

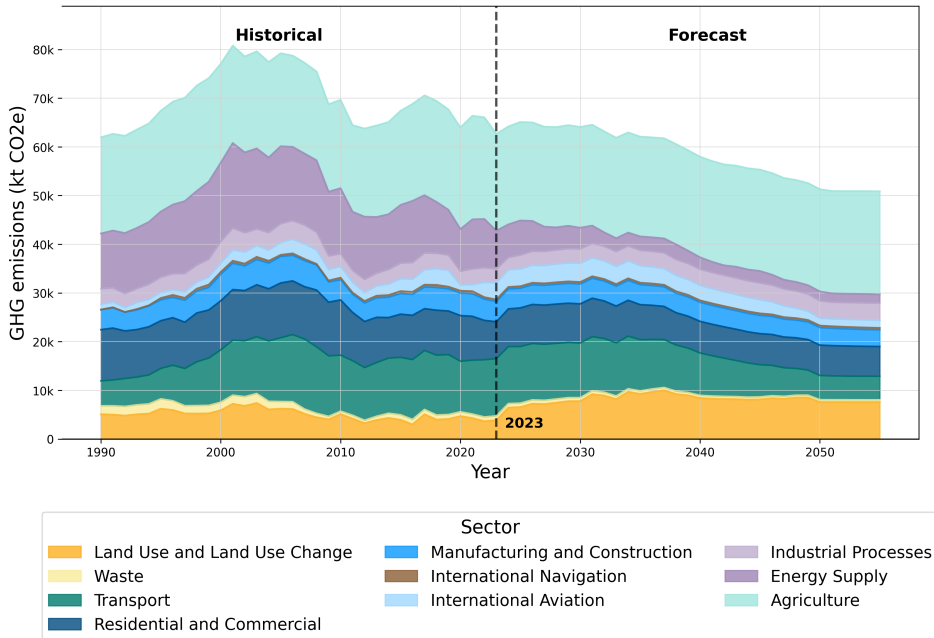


# National system for policies and measures and greenhouse gas projections of Ireland

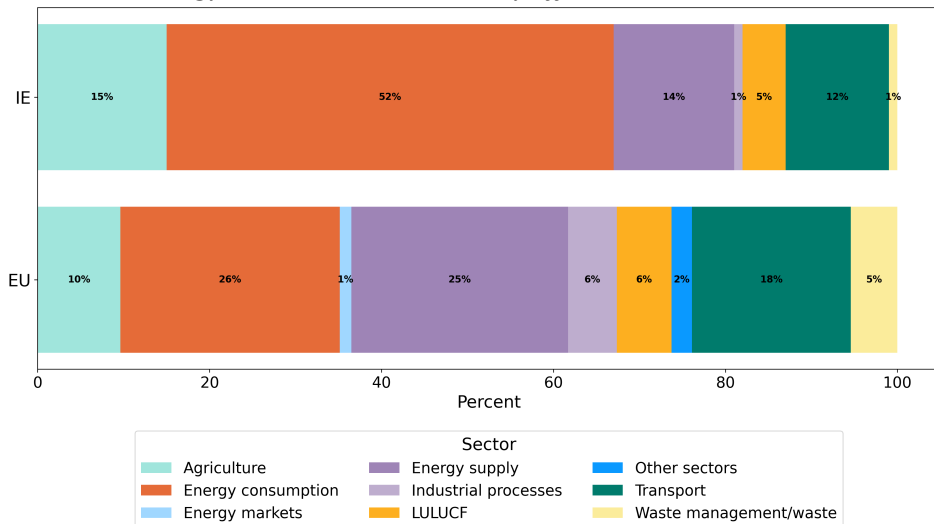
## Information reported in 2025

A robust and complete national system ensures the delivery of good-quality information on the projections of anthropogenic greenhouse gas emissions by sources and removals by sinks, as well as policies and measures in place to implement National Climate and Energy Plans. The two figures provide an overview of the information submitted by Ireland in 2025, enabled by the national system, as laid out below.

Historical and projected greenhouse gas emission in Ireland by sector in 2025.



Reported climate and energy Policies and Measures by affected sector in Ireland.



## Institutional and procedural robustness

### *Institutional arrangements*

The main stakeholders involved in the preparation of the PaMs and GHG emission projections are:

- Environmental Protection Agency;
- Department of the Environment, Climate and Communications (DECC);
- Sustainable Energy Authority of Ireland;
- Teagasc (The Irish Agriculture and Food Development Authority);
- Department of Agriculture, Food and the Marine;
- The Economic and Social Research Institute.

The Environmental Protection Agency is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. The primary functions of the EPA include environmental licencing, environmental law enforcement, environmental planning, environmental monitoring, environmental research, radiological protection and the regulation of Irelands GHG emissions. As explained above, the EPA has responsibility for the overall compilation and delivery of reporting on policies and measures (PaMs), GHG projections and preparing the National System for policies and measures and projections.

In addition to the primary data received from the key data providers, EPA draws on other data streams available within the EPA, such as the National Waste Database, reports on wastewater treatment, Annual Environmental Reports from operators subject to Integrated Pollution Prevention Control and Industrial Emissions Directive 2010/75/EU licences and submissions prepared under the European Pollutant Release and Transfer Register. Additional secondary data sources that also provide relevant data to the EPA include industrial facilities that hold an air pollution licence, industry sources with data on F-gases/cement and aviation authorities. The Emissions Trading Unit, also within the EPA, provides annual verified EU-Emissions Trading System emissions data.

The Minister for the Environment, Climate and Communications is responsible for the delivery of policies and programmes in a number of areas including Environment and Climate Action. The Minister has overall responsibility for climate change policy and the coordination of the development of the national PaMs in climate change mitigation and adaptation.

The EPA also works with the following organisations to clearly understand the assumptions, methodologies and models underpinning activity data projections and PaMs associated with the relevant sectors:

The Sustainable Energy Authority of Ireland (SEAI) is Ireland's national sustainable energy authority. SEAI works with householders, businesses, communities and government to create a cleaner energy future. SEAI is responsible for providing energy-demand projections including underlying data (e.g. macro-economic assumptions) and information on energy related policies and measures. The Economic and Social Research Institute (ESRI) produces independent, high-quality research with the objective of informing policies that support a healthy economy and promote social progress. The ESRI provide the macro-economic projections that feed in to the energy-demand projections developed by the SEAI.

Teagasc is Ireland's Agriculture and Food Development Authority providing integrated research, advisory and training services. Teagasc is responsible for providing projected agricultural activity data including animal numbers, crop areas and fertiliser use.

The Department of Agriculture, Food and the Marine is responsible for the sustainable development of the agri-food, forestry and marine sector in Ireland. This department provides activity data and projected estimates of greenhouse gas emissions and removals for forest land.

The Organogram attached shows the organisational structure of the National System for PaMs and projections.

All of the data used in the compilation of Ireland's PaMs and projected greenhouse gas emissions submission is stored on an EPA data server accessed by key staff only. All background data for recent years are available in electronic format, with a transparent file structure. All data on the data server is backed up daily. Data older than 6 years is archived.

### ***Procedural and administrative arrangements and timescales***

The cycle for preparation of the report on policies and measures and of projections typically follows the timeframe below:

Data collection: June - January/February (including energy forecasts projections and related policies and measures, agricultural data);

Use of reference year inventory data for underpinning projections: November – January;

Projections compilation: October – February/March (prior to submission in March);

PaMs compilation: October – February/March (prior to submission in March);

Projections QA/QC: January - and February/March (prior to submission in March);

Internal communication with key stakeholders and Government departments on latest PaMs and projections: February – May;

PaMs and Projections submission: As a minimum a submission is required by 15 March every two years as per Regulation EU 2018/1999 on the Governance of the Energy Union and Climate Action.

National publication on PaMs and projections: April/May annually.

A key part of the preparatory process is to inform and to assist policy makers in making decisions around which PaMs, including elements of Ireland's Climate Action Plans, are assigned to the WEM and WAM scenarios respectively.

Having examined the available guidance, the EPA considers that for any policies and measures to be included in the WEM scenario, the principle of certainty associated with the implementation of those policies and measures needs to be central to the assessment. The underpinning actions to deliver the policy and measure need to be clear and unambiguous. Such policies and measures need to be underpinned by, for example, one of the following and have a clear associated timeframe for which they apply:

- laws, directives, and decrees;
- regulations and standards;
- taxes, charges, subsidies, and incentives;
- information instruments;
- voluntary agreements;
- implementation of new technologies,
- processes, or practices;
- public or private sector financing and investment;
- allocation of human resources.

PaMs that are included in broad strategies or plans that are yet to have associated actions or interventions in place to help achieve their desired outcome should be included in the WAM scenario.

Procedural arrangements have been developed by the EPA to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported on PaMs and projections. These include:

Timeliness: All data is provided with enough time to enable checking and incorporation into the emission projection estimates. To do this, timings are agreed with well-established data suppliers along with requirements set out in Memorandum of Understanding (MoU) or Service Level Agreements (SLAs). These agreements cover the delivery of timely datasets and relevant input for the compilation of Ireland's emission projections.

The EPA has agreed specific MoU/ SLAs with the following key data providers:

1. Sustainable Energy Authority of Ireland
2. Teagasc (The Irish Agriculture and Food Development Authority)
3. Department of Agriculture, Food and the Marine

In addition to data supply agreements, timeliness is ensured by having the following in place:

- Early communication of data requirements and quality expectations to data suppliers in advance of compiling the projections;
- Prioritisation for the provision of data quality assurance and quality control;
- Clear timetable for preparation, review and delivery of projections;
- Regular project meetings to discuss progress and any slippages in the timetable.

Data quality is a priority in Memorandum of Understanding/service level agreements and ongoing communications with data providers. This provides stakeholders with a clear emphasis on quality expectations for the data and a framework for efficient preparation, prioritisation and QA/QC.

Transparency: All projections estimates are transparently described and compiled such that:

- An independent expert can recreate the estimates with a clear understanding of the data sources, assumptions and methods used;
- There is minimal need for clarification on the methods used for the estimates from key stakeholders, public and other independent review/analysis teams.

The EPA also produces a report which describes the methodology underpinning the development of Ireland's greenhouse gas emissions projections. This report ensures transparency and forms part of Ireland's reporting submission to the European Commission.

Accuracy: All stakeholders providing data are well established. The methods used for preparing the estimates conform to good practice guidance in accordance with the draft EC projections guidelines (see

[http://ec.europa.eu/clima/policies/g-gas/monitoring/docs/ghg\\_projection\\_guidelines\\_a\\_en.pdf](http://ec.europa.eu/clima/policies/g-gas/monitoring/docs/ghg_projection_guidelines_a_en.pdf)  
and

[http://ec.europa.eu/clima/policies/g-gas/monitoring/docs/ghg\\_projection\\_guidelines\\_b\\_en.pdf](http://ec.europa.eu/clima/policies/g-gas/monitoring/docs/ghg_projection_guidelines_b_en.pdf))  
and for air pollutants projections in the EMEP/EEA Guidebook (<http://www.eea.europa.eu/publications/emep-eea-guidebook-2013>) and UNECE Reporting Guidelines (Guidelines for Reporting Emissions and Projections Data under the Convention on Long-Range Transboundary Air Pollution (ECE/EB.AIR/125, C, 44)).

Projections follow the greenhouse gas source and sink categorization recommended by the European Commission (based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and revised UNFCCC CRF tables for inventory reporting).

Assumptions are well founded (and based on evidence and/or expert judgement) and, where relevant, consistent with assumptions used by Ireland for other related analysis and reporting (e.g. projections and policy analysis for energy, agriculture, waste activities) particularly those related to EU policies and measures. Assumptions are regularly reviewed.

The data are as accurate as possible, and sensitivities are understood and communicated in reports and outputs where relevant. The data are representative of the category and geographical scope for which it is being used. Sensitivity analysis is undertaken which uses appropriate input parameter data and assesses the relationship of variations in input data to emissions. Sensitivity analysis highlights the key parameters that the projections depend on and is further documented in the above-mentioned methodology report.

Consistent: Data are based on consistent data assumptions where relevant. For example, projections for energy and agriculture use the same key input parameters for population and GDP growth. Assumptions on policy impacts are applied to all sectors where they may apply.

Comparable: Data reported use nomenclature that makes it comparable with Member States and historical emissions estimates (e.g. by using the reporting categories in Table 1a of Annex XXV of

Commission Implementing Regulation 2020/1208).

Complete: The projections estimates include all categories and gases for which methods are provided and activities occur within the defined geographical area. This is continuously reviewed to ensure that all relevant sources are captured in the estimates.

Any communication on projections (e.g. to the European Commission under the Governance of the Energy Union and Climate Action Regulations (EU) 2018/1999) is complete and contains all mandatory datasets, and qualitative information.

The Organogram attached above describes the information flows through the system and at which points QC and QA measures are applied.

In relation to consistency with preparation of reports on PaMs and projections under the NEC Directive (Directive (EU) 2016/2284) largely the same source data is used for both sets of reports.

### ***Procedures for the official consideration and approval of the Member States national system***

Approval of the national system or changes to the national system for policies and measures and projections involves sign-off by the Department of the Environment, Climate and Communications and the EPA (Programme Manager) before it is transmitted to the Board of the EPA. Any issues arising from the Board's examination of the national system are communicated and resolved before submission.

### ***Description of the information collection process***

The EPA is responsible for coordinating the overall collection of data underpinning the compilation of emission projection estimates. The base year for projections is the latest year for which there exists available information on macroeconomic development, on energy and emission balances and on the national GHG emission inventory.

Consistent processes for collection and use of the data are applied as much as possible across the different sectors. The EPA co-ordinates the agreements for data supply with other agencies and experts, and initiates data collection activities. The EPA manages the data collection, data checking and compilation of estimates that conform to the data quality requirements. This is further described under Sections 3 and 4 above. The EPA ensures there are adequate resources for the collection and use of the data.

Consistent processes are used for collecting and using information for policies and measures and projections.

### ***Description of the process for selecting assumptions, methodologies and models for making projections of anthropogenic greenhouse gas emissions***

The EPA and other agencies are responsible for selecting the assumptions, methods and models used in emission projections compilation. This is achieved through the following:

- The EPA's experts work closely and interact regularly with data suppliers in particular on energy, agriculture, forestry and land use change and waste modelling in order to clearly understand the assumptions, methodologies and models underpinning activity data projections associated with the relevant sectors. Key assumptions are communicated between experts during the compilation of the emission projections;
- Key assumptions, data sources and methods are documented in the methodology report prepared by the EPA for each submission.

The EPA has prepared an improvement plan which includes identified improvements relating to the methodologies underpinning projections. This is reviewed and prioritised on a regular basis. Any

changes will be documented in the methodology report prepared by the EPA for each submission.

### ***Institutional administrative and procedural arrangements for domestic implementation of EU's NDC***

The Climate Action Plan 2019, published on 17 June 2019, provides for enhanced governance arrangements for the implementation of national climate mitigation and adaptation policies and measures. The Plan provides for a mechanism of quarterly reporting to Government in relation to committed actions under the Climate Action Plan and for publication of these progress reports.

The Plan also provides for the establishment of a Climate Action Delivery Board within the Department of the Taoiseach to oversee its delivery. The Delivery Board is jointly chaired by the Secretaries General of the Departments of the Taoiseach and Environment, Climate and Communications, with membership comprising the Secretaries General from Departments responsible for the actions outlined in the Plan. In addition, overall progress is monitored by a Cabinet Committee on Environment, chaired by the Minister for the Environment, Climate and Communications.

The Climate Action Plan also provides for a number of other governance and implementation mechanisms which will be given statutory effect in 2021 through a Climate Action and Low Carbon Development (Amendment) Bill as set out below.

The Bill will establish a 2050 climate neutrality objective in law and place all relevant climate plans and strategies on a statutory footing. The Minister for the Environment, Climate and Communications will be required to prepare an annual update to the Climate Action Plan commencing in 2021, and not less than once every 5 years, a National Long Term Climate Action Strategy.

The Bill will define how five-year carbon budgets and related sectoral targets will be set. A carbon budget programme, consisting of three five-year budgets, will be proposed every five years by the Climate Change Advisory Council, for adoption by Government and endorsement by the Oireachtas (the national legislature of Ireland). Within the ceilings of each carbon budget programme, the Government will agree 'Sectoral Emission Ceilings,' identifying the sectors to which ceilings will apply and with the possibility that different ceilings may apply to different sectors.

The Bill also provides appropriate oversight by Government, a strengthened Climate Change Advisory Council and a significantly strengthened accountability and oversight role by the Oireachtas.

Each year, relevant Ministers will be required to give account annually to an Oireachtas Committee on their performance in adhering to their sector's sectoral emissions ceiling. Where Ministers are not in compliance with the targets, they will need to outline what consequential measures are envisaged and respond to any recommendations made by the Committee within three months. This 'comply or explain' approach will ensure greater oversight to drive delivery.

The annual revision to the Climate Action Plan acts as a further review mechanism and opportunity to re-adjust or refocus actions, if required, to ensure targets are achieved.

The annual process of updating policies and measures and related actions to deliver on these policies and measures through the Climate Action Plan will, in turn, inform the preparation of annual greenhouse gas emissions projections by the EPA.

## **Formality**

### ***Legal arrangements***

EPA is responsible for the compilation and official reporting on policies and measures (PaMs) and

projected greenhouse gas emission estimates including preparing the National System for policies and measures and projections. Such responsibilities meet reporting obligations under EU 2018/1999 on the Governance of the Energy Union and Climate Action and associated Commission Implementing Regulation EU 2020/1208. There is no relevant national legislation in place in Ireland.

## Alignment with other reporting frameworks

### *GHG inventory reporting*

The national greenhouse gas emission inventory, which is also managed by the EPA, is a key dataset that underpins the greenhouse gas emission projections. This national system for PaMs and projections therefore builds on the National Atmospheric Inventory System (NAIS) for Ireland which was established by Government Decision in 2007.

The NAIS establishes the necessary institutional, legal and procedural arrangements for the compilation of robust inventories of national emissions to the atmosphere (initially established for greenhouse gas emissions and now includes air pollutants). The NAIS is a management system which assures the quality of inputs to and outputs from the national atmospheric inventory. It formally sets out the planning, preparation and management of the national atmospheric inventory and identifies clearly the roles and responsibilities of all the organisations involved in its compilation.

Following establishment of the National Atmospheric Inventory System, institutional arrangements directed towards national inventory reporting that involve the EPA, DECC and other stakeholders were consolidated across all participating institutions to strengthen inventory capacity within the EPA. This ensured that more formal and comprehensive mechanisms of data collection and processing were established and maintained for long term implementation.

The NAIS puts in place formal procedures for the planning, preparation and management of the national inventory and identifies the roles and responsibilities of all the organisations involved in its compilation. This includes the adoption of Memoranda of Understanding between key data providers and the EPA which stipulate the scope, timing and quality of the inputs necessary for inventory compilation in accordance with the guidelines for national systems. A QA/QC plan is also an integral part of this national inventory system.

In addition to the primary data received from the key data providers, the inventory team draws on various other data streams available within the EPA, such as the National Waste Database, reports on wastewater treatment, Annual Environmental Reports from operators subject to EPA licensing (e.g. Industrial Emissions Directive) and submissions prepared under the European Pollutant Release and Transfer Register (E-PRTR). The inventory team obtains information from other diverse sources to prepare the inventories for fluorinated gases and solvent use. The inventory team also draws on national research related to greenhouse gas emissions and special studies undertaken from time to time to acquire the information needed to improve the estimates for particular categories and gases.

The EPA has developed and implemented practices in the development of greenhouse gas emission projections, which broadly follow the processes and arrangements in place for the national inventory system. These include the following:

- Incorporation of the projections data processing into the national emission inventory file structures.
- Development of QA/QC procedures like those in place for national emission inventories.
- Extending the remit of national emission inventory system Memoranda of Understanding with key data providers to include the supply of activity data for national greenhouse gas and air pollutant emission projections.

### ***Article 17 of the Governance Regulation (EU) 2018/1999 (NECPR)***

The integrated national energy and climate progress report will be prepared by the Department of the Environment, Climate and Communications (DECC) and the EPA and will contain an analysis of information contained in the Article 26(3) and Article 18 reports (inventory and PaMs and projections reports respectively). As described above, the Minister for the Environment, Climate and Communications has overall responsibility for climate change policy and the coordination of the development of the national policies and measures in climate change prevention. As DECC is established as one of the key stakeholders in the preparation of the reports referred to above, the necessary institutional link with the EPA is already in place.

## **Accountability and transparency**

### ***Quality control activities***

The EPA implements a process of quality assurance and quality control (QA/QC) throughout the phases of the preparation of PaMs and projections.

The EPA includes QA/QC as part of its plan to manage the production of projected emission estimates which encompasses the following:

- Data supplier QA/QC is monitored and encouraged by the EPA in Memoranda of Understanding and Service Level Agreement;
- Sector experts undertake QA/QC for their particular sector estimates prior to incorporation into the overall estimates;
- Regular interaction between the EPA and data suppliers which include detailed QA/QC queries;
- The EPA manage and undertakes QA/QC of the final compilation of the emissions projections.

QA/QC is embedded in the detailed calculation sheets compiled by the EPA and evidence of checking is recorded in these files.

The EPA work with data suppliers to assess and understand sensitivities in the data provided with respect to the key input parameters such as energy prices and other key macro-economic data. Sensitivity analysis carried out on the projections (as legislatively required) is also documented in the methodology report that the EPA prepares for each relevant submission and includes the key assumptions behind the sensitivity analysis.

## **Public participation**

### ***Stakeholder engagement***

All stakeholders providing data are well established. The main stakeholders consulted in the preparation of the Policies & Measures and GHG emission projections are:

- Environmental Protection Agency;
- Department of the Environment, Climate and Communications;
- Sustainable Energy Authority of Ireland
- Teagasc (The Irish Agriculture and Food Development Authority)
- Department of Agriculture, Food and the Marine
- The Economic and Social Research Institute

Engagement between the various stakeholders, including government departments and state agencies, is undertaken in relation to the preparation and development of policies and measures. In particular, the new Climate Action and Low Carbon Development (Amendment) Bill will commit to annual revisions to the Climate Action Plan, which will act as a review mechanism and opportunity for stakeholders to engage in the re-adjustment or refocussing of actions, if required, to ensure that Ireland's climate objectives and targets are achieved.

Internal communication with key stakeholders occurs between February and May of each year. Data quality is a priority in Memorandum of Understanding/Service Level Agreements and ongoing communications with data providers. This provides stakeholders with a clear emphasis on quality expectations for the data and a framework for efficient preparation, prioritisation and QA/QC.

Following establishment of the National Atmospheric Inventory System, institutional arrangements directed towards national inventory reporting that involve the EPA, DECC and other stakeholders were consolidated across all participating institutions to strengthen inventory capacity within the EPA. This ensured that more formal and comprehensive mechanisms of data collection and processing were established and maintained for long term implementation.

## **Contact information for entities with overall responsibility for National Systems**

Ireland's Environmental Protection Agency (EPA) is designated as the national entity with overall responsibility for reporting on policies and measures (PaMs) and GHG projections. The EPA is responsible for the overall compilation and delivery of the PaMs and projected greenhouse gas emission estimates on time and to the required level of quality including the official reporting of Ireland's greenhouse gas emission projections outputs. This includes preparing the National System for policies and measures and projections. The EPA is also responsible for the QA/QC activities regarding submission of the National GHG Inventory each year. The data outputs from the national inventories are critically important in underpinning the greenhouse gas emission and air pollutant emission projections. The National System on Projections is broadly consistent with the National Atmospheric Inventory System (NAIS) for Ireland.

The Minister for the Environment, Climate and Communications has overall responsibility for climate change policy and coordination of the development of the national policies and measures in climate change mitigation and adaptation.

Contacts for the EPA are Suzanne Monaghan (s.monaghan@epa.ie) and Paul Duffy (p.duffy@epa.ie).