions reduction targets for 2030 by the EPA. Cumulative emissions however mean that the commercial buildings SEC will be breached, with the residential SEC projected to remain within limits in the second carbon budget period.

For Commercial and Public Services, a decrease of 19 - 49% is projected by the EPA (Figure 5). Accelerated retrofitting of private, public, and commercial buildings is clearly required for emissions reduction in the built environment, as committed to under CAP23, along with expansion of renewable heating options such as district heating and electric heat pumps.

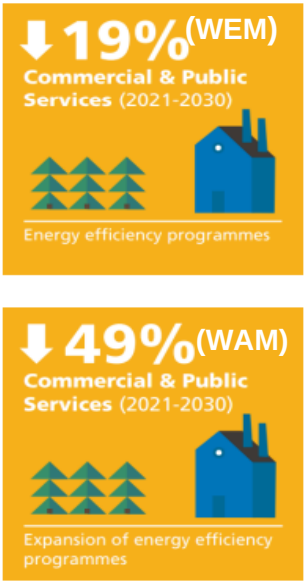


Figure 5 Projected emissions from Commercial and Public Services (EPA, 2023)

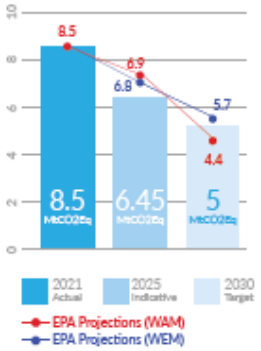
In its Annual Review 2023 released this quarter, the CCAC recommends more urgency around developing district heating schemes (including evidence-based zoning at Local Authority level) as well as an obligation on large energy users to supply their excess heat to surrounding communities. It further recommends targets to upgrade 100% of social housing stock to B2 BERs and/or connect to district heating by 2030. Increases in the number of retrofits carried out each year is also recommended, with prioirty given to homes that currently use coal or peat for heating. Finally, the CCAC advocates that mortgage providers be encouraged to provide green mortgages to align with, and support, necessary retrofit activity.

Building Better

Key Performance Indicators / 2030 Targets

9,796 Currently	33,197* Currently	0 Currently
400,000 heatpumps in existing homes by 2030	500,000 B2 Retrofits by 2030	2.5TWh of district heating by 2030

Gap to Target



Q1

- Implement Energy Efficiency Obligation Scheme
- Tax incentive for small scale landlords to encourage retrofitting
- District Heating Steering Group recommendations approved by Government

Q2

- Introduce 'net of grant' energy upgrade option for homeowners
- Geothermal Policy Statement
- Heat and Built Environment Delivery Taskforce Implementation Plan
- Launch new retrofit scheme for SMEs

Q3

- Review of cost optimal performance requirements for building regulations
- Low-cost loans available for home retrofit
- Increase number of registered retrofit providers and BER assessors
- National Heat Policy Statement
- Roadmap for retrofit of the commercial building stock
- Develop guidelines on retrofitting traditional/historic buildings

Q4

- Accelerate delivery of green skills apprenticeships
- Roadmap to phase out fossil fuel heating systems in all buildings
- Report on split incentives for rental properties
- Promote statutory requirements for installation of building automation systems
- Enhanced budget for home and community retrofit grants and schemes
- Make aggregated retrofit project supports available
- Increase budget for SEAI Warmer Homes scheme – 6,000 free upgrades
- Deliver retrofits to approx 2,400 Local Authority Homes
- Accelerate delivery of Dublin District Heating Scheme
- Rollout of solar panels on all schools
- Rollout of Pathfinder Programme for cost effective public sector retrofitting

*The KPI for residential retrofit is the equivalent of 500,000 homes to a BER B2/cost optimal by 2030. This graphic shows the number of B2s delivered but does not include the impact of non-B2 retrofits. For further information please refer to the SEAI Home Energy Upgrades annual report and the National Retrofit Plan.

High Impact Action Complete in Q3 2023: Buildings

Did You Know? While Action BE/23/28 was originally due in Q1, the District Heating Steering Group Report required under this action was approved by Government and published in July 2023. It outlines key recommendations, including around the need for a legislative framework for district heating, a proposed single utility ownership model, the potential for a centre of excellence and need for financial supports. Information on the steering group and the published report can be found here.

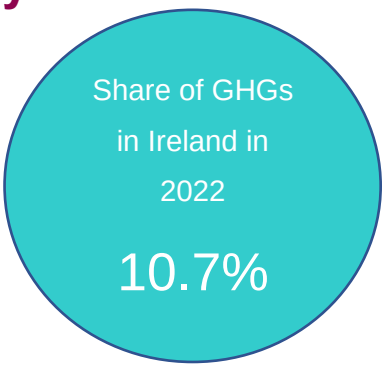
Why is it needed? Ireland currently has one of the lowest shares of renewable heating in Europe, with district heating making up less than 1% of the market. This tried and tested heating method is particularly useful for decarbonising older building stock, something which other European countries have done successfully. This technology is being actively pursued in Ireland, and the District Heating Steering Group was formed under CAP21. Under their remit, the group provided a key report to government on the steps needed to ensure district heating is developed in a structured way.

High Impact Action Delayed in Q3 2023: Buildings

Did You Know? Retrofitting your home means carrying out multiple energy upgrades such as installing insulation and heat pumps. Home retrofits allow consumers to make energy, carbon and economic savings, while also enhancing the value of their home. However, the upfront costs of retrofitting can be prohibitive, so CAP23 aims to support the delivery of low-cost finance for home retrofit to consumers by putting a loan guarantee in place for householders to access.

What's new? Under Action BE/23/12, the development of an innovative loan guarantee scheme has been a complex process involving intensive engagement with multiple national and international stakeholders. To date, this has included extensive due diligence between the European Investment Bank Group and the Irish banking and credit union sector. The action did not complete in Q3 as planned, but subsequently delivered early in Q4, with more details available here.

6 Land Use, Land Use Change and Forestry



Using current estimates, land uses emitted c.7.3Mt CO_2 eq in 2022, more than the emissions from residential buildings. The Land Use, Land Use Change and Forestry (LULUCF) sector has been an emissions source in Ireland since 1990 and has a challenging profile for future emissions creation. Science continues to evolve to better estimate emissions from the sector, which may lead to future inventory changes.

The main emissions source reported in 2021 in LULUCF was from grasslands on drained organic soil (e.g. used for grazing cattle). Despite currently representing only c.8% of grasslands, they were responsible for over 80% of reported emissions from drained peatlands (excluding forested peatlands).

Forestry on peat soils also creates emissions, as do degraded wetlands (e.g. bogs drained for peat extraction). These emissions sources are offset somewhat by removals of CO_2 through forests on mineral soils, active (wet) bogs and Harvested Wood Products which can act as carbon sinks.

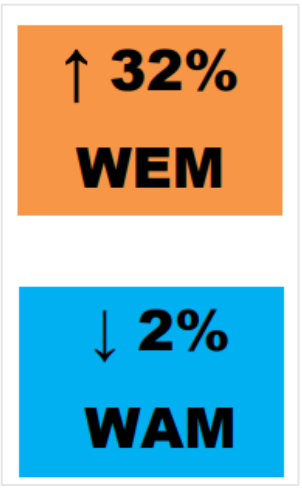


Figure 6 Projected LULUCF emissions to 2030 (EPA, 2023)

The EPA projects that emissions from LULUCF will increase to 2030 as our forestry reaches harvesting age and changes to a carbon source. Planned policies and measures can reduce the extent of the emissions increase, highlighting the importance of rapidly increasing tree planting, managing the water table on agricultural organic soils and rehabilitating peatland to revert current emissions sources to net sinks.

A key recommendation from the CCAC Annual Review published in Q3 2023 for the LULUCF sector concerns the need for a streamlined process for applications to the new forestry scheme that also launched in Q3. This, the Council reiterates, will be needed to ensure speedy implementation of new tree planting measures. The issue of forestry on drained peatlands (an emissions source) is also addressed by the CCAC, who call for resources and practical guidance for landowners to best manage these areas, including options for rewetting and rehabilitation. This will help to enhance their carbon storage capacity and resilience to climate change. The extraction of peat for horticulture is noted as unsustainable and must also cease according to the Council recommendations, with a need for accelerated research and development to identify alternative sustainable horticultural substrates.

High Impact Action Completed in Q3 2023: LULUCF

Did You Know? Trees planted on mineral soils act as essential carbon sinks by absorbing CO_2 from the atmosphere as they grow through photosynthesis. The larger the tree, the more CO_2 that is absorbed. Increasing forestry cover in Ireland is therefore an essential part of meeting climate neutrality targets by 2050 and will help to offset residual emissions in other sectors. CAP23 re-committed to targets of at least 8,000ha of tree planting per annum, with a new forestry strategy and programme of supports essential to achieving this goal to address recent low planting rates.

What's new? The €1.3bn Forestry Programme 2023-2027, delayed from Q2, has now been approved by the European Commission and the Strategic Environmental Assessment and Appropriate Assessment process completed. It was formally launched in Q3 under Action LU/23/1. The programme introduces new forest creation and management measures, as well as increased generous financial supports for farmers and landowners to support more tree planting. Schemes are now open for applications and a series of promotional events are taking place across the country to encourage participation. For more information, please see here.

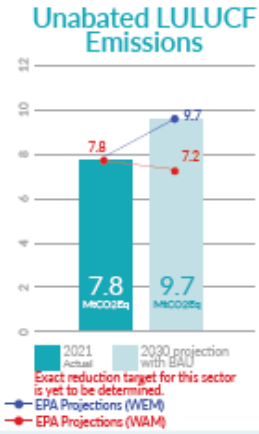
Changing Our Land Use

Key Performance Indicators / 2030 Targets

8,000ha per annum afforestation by 2030

80,000 ha reduction in organic grassland intensity by 2030

77,600 ha peatland rehabilitated by 2030



Q1

- Provide financial support to farmers to increase the number of hedgerows and trees on farms
- Cover crop measure included in CAP Strategic Plan
- Financial supports to improve carbon sequestration on mineral grasslands
- Impose mandatory carbon sequestration requirements under Nitrates Derogation
- Financial supports to reduce management of grasslands on drained organic soils
- EU Just Transition funding for research and knowledge transfer
- Phase 1 of Land Use Review
- Commencement of Phase 2 of Land Use Review

Q2

- Adoption of tree planting and management measures under new Forestry Programme
- Launch capital supports for tillage equipment
- Capital supports for mineral grassland management equipment

Q3

No high impact reportable actions for delivery this quarter

Q4

- Continued funding of Straw Incorporation Measure
- GHG towers installed on mineral and organic grasslands
- Restoration and rehabilitation of Bord na Móna peatlands
- Establish Peatland Finance Ireland
- NPWS restoration on protected raised and blanket bogs
- Land Use Review Interim Reporting

7 Industry

Industrial emissions accounted for 9.7% of Ireland's total emissions in 2022, with manufacturing combustion and industrial processes as the key emissions sources. These emissions are largely affected by cement production in Ireland, with emissions increasing, for example, in times of economic boom and when Covid-19 restrictions relaxed.

This quarter, the EPA projects that manufacturing combustion emissions will reduce by 6 - 22% from 2021 to 2030 with the implementation of efficiency measures and renewable heat generation in industry. The full implementation of biomethane targets (with use split across heating in buildings and industry) is also required to meet the upper end of this range.

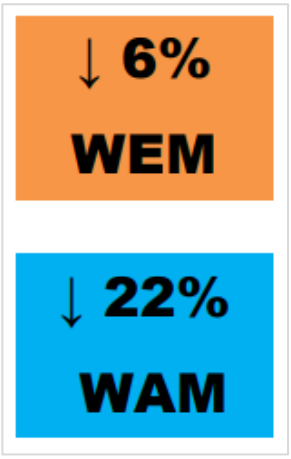


Figure 7 Projected manufacturing combustion emissions to 2030 (EPA, 2023)

Meanwhile, process emissions are projected to increase by 5% in the same time period under the EPA's WEM scenario due to anticipated increased cement production. There is no WAM scenario for process emissions as no additional measures are yet identified to address them.

The EPA were unable to model the full CAP23 targets for renewable heating in industry nor measures aimed at decreasing embodied carbon in construction materials due to unclear implementation pathways. The use of Carbon Capture and Storage in industry post-2030 was also not included for the same reason. The industry SEC is thus expected to be breached by quite a significant margin according to the EPA, without better defined emissions reducing pathways.

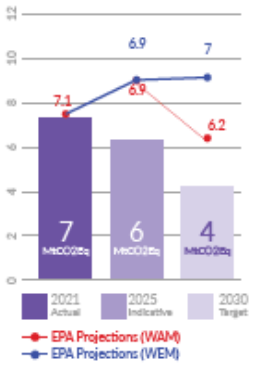
Recommendations from the CCAC Annual Review 2023 this quarter include the need for the decarbonisation roadmap for industrial heat to be delivered by Q4 2023 to provide clear signals for industry. Government is also recommended to find ways to help industry to become more energy efficient and less reliant on fossil fuels. Efforts to reduce the emissions intensity of cement and concrete used in construction are also required. The CCAC also recommends an urgent update to building regulations to increase the use of timber in construction and also encourage greater usage of lower carbon cement and concrete.

Greening Industry

Key Performance Indicators / 2025 Targets

A reduction in fossil fuel share of overall industry energy demand to 45% by 2025 compared to 2018 baseline (64%)

Gap to Target



Q1

No reportable actions for delivery this quarter

Q2

Develop roadmap for green hydrogen

Q3

Industry inputs to National Biomethane Strategy

Technical guidelines on low carbon construction methods for public bodies

Q4

Continued rollout of Green Transition Fund

Annual Review of Support Scheme for Renewable Heat

Decarbonisation roadmap for industrial heat

Feasibility assessment of carbon capture storage

Public procurement policy re low carbon construction

Report on actions to decrease embodied carbon in construction

High Impact Action Delayed in Q3 2023: Industry

Did You Know? As we increasingly consider the carbon embodied in construction materials, the demand for low carbon building materials is increasing. Producers, including cement manufacturers, can implement changes to their production processes and mix designs to create a lower carbon alternative to traditional materials.

What's new? A recommendation was due to Cabinet in Q3 specifying low carbon construction methods and low carbon cement material, as far as practicable, for directly procured or supported construction projects from 2023. This is an important part of the public sector leading by example in low carbon construction methods, but the action was delayed in Q3. DETE successfully secured expert services in May and a study is being produced to inform policy on the procurement of low carbon cement material. Results from this study will inform recommendations that will be brought to Government.

High Impact Action Delayed in Q3 2023: Commercial Buildings

Did You Know? CAP23 sets out our level of ambition for decarbonising commercial buildings and a detailed roadmap is being developed to guide this process. While this action rests under the SEC for buildings, it has important implications for businesses across Ireland. The roadmap aims to set out the key existing and new policy interventions to support and reduce emissions from the commercial sector. It will set out the standards, regulations and timelines that will help drive the necessary changes in heating and energy systems.

What's new? Drafting of the Commercial Built Environment Roadmap is currently being finalised by the relevant working group, following detailed stakeholder engagement. Once a final draft is agreed by the working group, it will be presented for discussion by the Heat and Built Environment Taskforce before being submitted to Government for information in advance of publication. Drafting and publication will be closely aligned with other policy documents due imminently regarding public sector buildings decarbonisation, district heating and broader heat policy decisions, and the sequence of these publications may influence the exact timing for delivery of this roadmap.