Circular economy country profile 2024 – Ireland



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Contents

Introduction	2
reland – facts and figures	4
Existing policy framework	8
Dedicated national and/or regional strategy, roadmap or action plan for circular economy	8
Dedicated local strategy, roadmap or action plan for circular economy	9
Circular economy policy elements included in other policies	10
Monitoring and targets	13
Assessment of circular economy performance	13
Circular economy monitoring frameworks and their indicators beyond the ones from Eurostat	14
Circular economy targets	14
Innovative approaches and good practices	16
Examples of public policy initiatives (national, regional or local)	16
Examples of private policy initiatives (sectoral)	20
The way forward	24
Identifying and addressing barriers and challenges	24
Future policy plans	24
Annex 1: Circular Economy Monitoring Framework – FU and Ireland data	25

Introduction

The European Commission requested the EEA to produce EU country profiles that offer an updated view of the following elements:

- what circular economy policies are being implemented at a national level with a particular focus on elements that go beyond EU mandatory elements, and
- what are best practices with a focus on policy innovation.

With the EU Circular Economy Action Plan (CEAP 2020) "the Commission [..] encourages Member States to adopt or update their national circular economy strategies, plans and measures in the light of its ambition".

These country profiles originate in the work leading to the EEA More from less report (2016)¹, that presented an overview of approaches to material resource efficiency and to circular economy in thirty-two European countries. The More from Less report was followed by the 2019 EEA Report 'Resource efficiency and the circular economy in Europe 2019 – even more from less: An overview of the policies, approaches and targets of 32 European countries'².

It presented an updated and extended assessment of approaches and identified trends, similarities and new directions taken by countries in the connected policy areas of resource efficiency and the circular economy.

These reports, comprising a compilation of extensive survey responses from countries, were accompanied by 32 country profiles.

In the second quarter of 2022 a new survey with questions and guidelines was launched. Based on information reported by the Eionet network, in particular, the Eionet Group on Circular Economy and Resource Use, and after review and editing by the European Topic Centre on Circular economy and resource use (ETC CE), the 30 2022 Circular Economy country profiles³ were published alongside the EEA report 'Circular Economy policy innovation and good practice in Member States'⁴ (2022).

These 2024 Circular Economy country profiles are an update of the 2022 ones and based on the responses of 29 countries to the survey questions and guidelines that were launched in March 2024. The information in the countries' responses was again reviewed and edited by the European Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement these country profiles.

The main objectives of these assessments and its updates are to: (i) stimulate exchange of information and share good practice examples among country experts; (ii) support policymakers in Eionet countries, the European institutions and international organisations by providing an updated catalogue of circular economy actions being undertaken in European countries.

This circular economy country profile is based on information reported by the Eionet network and, in particular, the Eionet Group members on Resource Efficiency and Circular Economy in the second quarter of 2024. Proposals for the further development or amendment of policies represent the view of the reporting country. For Ireland, all input was provided by the Circular Economy Programme at the Irish Environmental Protection Agency and the Circular Economy Division within the Department of the Environment, Climate and Communications. The information was reviewed and edited by the European

¹ More from less — material resource efficiency in Europe — European Environment Agency (europa.eu)

² Resource efficiency and the circular economy in Europe 2019 — European Environment Agency (europa.eu)

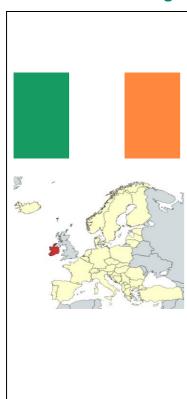
³ Country profiles on Circular Economy in Europe — Eionet Portal (europa.eu)

⁴ draft-report-for-dg-env final.pdf (europa.eu)

Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement this country profile.

The information is current as of September 2024, when members of Eionet verified the content of this profile.

Ireland – facts and figures



GDP: EUR 510.0 billion (3.0 % of EU27 total in 2023)

GDP per person: EUR 96,290 (purchasing power standard) (212.2 % of EU27 (from 2020) total per person)

Use of materials (domestic material consumption (DMC))

122.2 million tonnes DMC (1.9 % of EU27 total in 2022)

23.7 tonnes DMC/person (166.3 % of EU27 average per person in 2022)

Structure of the economy (2023):

Agriculture: 0.9 % Industry: 35.0 % Services: 64.1 %

Employment in circular sectors:

33,541 people employed in CE sectors (0.8 % of EU total in 2021)
People employed expressed as a percentage of total employment: 1.4 %

(compared to 2.1 % for EU average in 2021)

Surface area: 69,797 square kilometres (1.7 % of EU27 total)

Population: 5,271,395 (1.2 % of EU27 total in 2023)

Note: all definitions and metadata used in this profile are taken, as shown, from Eurostat Source: Eurostat datasets, EU27 2021 EU27 2022 and EU27 2023 (accessed 21 August 2024)

Reports
4.515

Direct
material Processed
inputs material Processed
inp

Figure 1 Material flow diagram for Ireland in 2022, thousand tonnes

Source: Eurostat (2024) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 21 August 2024)

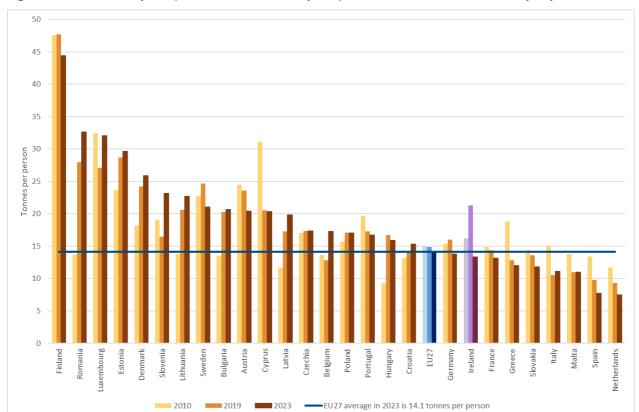
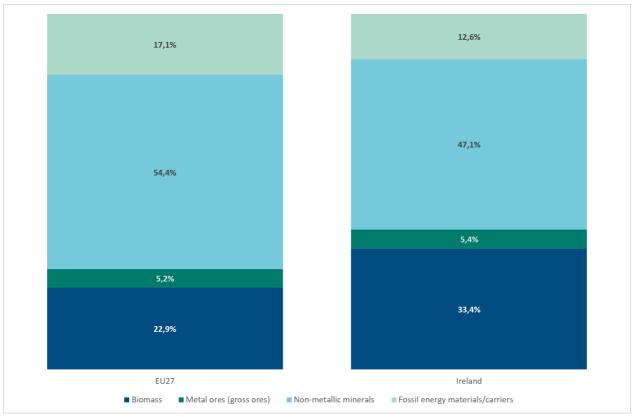


Figure 2 Material footprint (raw material consumption), 2010,2019 and 2023, tonnes per person

Source: Eurostat (2024) [env_ac_rme] (accessed 21 August 2024)

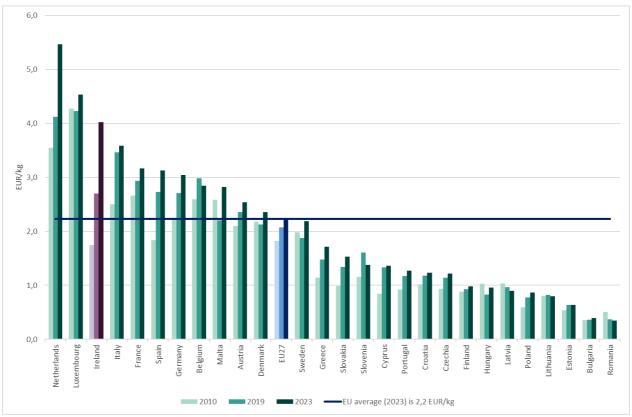




Note: totals may not sum to 100 % due to rounding

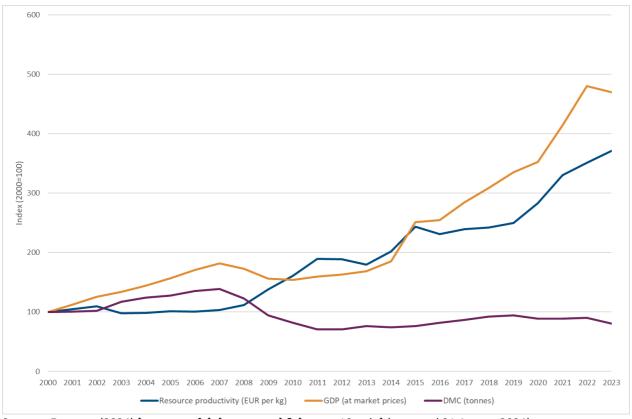
Source: Eurostat (2024) [env_ac_mfa] (accessed 21 August 2024)

Figure 4 Resource productivity (gross domestic product/domestic material consumption), EU27, 2010, 2019 and 2023, EUR per kilogramme



Source: Eurostat (2024) [env_ac_rp] (accessed 21 August 2024)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Ireland, 2000–2023, index (2000=100)



Source: Eurostat (2024) [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 21 August 2024)

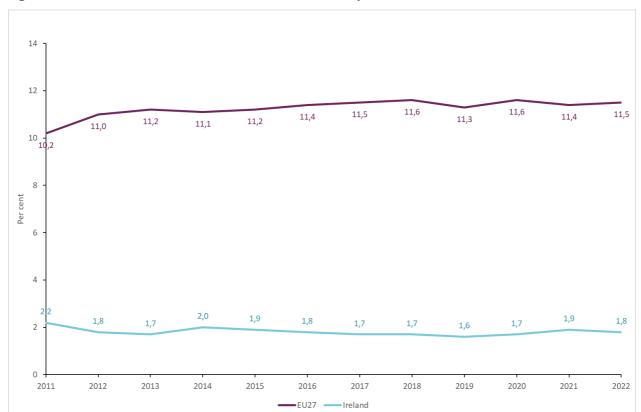


Figure 6 Circular material use rate in Ireland, 2011–2022, per cent

Source: Eurostat (2024) [env_ac_cur] (accessed 21 August 2024)

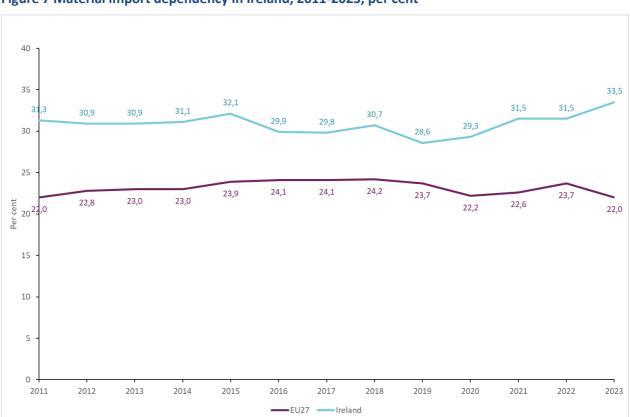


Figure 7 Material import dependency in Ireland, 2011-2023, per cent

Source: Eurostat (2024) [cei_gsr030] (accessed 21 August 2024)

Existing policy framework

Dedicated national and/or regional strategy, roadmap or action plan for circular economy

The first Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less' was published in December 2021. The Strategy set out an overall approach to circular economy policy, identified key objectives, and indicated the direction of future policy development. Mainstreaming circularity across sectors and actors is an ongoing process. The current Strategy's primary objective was to provide the initial framework to enable the realisation of the need for circularity and to promote public sector leadership in adopting circular policies & practices.

The following activities have been implemented since the Strategy was published:

- Reconfiguration of the National Waste Prevention Programme to Ireland's Circular Economy Programme led by the Irish Environmental Protection Agency (EPA) (December 2021)
- New National Waste Management Plan for a Circular Economy (published March 2024)
- New Policy on Green Public Procurement 'Buying Greener' (published April 2024)
- New National End-of-Waste/By-Product Decisions for construction materials (recycled aggregates, greenfield soil & stone, site-won asphalt).
- National Circular Economy Communications Strategy

Some of the Strategy's Annex 1 List of Actions are still ongoing.

The second Strategy is expected be published before the end of 2024, and will have a statutory basis, as established under the **Circular Economy and Miscellaneous Provisions Act, 2022**⁶ (No. 26 of 2022). The 2nd iteration of the Strategy will have sectoral targets and with sector-specific circularity roadmaps (textiles and construction).

To provide a robust evidence-base for the second Strategy, the Department of the Environment, Climate and Communications commissioned a national Circularity Gap Report. This report, by Circle Economy (a not-for-profit based in the Netherlands), was published in September 2024⁷ and will inform the sectoral priorities of the new Strategy in general and the setting of sectoral targets in particular. In addition, an EPA research project on a 'Review of Circular Economy and Bioeconomy Governance in Ireland' is nearing completion and its findings will also inform the 2nd Strategy.

There are two Irish stakeholders involved in the Circular Cities and Regions Initiative (CCRI).

Ireland West

Ireland West's application for the CCRI initiative was launched under the auspices of an action under the West Regional Enterprise Plan⁸: **Develop further capacity to stimulate circular economy adaptation by enterprise in collaboration with the public bodies, industry and Higher Education Institutions (HEIs)**. The outcome targeted was 'Capacity building achieved for regional public body representatives involving knowledge transfer from practices from advanced European Regions, involving follow-up collaboration around specific identified topics with the HEIs' under Strategic Objective 7: Facilitate an equitable digital and green transformation in the West.

Ireland West is working towards a regional circular economy action plan, with focus on enterprise.

⁵ https://www.gov.ie/en/publication/b542d-whole-of-government-circular-economy-strategy-2022-2023-living-more-using-less/

⁶ https://www.irishstatutebook.ie/eli/2022/act/26/enacted/en/html

⁷ https://circularity-gap.world/ireland?mc_cid=721f7dde31&mc_eid=6f25251e8c

https://enterprise.gov.ie/en/publications/publication-files/west-regional-enterprise-plan-to-2024.pdf

There is a two-fold focus - on industrial symbiosis (in collaboration with University of Galway) and circularity in construction (in collaboration with Atlantic Technological University). Given the nascent position in the region, there was a focus on the industrial symbiosis working group with further focus on development of mapping and matchmaking activities. With the support of CCRI, Ireland West is currently engaging with the OECD to receive technical support in the development and implementation of their circular economy strategies and programmes, with a focus on the governance enabling conditions for the transition. In collaboration with the CCRI-CSO the OECD are gathering quantitative and qualitative information through a detailed questionnaire on the circular economy in the West of Ireland, assess the main tools being used, look at obstacles and established priorities.

For more information see: Ireland West

Southern Region Waste Planning Authority

The Southern Region work across ten local authorities and collaborate nationally on issues including waste capacity, waste management, waste prevention, historic landfills, data capture and analysis and communications. The Southern Region has "fellow" status under the CCRI, which means their role is participating in networking and sharing information. Two objectives called out are 'growth in bioeconomy' and 'circular textile initiatives within our region' and a focus to date has been textiles.

For more information see: Southern Region Waste Planning Authority

Dedicated local strategy, roadmap or action plan for circular economy

Two local authority areas in the Dublin region are signatories of the **Circular Cities Declaration**: Dún-Laoghaire Rathdown County Council and Fingal County Council. The Declaration is a commitment from European cities and regions to encourage the transition from a linear to a circular economy. Signatories are committed to the need to decouple economic growth from resource use, recognise that local and regional governments have a role to play, and share a common vision of a circular economy.

Dún-Laoghaire Rathdown

Dún-Laoghaire Rathdown signed the Circular Cities Declaration in May 2022. The Council will embed the Declaration commitments into the implementation of their Climate Change Action Plan 2019-2024 and Litter Management Plan 2021-2024. Resource management is one of five themes in the Council's Climate Change action plan.

For more information see: https://circularcitiesdeclaration.eu/cities/dun-laoghaire-rathdown-county

Fingal

Fingal County Council signed the Circular Cities Declaration in April 2023.

Fingal County Council's Climate Action Plan 2024 – 2029 embeds circular actions related to resource management and land use, as well as the promotion of waste prevention. Circular principles have been integrated via sectoral strategies such as Future Fingal: An Economic Development Strategy⁹ which has Sustainability as a key theme with objectives to explore the circular economy and to maximise opportunities which advance renewable and alternative energy. and the Fingal Tourism Strategy 2024 –

⁹ https://www.fingal.ie/sites/default/files/2024-08/234371-fingal-economic-development-strategy-final-version-10.5.24-with-note-pages.pdf

2029 ¹⁰ which includes a focus on sustainable tourism. The Fingal Skills Strategy ¹¹ is a collaborative approach between Fingal County Council, education providers and industry stakeholders to skills development in the county. The Council has established a Green Skills Group to consider how to encourage and develop education and training provision on green and sustainable skills and is participating in the SKYLA Interreg Project "Smart Specialisation Skills Ecosystems for the Twin Transition (green and digital)". A Fingal Circular Cities Action Plan is in development. Fingal also has a Green Public Procurement Strategy, with actions being implemented. Fingal County Council exchange best practice with Nokia in Finland through the European Urban Initiative on sustainable economic development and the development and management of a local circular economy.

The Council is currently developing the Sustainable Fingal Strategy as a key action listed in the Fingal Economic Development Strategy, the Fingal Local Economic and Community Plan (LECP) and the Fingal Climate Action Plan.

For more information see: Fingal County

Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
National waste policy, with a focus on circular economy	Waste Action Plan for a Circular Economy 2020 - 2025
Circular economy and waste management	National Waste Management Plan for a Circular Economy 2024 – 2030
Circular economy and climate	Climate Action Plan 2024
Green criteria (including circularity ambitions) in public procurement	Buying Greener: Green Public Procurement Strategy and Action Plan 2024 - 2027
Food waste prevention	National Food Waste Prevention Roadmap 2023-2025
Circular bioeconomy	Bioeconomy Action Plan 2023 - 2025
Increase the deployment of geothermal energy, to substitute fossil energy	Policy Statement on Geothermal Energy for a Circular Economy
Critical raw materials for the circular economy	Policy Statement on Mineral Exploration and Mining Critical Raw Materials for the Circular Economy Transition
The Biodiversity Action Plan contributes to meeting UN SDGs/circular economy ambitions	4th National Biodiversity Action Plan 2023-2030

Waste Action Plan for a Circular Economy 2020 - 2025

The Waste Action Plan for a Circular Economy 2020 - 2025 is the current national waste policy, published 2020. This policy contains 205 individual measures which are being delivered on a phased basis over the lifetime of the Plan. Many of the actions have been implemented and are now being delivered through national programmes, plans and roadmaps which have been published since 2020.

National Waste Management Plan for a Circular Economy 2024 - 2030

The National Waste Management Plan for a Circular Economy 2024 – 2030 was published in March 2024. This is the first national waste management plan and seeks to influence circularity, including sustainable consumption, waste prevention, improve the capture of materials to optimise circularity and enable

¹⁰ https://www.fingal.ie/sites/default/files/2024-03/final-fingal-tourism-strategy-mar24.pdf

¹¹ https://fingalchamberskillnet.ie/wp-content/uploads/2019/04/Fingal-Co-Co-Skills-Strategy-Document-WEB5.pdf

compliance with policy and legislation. The Plan is led by the local government sector, who have statutory responsibility for waste management planning.

The ambition is 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector. Increasing recycling rates is also a key priority. The Plan has 8 national targets, 16 focus areas and 51 key deliverables. There are national targets for reuse, repair, resource consumption and recycling, and the Plan addresses measures such as the enhanced use of civic amenity sites as circular economy hubs.

Climate Action Plan 2024

The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan. The Plan provides a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero by no later than 2050, as committed to in the Climate Action and Low Carbon Development (Amendment) Act 2021.

CAP24 has an Annex of Actions, with lead and supporting organisations and timelines for actions. There is a chapter and actions on Circular Economy; but circular economy elements are incorporated throughout CAP24 such as Public Sector as Leader and Built Environment.

The following are actions in CAP24 relating to circular economy to be completed by Q4 2024:

- Deposit and Return Scheme for plastic bottles and aluminium cans (scheme went live 1 February 2024);
- Develop a new levy on single-use packaging, focusing on disposable cups for cold drinks (in progress);
- Develop a roadmap for improved circularity in textiles and improve the separate collection system (in progress);
- Develop a Circular Economy Roadmap for the Construction Sector (in progress);
- Undertake high level assessments of Irish geology, for potential for Critical Raw Materials. This
 report will identify which of the which of the European Critical Raw Materials are potentially
 hosted in Irish primary deposits (in progress).

Linked to the Climate Action Plan are strategies and mandates for different sectors within the public sector:

- Public Sector Climate Action Mandate;
- School Sector Mandate;
- Local Authority Mandate;
- Climate Action Framework for commercial semi-state bodies.

These mandates include elements of circular economy implementation and focus areas. For example, the 2024 public sector mandate includes requirements to measure and monitor food waste generation, to implement GPP, to avoid consumption of single-use items and reduce consumption of paper. For more information and links to these documents see: Public Sector Climate Action

Buying Greener: Green Public Procurement Strategy and Action Plan 2024-2027

The government published *Buying Greener: Green Public Procurement Strategy and Action Plan 2024 - 2027* in April 2024, recognising that Green Public Procurement (GPP) will play a key role in driving the implementation of green and circular procurement practices across the public sector. There is an Annex of Actions, with lead and supporting organisations and timelines for actions.

Key areas of focus include measures to progress GPP implementation in the Public Sector; GPP Monitoring and Reporting; GPP Training and Awareness; and further development of national GPP guidance and criteria. In addition, the strategy sets out how market engagement, research and innovation and EU and

international initiatives on GPP will be addressed. The strategy has a key sectoral focus with related GPP targets included.

National Food Waste Prevention Roadmap 2023 - 2025

The government published the *National Food Waste Prevention Roadmap 2023 – 2025* in November 2022. The development of this Roadmap was a commitment under Ireland's Waste Action Plan for a Circular Economy¹², Food Vision 2030^{13} , and the Government's Climate Action Plan 2021^{14} .

The Roadmap sets out a number of priority actions to bring the focus on food waste prevention across key sectors in the food supply chain, including food waste measurement and reporting, Food Waste Charter (a national voluntary agreement for food & drink sector organisations), food donation/redistribution, food waste segregation, Green Public Procurement, communications, education & awareness, research & innovation and monitoring and evaluation.

Bioeconomy Action Plan 2023 - 2025

Ireland's first national Bioeconomy Action Plan was published in 2023 and includes 33 actions to accelerate support for the development of the bioeconomy. The plan has a high focus on bringing sustainable scientific practices, technologies and biobased innovation and solutions into use on farms and by biobased industries in Ireland. Summary actions are as follows:

- Increase awareness and understanding of the bioeconomy as a powerful climate action tool;
- Enhance governance of bioeconomy policy across government;
- Assess how our regulatory system interacts with bioeconomy activities;
- Enhance our North/South, EU and international cooperation for the bioeconomy;
- Develop a National Bioeconomy Strategy.

Policy Statement on Geothermal Energy for a Circular Economy

This statement was published in June 2023 and is the government's policy to increase the deployment of geothermal energy. The Policy Statement will be effective from 2023 – 2028 and sets out:

- The approach to regulating shallow and deep geothermal systems, including licensing the
 exploration for and the utilisation of deep sources of geothermal energy, and confirms the
 importance of ensuring environmental protection by integrating with existing environmental,
 health and safety and planning regulatory frameworks;
- The scope of a strategy to promote the sustainable development of Ireland's geothermal resources to decarbonise the heating and cooling of buildings and for industrial uses and power generation.

<u>Policy Statement on Mineral Exploration and Mining Critical Raw Materials for the Circular Economy Transition</u>

This policy statement was published in December 2022, recognising that minerals have a critical role to play in realising Ireland's national ambitions, including the implementation of the National Planning Framework, the Climate Action Plan and the transition to a circular economy. As the need for minerals across society will continue, it is critical that these are extracted in a socially and environmentally responsible manner, enforced by strong legislation. In that context, the policy for mineral exploration and mining is to:

¹² https://www.gov.ie/en/publication/4221c-waste-action-plan-for-a-circular-economy/

¹³ https://www.gov.ie/en/policy/b2a3c-food-vision-2030-a-world-leader-in-sustainable-food-systems/

¹⁴ https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/

- ensure a stable, robust and transparent regulatory framework that supports environmentallysustainable mineral exploration and mining; and
- maximise the contribution that sustainable exploration and mining can make to our society, economic development and the transition to a circular economy and net-zero greenhouse gas emissions — through the supply of the raw materials necessary for our sustainable development.

4th National Biodiversity Action Plan 2023-2030

The 4th National Biodiversity Action Plan was published in January 2024. There is recognition that the Plan contributes to meeting UN SDGs/circular economy ambitions. For example, one of the targets is to reduce pollution and reference is made to the need to reduce plastic pollution and reduction of single use plastics. Another target is reducing over-consumption patterns and excessive food waste generation that affects nature/biodiversity. These targets align to ambitions and actions in the Whole of Government Circular Economy Strategy and the Waste Action Plan for a Circular Economy.

To note that there are other national plans, policies & strategies that have interlinkages with boosting circularity in Ireland, including: Rural Development Policy 2021-2025, Project Ireland 2024, National Development Plan 2021-2030, Housing for All: A New Housing Plan for Ireland 2021, National Skills Strategy 2025 and Action Plan for Apprenticeship 2021-2025, Ireland's National Biomethane Strategy 2024 and the National Sustainable Mobility Plan 2022.

Monitoring and targets

Assessment of circular economy performance

The European Commission has set up a <u>monitoring framework</u> to keep track of progress towards a circular economy. This framework provides a holistic view as it:

- measures direct and indirect benefits of 'becoming circular' and
- values the contribution of a circular economy in living well within the limits of the planet
- · addresses energy and material supply risks.

It consists of **5 thematic sections** with a total of **11 statistical indicators**, some of which have additional sub-indicators. In some cases, policy targets exist which should be achieved in the future, and the indicators monitor progress towards these targets. The current monitoring framework is a revision of the original framework which was set up in 2018.

This section elaborates on the assessment of Ireland's progress in terms of observed trends over the last 5 years and what country characteristics or policy actions may explain differences between the country its performance and the average EU performance.

Ireland's circular material use rate (CMUR) is with 1,8% low compared with the EU average (11,5%). The government has committed to significantly reducing Ireland's circularity gap, both in absolute terms and relative to other Member States. The CMUR is a 'whole of economy' metric expressing recycling and recovery tonnage as a percentage of total materials/resources extracted and used in an economy including imports. Ireland's low CMUR rate is explained in part by its open economy with a strong agricultural sector and high level of exports. For other circular economy indicators, Ireland is more closely aligned to other Member States (e.g. Ireland's municipal recycling rate is 41% compared to EU average 46%).

An EPA Research report on 'A Critical Analysis of Ireland's Circular Material Use Rate' was published in 2024. The research specifically illustrates the following points:

¹⁵ https://www.epa.ie/publications/research/circular-economy/research-458-a-critical-analysis-of-irelands-circular-material-use-rate-cair.php

- To utilise circular economy metrics for policy decision-making, it is important to understand the processes, methodologies and data underpinning those metrics;
- Any given metric is limited in its scope and should be used in conjunction with other metrics and/or points of information. For instance, the CMUR metric is mass based and therefore does not directly consider other environmental pressures such as greenhouse gas emissions;
- The data underpinning the CMUR metric are important resources that, when explored in depth, can help to identify areas for policy intervention. In the case of this research, examining data underpinning Austria's and Croatia's CMUR scores led to the identification of effective policy interventions in the areas of (1) construction and demolition and (2) bioenergy generation, respectively.

In Annex 1 a table showing the EU Circular Economy Monitoring Framework indicators, the currently published EU and IE data, and some comments that provides further insights.

Circular economy monitoring frameworks and their indicators beyond the ones from Eurostat

In September 2024, Circle Economy published Ireland's Circularity Gap Report ¹⁶. It determined that Ireland's Technical Cycling rate (the technical term for the Secondary material input rate and the Circularity Metric) is 2.7%, meaning that over 97% of the materials flowing through its economy come from virgin sources. This is considerably lower than the Technical Cycling rate for the global economy, measured at 7.2% in 2023. This can, in part, be attributed to Ireland's very high material footprint: its economy consumes 111 million tonnes of virgin materials - metal ores, non-metallic minerals, biomass and fossil fuels - each year, equivalent to 22 tonnes per capita— well above the EU average of 17 tonnes per capita. This report will inform the second Whole of Government Circular Economy Strategy which is due to be published before the end of 2024. This second Circular Economy Strategy will have a statutory footing and will include sectoral targets, as provided for under the Circular Economy Act, 2022.

Circular economy targets

An objective for improving the CMU rate was set out in the Whole of Government Circular Economy Strategy 2022 – 2023: "Specifically, by 2030 Ireland's ambition is to significantly improve its circular material use rate (in both absolute terms and in comparison with other EU Member States) so that our national rate is above the EU average by the end of this decade". Note that Ireland's low CMUR rate is explained in part by its open economy with a strong agricultural sector and high level of exports.

The second Circular Economy Strategy shall set out targets in respect of the following sectors of the economy (i) construction (ii) agriculture (iii) retail (iv) packaging (v) textiles (vi) electronic equipment or other sectors that are deemed appropriate. The targets to be set out in respect of a sector of the economy shall include any or all of the following as the Minister considers appropriate for the sector concerned:

- reductions in material resource consumption and the use of non-recyclable materials;
- increases in the use of re-usable products and materials;
- increased levels of repair and re-use of products and materials;
- improved maintenance and optimised use of goods, products and materials.

The National Waste Management Plan for a Circular Economy 2024 – 2027 includes eight (non-statutory) targets (in relation to 2024) as set out in graphic below.

¹⁶ https://circularity-gap.world/ireland?mc_cid=721f7dde31&mc_eid=6f25251e8c



This Plan responds to the Waste Action Plan for a Circular Economy requirement to include targets for reuse, repair, resource consumption and a reduction in contamination.

Eight national targets have been developed as follows:

6%

Reduction in
MSW per person
by 2030

Target 1A Residual Municipal Waste

Waste destined for landfill or recovery by thermal treatment

12% Reduction in C&D Waste by 2030

Target 1B Construction Materials

Construction and Demolition Waste generated

90%
Material Compliance in the Dry Recycling Bin

Target 2A Material Compliance Recycling

Material Compliance in the Dry Recycling Bin

10%
per annum increase in
Material Compliance in
the Residual Bin. (90%
by end of 2030)

Target 2B Material Compliance Residual

Material Compliance in the Residual Bin

20kg
Per person/year

Target 3A Reuse of Materials

Reuse of materials like clothes or furniture to prevent waste

Sites for Reuse (min)

Target 3B Reuse Facilities

Provide for reuse at 10 Civic Amenity Sites, minimum

Collection Schemes

Target 4A/B Repair of Materials

(Develop a roadmap for a Repair Target and Provide 1 collection scheme for repairable materials in each region and align with repair practitioners). This target will also consider a roadmap for remanufacturing

Innovative approaches and good practices

Examples of public policy initiatives (national, regional or local)

→ Good practice example: Awareness raising

Circular Economy Communications Platform

In May 2024, the Irish government approved funding for the Rediscovery Centre to develop and build a Circular Economy Communications Platform and complementary actions to support excellence in communications for a circular economy. A key focus of the Platform will be to address the lack of awareness of circular economy practices and principles which has been found to be a barrier to successfully effecting the behavioural change required to achieve a circular transition. The key objective of the platform will be to connect key activities of the circular economy and adopt a coordinated approach to raising awareness, thereby helping to shift behaviour to more circular options and achieving the Department's strategic objective of establishing a circular economy.

A Roadmap will be developed to include the design and implementation of a national circular economy gateway on-line platform, alongside targeted communications campaigns, and complementary public engagement activities. The project will also provide support services and evidence-based insights to the circular economy sector and support excellence in communications and public engagement for a circular economy. The overall vision for the platform is that Ireland is engaged, informed, and enabled to transition to a circular economy. A primary objective of the platform's communications and public engagement activities will be to bring about behavioural change by raising public awareness of the circular economy and providing clear and consistent messaging on circular economy principles and activities.

<u>Circular Economy Programme's behavioural insights programme</u>

The Circular Economy Programme's behavioural insights programme has now published a series of quantitative and qualitative research on circular economy topics plastics, food, textiles, single use packaging on fruit & vegetable, reuse and repair. This research is informing policy, developing evidence-led national awareness and behavioural change campaigns targeting specific population segments, and monitoring the effectiveness of national communications campaigns. The Rediscovery Centre and Regional Waste Management Planning Offices and the Department of the Environment, Climate and Communications are also using market research to inform circular economy policy and communications. Further Information: https://www.epa.ie/our-services/monitoring--assessment/circular-economy/behavioural-insights/

Campus Living Labs project

The Campus Living Labs project, a partnership initiative between the Irish Universities Association and the EPA, concluded in 2023. Resources developed include the findings from a reusable coffee cup trial, roll out of 'The Waste Game' – a gaming initiative for students & staff, a step-by-step guide to design and trial behavioural interventions and recommendations for universities on bulky item reuse. For more information and resources developed see: Campus Living Labs | Irish Universities Association (iua.ie)

Rediscovery Centre's ECCO project

The government's Community Climate Action Programme Strand 2 has supported numerous projects in engaging communities in taking circular economy action, including the Rediscovery Centre's ECCO

project which spans four counties providing year-long mentoring and support for reuse and repair projects.

The DIRECT LIFE project which funded the Rediscovery Centre delivered a modern robust digital framework for a circular economy and highlighted the opportunity to reduce the carbon impact of digital communications and marketing.

→ Good practice example: Education and training

An Accredited **Bicycle Technician Training** scheme with Cytech has been introduced to Ireland in the Rediscovery Centre, supporting green skills development for the circular economy.

Further information: https://www.rediscoverycentre.ie/learn/cytech-ireland/

SOLAS's Green Skills training programme

SOLAS's Green Skills training programme is part of the National Recovery and Resilience plan. Since 2022 a number of micro-qualifications have been developed and courses available to employers, including:

- The Circular Economy;
- Environmental Sustainability in the Workplace;
- Resource Efficiency for a Sustainable Workplace;
- Lean Practice for Sustainable Business;
- Sustainable Supply Chain Procurement.

Further information: https://www.solas.ie/programmes/skills-to-advance/Training-Programmes/

→ Good practice example: Producer /supplier responsibility

Establishment of a new EPR scheme for tobacco filter products containing plastic in December 2022

Further information: https://www.tppfg.ie/about-us/

Extended Producer Responsibility (EPR) to include all categories of tyres (January 2024)

Further information: Extended Producer Responsibility (EPR) Scheme to now include all categories of tyres

→ Good practice example: Taxation and economic instruments to encourage investment in the Circular Economy

Levies and fees for waste prevention

- A Waste Recovery Levy of €10 per tonne came into effect on 1 September 2023, and a €10 per tonne increase to the Landfill Levy (now €85 per tonne).
- Introduction of incentivised waste collection charging in the commercial sector in July 2023 through enacting amending waste collection legislation.
- Plans to introduce a levy on single use hot beverage cups, the so-called "latte levy" are in progress
- A landfill levy was introduced in 2002 and has been hugely successful in effecting behavioural
 change in relation to waste disposal and driving a steep decline in Ireland's overall landfill rate.
 However, in 2023, almost 90% of the waste that was sent to landfill was exempt from the levy. A
 review is currently underway to examine the existing landfill levy exemptions by assessing their
 continued relevance and commercial and environmental impact. The overriding objective of the
 review will be to improve Ireland's waste performance and reduce our circularity gap.

→ Good practice example: Research & innovation

Thematic hub 'Facilitating a Green and Circular Economy'

The EPA Research 2030 programme has a thematic hub 'Facilitating a Green and Circular Economy' which is funding primary research. For example, in 2024, a project on 'Barriers and Enablers to Ireland's Transition to a Circular Economy¹⁷ was supported and a project on 'Batteries -Barriers and Enablers to Circular Economy'¹⁸ was funded in 2023.

Further information: https://www.epa.ie/our-services/research/epa-research-2030/

Circular Insights

Under the <u>Circular Insights</u> series, the EPA has published four studies to date, with two more on repair topics at final draft stage:

- Government interventions to support transition to a circular economy:
 <u>https://www.epa.ie/publications/circular-economy/resources/circular-insights-government-interventions.php</u>
- Role of Ireland's digital sector in accelerating the transition to a circular economy: https://www.epa.ie/publications/circular-economy/resources/circular-insights-digital-sector.php
- Comparative study of waste recovery taxes / levies in Europe
 https://www.epa.ie/publications/circular-economy/resources/comparative-study-of-waste-recovery-taxes--levies-in-europe.php
- Examining how single-use packaging used in the sale of fruit & veg can be reduced: https://www.epa.ie/publications/circular-economy/resources/sup-packaging-used-in-the-sale-of-fruit--veg-.php
- → Good practice example: Change in consumption patterns and consumer behaviour

Deposit return scheme

A deposit return scheme (Re-turn) for plastic bottles, aluminium and steel cans (drinks containers from 150ml – 3 litres featuring the Re-turn logo) launched on 1 February 2024. A milestone of 500 million drinks containers returned since the scheme launched was reached on 13 September 2024. For more info see: Home-Re-Turn

- → Good practice example: Institutional and regulatory arrangements to support the transition towards a resource-efficient Circular Economy
- Expansion of **requirements on waste collectors** to provide all their customers with a bio-waste bin collection service and to provide information on bin weights collected through enacting amending waste collection legislation.
- Expansion of the list of **items acceptable in the household recyclable bin** to include soft plastics (in place since September 2022).
- Establishment of **National End-of Waste-Criteria** for recycled aggregates. <u>National End-of-Waste</u> Criteria-Recycled Aggregates | Environmental Protection Agency (epa.ie)

¹⁷ https://www.epa.ie/our-services/research/epa-funded-research/epa-funded-projects/research-data-table-dev/barriers-and-enablers-to-transition-to-irelands-transition-to-the-circular-economy.php

¹⁸ https://www.epa.ie/our-services/research/epa-funded-research/epa-funded-projects/research-data-table-dev/batteries-barriers-and-enablers-to-irelands-circular-economy.php

- Establishment of **National By-Product Criteria** for site-won asphalt. <u>National By-Product Criteria</u> <u>Ref. No. BP-N001/2023 | Environmental Protection Agency (epa.ie)</u>
- Establishment of **National By-Product Criteria** for Greenfield Soil and Stone <u>National by-product</u> <u>criteria for greenfield soil & stone BP-N002/2024 | Environmental Protection Agency (epa.ie)</u>
- Develop separate collection systems for household hazardous waste and textiles by the end of 2024.
- → Good practice example: Public-private partnerships

Textiles Advisory Group

A Textiles Advisory Group was established by the Department of the Environment, Climate and Communications in 2022 to inform policy on this priority area for circular economy.

Further information: https://www.gov.ie/en/publication/dac76-textiles-advisory-group/

Circular Economy Hotspot Dublin 2023

The Circular Economy Hotspot Dublin 2023 (which was a public-private initiative) brought the Hotspot to Ireland for the first time in May 2023 and showcased the sector on an international stage. This was a four-day celebration of circular economy practice relating to innovation, policy and citizen engagement from across the globe. Delegates had the opportunity to engage with international stakeholders, exchange ideas and explore innovative solutions related to the circular economy. Key thematic areas that were discussed included (i) policy in practice (ii) building circular communities — citizen engagement (iii) innovation & collaboration.

Further information: www.dublincirculareconomyhotspot.com

EcoCore Network

Fingal County Council is leading an URBACT IV Programme Network called EcoCore which is examining the sustainable economic development of industrial areas located along strategic transport corridors. Fingal County Council is the first local authority in Ireland to lead an Urbact Network and this 2.5-year project is focused on a strategic industrial landbank in Balbriggan along the Dublin to Belfast Economic Corridor (DBEC region). The network is comprised of 9 similar small cities in Europe with teams in each city using peer to peer learning, URBACT tools and expert advice to learn how to develop industrial areas in a more sustainable way – considering issues such as active travel transportation and infrastructure, renewable energy sources, biodiversity, water usage, green procurement, the circular economy, sustainable supply chains, last mile delivery, digital solutions, requirements under the EU Corporate Social Responsibility Directive (CSRD). The Council will be participating in a best practice exchange through the European Urban Initiative (EUI) with Nokia, Finland in 2024 to examine good practice from the development and management of the ECO3 Industrial Zone in Nokia.

The Circular Economy Innovation Grant Scheme

Funded by the Department of the Environment, Climate and Communications, this scheme aims to support innovation and demonstration circular economy projects by small to medium enterprises and social enterprises. €650 thousand has been allocated to support the scheme in 2024, bringing total funding to €1.8 million since the scheme was launched in 2021. The 2024 call successful applications will be announced in Q4 2024 and projects for repair and reuse will feature prominently.

Further information: https://www.gov.ie/en/service/a42cc-circular-economy-innovation-grant-scheme-ceigs-2024/

Examples of private policy initiatives (sectoral)

→ Good practice example for other sector/value chain

CIRCULÉIRE

<u>CIRCULÉIRE - The National Platform for Circular Manufacturing</u> – is Ireland's first industry-led public-private partnership dedicated to scaling circular innovation. CIRCULÉIRE was launched in 2020 by <u>Irish Manufacturing Research</u> (IMR), an Enterprise Ireland and IDA Ireland supported Technology Centre, in partnership with the Department of the Environment, Climate and Communications (DECC), the Environmental Protection Agency (EPA), and <u>EIT Climate-KIC</u> and 25 cross-sectoral Founding Industry Members. Between 2020 and 2024, CIRCULÉIRE has taken manufacturers and their supply-chains on a journey from linear to circular business models through baselining, assessments, business case development, deep demonstration innovation projects and thematic working groups- raising industry awareness of circular practices and supporting its' members to contribute to their voluntary commitment to reduce their collective CO2 emissions and eliminate waste streams.

In recognition of the noteworthy progress made by CIRCULÉIRE in creating significant momentum around circular economy implementation across industry during its pilot phase (2020-2022), <u>DECC announced in November 2022</u>, €1.5 million continuation funding for the initiative in 2023 to build on the momentum and maintain critical industry engagement to continue to deploy circular economy principals and best practices.

CIRCULÉIRE has over 50 cross-sectoral industry members ranging from ventures, micro-enterprise to SMEs and MNCs – across the Built Environment, Automotive, Financial Services, Medical Devices, Agri-Food & Drinks, Pharmaceutical & Chemicals, ICT/WEEE, Textiles & Fashion, Plastics and Consumer Goods.

Over 2022-2024 CIRCULÉIRE led systems change oriented activities at a sectoral level.

CIRCULÉIRE piloted an annual ring- fenced innovation fund of €500k each year over 2020-2022. This innovation fund sought to enable systems innovation by virtue of the funds eligibility criteria namely that applicants needed to:

- → Solve collective circular economy challenge facing- sector, industrial cluster or supply-chain.
- → All consortia needed a minimum 2 nodes in a supply-chain / industry cluster engaged in the pilot.
- → The pilot needed to demonstrate multiple circular economy strategies for example, but not limited to: Design for Circularity; Re-Use; Asset Utilisation; Remanufacturing; Take-back Schemes / Reverse Logistics; Product Service Systems; Circular Procurement....

See here for an overview of the 10 innovation pilots funded and their impacts – of which 5 were funded and implemented in 2022 - https://circuleire.ie/innovation-fund-awardees/

CIRCULEIRE Thematic Working Groups

Over 2020-2022, IMR have co-designed and delivered 9 thematic working groups to uncover the state of the art, key enablers, and barriers as well as innovation opportunities to scale-up circular implementation – knowledge creation and capacity building were central to these industry-oriented multi-stakeholder working groups. Topics ranged from: Circular Bioeconomy (in collaboration with Irish Bioeconomy Foundation), Industrial Symbiosis (in collaboration with International Synergies Ltd.), Circular Procurement (in collaboration with IDDEA), Circular Design (in collaboration with M:CO), Circular Plastics (in collaboration with TUS Shannon), Circular Packaging (in collaboration with Mabbett & Associates), End Of Waste and By-Products (in collaboration with Re-Mine UK), Financing the Circular Economy (in collaboration with EUR Digital Village / Kilpatrick Innovation), and more recently in 2023 Thematic Working Group the focus was on the interconnection between forthcoming EU Eco-design for Sustainable Products

Regulation (ESPR), Digital Product Passports (DPP) and Measuring Circularity — which included the principles of systems thinking, product life-cycle thinking, impact measurement methodologies (from LCA to EPDs to GHG Protocol - Scope 1, 2 and 3 emissions) to exploring micro, macro and meso-circularity metrics and performance indicators.

In addition, to bring sectoral circular economy opportunities to life for industry, IMR have developed *CIRCULÉIRE Sectoral Good Practice Guides* ranging from topics like: Circular Economy of Water (2023); Circular ICT & EEE (2022); Circular Maritime and Shipping (2022); Circular Road and Rail (2022); Circular Aviation (2022); Circular Construction & Built Environment (2021); Circular Fashion and Textiles (2021); Circular Food and Drinks (2021); Circular Bioeconomy and Agri-Food (2021).

In 2023, DECC commissioned CIRCULÉIRE to develop a strategic roadmap for the establishment of a **National Centre for Excellence for Circular Innovation** which was developed through multi-stakeholder, multi-sectoral workshops exploring the barriers enablers of scaling circularity in key sectors across the island of Ireland.

Food Waste Charter, a national voluntary agreement

The <u>Food Waste Charter</u> is a voluntary agreement originally introduced by the Environmental Protection Agency (EPA) in 2017 to support engagement on food waste with the grocery retail sector, using a set of binding principles around improved measurement and reducing food waste.

The Food Waste Charter is a key action under the National Food Waste Prevention Roadmap, published in November 2022, which provides a pathway and sets out key actions to meet Ireland's national target of a 50% reduction in food waste by 2030 in line with UN SDG Target 12.3.

The Food Waste Charter has been revised, building on the principles of the Charter developed in 2017, and now extends to all food sector businesses to promote a collective industry commitment to measure and reduce food waste along the entire food supply chain. The revised Charter launched in June 2023.

The activities complement existing food waste prevention work targeting households through the national consumer campaign Stop Food Waste (www.stopfoodwaste.ie), aiming to help deliver the national target through evidence-led awareness raising and behavioural interventions.

Policy context

The EPA is working collaboratively with the Department of the Environment, Climate and Communications (responsible for Circular Economy and waste policy), the Department of Agriculture, Food and the Marine (responsible for SDGs and food policy) and other stakeholders (including five State Agencies with a remit to develop the food & drink sector in Ireland) to successfully deliver the actions in the Roadmap relating to the Food Waste Charter and has formed a coalition with strategic partner organisations (known as the Food Waste Charter Action Group) to facilitate this engagement. The objective of the Action Group is to use expertise and knowledge to develop and implement collaborative actions to implement the Food Waste Charter and establish industry-commitment for preventing food waste and to ensure consistent measurement and accurate reporting of food waste.

Where appropriate, sub sectoral working groups will also be formed to address key issues identified, to drive change in certain sub-sectors (e.g., bakeries, prepared foods, brewing and distilling, meat, dairy, seafood), to identify interventions and actions, and to share best practice on how to rapidly reduce food waste.

Participants

In 2017, five of the main grocery supermarket chains, making up 70% of the Irish market, signed the Charter and agreed to general commitments around improved measurement and reducing food waste. Since June 2023, membership of the Food Waste Charter is open to all food sector businesses, from primary production to hospitality, with initial emphasis on the food manufacturing sector. Other organisations can also sign the Charter as a supporting organisation to support and influence the achievement of the national objectives and to increase industry commitment to reducing food waste. Five government agencies that play a key role in supporting the food and drink sector in Ireland have signed as supporting organisations to champion the Charter.

Targets

All food sector business members will be required to commit to:

- Pledge: to reduce their food waste
- Measure: by monitoring and tracking of their food waste
- Reduce: by identifying and taking at least one target-based action to reduce food waste, and
- Report: by reporting annually to the EPA on progress towards measurable outcomes and achievements.

Measurement and methodologies

Since the introduction of the Charter, retailers have worked with the EPA to develop and agree a reporting methodology, develop in-house systems to improve data availability, and have been demonstrating an increased focus on food waste prevention measures.

Driving food waste reduction across the food value chain will require food businesses to commit to measurement and reporting of food waste in a clear and consistent manner. In order to improve data quality, the EPA has developed a standard measurement protocol for food sector businesses, designed to bring consistency by following a step-based approach to measure food surplus and waste. Charter signatories commit to measure the quantity of food waste within current operations, using the consistent and standardised approach set out in the EPA Protocol and guidelines. Before deciding on any course of action, businesses need to know what food waste is coming from the business, where it is coming from and what causes it to happen. It will also allow these businesses to track performance over time.

The Pathway to Less Food Waste for the food services sector is a simplified version of the measurement methodology, designed specifically for the hospitality sector to use information already available to estimate food waste in a consistent manner, and to track performance and inform on food waste reduction decisions.

More businesses measuring food waste consistently will in turn improve national food waste data for legislative reporting requirements and allow for the development of sectoral benchmarks and indicators, as well as provide data for monitoring and reporting on progress towards reduction targets.

Impacts

- As of end August 2024, 55 businesses from the supply chain have signed the Charter;
- Work with the State Agency supporting organisations is ongoing to identify activities and exiting programmes where the Charter and measurement methodologies can be incorporated;
- The Forum on Food Waste provides a platform to share information, good practices, and regular
 events are held to bring together business and policy leaders from across the food supply chain.
 An online forum was held in November 2023 (recording can be accessed here

<u>morroweventshub.com</u>) and in June 2024 an in-person networking event was held to mark one year of the Charter Forum - Food Waste (foodwastecharter.ie)).

The EPA is currently preparing a report on the first year of implementation of the relaunched Food Waste Charter that will be published in Q4 2024. The effectiveness of the voluntary approach to food waste measurement and reporting, and the revised Food Waste Charter, in terms of measurement and reporting of food waste by key sectors, will be monitored as part of the Roadmap review. This will determine if there is a need to set mandatory requirements in relation to food waste measurement and reporting.

Key Learnings

Key learnings of the Food Waste Charter are:

- Establishing industry commitment to improve data reporting and targeted food waste reduction
 across the supply chain is key to encourage a sense of common purpose and share best practice
 across the food supply chain. Improved monitoring of food waste levels will highlight the costs of
 mismanagement of food, and in turn, prompt action by business operators to reduce this;
- Working with a sectoral group provides useful insights on issues and encourages collaboration to tackle common issues. Cross-sectoral groups can help tackle issues that extend along the supply chain;
- Working with cross-government groups is also essential to ensure cohesion and link relevant policies. In particular, embedding the agreement within existing programmes and supports for food sector businesses is important;
- Having representatives from the actual businesses rather than sectoral representative bodies is also beneficial;
- Collaboration, transparency, and openness are key;
- The need to establish more definitive target-based commitments and preferably include a reporting commitment in the voluntary agreement, as general binding principles can be difficult to monitor. This is reflected in the revised Charter agreement;
- Data submitted by members of the voluntary agreement may support national data reporting obligations.

For more information see www.foodwastecharter.ie

The way forward

Identifying and addressing barriers and challenges

Ranking types of barrier

High barrier	Institutional challenge to develop policy for a complex cross-sectoral issue
1	Companies' ability to grasp opportunities
Low barrier	Consumer behaviour and awareness
LOW Darrier	Good indicators and targets
	Market barriers for recycled resources
	Awareness (public and enterprise)
	Regulatory barriers
	The situation probably changed for the better since 2022, as more policy initiatives have been undertaken, legislative changes implemented and national communications campaigns on circular economy underway. The Circularity Gap Report (published in September) will address these barriers & recommend policy interventions to boost circularity. The second Whole of Government Circular Economy Strategy (to be published before the end of 2024) will introduce sectoral targets and seek to address barriers to implementation.

Future policy plans

The majority of the relevant activities are already described in detail in the Country Profile 2022.

Annex 1: Circular Economy Monitoring Framework – EU and Ireland data

For some indicators, data is only available for the EU aggregate and not for Member States individually.

Data accessed 28 May 2024: Monitoring framework - Eurostat (europa.eu)

Indicator	Units	Value EU aggregate [reference year]	Value Ireland [reference year]	Comment
Production and Consumption				
Material footprint	Tonnes per capita	15 [2022]	15 [2022]	
Resource productivity	Index 2000 = 100	137.5 [2022]	337.2 [2022]	Higher than EU average
Green Public Procurement				While there are no EU indicators, in Ireland there are reports on GPP implementation by government departments (of which there are 18), for reference years 2020, 2021, 2022. ¹⁹ The government's GPP Strategy and Action Plan (published 2024) is introducing reporting obligations across the public sector
Total generation of waste per capita	Kg per capita	4815 [2020]	3248 [2020]	Total waste lower than EU aggregate
Generation of waste excluding major mineral wastes per GDP unit	kg per thousand euro, chain linked volumes (2010)	65 [2020]	24 [2020]	
Generation of municipal waste	Kg per capita	513 [2022]	644 [2020]	Ireland's generation of municipal waste is increasing in line with population growth.
Food waste	Kg per capita	131 [2021]	150 [2021]	Most food waste is generated by households and manufacturing & processing sectors
Generation of packaging waste per capita	Kg per capita	189.8 [2021]	246.1 2021]	Generation of packaging waste is increasing
Generation of plastic packaging waste per capita	Kg per capita	36.1 [2021]	74.1 [2021]	
Waste Management				
Recycling rate of municipal waste	%	48.6 [2020]	40.8 [2020]	The EPA's National Waste Statistics web

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¹⁹ <u>Green Public Procurement | Environmental Protection Agency (epa.ie)</u>

Describe a set of all constant and all all	0/	F0	144	
Recycling rate of all waste, excluding	%	58	41	resource ²⁰ has the
major mineral waste	%	[2020] 64	[2018] 58.1	latest data releases. The National Waste
Recycling rate of overall packaging	70	[2021]	[2021]	Statistics Summary
Recycling rate of plastic packaging	%	40.7	27.9	Report for 2021 is
Recycling rate of plastic packaging	70	[2021]	[2021]	available on this web
				resource and is the
Recycling rate of WEEE separately	%	81.1	83.4	latest summary
collected		[2021]	[2021]	report. The 2022
				summary report will
				be published in Q4
				2024.
Secondary Raw Materials		•	•	
End-of-live recycling input rates	%	12.3	N/A	
(EOL-RIR), aluminium		[2019]		
CMU rate	%	11.5	1.8	The CMUR is a 'whole
		[2022]	[2020]	of economy' metric
				expressing recycling
				and recovery tonnage
				as a percentage of
				total
				materials/resources
				extracted and used in
				an economy including
				imports. Ireland's low
				CMUR rate is
				explained in part by its
				open economy with a
				strong agricultural
				sector and high level
				of exports. For other
				circular economy
				indicators, Ireland is
				more closely aligned
				to other Member
				States (e.g. Ireland's
				municipal recycling
				rate is 41% compared
Tundo in unavalable very protectivity	Thousand	20.925.2	1 020 2	to EU average 46%).
Trade in recyclable raw materials Imports from non-EU countries	Thousand tonnes	39,835.3 [2023]	1,839.2 [2023]	
Trade in recyclable raw materials	Thousand	39,267.6	1,345.4	
Exports to non-EU countries	tonnes	[2023]	[2023]	
Trade in recyclable raw materials	Thousand	84,445.7	893.2	
Intra-EU trade	tonnes	[2023]	[2023]	
Competitiveness and Innovation				
Private Investments	% of GDP at	0.8	0.6	
	current prices	[2021]	[2021]	
People employed	% of total	2.1	1.4	
	employment	[2021]	[2021]	
Gross added value	% of GDP at	2.1	2.9	
	current prices	[2021]	[2021]	
Patents related to waste	number	206.6	3.8	
management and recycling		[2021]	[2020]	
Global sustainability and resilience				

²⁰ National Waste Statistics | Environmental Protection Agency (epa.ie)

Consumption footprint	Index	109	90	
	2010=100	[2022]	[2022]	
GHG emissions from production	kg per capita	6,481.2	12,040.4	
activities		[2022]	[2022]	
Material import dependency	percentage	22.4	33.1	
		[2022]	[2022]	
EU self-sufficiency for raw materials,	percentage	11.0	N/A	
aluminium		[2022]		

European Topic Centre on
Circular economy and resource use
https://www.eionet.europa.eu/etcs/etc-ce

The European Topic Centre on Circular economy and resource use (ETC-CE) is a consortium of European institutes under contract of the European Environment Agency.

