

Circular economy country profile – Ireland



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Introduction

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

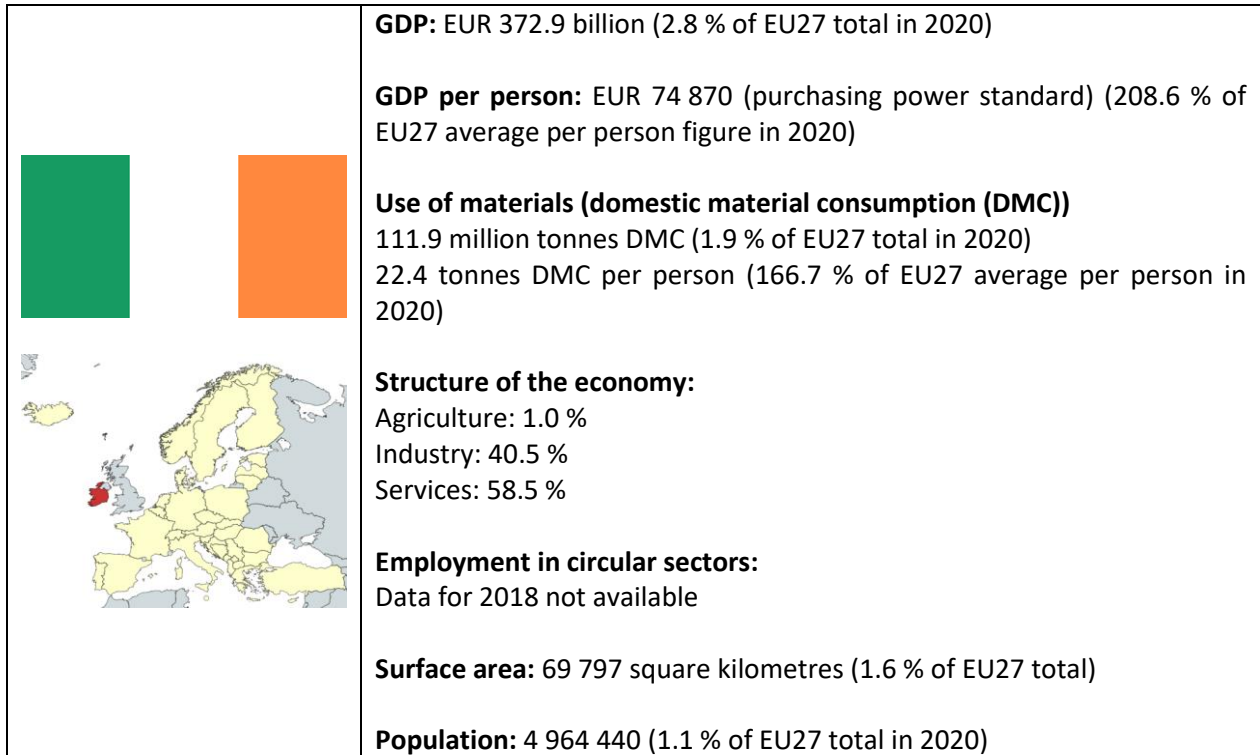
- circular economy policies being implemented at a national level with a particular focus on elements that go beyond EU mandatory elements; and
- best practice with a focus on policy innovation.

While implementing the EU Circular Economy Action Plan (CEAP 2020), Member States are encouraged to advance circularity at a national level by adopting policies and initiatives that go beyond EU regulations, while preserving the Single Market.

This circular economy country profile is based on information reported by the Eionet network and, in particular, the Eionet Group on Circular Economy and Resource Use in the second quarter of 2022. The information was reviewed and edited by the European Topic Centre on Circular economy and resource use (ETC CE). A selection of Eurostat data was made to further complement this country profile.

The information is current as of 11 October 2022 (final review), when members of Eionet verified the content of this profile.

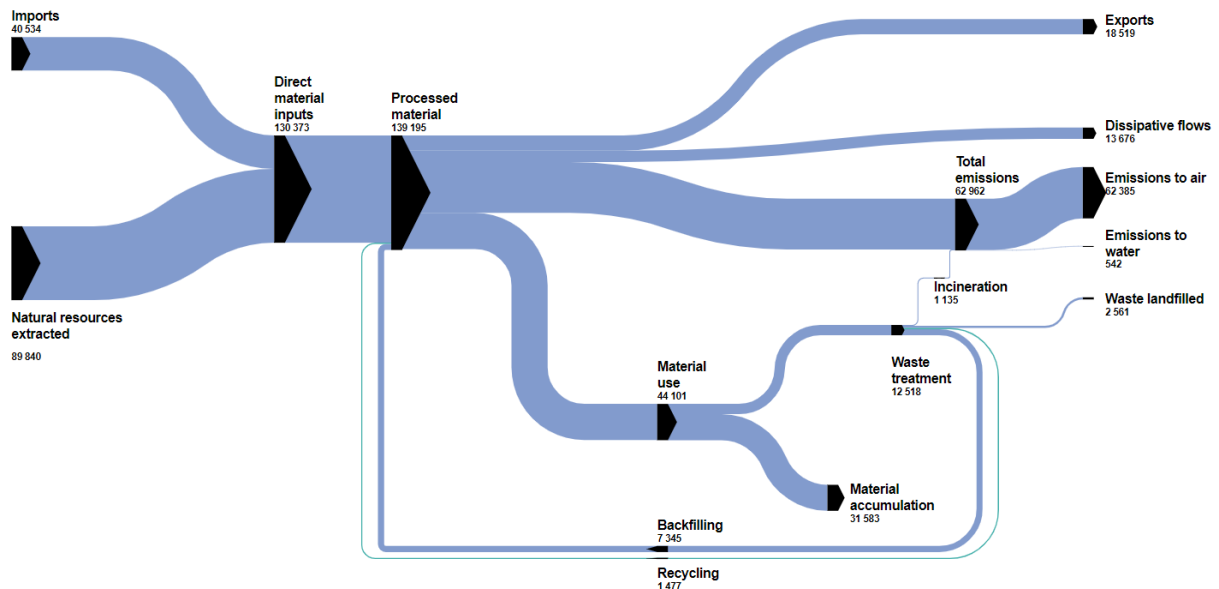
Ireland – facts and figures



Note: all definitions and metadata used in this profile are taken, as shown, from Eurostat

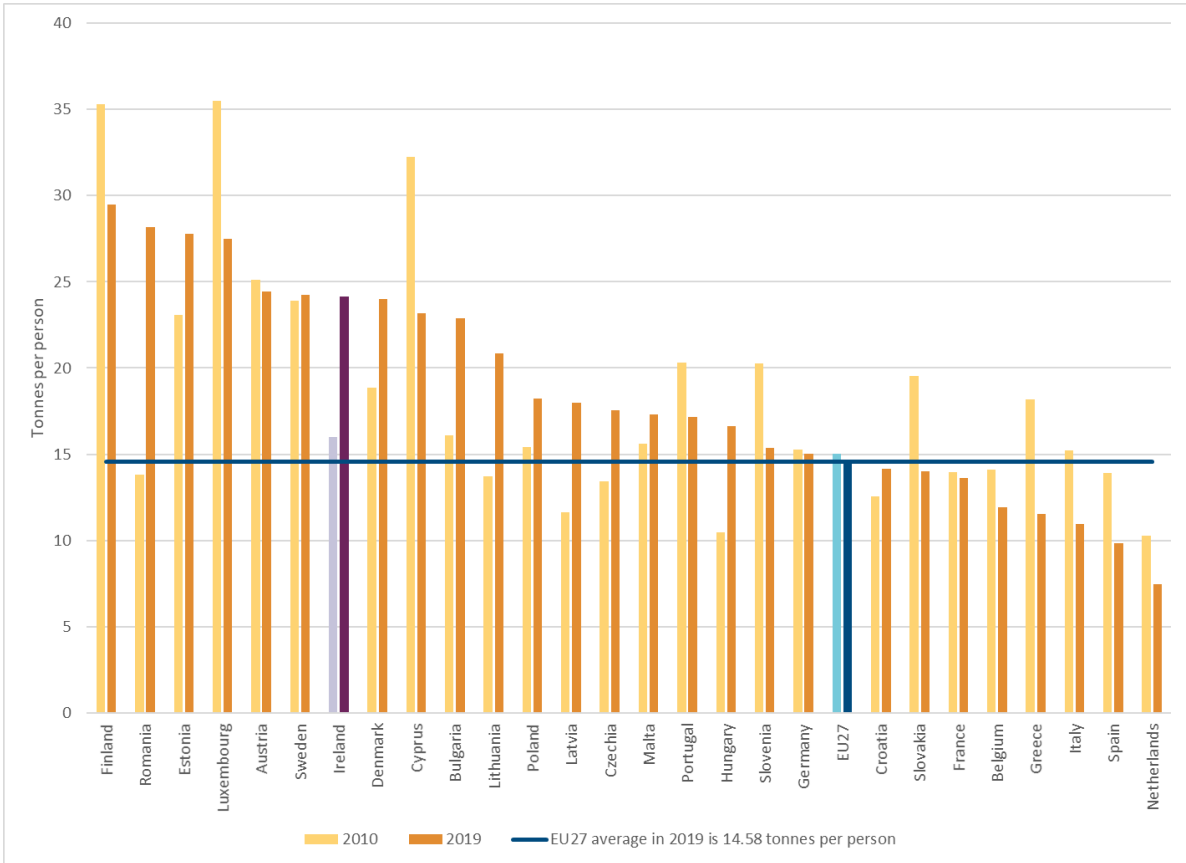
Source: Eurostat datasets, EU27 2020 (accessed 20 June 2022)

Figure 1 Material flow diagram for Ireland in 2020, '000 tonnes



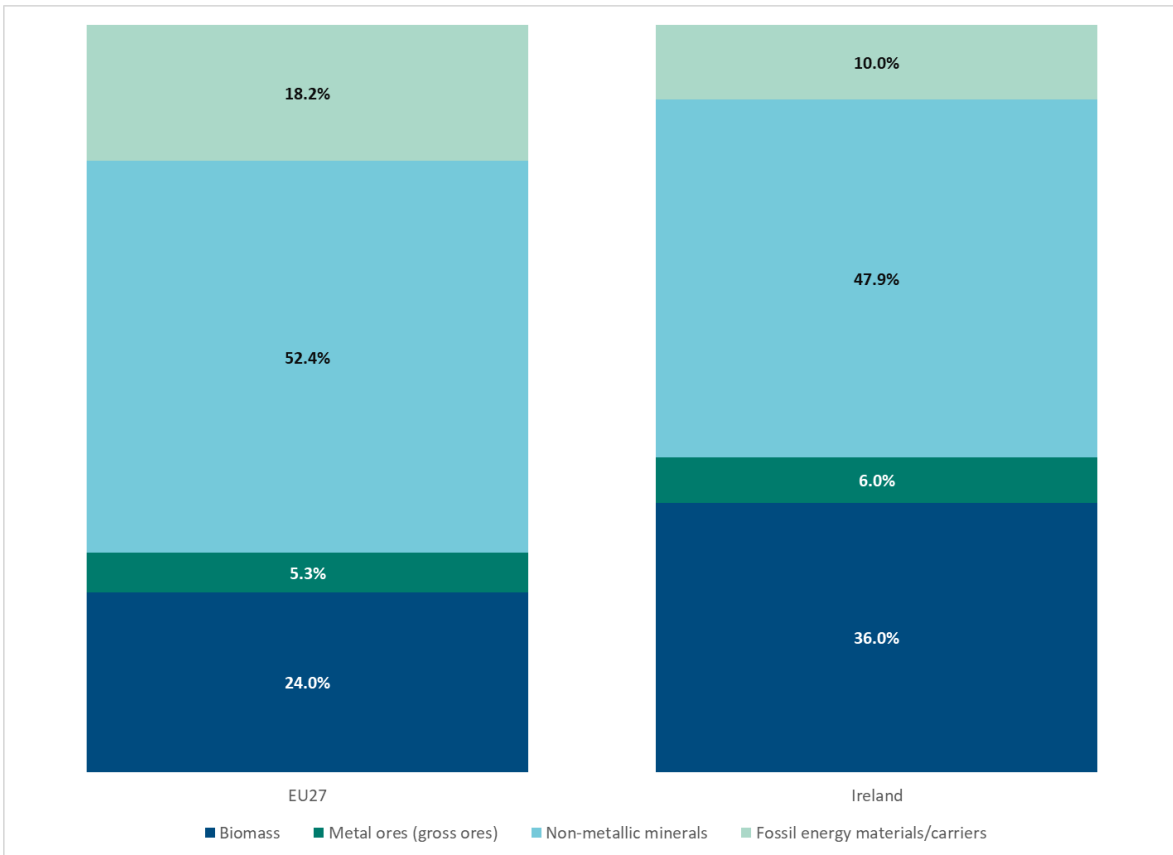
Source: Eurostat (2022) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 20 June 2022)

Figure 2 Material footprint (raw material consumption), EU27, 2010 and 2019, tonnes per person



Source: Eurostat (2020) [env_ac_rme] (accessed 4 July 2020)

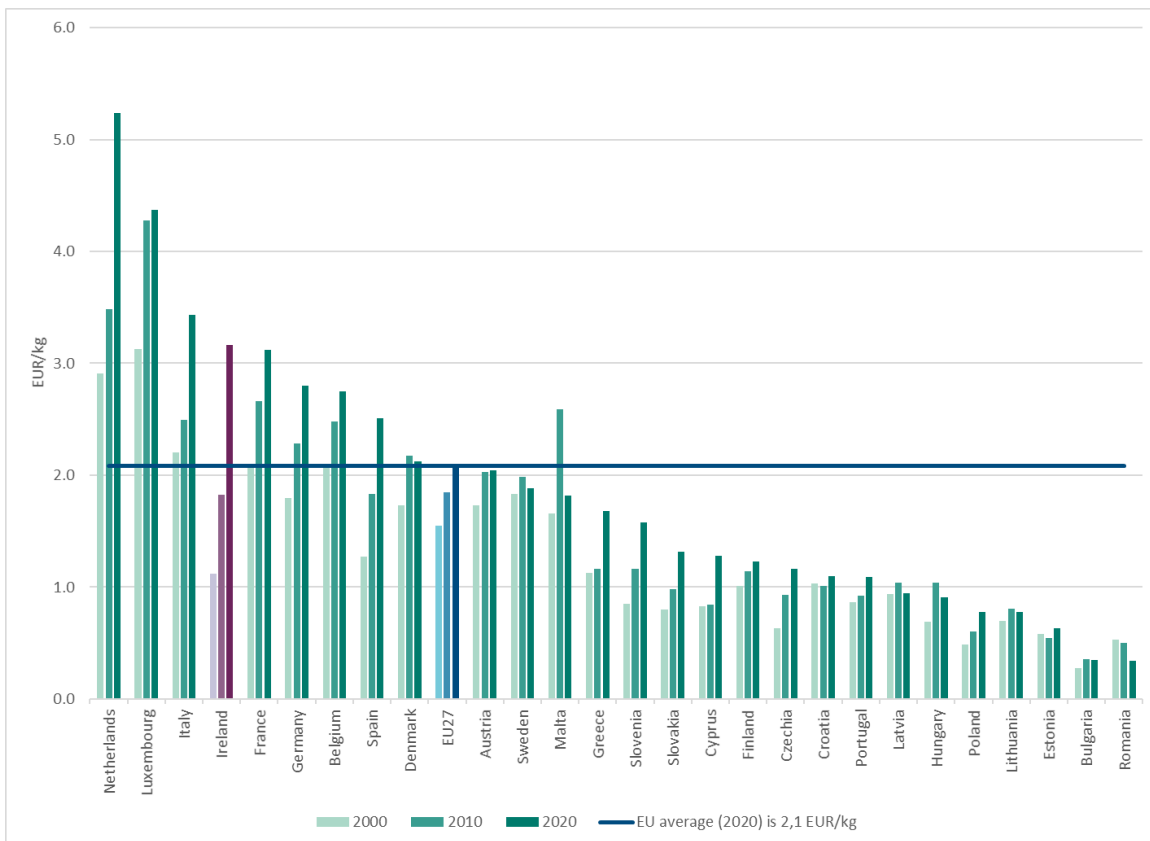
Figure 3 Domestic material consumption by selected material category, EU27 and Ireland, 2020, per cent



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

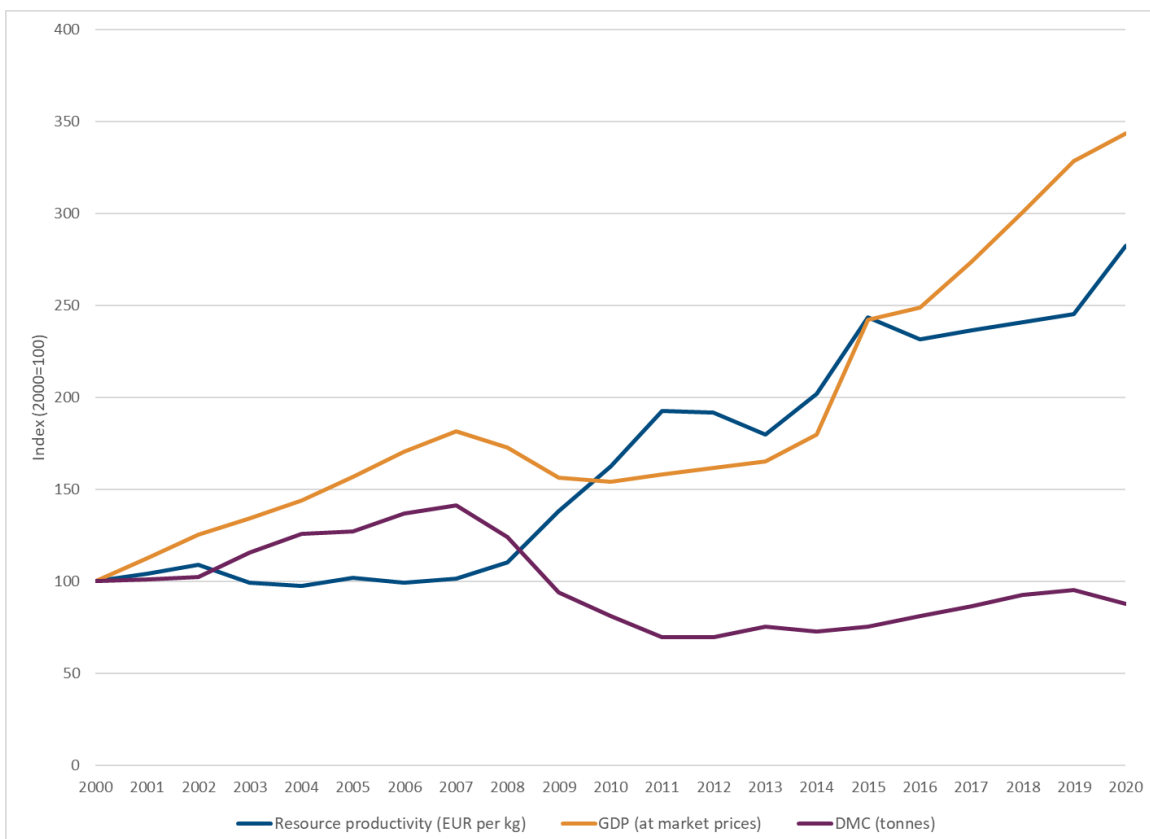
Source: Eurostat (2022) [env_ac_mfa] (accessed 20 June 2022)

Figure 4 Resource productivity (gross domestic product/domestic material consumption), EU27, 2000, 2010 and 2020, EUR per kilogram



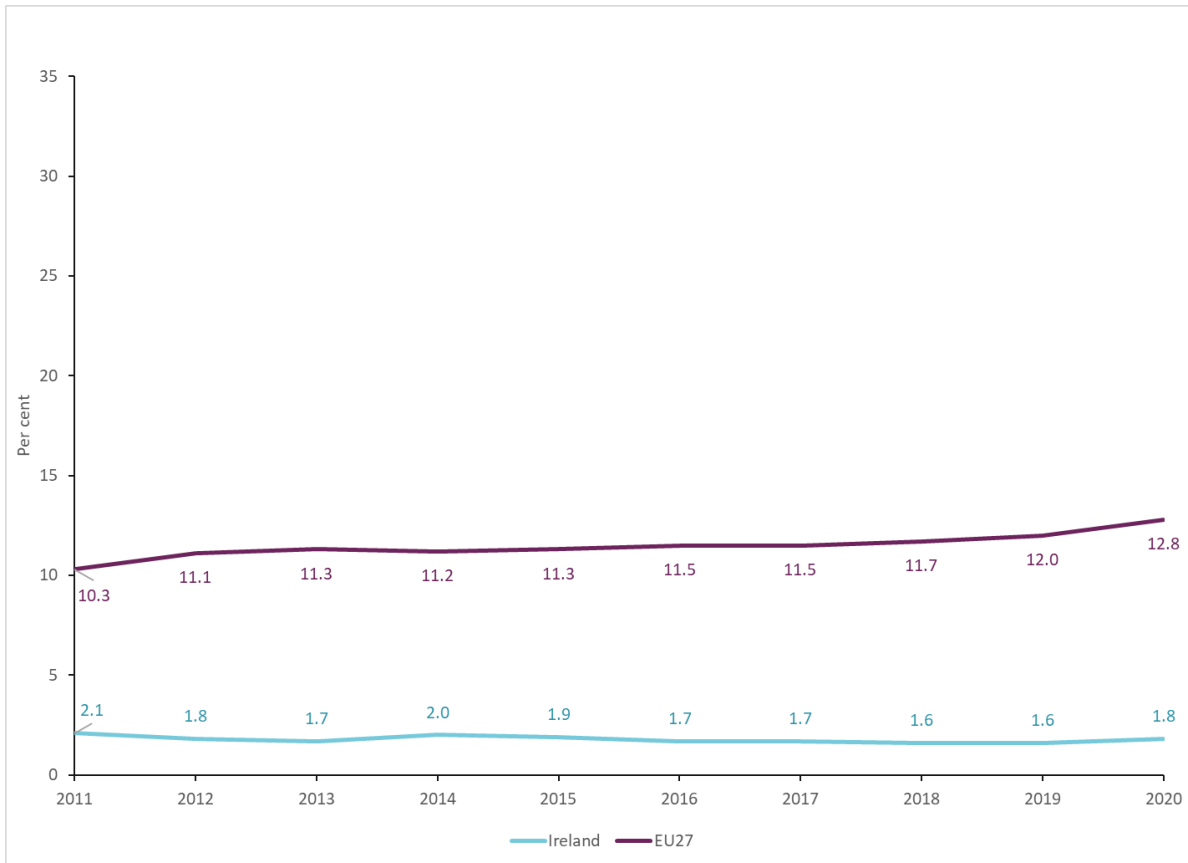
Source: Eurostat (2022) [env_ac_rp] (accessed 20 June 2022)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Ireland, 2000–2020, index (2000=100)



Source: Eurostat [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 4 July 2022)

Figure 6 Circular material use rate in Ireland, 2011–2020, per cent



Source: Eurostat (2022) [env_ac_cur] (accessed 20 June 2022)

Existing policy framework

Dedicated strategy, roadmap or action plan for circular economy

There has been significant policy and legislative activity linked to transitioning to a circular economy in Ireland. The OECD's 2022 report on The Circular Economy in Ireland ⁽¹⁾ notes that "Ireland is at a turning point for the transition to a circular economy."

- In September 2020 new waste policy, **A Waste Action Plan for a Circular Economy**, was published;
- a first national **Whole of Government Circular Economy Strategy** was published in December 2021;
- a **Circular Economy and Miscellaneous Provisions Act** (No. 26 of 2022) (hereafter referenced as the Circular Economy Act 2022) was published in July 2022;
- Ireland's National Waste Prevention Programme has been reconfigured into a national **Circular Economy Programme**, with the new programme published December 2021;
- The new National Waste Management Plan, currently being drafted, is a **National Waste Management Plan for a Circular Economy**;
- The **National Hazardous Waste Management Plan 2021–2027** has been refocussed to support and deliver a CE.

A Waste Action Plan for a Circular Economy ⁽²⁾ shifts focus away from waste disposal and looks instead to how to preserve resources by creating a circular economy, setting out a range of aims and targets for the State and the measures by which these will be achieved.

The **Whole of Government Circular Economy Strategy 2022–2023** (CES) ⁽³⁾ is Ireland's first national CE strategy. This first iteration of the strategy focusses on an overall policy vision and approach. Future iterations will include targets and actions to support those targets. The Strategy will be an evolving document, expected to be updated every 18 months to 2 years.

The CES has five key objectives:

- (i) to provide a national policy framework for Ireland's transition to a CE and to promote public sector leadership in adopting circular policies and practices;
- (ii) to support and implement measures that significantly reduce Ireland's circularity gap, in both absolute terms and compared to other EU Member States, so that Ireland's rate is above the EU average by 2030; such measures to address the most impactful facets of sustainable production and consumption in an Irish context;
- (iii) to raise awareness amongst households, businesses and individuals about the CE and how it can improve lives;
- (iv) to support and promote increased investment in the CE in Ireland, with a view to delivering sustainable, regionally balanced economic growth and employment; and
- (v) to identify and address the economic, regulatory and social barriers to Ireland's transition to a more CE.

The CES identifies some key sectors for future policy development including construction and demolition, agriculture and digital services. A first National Food Waste Prevention Roadmap ⁽⁴⁾, is being finalised

¹ <http://t4.oecd.org/publications/the-circular-economy-in-ireland-7d25e0bb-en.htm>

² [gov.ie](http://www.gov.ie) - Waste Action Plan for a Circular Economy (www.gov.ie)

³ <https://www.gov.ie/en/publication/b542d-whole-of-government-circular-economy-strategy-2022-2023-living-more-using-less/>

⁴ <https://www.gov.ie/en/consultation/96a04-public-consultation-on-the-draft-national-food-waste-prevention-roadmap/>

following a public consultation earlier in 2022. The Roadmap will set out a series of activities to meet the UN Sustainable Development Goal (SDG) 2030 goal on food waste reduction.

The **Circular Economy Programme (CEP)** ⁽⁵⁾ is being led and implemented by the Environmental Protection Agency, an independent public body. The CEP has a statutory footing under the Circular Economy Act 2022 and incorporates and builds upon the statutory National Waste Prevention Programme (including Ireland's food waste prevention programme), to support national-level, strategic programmes to prevent waste and drive the CE in Ireland. As referenced in the CES, the Circular Economy Programme will "play a central role in Ireland's circular transition" and have roles in promoting circularity as an economic model; enhancing coherence and alignment among national, regional and local activities; provide a competitive programme of CE support through innovation grants, sponsorships and seed funding; and improve national knowledge and provide an evidence base to inform CE development in Ireland.

There are seven priority areas in the programme, aligned to those in the EU Green Deal: packaging; plastics; textiles; food, water and nutrients; construction and buildings; electronics and information and communications technology (ICT); and batteries and vehicles. The programme is based on a four-pillar structure: advocacy; insights; data and co-ordination; and innovation and demonstration, delivering through partnerships, and the Regulatory Framework for Circularity, including regulation of end-of-waste and by-products.

The Circular Economy Act 2022 ⁽⁶⁾ underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, to retain the value of resources in the Irish economy for as long as possible. The Act:

- defines the Circular Economy for the first time in Irish domestic law;
- incentivises the use of reusable and recyclable alternatives to a range of wasteful single-use disposable packaging and other items;
- re-designates the existing Environment Fund as a Circular Economy Fund, which will remain ring-fenced to provide support for environmental and circular economy projects;
- introduces a mandatory segregation and incentivised charging regime for commercial waste, similar to what exists for the household market. This will increase waste separation and support increased recycling rates;
- provides for the GDPR-compliant use of a range of technologies, such as CCTV for waste enforcement purposes. This will support efforts to tackle illegal dumping and littering, while protecting the privacy rights of citizens;
- places the Circular Economy Strategy, the Circular Economy Programme and National Food Waste Prevention Roadmap on a statutory footing, establishing a legal requirement for governments to develop and periodically update these documents;
- streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and
- consolidates the Irish government's policy of keeping fossil fuels in the ground – by introducing prohibitions on exploration for and extraction of coal, lignite and oil shale.

⁵ <https://www.epa.ie/publications/circular-economy/resources/the-circular-economy-programme-2021-2027.php>

⁶ [gov.ie](https://www.gov.ie) - Landmark Circular Economy Act signed into law (www.gov.ie)

Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
<p>The Climate Action Plan 2021 is a detailed plan with an annex of actions with the ambition of achieving a 51 % reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government (7) and the Climate Action and Low Carbon Development (Amendment) Act 2021.</p> <p>Chapter 18 of the plan is focussed on the CE and there are 18 activities with timelines and responsible organisations set out.</p> <p>Some examples of action in the Climate Action Plan 2021 (see page 185 of the Plan) are:</p> <ul style="list-style-type: none"> • Publish a Whole of Government Circular Economy Strategy and promote the CE, including a focus on awareness raising, green public procurement (GPP) and international partnerships. • Strengthen the regulatory and enforcement frameworks for the waste collection and management system, to maximise CE principles. • The National Bioeconomy Implementation Group will develop a detailed Bioeconomy Action Plan in 2022. • Enhance food waste separation, collection and treatment. • Develop new and expanded environmental levies to encourage reduced resource consumption and incentivise higher levels of reuse and recycling. 	<p>Climate Action Plan 2021 and Annex of Actions</p>
<p>While the CE is not explicitly referenced in the National Recovery and Resilience Plan, the priorities of advancing the green transition, accelerating and expanding digital reform and transformation, and social and economic recovery and job creation all have links with the CE.</p> <p>The Plan includes, for example, investment for the digitalisation of government services including the census and e-health initiatives which will result in reductions in material use.</p> <p>Investment in the SOLAS⁸ state agency Green Skills training programme will provide accredited training for enterprise employees on topics supporting circular economy.</p>	<p>Ireland’s National Recovery and Resilience Plan</p>
<p>Project Ireland 2040 is the Irish government’s long-term, overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future. The strategy ensures the alignment of investment plans with the stated National Strategic</p>	<p>Project Ireland 2040</p>

⁷ <https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/>

⁸ <https://www.solas.ie/>

Circular economy policy element	Included in policy
Objectives for 2040 in a considered, cohesive and defined manner.	
<p>The National Planning Framework (NPF) and the National Development Plan (NDP) 2021–2030 ^(9) combine to form Project Ireland 2040. The NPF sets the vision and strategy for the development of the country to 2040 and the NDP provides the enabling investment to implement that strategy.</p> <p>Project Ireland 2040, through the National Planning Framework, recognises that the transition to a CE and bioeconomy, in which natural capital is regenerated, the generation of waste minimised, materials and resources maintained in the economy for as long as possible, and biodegradable and biobased products replace energy-intensive and fossil-based materials, could provide an essential contribution to developing a sustainable, low carbon, resource efficient and competitive economy.</p>	
<p>There are significant opportunities to embrace the CE through the building of more than 300 000 housing units by 2030. Actions 23.11 and 23.12 in the Table of Actions for the Plan address construction and demolition waste separation and the use of end-of-waste and by-product decision-making processes to reduce use of virgin raw materials.</p>	Housing for All – A New Housing Plan for Ireland
<p>This policy includes the following: <i>“As Ireland transitions to a climate neutral economy, rural areas are also well placed to see employment growth in areas such as circular economy. Expanding the use of socially responsible public procurement contracts, where feasible, will incentivise the engagement of social enterprises and circular economy organisations.”</i></p>	Our Rural Future, Rural Development Policy 2021-2025
<p>A review of the 2012 Green Tenders¹⁰ (the government’s action plan for Green Public Procurement) is a measure in waste policy (A Waste Action Plan for a Circular Economy). Following a government Circular 20/2019 there has been increased focus on the potential for GPP to deliver reduced emissions and incentivise the CE.</p>	Green Tenders Green Public Procurement Circular 20/2019
<p>Food Vision 2030 is a ten year strategy for the Irish agri-food sector. It signals policies to make the sector more diversified, resilient, and based on CE principles, including targets for reducing food waste. Goal 6 is to embed the agri-food sector in the circular, regenerative bioeconomy. Food loss, waste and packaging are a focus area, as is agri-food research and development (R&D) linked to the circular economy (and other topics). Examples of action called out are:</p>	Food Vision 2030

⁹ <https://www.gov.ie/en/press-release/7ac57-government-launches-the-renewed-national-development-plan-2021-2030/>

¹⁰ www.gov.ie - Green Tenders - an Action Plan on Green Public Procurement (www.gov.ie)

Circular economy policy element	Included in policy
<ul style="list-style-type: none"> • research the extent of food loss at the production (primary) stage in an Irish context, and develop innovative ways of reducing it; • along with efforts to reduce packaging, the industry should urgently pursue more sustainable packaging. 	National Policy Statement on the Bioeconomy
<p>The bioeconomy is recognised as a key facet of the CE in Ireland. A National Policy Statement on the Bioeconomy was published in 2018. A high-level Bioeconomy Implementation Group (set up by government) has been proactive in setting up a National Bioeconomy Forum and leading on the development of a Bioeconomy Action Plan (due to be published in 2022). It may include waste prevention measures for biological resources, or new circular business models utilising/valorising biological resources, or the development of biodegradable and biobased products to replace energy-intensive and fossil-based materials.</p>	National Policy Statement on the Bioeconomy
<p>The rollout of the National Broadband Plan will minimise the use of virgin raw materials by ensuring that, where possible, overhead lines and existing poles will be used to hang the fibre cables. This approach will ensure that only 12 % of the project will be new build.</p>	National Broadband Plan
<p>The Harnessing Digital policy has a commitment that government will conduct an analysis of positive and negative impacts of digital technological changes on sustainability, in particular energy efficiency and the CE, in consultation with experts.</p>	Harnessing Digital
<p>Opportunity through the National Skills Strategy for skills in repair, recycling and remanufacturing to deliver a CE.</p>	Ireland's National Skills Strategy 2025 – Ireland's Future
<p>Opportunity through the Action Plan for Apprenticeships to build a CE skills base in Ireland.</p>	Action Plan for Apprenticeship 2021-2025
<p>Opportunity through the National Further Education Strategy to build CE awareness and skills into further education training.</p>	Future FET: The National Further Education and Training Strategy

Monitoring and targets

Assessment of circular economy performance

There has not been an assessment of Ireland's progress in relation to the EU's Circular Economy Monitoring Framework to date. The OECD's report on The Circular Economy in Ireland does make some policy recommendations, including introducing a monitoring framework for measuring progress.

The **Annex** sets out a table with the EU Circular Economy Monitoring Framework indicators, the most recent Eurostat data reported for EU and Ireland, and some commentary on Ireland's indicators. For many indicators, however, there are no Irish data reported and the reasons for this would need to be further explored. It does indicate though the need to focus on gathering data and reporting on indicators other than waste that are reflective of CE activity in Ireland, including but not exclusive to these EU framework indicators, for example reuse (for which there is now an EU legislative reporting obligation), repair, and other activities such as remanufacturing, resource consumption and reducing contamination of bins, for which future targets have been flagged in national policy. There are also targets under the Single-Use Plastics (SUP) Directive, and there are opportunities for indicators to monitor other activities supporting the CE such as end-of-waste decisions and by-product notifications that, under strict environmental conditions, allow materials which might otherwise be treated as waste to be recycled or beneficially used in other applications.

Besides the currently missing data, which prevents a detailed analysis, there are some other challenges.

- For waste management indicators, there is the challenge of meeting future EU legislative recycling targets, in particular the 2025 plastic packaging recycling rate, and municipal waste recycling, given current performance. Ireland has a heavy reliance on export markets for recycling of plastics, glass, paper and metal, and for hazardous waste.
- A critical analysis of Ireland's circular materials use (CMU) rate needs to be undertaken to understand the reasons for Ireland's low rate of 1.8 % compared to the EU average of 12.8 % and this topic has been included in the EPA Research's 2022 ⁽¹¹⁾ call. This low rate could be partly down to the country's economic sector profile compared to other countries, with its focus on agriculture/food services and smaller service-type enterprises, but Ireland would also like to examine the use of trade and waste statistics, particularly for recyclables given its high export rate.
- The Organisation for Economic Co-operation and Development (OECD) report on The Circular Economy in Ireland (2022) noted, "*demographics, urbanisation and climate change will play a role in future resources management*" as Ireland's population is growing almost twice as fast as the OECD average, and construction grew eight times faster in Ireland than in the EU27 between 2013 and 2019 – applying CE principles to construction could contribute to carbon neutrality.

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

Ireland does not yet have a national or regional framework for monitoring the CE.

Circular economy targets

There are no legal CE targets currently in place in Ireland but there are plans for introducing targets as set out below.

¹¹ <https://www.epa.ie/our-services/research/epa--research-funding/epa-research-call/opportunities-and-barriers-in-climate-action-and-in-circular-economy/>

The Whole of Government Circular Economy Strategy 2022-2023 ⁽¹²⁾ has an objective to bring Ireland's CMU rate above the EU average by 2030 and notes that future iterations of the Strategy will include more detailed actions and targets, including sector specific targets.

The Circular Economy Act 2022 provides that, for the purposes of the development of the circular economy, the circular economy strategy shall set out targets in respect of each of the following sectors of the economy: construction; agriculture; retail; packaging; textiles; electronic equipment. The Act also provides for the inclusion in waste management plans of appropriate qualitative or quantitative indicators and targets in respect of re-used and repaired products and materials. The targets to be set out shall include any or all of the following as the Minister considers appropriate for the sector concerned: (i) reductions in material resource consumption and the use of non-recyclable materials; (ii) increases in the use of re-usable products and materials; (iii) increased levels of repair and re-use of products and materials; (iv) improved maintenance and optimised use of goods, products and materials.

Government policy has the stated aim of reducing food waste by 50 %, in support of commitments under SDG 12.3, for example, referenced in the Climate Action Plan and the Waste Action Plan for a Circular Economy. The EPA's Food Waste Prevention Programme ⁽¹³⁾ supports the delivery of this target. Ireland's baseline reference year and dataset that links to the 50 % reduction target needs to be established. The process is underway at the EU level on setting targets to reduce food waste across the EU, which will consider data to be reported from Member States for the reference year 2020.

The OECD report The Circular Economy in Ireland sets out recommendations for the establishment and monitoring of CE targets, under recommendations of the government as an enabler through data and assessment.

¹² <https://www.gov.ie/en/publication/b542d-whole-of-government-circular-economy-strategy-2022-2023-living-more-using-less/>

¹³ [Food Waste Prevention Programme](#)

Innovative approaches and good practice

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

- ➔ *Good practice example: institutional and regulatory arrangements to support the transition towards a resource-efficient CE*

Waste Action Plan for a Circular Economy

The CES commitment in national waste policy, the Waste Action Plan for a Circular Economy (WAPCE) ⁽¹⁴⁾, was published in September 2020. The WAPCE shifted focus away from waste disposal and towards how resources can be preserved by creating a CE. Other commitments in the WAPCE to transition to a CE, which have already been delivered or are underway, include:

- A Circular Economy Division was established in the government's Department of the Environment, Climate and Communications in 2021.
- The **Circular Economy Programme (CEP)** ⁽¹⁵⁾ was co-launched with the CES in December 2021. This programme is being led and implemented by the EPA. The CEP incorporates and builds on the statutory National Waste Prevention Programme, that includes Ireland's food waste prevention programme, to support national-level, strategic programmes to prevent waste and drive the transition to a CE in Ireland. The CEP will provide leadership, maintain a programme of supports for CE activities, build knowledge and an evidence base to inform CE development and realise the enterprise opportunity of the CE by supporting new business models. There are seven priority areas in the programme, aligned to those in the EU Green Deal: packaging; plastics; textiles; food, water and nutrients; construction and buildings, electronics and ICT; and batteries and vehicles. The programme is based on a four-pillar structure: advocacy, insights, data and co-ordination; innovation and demonstration; delivering through Partnerships; and the Regulatory Framework for Circularity (including regulation of end-of-waste and by products).
- A **National Waste Management Plan for a Circular Economy** is currently under development. This National Plan will replace the three existing regional waste management plans. As set out in the WAPCE, the National Waste Management Plan will include CE targets as described above. The OECD 2022 report on The Circular Economy in Ireland states "*local authorities and cities are well placed to lead the transition from the bottom up with their planning, economic and community development responsibilities*".
- A **Circular Economy Act** ⁽¹⁶⁾ was published in July 2022 and this legislation provides a statutory basis to several key measures including the Circular Economy Strategy, the Circular Economy Programme and the National Food Waste Prevention Strategy. The Act defines the circular economy for the first time in Irish domestic law (Part 2, Interpretation). The legislation provides that the statutory version of the CES may feature both economy-wide and sectoral targets and specify sectors which its future versions must adopt as targets in relation to construction, agriculture, packaging, and electronic and electrical equipment. The Act will also end the issuing of new licences for the exploration and mining of coal, lignite and oil shale.
- Ireland's **National Hazardous Waste Management Plan 2021–2027** ⁽¹⁷⁾ recognises that the CE concept is the overarching framework driving resource and material sustainability at EU and national levels, and includes objectives that support the CE, such as the prevention of hazardous waste, and the promotion of safe reuse and recycling pathways.

¹⁴ <https://www.gov.ie/en/publication/4221c-waste-action-plan-for-a-circular-economy/>

¹⁵ <https://www.epa.ie/publications/circular-economy/resources/the-circular-economy-programme-2021-2027.php>

¹⁶ <https://data.oireachtas.ie/ie/oireachtas/act/2022/26/eng/enacted/a2622.pdf>

¹⁷ <https://www.epa.ie/publications/circular-economy/resources/national-hazardous-waste-management-plan-2021---2027.php>

→ *Good practice example: taxation and economic instruments to encourage investment in the CE*

Levies and fees for waste prevention

Some of Ireland's existing levies, such as the plastic bag levy and the landfill levy, have been very successful in preventing waste, driving behavioural change and moving waste management up the waste hierarchy. The Circular Economy Act ⁽¹⁸⁾ will facilitate further charges.

- A "latte levy" which will place a mandatory charge on disposable coffee cups, will be implemented through secondary legislation, following a public consultation process. Ultimately the ambition is to make Ireland the first country to eradicate disposable coffee cups.
- A waste recovery levy ⁽¹⁹⁾ is based on the model of the existing landfill levy, under which operators pay the local authority EUR 75 per tonne of waste disposed and the levy goes into the ring-fenced Environment Fund. The new levy will apply to recovery operations – backfilling and incineration with energy recovery – whether in Ireland or for waste exported for treatment.
- A deposit return scheme for plastic bottles and aluminium cans; secondary legislation ⁽²⁰⁾ is already in place.
- Introduction of a mandatory separation and incentivised charging regime for commercial waste, similar to those that already exist for the household market, with aim of increasing waste separation and increasing recycling rates.
- The packaging-producer compliance scheme has introduced eco-modulated fees for plastics ⁽²¹⁾ and plans to add other materials soon.
- The introduction of fees for determining end-of-waste and by-product status.

→ *Good practice example: partnerships and networks to support CE*

Local networks fostering circular economy measures

In Ireland, networks have emerged, particularly at the local level, with the aim of promoting waste prevention approaches.

- The Community Resources Network Ireland (CRNI) ⁽²²⁾ is this representative body for community-based reuse, repair and recycling organisations. The CRNI connection with a new Northern Ireland Resources Network (NIRN) ⁽²³⁾ offers opportunities for all-island learnings over time.
- Local Authority Prevention Network ⁽²⁴⁾ builds capacity in local government to promote waste prevention and the CE locally.

Rediscovery Centre

The Rediscovery Centre ⁽²⁵⁾ as National Centre for the Circular Economy, supports the transition to the CE. One of its focus areas is the development of social enterprises based on the principles of the CE, including on the reuse of paint, fashion items, bicycles and furniture. It has led a free mentoring programme, in partnership with the EPA, called Circular Economy Academy ⁽²⁶⁾ to assist social enterprises and community organisations to move their activities towards sustainability and embrace the CE.

¹⁸ <https://data.oireachtas.ie/ie/oireachtas/act/2022/26/eng/enacted/a2622.pdf>

¹⁹ <https://www.gov.ie/en/press-release/e24d9-cabinet-approves-landmark-bill-that-will-introduce-world-leading-moves-to-reduce-waste-and-influence-behaviour/>

²⁰ <https://www.irishstatutebook.ie/eli/2021/si/599/made/en/print>

²¹ <https://repak.ie/news-room/blog/eco-modulated-fees/>

²² <https://crni.ie/>

²³ <https://www.ni-rn.com/>

²⁴ <https://localprevention.ie/>

²⁵ <http://www.rediscoverycentre.ie/>

²⁶ <http://www.rediscoverycentre.ie/research/circular-economy-academy/>

→ *Good practice example: financial support programmes*

Green Enterprise

Green Enterprise ⁽²⁷⁾ is a CEP annual innovation funding call of approximately EUR 650 000, which supports enterprises to develop and demonstrate new CE approaches. Projects funded include an industrial symbiosis project between a bakery and brewery; creating a community of practice for innovation for the CE; developing a recyclable wind turbine blade; insect farming; trailing collections systems for textiles; and bicycle remanufacturing.

Circular Economy Innovation Grant Scheme

The Circular Economy Innovation Grant Scheme ⁽²⁸⁾ is a Department of the Environment, Climate and Communications grant scheme to support social enterprises and voluntary and community-based organisations to deliver CE initiatives. The first year of this call was 2021 and the funding available was EUR 250 0000 in total, which was increased to EUR 490 000 at the end of 2021.

CIRCULÉIRE Innovation Fund

The CIRCULÉIRE Innovation Fund ⁽²⁹⁾ supports industry to develop and demonstrate circular initiatives. The budget for the fund amounts EUR 1.5 million, ring-fenced over a three-year period.

Circular Economy Fund

A ring-fenced Circular Economy Fund ⁽³⁰⁾, with revenues coming from existing environmental levies – the plastic bag levy and the landfill levy – and future levies, such as on disposable beverage cups and the waste recovery levy will provide support for environmental and CE projects. Through the Circular Economy Act provisions this fund will replace the existing Environment Fund.

→ *Good practice example: education*

MODOS Circular Economy Training Programme

MODOS ⁽³¹⁾ is a CE training programme for micro, small and medium-sized enterprises, developed and led by local government.

SOLAS Skills to Advance - Green Skills

A national initiative ⁽³²⁾ providing a set of accredited modules developed/in development to support employers, employees and those in further education training. Work on a CE module has started.

SkillsNet

SkillsNet ⁽³³⁾ provides sustainability training to the workforce to support the transition to a low carbon economy.

Circular Economy Skills Initiative

A project under CIRCULÉIRE's Innovation Fund developed an electrical repair course to train a new generation of repair technicians to prevent electrical and electronic equipment going to waste ⁽³⁴⁾

²⁷ <https://www.epa.ie/our-services/monitoring--assessment/circular-economy/green-enterprise/>

²⁸ <https://www.gov.ie/en/service/b3faa-apply-for-the-circular-economy-innovation-grants-scheme-ceigs/>

²⁹ <https://circuleire.ie/circuleire-innovation-fund-2022/>

³⁰ <https://www.gov.ie/en/publication/f6b84-environment-fund-accounts/>

³¹ <http://modos.ie/>

³² <https://www.solas.ie/programmes/skills-to-advance/>

³³ <https://www.skillnetireland.ie/climate-ready/>

³⁴ <https://www.weeeireland.ie/2021/07/19/weee-ireland-key-industry-and-training-partners-launch-new-circular-economy-skills-initiative-electrical-repair-course/>

Training on circular construction

The Southern Region Waste Management Planning Office led on the development of training on circular construction for local authorities, to incorporate CE thinking into projects from the design stage. Limerick City's Opera Square ⁽³⁵⁾ development has incorporated many circular design elements.

→ *Good practice example: research and innovation*

Behavioural insights studies

The EPA's Circular Economy Programme has, to date, carried out attitudinal and behavioural surveys – online surveys of nationally representative samples of the population aged 16+ – on plastics, food waste and textiles. The report *Plastics: Attitudes and Behaviours in Ireland 2019–2021* ⁽³⁶⁾ was recently published. The ambition of this work is to provide baseline evidence on attitudes and behaviour of the population that can be monitored over time, as policy initiatives are introduced, which will be used to inform policy and behavioural interventions and targeted communication campaigns.

The Department of the Environment, Climate and Communications commissioned a study on CE knowledge, attitudes and behaviour which will inform a national campaign to raise public awareness of the CE.

The EPA's CEP is commissioning a series of Circular Insights papers. Two papers that will be published later in 2022 are *Government interventions (legal/financial) to add economic value through encouraging circular economy activities in Ireland* and *The role Ireland's digital sector can play in accelerating our transition to a circular economy*. The aim is that these papers will provide insights for policy makers and contribute to knowledge on the CE and support its development.

Environmental Protection Agency Research 2030

The research strategy of the Irish EPA contains a thematic area Facilitating a Green and Circular Economy. Research under this theme will contribute to the mainstreaming of sustainable management of natural resources and waste, unlocking the potential of the CE and bioeconomy, and boosting competitiveness, through resource efficiency and deployment of innovative technologies and solutions. This includes research projects on opportunities and barriers in climate action and in circular economy ⁽³⁷⁾ and raw materials and resources substitution and efficiency ⁽³⁸⁾.

Circular bioeconomy and food waste prevention

The Department of Agriculture, Food and the Marine provides research funding to support the circular bioeconomy and food waste prevention. In 2021 four projects were funded which will support businesses to prevent food waste.

→ *Good practice example: institutional and regulatory arrangements to support the transition towards a resource-efficient CE*

Circular Economy standards

The National Standards Authority of Ireland ⁽³⁹⁾ is supporting the development of four International Organization for Standardization (ISO) standards for the CE and sustainable construction.

³⁵ <https://limerick2030.ie/opera-site/>

³⁶ <https://www.epa.ie/publications/circular-economy/resources/plastics-attitudes-and-behaviours-in-ireland-2019---2021.php>

³⁷ <https://www.epa.ie/our-services/research/epa--research-funding/epa-research-call/opportunities-and-barriers-in-climate-action-and-in-circular-economy/>

³⁸ <https://www.epa.ie/our-services/research/epa--research-funding/epa-research-call/raw-materials-and-resources-substitution-and-efficiency/>

³⁹ <https://www.nsai.ie/standards/sectors/circular-economy-standards/>

ReMark

ReMark⁽⁴⁰⁾ is a reuse quality mark developed by Community Resources Network Ireland through EPA Green Enterprise funding. The aim of the mark is to raise the profile of, and demonstrate the quality and safety of, secondhand, upcycled and refurbished goods. The quality mark is now being further developed for a national roll-out through funding under the Department of the Environment's CE Grant Scheme.

Examples of private policy initiatives (sectoral)

CIRCULÉIRE

CIRCULÉIRE⁽⁴¹⁾ is a public-private partnership which has been developed as a platform to support circularity in manufacturing. It is the first cross-sectoral industry-led innovation network dedicated to accelerating the net-zero carbon CE in Ireland. It is a EUR 4.5 million public-private partnership co-created by Irish Manufacturing Research (Secretariat), and three strategic partners, the Department of the Environment, Climate and Communications, the Environmental Protection Agency, and EIT Climate-KIC, and 25 founding industry members. *"CIRCULÉIRE's overarching objective between 2020-2022 is to source, test, finance, and scale, circular manufacturing systems, supply chains and circular business models to deliver significant reductions in both CO₂ emissions and waste across our Industry Membership over the programmes' lifespan."*⁴² The platform's key activities include circularity assessments for members, an innovation fund, thematic working groups on topics such as Financing the Circular Economy, Circular Design and Circular Plastics and an open-access circular economy knowledge library.

Paint Reuse Network

The Paint Reuse Network⁽⁴³⁾ is a network of local authority civic amenity sites, the Rediscovery Centre and social enterprises to scale up paint donation for reuse and to support the development of paint reuse enterprises around the country. The Network encourages and facilitates the reuse and redistribution of second-life paint within their communities. Paint Reuse Network members collect paint from recycling centres and recycle it to create new colours. The network also aims to share knowledge, best practice and provide a coherent and cohesive approach to the process of collecting and redistributing paint.

Repair My Stuff

RepairMyStuff⁽⁴⁴⁾ is a national online repair directory to support, promote and encourage a repair industry in Ireland. It aims to make it easier for the consumer to access the many repair services throughout the country.

Conscious Cup campaign

The Conscious Cup campaign⁽⁴⁵⁾ is a non-profit environmental initiative which seeks to reduce and eventually eliminate single-use cups in Ireland. The campaign's objective is to increase awareness about why reuse is important and how reducing waste protects natural resources. The campaign encourages cafés to reward conscious consumers for carrying their own cup through incentives and promotes and maps those cafés.⁴⁶

Food Waste Prevention Roadmap

A Food Waste Prevention Roadmap⁽⁴⁷⁾, currently under development by the government, is an action under the Circular Economy Strategy that will strengthen the National Food Waste Prevention Programme,

⁴⁰ <https://crni.ie/re-mark/>

⁴¹ <http://circulareconomy.imr.ie/>

⁴² <http://circulareconomy.imr.ie/about/#our-approach>

⁴³ <https://www.paintreuse.network/>

⁴⁴ <https://www.repairmystuff.ie/>

⁴⁵ <https://consciouscup.ie/>

⁴⁶ <https://www.voiceireland.org/>

⁴⁷ <https://www.gov.ie/en/consultation/96a04-public-consultation-on-the-draft-national-food-waste-prevention-roadmap/>

led by the EPA, in terms of scaling up its reach, measuring its impact and effectiveness and ensuring it continues to play a central role in meeting food waste prevention targets.

The Roadmap will set out a pathway to help achieve Ireland's target of halving food waste by 2030, including:

- providing context on food waste and what components of the food supply chain are included in the roadmap;
- establishing a commitment to work together, enhance food waste measurement, and identify and implement key priority activities along the food supply chain to help deliver on Ireland's commitments on preventing food waste and loss;
- the approach to food waste separation, food donations, the role of research and innovation, and GPP in relation to food waste prevention;
- a commitment to deliver sustained communications and awareness on food waste prevention;
- establishing a monitoring and evaluation framework to check the progress of key activities and update the roadmap accordingly.

Food waste prevention programme

Ireland's National Food Waste Prevention Programme ⁽⁴⁸⁾ is led by the EPA and implemented through the CEP. The programme delivers campaigns and targets food waste in households, across the supply chain and in the hospitality sector, to support the delivery of the national target for a 50 % reduction in food waste by 2030. The baseline reference year and dataset that links to the 50 % reduction target needs to be established.

A priority of the National Food Waste Prevention Programme is to improve data quality and availability. Robust and meaningful data on food waste is central to building a compelling narrative on the benefits of preventing food waste. Food waste prevention actions must be linked to consistent measurement in order to track improvements and provide data and evidence to support action. Action to build capacity for food waste prevention in the retail, processing and manufacturing and hospitality sectors includes the roll-out of a standardised food waste measurement methodology for businesses in the food supply chain and conducting studies to improve the granularity and address data gaps. The three-year goals for the programme include:

- an increase in business commitment to reducing food waste, measured as a significant number of businesses committed to food waste reduction targets;
- food waste from across the supply chain is quantified, with sectoral benchmarks and indicators established;
- a 25 % reduction in the reported amounts of food being wasted across the food supply chain;
- an increase in businesses in the hospitality and food service sector measuring food waste against national sectoral benchmarks and indicators;
- a 30 % reduction in the reported amounts of food being wasted in the hospitality and food service sector.

The EPA has developed national standard measurement methodologies to support a consistent approach to food waste measurement in food sector businesses and this will provide the basis for improving data and targeted food waste reduction across the supply chain. The methodologies are designed to bring consistency by following a step-based approach and are based on information already available, such as the information provided in waste collection bills. This will lay the foundations for mapping out actions to reduce food waste within the business in line with realistic, measurable targets.

⁴⁸

<https://www.epa.ie/our-services/monitoring--assessment/circular-economy/food-waste/>

Best Practice Guidelines for Construction and Demolition Projects

In 2021 revised *Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects* ⁽⁴⁹⁾ were published to support circular activities in the construction sector, from design stage through to site construction. The focus is now on implementing the Guidelines through partnerships with the construction industry, awareness raising with relevant stakeholders and developing training.

In addition, in 2022 the EPA commenced the development of national criteria for end-of-waste and by-products for construction-based materials that are generated in high volumes, such as crushed concrete, road planings and greenfield soil and stone.

⁴⁹ <https://www.epa.ie/publications/circular-economy/resources/CDWasteGuidelines.pdf>

The way forward

Addressing barriers and challenges

The low level of awareness and understanding of circularity among households, businesses and policy makers is identified as a challenge in the Circular Economy Strategy. Other challenges include the increased investment requirements, the need for more skills and training, the removal of regulatory barriers and the streamlining of regulatory processes.

For some policies, including some recently published but particularly those published prior to 2020, there is no explicit reference to the CE; resource efficiency was more commonly referenced. It is, however, expected that through the work of the Interdepartmental Circular Economy Working Group, the CE will feature more strongly in future national policies as the links to and opportunities of implementing the CE are recognised.

The OECD's Programme on the Circular Economy in Cities and Regions led a two-year policy dialogue in Ireland with more than 100 stakeholders from the public, private and not-for-profit sectors. Their case study report on *The Circular Economy in Ireland* ⁽⁵⁰⁾ was published in April 2022. This highlighted the drivers and the main governance challenges for Ireland in implementing a CE and sets out a framework of policy recommendations through which the government can play a role as promoter, facilitator and enabler of the CE.

The three main obstacles for CE policy to overcome identified in the report are:

- the sectoral view of the CE, mainly based on waste, rather than a broader review of resources management and a holistic approach to leverage the circular economy as a cross-sectoral driver of economic growth, job creation, social wellbeing and environmental protection;
- the current approach tends to focus on recovery and recycling rather than prevention and repair;
- a lack of place-based considerations as consolidating three regional waste management plans into a national plan may fail to account for local specificities, such as differences in income, population density and access to services.

Governance challenges are reported under four headings.

- Regulatory: lengthy and unreliable licensing processes; limited government oversight of the waste sector; and businesses face legislative barriers.
- Capacity: relevant government departments, agencies and local authorities are still building the technical expertise and human resources required to lead the circular transition. Capacity gaps in Irish SMEs are hampering adoption of circular practices and applications for funding.
- Awareness: limited awareness and understanding of the costs and benefits of a CE among businesses and civil society; a lack of circular criteria in GPP; and businesses face operational and informational barriers.
- Funding: funding gaps relate to the absence of a clear and coherent funding framework for the CE that also considers private investment; limited use of price-based incentives; knowledge institutions are confronted with challenges in applying for research and innovation grants; and limited collaboration with policymakers.

The OECD report also recommends that one of the ways that the government could facilitate the CE transition would be to *“foster policy coherence and transcend silos by enhancing synergies and complementarity between the Circular Economy Strategy and the Climate Action Plan and other policy documents such as National Planning Framework, Bioeconomy and Enterprise Strategies”*.

⁵⁰ <https://www.oecd.org/publications/the-circular-economy-in-ireland-7d25e0bb-en.htm>

Ranking types of barrier

High barrier	Institutional challenge to develop policy for a complex cross-sectoral issue
	Companies' ability to grasp opportunities
	Consumer behaviour and awareness
	Good indicators and targets
Low barrier	Market barriers for recycled resources
	Awareness (public and enterprise)
	Regulatory barriers

Future policy plans

The next iteration of the Circular Economy Strategy will be published in 2023.

Annex

Circular Economy Monitoring Framework – EU and Ireland data⁵¹

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

Indicator	Units	Value EU aggregate [reference year]	Value Ireland [reference year]	Comment
Production & Consumption				
EU self-sufficiency for raw materials, Aluminium	%	9.8 [2018]	N/A	
Green Public Procurement		N/A	N/A	Monitoring and reporting on GPP activity by government departments (⁵²) has started (first reference year 2020).
Generation of municipal waste per person	Kg/person	517 [2020]	555 [2020]	Ireland’s generation of municipal waste is increasing in line with population growth. Per person generation is also increasing.
Generation of waste, excluding major mineral wastes, per GDP unit	Kg/EUR ‘000	66 [2020]	28 [2018]	
Generation of waste, excluding major mineral wastes, per DMC unit	%	12.8 [2020]	6.6 [2018]	
Food waste	Million tonnes	69 [2018]	N/A	Estimated at 766,000 tonnes(2020 reference year) (⁵³).
Waste Management				
Recycling rate of municipal waste	%	48.6 [2020]	40.4 [2020]	The EPA’s National Waste Statistics (⁵⁴) web resource and the National Waste Statistics Summary Report for 2019 (⁵⁵) provides data and analysis on Ireland’s waste generation and management.
Recycling rate of all waste, excluding major mineral waste	%	55 [2018]	41 [2018]	
Packaging recycling	%	64.4 [2019]	62.5 [2019]	
Plastic packaging recycling	%	40.6 [2019]	27.5 [2019]	
Wooden packaging recycling	%	31.1 [2019]	64.9 [2019]	
Recycling of e-waste	%	38.9 [2018]	53.5 [2018]	
Biowaste recycling	%	93 [2020]	49 [2020]	

⁵¹ In this table, the Value EU and Value Ireland data are as reported by Eurostat [Monitoring framework - Circular economy - Eurostat \(europa.eu\)](#) (accessed 11 October 2022)

⁵² <https://www.epa.ie/publications/circular-economy/resources/green-public-procurement-monitoring-and-reporting-by-government-departments-.php>

⁵³ [Food Waste Statistics | Environmental Protection Agency \(epa.ie\)](#)

⁵⁴ <https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/release-calendar/>

⁵⁵ <https://www.epa.ie/publications/monitoring--assessment/waste/national-waste-statistics/national-waste-statistics-summary-report-for-2019.php>

Recovery of construction and demolition waste	%	89 [2020]	100 [2018]	
Secondary Raw Materials				
End-of-life recycling rates of aluminium	%	12.3 [2019]	N/A	
CMU rate	%	12.8 [2020]	1.8 [2020]	The 2022 EPA Research call (⁵⁶) has a topic to critically analyse Ireland's CMU rate to better understand the gap between Ireland and EU rates and to identify areas of potential in the Irish economy.
Imports from non-EU countries		46,838,227 [2021]	1,901,514 [2021]	
Exports from non-EU countries		40,568,862 [2021]	1,269,499 [2021]	
Intra-EU trade		98,868,774 [2021]	936,091 [2021]	
Competition and Innovation				
<i>Private investment, jobs and gross value added related to CE sectors</i>				
Gross investment in tangible goods	% of GDP at current prices	0.12 [2019]	N/A	
People employed	% of total employment	1.76 [2019]	N/A	
Value added at factor cost	% of GDP at current price	0.99 [2019]	N/A	
Number patents relating to recycling and raw materials (per million inhabitants)		295.32 [2019]	7 [2019]	

⁵⁶ <https://www.epa.ie/our-services/research/epa--research-funding/epa-research-call/raw-materials-and-resources-substitution-and-efficiency/>

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.

