



Roinn an Taoisigh
Department of the Taoiseach

Climate Action Plan 2023

Progress Report

Q1 2023



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

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1 Executive Summary

This is the first Progress Report on Climate Action Plan (CAP) 2023, detailing progress on 36 actions due for delivery and reporting in Q1 2023. A **delivery rate of 75%** was achieved.

Reflecting the six high impact areas identified in CAP23, the report is organised into sectoral chapters, in order of emissions impact (Agriculture, Transport, Electricity, LULUCF, Buildings and Industry). As a result of efforts to streamline the CAP23 Annex to focus on high impact actions, and given the smaller number of actions under consideration this quarter compared to previous progress reports, more attention is paid to the qualitative descriptions of actions and sectoral progress. This includes attention to Key Performance Indicators (KPIs) established under CAP23, state of play on emissions targets¹, recent emissions trends, action case studies and foresight on key actions due later in 2023.

It is worth noting that the CAP23 Annex also identified a number of 'non-reportable' actions and sub-actions (marked with an asterisk *) that provide important detail of ongoing work, and previously established activity being undertaken in support of climate action. The continued implementation of these activities is assumed and they do not fall to be reported anew to Government. Some further actions often better align with internal Departmental or Taskforce reporting (e.g., related to project management) and similarly do not warrant centralised quarterly reporting by the Department of the Taoiseach.

Progress reporting on CAP23 is therefore largely confined to actions relating to new initiatives or significant steps towards achieving the Government's climate ambitions, as detailed in this Q1 2023 Progress Report and its accompanying **Appendix 1**.

1.1 Climate change news and activity in Q1 2023

Extreme weather events continue to ravage various parts of the world, causing significant damage and loss of life. In January, [severe flooding occurred in Indonesia](#), while in February, the United States [experienced a polar vortex](#) that caused freezing temperatures

¹ This includes attention to published [Sectoral Emission Ceilings](#) as well as [EPA emissions projections](#) under WEM (with existing measures) and WAM (with additional measures) scenarios. The WEM scenario includes policies and measures already in place when projections were compiled (in this case, to the end of 2020, including from CAP19). The WAM scenario assumes implementation of [planned](#) government policies and measures and models their predicted impact on GHGs (in this case, planned measures from CAP21).

and power outages in several states. March saw wildfires breaking out in [Australia](#) and [California](#). A [European heatwave](#), likely “supercharged” from climate change, meant much of mainland Europe experienced jarringly mild summer temperatures in the depths of winter.

The Intergovernmental Panel on Climate Change (IPCC) released a [new report](#) in March that warned of the catastrophic consequences of allowing global temperatures to rise above 1.5°C. The report called for accelerated action to reduce emissions and address the impacts of climate change, highlighting the clear need for international cooperation. The report also highlights the important linkages between climate mitigation and adaptation as well as the reality of “limits to adaptation” in a changing world.

Domestically, Met Eireann confirmed in their [annual statement](#) that 2022 was the warmest year on record, and that the Irish summer of 2022 is broadly consistent with projected future climate change trends.

The start of the year however also brought some positive news for climate action. Luiz Inacio Lula da Silva [was sworn in](#) as Brazil's president, marking a new era for the country's environmental policies, including commitments to end deforestation. Meanwhile, Australia [passed a landmark bill](#) to cap oil and gas emissions. The law will require coal mines, oil refineries, aluminium smelters and other large polluters to cut their emissions by 4.9% each year. It is estimated that this will prevent 200 million tonnes of carbon emissions over the next decade.

Closer to home, [new data released this quarter revealed](#) that 34% of Ireland's electricity needs last year were met by wind energy, avoiding a €2billion spend on gas. Meanwhile, ESB Networks [announced](#) its new strategy to make the electricity network capable of supporting the Climate Action Plan goal of 80% renewable generation by 2030. The planned €10 billion investment in the electricity network will also generate 1,500 jobs. Government funding was also announced for new environmental initiatives, such as [community climate action](#), and [integrated anaerobic digestion and green biorefining demonstration](#) to support climate neutral farming .

Overall, the news and events of Q1 2023 demonstrate the ongoing urgency of the climate change crisis, as well as the growing recognition among governments and organisations of the need for quick and decisive action to address the issue.

1.2 Overview of delivery in Q1 2023

In total, 36 actions were scheduled for delivery and reporting in Q1 2023. An implementation rate of 75% was achieved, with 27 measures completed on time this quarter. Delivery rates by responsible Department are detailed in Table 1.

Table 1 Delivery rate by Department on Q1 2023 measures

Department	No. of Q1 actions due	Complete	Delayed	Delivery Rate
DECC	14	10	4	71%
DAFM	11	10	1	91%
DPER	4	1	3	25%
DHLGH	3	2	1	67%
DFIN	2	2	0	100%
DETE	1	1	0	100%
DFA	1	1	0	100%
TOTAL	36	27	9	75%

1.2.1 Sectoral actions completed and delayed in Q1 2023

Six high impact sectors were identified in CAP23, reflecting the areas where emissions reduction is most significantly and urgently required under Ireland's legally-binding carbon budgets. Sectoral Emissions Ceilings (SECs) have been established for 5 out of 6 of these sectors, with the exception of Land Use, Land Use Change and Forestry (LULUCF). This final SEC is expected by year end, pending the assessment of evolving scientific data.

With significant potential for direct emissions reduction, examples of high impact sectoral actions completed and delayed this quarter are detailed in Table 2 and Table 3. They are further expanded upon in relevant sectoral chapters throughout this progress report, with detail on every action due for reporting contained in Appendix 1.

Any delays in implementation must be urgently overcome to meet legally binding emissions reduction targets at EU and national levels.

Table 2 Examples of high impact sectoral actions and sub-actions completed in Q1 2023

Sector	Action / sub-action completed in Q1 2023
Agriculture	AG/23/21: Implementation of the Agri-Climate Rural Environment (ACRES) scheme
	AG/23/10/A: Grant-aiding of solar panels for on-farm electricity generation under TAMs with increased kw limits
Electricity	BE/23/9: Implement the Energy Efficiency Obligation Scheme
LULUCF	LU/23/19: Publication of Phase 1 of the Land Use Review
	LU/23/21: Protect, enhance, and increase the number of hedgerows and trees on farms
	LU/23/10: Launch the CAP Strategic Plan and include a Low Input Peat Grassland Measure under ACRES
Buildings	BE/23/13: Introduce a new tax incentive to encourage small-scale landlords to undertake retrofitting works while tenant in situ

Table 3 Examples of high impact sectoral actions and sub-actions delayed in Q1 2023

Sector	Action / sub-action delayed in Q1 2023
Agriculture	AG/23/3: Continue to fund LESS to contribute to nitrogen reduction
Electricity	EL/23/18: Complete and publish System Services Future Arrangements Phase III: Detailed Design and Implementation Transition Pathway
Buildings	BE/23/28: Finalise District Heating Steering Group Report and submit to Government

1.2.2 Cross-cutting actions completed and delayed in Q1 2023

In addition to headline sectoral actions, it is important to acknowledge a number of cross-cutting actions completed and delayed in Q1 2023 that support the delivery of climate action from finance, planning, research, engagement, resilience, and leadership standpoints. This includes a range of actions across CAP23 chapters dedicated to Just Transition, Citizen Engagement, Research & Innovation, Governance, Carbon Pricing, Adaptation, International and Public Sector Leading by Example.

While more difficult to quantify and attribute direct emissions reductions, these actions provide an important enabling framework for individual, household, community, public sector, and business-level climate action. Examples of high impact cross-cutting actions completed and delayed in Q1 2023 are detailed in Table 4 and Table 5. Detail on all cross-cutting actions due for reporting are contained in Appendix 1.

Table 4 Examples of high impact cross-cutting actions and sub-actions completed in Q1 2023

Cross-Cutting Policy Area	Action / sub-action completed in Q1 2023
Citizen Engagement	CZ/23/3/A: Launch the National Dialogue on Climate Action (NDCA) Annual Report
Public Sector Lead	PS/23/2: Deliver a strategy to achieve at least a 51% reduction in GHG emissions and a 50% improvement in public sector energy efficiency by 2030
	PS/23/12/A: Support delivery of Green Public Procurement (GPP) procurer & specifier training for the public sector
Finance	CP/23/7: Consider further opportunities for issuing new Irish Sovereign Green Bonds
Adaptation	AD/23/6: Finalise scoping report on coastal change management
International	IC/23/3: Conclusion of an ambitious legally binding instrument on marine conservation in the high seas

Table 5 Examples of high impact cross-cutting actions and sub-actions delayed in Q1 2023

Cross-Cutting Policy Area	Action / sub-action completed in Q1 2023
Carbon Pricing	CP/23/4/A: Finalise research on marginal abatement cost of reaching our climate targets in order to revise the shadow price of carbon appropriately
Planning	CP/23/9: Establish a working group to examine implementation of climate actions in the National Planning Framework

1.3 Overcoming delays to climate action delivery

As the first Progress Report on CAP23, any early challenges to climate action implementation must be overcome to prevent further knock-on delays to subsequent CAP23 actions. The delivery of all actions listed in the CAP is essential to meet national and EU emissions reduction obligations.

Key reasons cited by Departments for delayed implementation this quarter include the finalisation of technical issues (e.g., related to funding or research modelling) and requirements of alignment (e.g. delaying completion to coincide with other policy developments). Other actions experienced more minor delays including the final publication of reports or schemes, with these actions expected in Q2 2023. The 9 delayed actions from Q1 2023 will carry forward for delivery and reporting in Q2 2023 to maintain accountability to their completion.

1.4 Accountability to CAP 21 legacy actions

In addition to the open-source detail on all actions completed and delayed this quarter (Appendix 1), an additional spreadsheet accompanies this Progress Report (Appendix 2). This spreadsheet details how both delayed measures (e.g. those due in 2022) and future actions (e.g. those due in 2023, 2024 etc) from CAP21 were accounted for, either within the updated CAP23 and Annex of Actions or otherwise.

Where actions carried forward directly, the new action number is provided for enhanced clarity and traceability. Other actions carried forward indirectly, including the appropriate merging of lower-impact actions to allow for a focus on high impact activities in CAP23 (e.g. more minor research, consultation or project management steps in the delivery of a more significant action).

Where actions did not carry forward either directly or indirectly to CAP23, a rationale is provided by the responsible Department. This includes reasoning associated with changed policy approaches and/or actions being superseded by increased ambition.

Further detail on the sectoral measures due for delivery in Q1 2023 is provided next, with full open-source data on all actions completed and delayed this quarter contained at Appendix 1.

2 Agriculture

Agriculture Emissions Context

Agriculture is the single largest GHG emitting sector in Ireland. Additional agriculture-related emissions also arise in the Land Use, Land Use Change and Forestry (LULUCF) sector from organic soils drained for farming uses (grasslands). Combined, emissions from agriculture and LULUCF account for c.45% of Irish emissions.

Agricultural emissions increased by 3% in 2021, primarily due to increased fertiliser use, dairy cow numbers and milk production (Figure 1). Sectoral emissions overall are up 19.3% in the last ten years (Figure 2). Methane from livestock (enteric fermentation and manure management) accounts for 68% of Irish agricultural GHGs.

Ireland consistently has one of the [highest EU greenhouse gas emissions per capita](#), largely due to the disproportionate impact that agriculture has as an industry here. This signals the importance of decarbonisation in the sector.

CAP23 aims to reduce emissions in agriculture through reduced fertiliser use, farm income diversification for livestock reductions through tillage, organics and renewable energy, reduced slaughter ages, extended grazing, animal breeding and feed management.

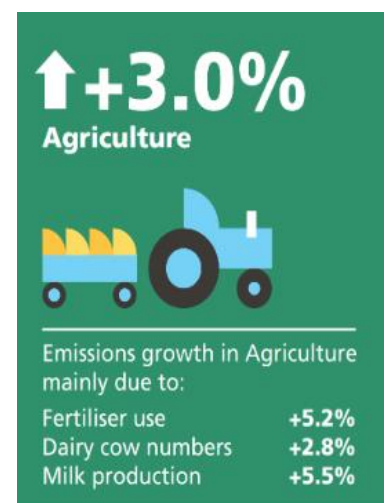
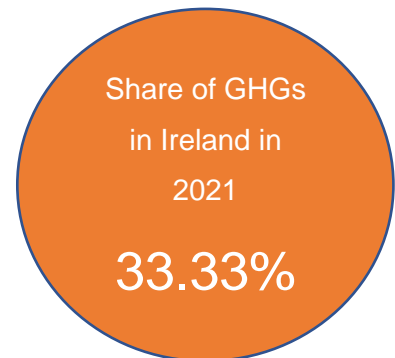


Figure 1 Agriculture emissions growth in 2021 (EPA, 2022)

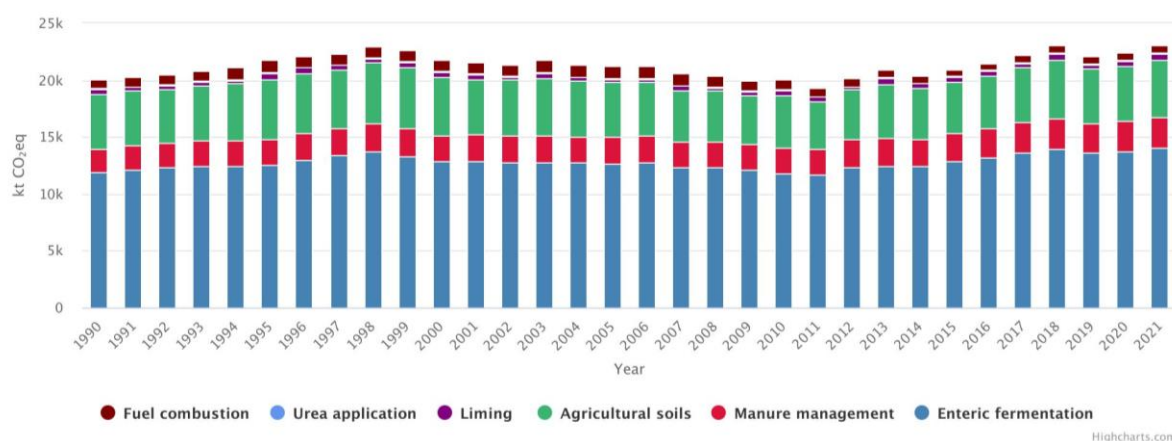


Figure 2 Agriculture emissions trends 1990-2021 (EPA 2022)



Making Family Farms More Sustainable

Key Performance Indicators / 2030 Targets



400,000ha for tillage by 2030

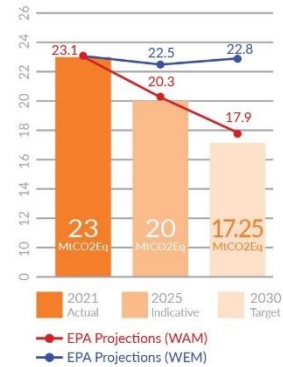


450,000ha for organic farming by 2030



Fertiliser use reduced to max 300,000 tonnes by 2030

Gap to Target



Q1

- ✓ Open Agri-Climate Rural Environment Scheme (ACRES)
- ✗ New TAMS 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



In Focus in Q1 2023: Agriculture

Did You Know? A number of payment and support schemes opened to farmers in Q1 2023 under Ireland's new [Common Agricultural Policy Strategic Plan](#). This will continue supporting farm incomes in producing world class, safe and sustainable food, and help us achieve climate and environment ambitions. By structuring farm payments with climate action in mind, farmers can now apply to schemes that help to reduce emissions, limit pollution, restore biodiversity and sequester carbon.

What's new? The €1.5billion [Agri-Climate Rural Environment Scheme](#) (ACRES) in particular (AG/23/11) will help to improve biodiversity, climate, air and water quality through both national and area-based actions. In Q1, 46,000 applications were received and approved by DAFM. This enabled the achievement of a number of related LULUCF actions in CAP23, allowing farmers to receive funding for, among other things, the planting of cover crops to help stop soil erosion (LU/23/4), improving carbon sequestration on mineral grasslands (LU/23/7), low input peat soils management (LU/23/10) and tree and hedgerow planting (LU/23/21).

3 Transport

Transport Emissions Context

Overall, transport accounted for 15.7% of Ireland's total GHGs in 2021, increasing by 6.7% in 2021 on the previous year (Figure 3). Transport emissions overall have increased by 112.2% between 1990 and 2021, the greatest increase of all sectors (Figure 4).

The EPA estimates that transport emissions may rise by 18-19% between 2020 and 2022, given that all Covid-related travel restrictions were removed in 2022. The need to accelerate transport emissions abatement is clear as emissions continue to rebound post-Covid-19.

For CAP23, the approach to decarbonisation of the transport sector in Ireland was recalibrated to identify additional measures to close the “gap” to delivering 50% emissions abatement by 2030. The [Avoid-Shift-Improve framework](#) for transport sustainability has been applied, emphasising the crucial role of spatial and land-use planning in designing transport systems as well as modal shift to public transport, walking and cycling. These take priority over fuel-switching in vehicles (e.g., electric or biofuels) though significant abatement will also be achieved by these ‘Improve’ measures.

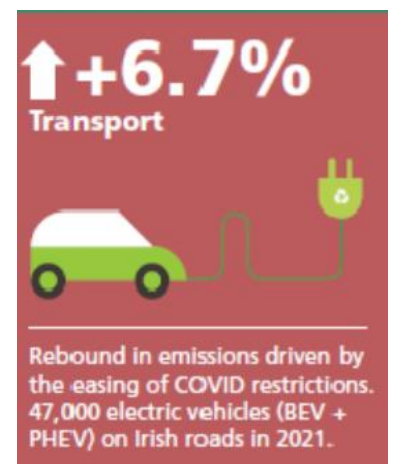
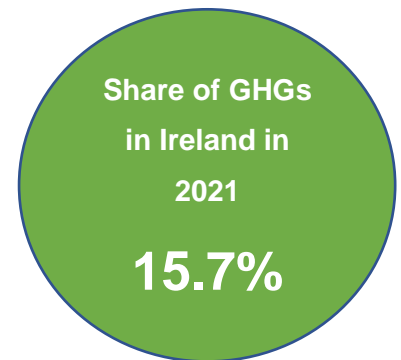


Figure 3 Transport emissions growth in 2021

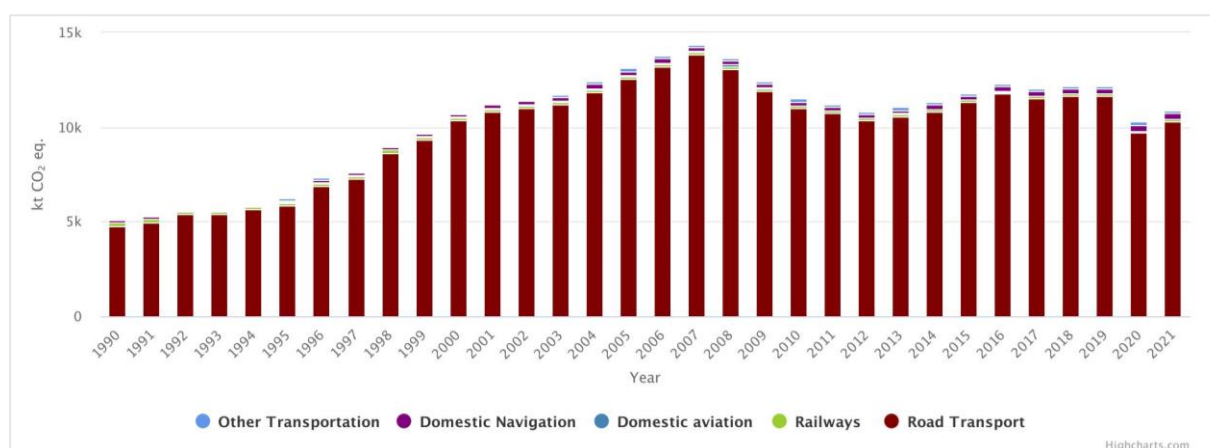


Figure 4 Transport emissions trends 1990-2021 ([EPA 2022](#))



Transforming How We Travel

Key Performance Indicators / 2030 Targets

84,727
Currently

945,000 EVs
by 2030

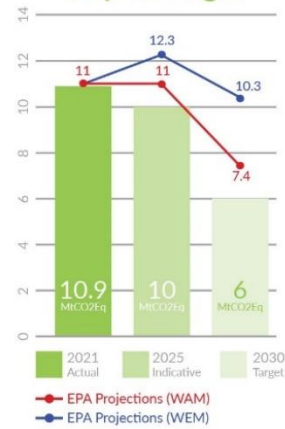
E5/B7
Currently

E10/B20 biofuel
blend rates by 2030

9%*
Currently

50% reduction
in transport fuel usage
by 2030

Gap to Target



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
Expand National Transport Authority remit to regional cities

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 2021 data, reflective of restricted travel from COVID period.

In Focus in Q1 2023: Transport

Did You Know? Shifting away from petrol and diesel cars to electric vehicles (EVs) will greatly help reduce transport emissions and improve air quality. The sales of EVs have increased in Ireland in the last few years thanks to Government incentives, an increasing variety of models on the market, and improving infrastructure. 2022 saw an 81% increase in the registration of EVs compared to the previous year. 24% of all new cars sold in first quarter of 2023 were EVs, [bypassing the sale of diesel cars](#) for the first time. There are now 84,727 EVs registered in Ireland.

What's new? From July 1, 2023, the maximum [private vehicle car grant](#) will be set at €3,500 for application, down from the current maximum of €5,000. This change aligns with similar policies in European nations, where countries including Norway, Germany, and France, have begun to curb vehicle subsidies and move government investment towards charging infrastructure. Other incentives for EVs remain unchanged, including favourable tax rates, tolls and incentives for businesses, taxis, hackneys and trucks.

Earlier in Q1, Ireland's first [EV charging infrastructure strategy](#) was published, shortly followed by the launch of a [Shared Island Sports Club EV Charging Scheme](#). This will provide €15 million in funding for fast EV charging in sports clubs around Ireland. Over 600 sports clubs have already applied. This initiative and others coming later this year will support communities nationwide, providing necessary charging infrastructure for current and future EV owners.

4 Electricity

Electricity Emissions Context

Energy industries accounted for 16.7% of national emissions in 2021. Renewables accounted for 34.7% of electricity generated in 2021. GHG emissions increased by 17.6% in 2021 from 2020 (Figure 5). This was caused by a tripling of coal & oil use within electricity generation and decreased renewable energy electricity generation in 2021; wind -16% & hydro -20%. This was the first year of energy GHG increases since 2016 (Figure 6).

CAP23 continues ambition to increase renewable electricity generation to 80% by 2030, including the rapid acceleration of offshore and onshore wind, and increased solar PV capacity. This ambition is supported by additional actions focused on interconnectivity, demand management and improved storage.

The Plan further aims to produce green hydrogen from surplus renewable electricity and introduces targets and actions to create new flexible gas-fired generation of at least 2GW to assist with energy security during the transition. Increased attention is also given to accelerating other flexibilities (including storage) and demand side management.

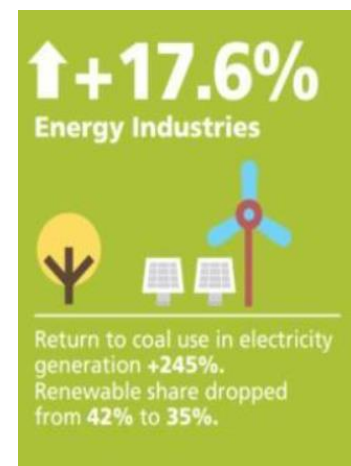
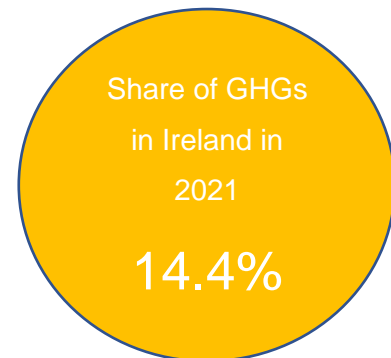


Figure 5 Electricity emissions growth in 2021

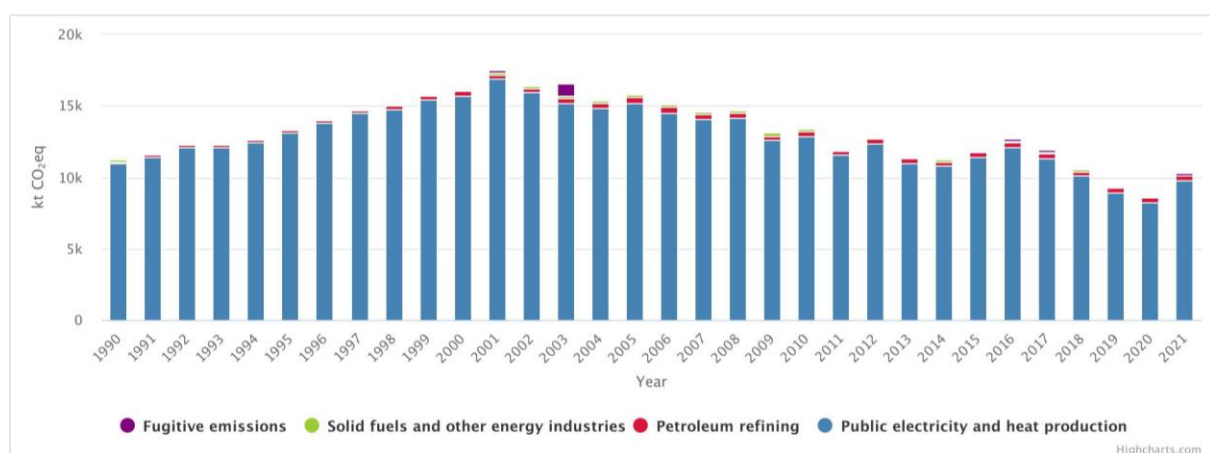


Figure 6 Energy Industry emissions trends 1990-2021 ([EPA 2022](#))



Powering Renewables

Key Performance Indicators / 2030 Targets

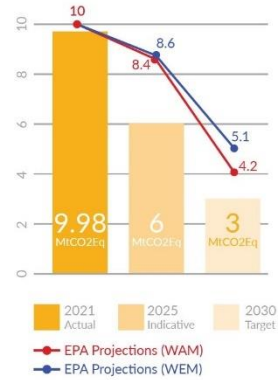


80% electricity from
renewable sources by 2030



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

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



In Focus in Q1 2023: Electricity

Did You Know? In Climate Action Plan 2023, the action BE/23/9 called for the implementation of the [Energy Efficiency Obligation Scheme](#). Under the Scheme, energy suppliers must support energy efficiency projects in businesses, public services and homes across Ireland, helping energy users save energy.

Companies who sell large amounts of energy have targets under the scheme. They must offer supports to make your home or business more energy efficient (e.g. insulation, window glazing, changed heating systems or information provision). For every unit of energy saved, they achieve energy credits towards their targets. This will help Ireland to reach national and European energy saving targets.

From 2014 - 2020 obligated parties supported energy efficiency in more than 290,000 dwellings and over 3,000 businesses. This offset c.1.2Mt of CO₂ emissions and resulted in recurring financial savings of approximately €240 million per year.

What's new? The [newly redesigned scheme](#) is now being implemented as of January this year. The scheme has been redesigned in response to amendments to the EU Energy Efficiency Directive (EED) and the Government's climate priorities. This will build on the obligation scheme that has been in place since 2014 and will contribute significantly to the delivery of Ireland's energy-saving target under the revised EED.

5 Land Use, Land Use Change and Forestry

LULUCF Emissions Context

Land Use, Land Use Change and Forestry (LULUCF) has been an emissions source in Ireland since 1990. Land uses emitted 7.8Mt CO₂ eq in 2021, roughly equivalent to emissions from the entire residential sector. Emissions from LULUCF are 25% higher than in 1990 (Figure 7).

Share of GHGs
in Ireland in
2021

11.2%

Emissions in LULUCF largely come from Grassland and Wetlands, mainly due to the drainage of organic soils for agriculture and forestry. This is offset somewhat by Forest Land on mineral soils, Harvested Wood Products, and functioning (wet) bogs which can act as carbon sinks. However, an ageing tree profile, planting on organic soils, drained bogland and deforestation create challenging conditions for emissions in the sector.

A decision on setting a Sectoral Emissions Ceiling for LULUCF was [deferred by 18 months](#) last July, pending evolving scientific data. In absence of a ceiling, CAP23 continues efforts to increase planting rates to 8,000ha per annum, restore and rehabilitate bogs and promote changes in grassland management on both mineral and organic soils.

The LULUCF sector must be re-balanced to revert current emissions sources to net sinks. Changed land practices can also bring benefits for adaptation, biodiversity and water quality.

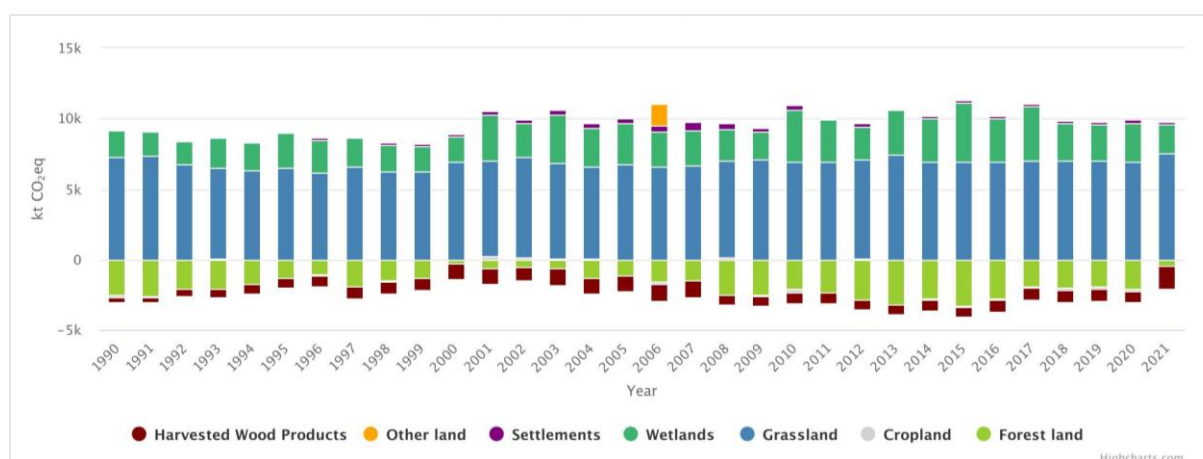


Figure 7 LULUCF emissions trends 1990-2021 ([EPA, 2022](#))



Changing Our Land Use

Key Performance Indicators / 2030 Targets

2,273
Currently

8,000ha per annum
afforestation
by 2030

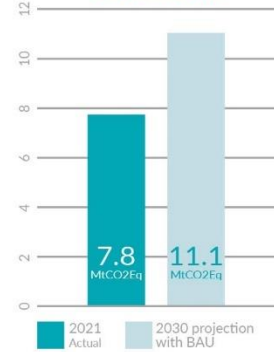
-
Currently

80,000 ha reduction
in organic grassland
intensity by 2030

13,437
Currently

35,900ha
peatland rehabilitated
by 2030

Unabated LULUCF Emissions



Exact reduction target for this sector is yet to be determined.

- ✓ 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



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 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



Did You Know? [Phase I of the Land Use Review](#) published in Q1 2023 (LU/23/19).

Originally committed to in the Programme for Government, the Land Use Review provides a strong evidence base for decision-making with the aim of ensuring that optimal land use options (including from environmental, economic, and social standpoints) inform relevant Government decisions. The work was carried out with the support of a Land Evidence Forum chaired by the EPA and the oversight of a Land Use Review Steering Committee co-chaired by DECC and DAFM.

Phase I of the review determines the environmental, ecological and economic characteristics of land types across Ireland. It provides a better understanding of current land use patterns to help shape future policies and measures for improvements in the sector. It estimates that 78% of Ireland's land is privately owned, signalling the importance of land ownership in the design and delivery of a land use strategy.

Phase II will build on the evidence gathered and also commenced in Q1 2023 (LU/23/20). In consultation with stakeholders, Phase II will consider the policies, measures, and actions which will need to be taken in the context of committed economic, social and climate objectives. The approach to be taken was approved by Government on 7 March 2023.

6 Buildings

Buildings Emissions Context

Emissions from buildings, which includes residential homes, commercial premises and public services buildings, were responsible for 12.3% of Ireland's emissions in 2021.

Emissions in the residential sector decreased by 4.9% in 2021 (Figure 8), from an inflated position in 2020 due to remote working. Emissions from commercial and public buildings also decreased in 2021, in keeping with wider reduction trends in both sectors (Figure 9 and 10).

CAP23 focuses on enhancing home heating efficiencies and investing in renewable heating to reduce emissions. CAP 21 retrofit and heat pump targets remain in CAP23, including 500,000 home retrofits by 2030, and the installation of 680,000 heat pumps across new and existing buildings.

CAP23 brings an increased focus on district heating compared to previous CAPs, targeting up to 2.5 TWh of district heating installed capacity by 2030. Improved building regulations will also require that all new dwellings are built to [Nearly Zero Energy Building](#) (NZEB) standard by 2025, and Zero Emission Building (ZEB) standard by 2030. Finally, roadmaps to decarbonise commercial and public building stocks are also a priority in CAP23 along with the exploration of other novel heating sources such as renewable gas and geothermal energy.

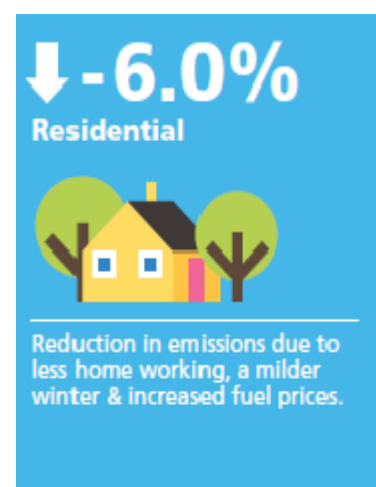
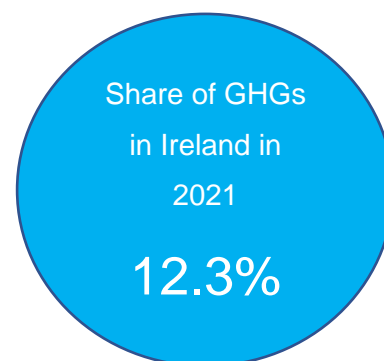


Figure 8 Residential emissions reduction in 2021

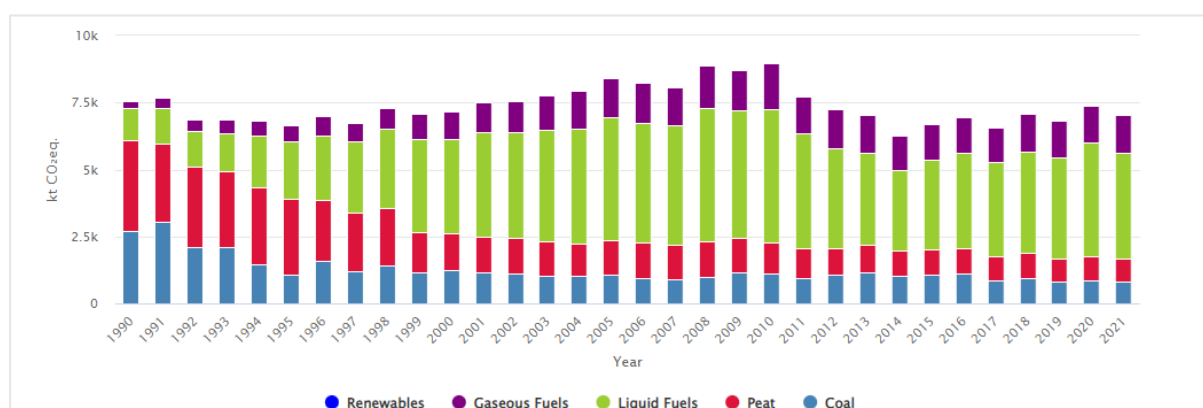


Figure 9 Residential emissions trends 1990-2021 (EPA, 2022)

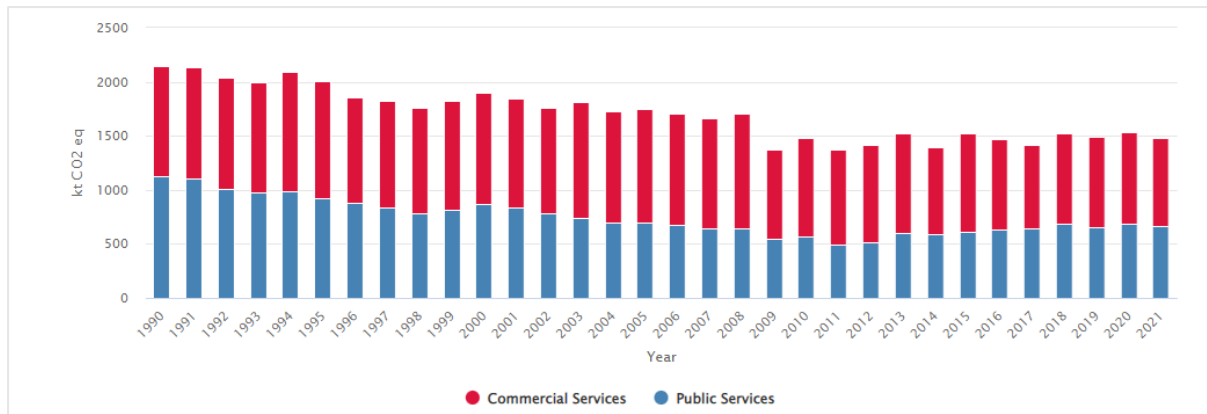


Figure 10 Commercial and public building emissions trends 1990-2021 (EPA 2022)

In Focus in Q1 2023: Buildings

Did You Know? In the residential rental sector, the incentives to invest in energy efficiency upgrades are misaligned between landlords and tenants, i.e. the benefits of retrofitting a house or apartment for warmer, more comfortable and cheaper-to-run homes do not primarily accrue to the person who pays for the transaction. This can impact negatively on the energy performance of the sector and in ensuring a Just Transition for those who rent.

What's new? A [new tax incentive](#) for small-scale landlords was enacted this quarter to encourage retrofitting in rental properties while the tenant remains living there. This measure provides for a tax deduction of up to €10,000 per property for certain residential retrofitting expenses incurred by the landlord, for a maximum of two rental properties. The aim is to retain small-scale landlords in the market, while also improving rental housing, ensuring more comfortable homes for tenants and reducing emissions from buildings.



Building Better

Key Performance Indicators / 2030 Targets

7,839
Currently

400,000 heatpumps
in existing homes
by 2030

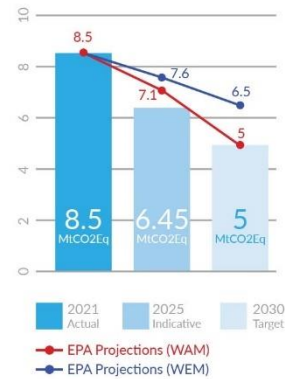
24,396
Currently

500,000 B2
Retrofits by 2030

0
Currently

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
- ✗ Implement District Heating Steering Group recommendations



Q2

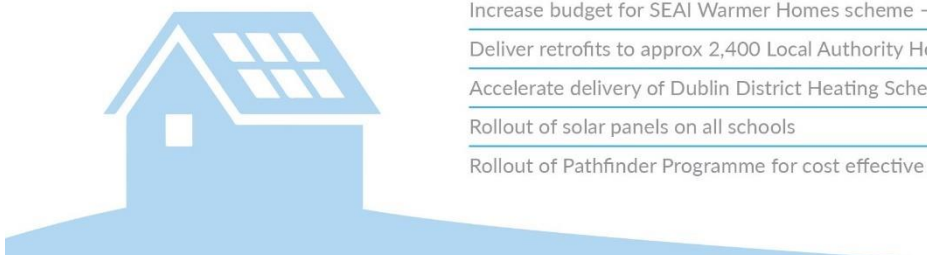
- Introduce 'net of grant' energy upgrade option for homeowners
- Geothermal Policy Statement
- Heat and Built Environment Delivery Taskforce Implementation Plan
- Launch new retrofit scheme for SMEs

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

- 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



7 Industry

Industry Emissions Context

Industrial emissions accounted for 10.2% of Ireland's total emissions in 2021, with manufacturing combustion (Figure 12) and industrial processes (Figure 13) as the key emissions sources. Combustion and process emissions increased in 2021 by 0.9% and 16.8% respectively, largely due to increased cement production as Covid-19 restrictions relaxed (Figure 11).

CAP21 aimed to reduce emissions in industry through increased use of carbon-neutral heating in manufacturing and reduced embodied carbon reduction in construction materials.

Building the [SEAI National Heat Study](#), CAP 23 intensifies the focus on industry decarbonisation, with actions pursuing a 70-75% share of carbon neutral heating in total fuel demand by 2030.

CAP23 also increases focus on reducing fossil fuel demand in industry including through supported energy efficiency measures, as well as accelerating the use of zero emissions gas in industrial heating (at least 2.1 TWh by 2030) and growing the circular- and bio-economies.



Figure 11 Industry activity in 2021

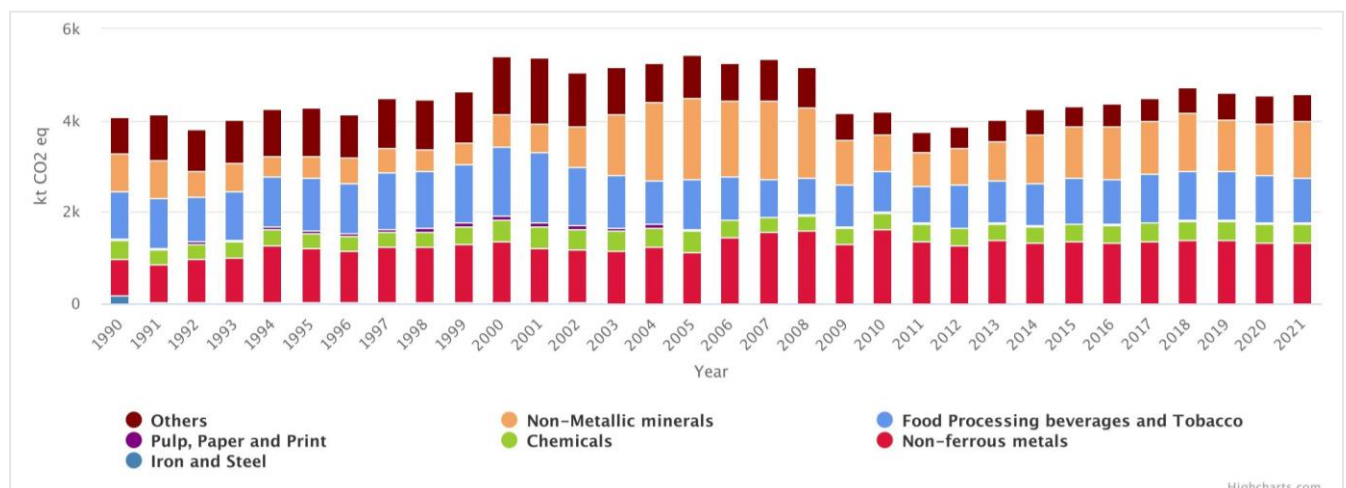


Figure 12 Manufacturing combustion emissions 1990-2021 ([EPA, 2022](#))

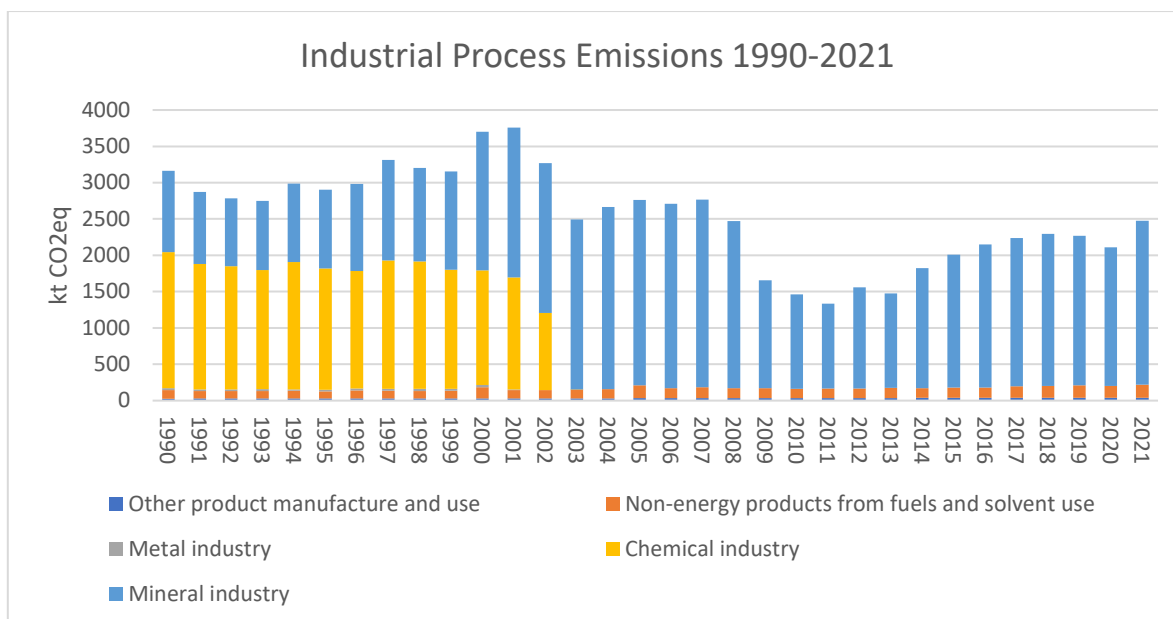


Figure 13 Industrial processes emissions 1990-2021 (EPA, 2022)

In Focus in Q1 2023: Industry

Did You Know? The [Large Industry Energy Network](#) (LIEN) is an organisation that aims to promote sustainable energy practices among large energy users. LIEN is made up of a network of companies across various industry sectors, including pharmaceuticals, food and drink, and data centres.

The members of LIEN, supported by SEAI, work together to improve their energy performance. The organisation provides a platform for members to share knowledge, best practices and collaborate on energy efficiency projects. LIEN also works closely with policymakers to advocate for the implementation of sustainable energy policies and to facilitate the transition towards a low-carbon economy.

The Network's mission is to help its members reduce energy costs, improve their competitiveness, and contribute to Ireland's sustainable energy goals. 196 of Ireland's largest energy users, employing 140,000 people, are members of LIEN; and 18% of Ireland's Total Primary Energy Requirement is accounted for by LIEN members.

If you are interested in joining or have any queries about LIEN, please email business@seai.ie.



Greening Industry

Key Performance Indicators / 2030 Targets

36%
Currently

70-75% share carbon neutral
heating by 2030

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

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

