



Rialtas na hÉireann
Government of Ireland

Whole of Government Circular Economy Strategy 2026-2028

Accelerating Action

2026



Prepared by the Department of
Climate, Energy and the Environment
[gov.ie](https://www.gov.ie)

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Foreword by Minister Darragh O'Brien, T.D. and Minister Alan Dillon, T.D.

Ireland's Second Whole of Government Circular Economy Strategy has been designed to accelerate our transition to a more resilient, resource-efficient, and innovation driven economy.

This Strategy marks the next phase of our national journey toward a more sustainable society, one that keeps materials and products in use for longer, minimises waste, and redefines the value of materials. At its core, it reflects a simple and phased transition: through innovation and enterprise, we can do more with less, decouple growth from resource use, and ensure prosperity within our planet's limits.

It has also been shaped through extensive engagement with businesses, local authorities, community groups, researchers, and citizens. It clearly demonstrates a national appetite for change, through innovation-led enterprise that is a clear recognition that circularity can unlock new business opportunities, reduce costs, and support high-quality jobs across the country.

Since the publication of Ireland's first Circular Economy Strategy, we have made significant progress. Irish businesses and innovators are already adopting new approaches, from repair and remanufacturing to product redesign, digital tracking systems and innovative reuse initiatives. These innovations demonstrate circularity is not a theoretical concept but a practical pathway to reducing emissions, improving supply chain resilience, and enhancing long-term economic performance. For households, this means practical benefits: reducing waste, extending the life of products and helping families get better value from the goods they purchase.

Delivering on this ambition will require collective leadership across government and sustained collaboration with enterprise and society. Every department and agency has a role to play embedding circular thinking into policy design, infrastructure delivery, and service provision. Equally, many of the successful circular initiatives in Ireland have emerged at local level, driven by people who see opportunity in new sustainable ways of working with circular thinking. This Strategy recognises the value of these local efforts and seeks to support and scale them nationwide. This Strategy is not solely an environmental initiative. It is an economic resilience Strategy. By embedding circular practices across all sectors, we will reduce our dependency on raw materials, enhance our competitiveness, support job creation, and strengthen our national resilience. This Strategy sets a clear and practical direction for the years ahead, one that aligns economic progress with environmental protection and places innovation and enterprise at the heart of Ireland's sustainable future.

All measures under this Strategy will be implemented in line with Ireland's competitiveness framework and subject to appropriate cost and regulatory impact assessment. It aligns Ireland with agreed EU obligations while supporting enterprise, households and communities.



1

Introduction: The Circular Economy in Ireland



1. Introduction

1.1 Vision and Objectives

Economic Resilience and Competitiveness

Ireland is progressing towards a more resource-efficient economic model that keeps materials in productive use for longer and reduces avoidable waste. This transition will be implemented in a structured and phased manner, grounded in evidence, aligned with European Union policy, and designed to support economic growth, competitiveness and regional development.

EU Alignment and Statutory Basis

The **Programme for Government ‘Securing Ireland’s Future’**¹, highlights the circular economy as a core enabler of a fair, green, and competitive transition. It aligns with existing and forthcoming European Union legislation, ensuring that Ireland remains compliant while maintaining a competitive business environment.

Developed under the provisions of the **Circular Economy and Miscellaneous Provisions Act 2022**², this Strategy has a statutory basis. It therefore sets legally required targets and actions for key priority sectors: construction (the built environment), the bioeconomy (including agriculture), retail, packaging, textiles, and electronics and electronic equipment.

Phased Transition Approach

Measures will be introduced proportionately, informed by data and impact assessment, and sequenced to support enterprise, digital and green innovation, housing delivery and improving quality of life.

In doing so, Ireland will become a recognised leader in circular innovation and collaboration that enables an economy where the value of products, materials, and resources is maintained for as long as possible and the environmental, social, and economic benefits of circularity are fully realised, while reducing exposure to resource price shock and supply chain risks.

¹ [Programme for Government 2025 - Securing Ireland’s Future](#)

² [Circular Economy and Miscellaneous Provisions Act 2022, Section 7](#)

Household and SME Benefits

A more resource-efficient economy delivers practical benefits for households and small businesses. By encouraging repair, reuse and better material management, the Strategy aims to help reduce avoidable costs, improve product longevity and support better value for money. Circular practices strengthen local services and enterprise while helping families and businesses manage input and disposal costs more effectively. Ireland is well positioned to lead this transition. Since Ireland's first **Whole-of-Government Circular Economy Strategy**³, in 2021, new models of circular innovation have emerged across all sectors. The case studies included in this document, kindly provided by CIRCULÉIRE⁴, aim to illustrate this emergence.

Core Measurable Objectives

The circular transition also relies on a strong and efficient waste management system. The **Waste Action Plan for a Circular Economy**⁵ (WAPCE) 2020-2025 established an ambitious suite of measures to continuously improve Ireland's waste management systems, minimise waste and improve resource efficiency. It should be noted that the WAPCE will be updated in 2026 to ensure that it aligns with and drives the delivery and implementation of this Strategy. The updated WAPCE will give direction to waste planning and management in Ireland, providing certainty to the market for the delivery of appropriate infrastructure and how the waste collection market will operate over the coming years.

The **core objectives** of this Strategy are:

- **Raise Ireland's circular material use rate (CMUR)**⁶: Increase Ireland's circular material use rate by two percentage points each year, with the aim of reaching 12% by 2030.
- **Support economic expansion** while improving resource productivity and reducing dependency on virgin raw materials.
- **Enhance competitiveness and innovation**: Strengthen Ireland's position as a centre for sustainable design, advanced manufacturing and innovative circular business models, enhancing competitiveness in domestic and export markets.
- **Enhance social equity**: Ensure the benefits of the circular transition are widely shared by communities and workers.
- **Empower people** to make sustainable, cost-effective lifestyle choices.
- **Actively support** local authorities in developing coordinated, community-level circular initiatives.

3 [Whole of Government Circular Economy Strategy 2022 – 2023 'Living More, Using Less'](#)

4 [CIRCULÉIRE - Irish Manufacturing Research](#)

5 [Waste Action Plan for a Circular Economy](#)

6 The circular material use rate measures the share of waste material recovered and fed back into the economy in overall material use. A higher CMUR means that more recovered materials substitute primary raw materials thus reducing the environmental impacts of extracting primary materials.

- **Digitalisation** is established as an enabler of the circular economy by businesses adopting digital tools such as digital product passports, traceability and resource optimisation systems.

Cross Government Responsibility

Achieving a more circular Ireland will require coordinated action across government, enterprise, and society. This Strategy provides a clear national direction for the transition; one grounded in evidence, aligned with EU policy, and focused on delivering environmental, economic, and social benefits across every region of the country.

Responsibility for delivery will rest across government. Departments and agencies will reflect circular economy considerations within their Statements of Strategy and annual business planning processes as appropriate, ensuring integration into existing policy and investment frameworks.

1.2 The Circular Economy in Ireland – EU and National Legislation, Strategies, Plans and Programmes

The circular economy has transformative impact potential for Ireland, and we are well positioned to achieve and capitalise on the many opportunities of an economy-wide circular just transition, future-proofing Ireland environmentally, economically and socially.

Since the publication of Ireland's first **Whole-of-Government Circular Economy Strategy** in 2021, we have put in place the necessary policy and regulatory framework required for a successful circular transition. Ireland has taken very significant steps to help drive the necessary improvements in our waste segregation practices which will form a major part of our efforts to meet EU waste recycling targets. The 2024 **Green Public Procurement Strategy and Action Plan**⁷ is playing a key role in driving the implementation of green and circular procurement practices across the public sector. Organisations and platforms such as The **Rediscovery Centre**⁸, **Community Resources Network Ireland (CRNI)**⁹ and **Repairmystuff.ie**¹⁰ have all played a key role in mainstreaming the circular economy.

Circular Economy in the European Union

The European Union places the circular economy as a cornerstone of its environmental, climate, industrial, and competitiveness agendas.

The circular economy also represents a major business opportunity for the EU. Circular-

⁷ [Green Public Procurement Strategy and Action Plan 2024-2027](#)

⁸ [The Rediscovery Centre](#)

⁹ [CRNI](#)

¹⁰ [Repairmystuff.ie](#)

economy sectors already generate around €316 billion in gross value added annually and invest approximately €131 billion and employ 4.3 million people, with strong growth potential towards 2030¹¹. Yet, despite these opportunities, progress towards a truly circular economy remains too slow. The EU remains far from achieving its ambition to double Europe's circularity rate to 24% by 2030: from 2010 to 2024, the share of recycled materials in the economy increased only slightly from 10.7% to 12.2%¹².

To accelerate progress, and endorsed in December 2025 (Environment) Council Conclusions¹³, the European Commission will propose a **Circular Economy Act** in 2026 to address structural barriers, create a Single Market for waste and secondary raw materials, and foster demand for circular products, services and solutions. Each material stream faces specific barriers that must be addressed through tailored measures. According to the Commission, we require *'coordinated action at local, national and EU levels to remove those barriers and unleash the full potential of the circular economy'*¹⁴.

The **Circular Economy Action Plan (CEAP)**¹⁵ aims to promote sustainable growth and resource efficiency in the EU, with a focus on reducing waste and enhancing product lifecycle. The CEAP was adopted by the European Commission in March 2020 as part of the **European Green Deal**¹⁶.

The European Green Deal recognises that climate change, biodiversity loss and environmental degradation are an existential threat to Europe and the world and are inextricably intertwined. The Green Deal constitutes a framework across all sectoral areas for transforming the EU into a climate-neutral, environmentally sustainable, non-toxic, and fully circular society and economy by 2050.

11 [Communication on Accelerating Europe's transition to a circular economy: boosting the circularity of plastics](#)

12 <https://www.eea.europa.eu/en/analysis/indicators/circular-material-use-rate-in-europe>

13 [Europe's environment: Council urges accelerated transition for a climate-resilient and circular Europe by 2030 - Consilium](#)

14 [Accelerating Europe's transition to a circular economy](#)

15 [Circular Economy Action Plan - European Commission](#)

16 [The European Green Deal - European Commission](#)

1.3 The Circular Economy in Ireland to Date

Since 2021, Ireland has taken major steps to embed circular thinking into national policy:

- **Ireland's WAPCE¹⁷** set over 200 measures to reduce waste, improve segregation and support recycling.
- This was followed by Ireland's national Strategy dedicated to the circular economy: the Whole of Government **Circular Economy Strategy 2022–2023 'Living More, Using Less'¹⁸**.
- The **Circular Economy and Miscellaneous Provisions Act 2022¹⁹ (the Act)**, enshrined the circular economy in Irish law and provided a legal basis for actions to support it.

This second iteration of the Strategy has a statutory basis and, in line with the requirements under statute through the Act includes targets for key sectors, delivering on the potential to make significant contributions to the circular transition. The Act prescribes that actions and targets should be set for the following sectors: construction²⁰, agriculture²¹, retail, packaging, textiles, and electronic equipment.

The Act provides that these sectoral targets shall include any or all of the following:

- 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 reuse of products and materials.
- improved maintenance and optimised use of goods, products and materials.

The **National Waste Management Plan for a Circular Economy²²** was published in 2024 which further enhances the regulatory framework by setting out the specific targets and actions which need to be taken by local authorities over the period 2024 to 2030 to achieve this transition. The key ambition of the Plan is to achieve 0% total waste growth per person which is to be delivered via the targets. One such target, commits to developing a **Repair Target Roadmap** with a view to attaining the target of **20kg per person per annum of reuse** in key

17 [Waste Action Plan for a Circular Economy](#)

18 [Whole of Government Circular Economy Strategy 2022 – 2023 'Living More, Using Less'](#)

19 [Circular Economy and Miscellaneous Provisions Act 2022](#)

20 [The Built Environment](#)

21 [For the purposes of this Strategy this is referred to as the Bioeconomy, which includes Agriculture.](#)

22 [National Waste Management Plan for a Circular Economy 2024-2030 - My Waste](#)

product categories including: textiles, Electronics and Electronic Equipment (EEE), Furniture, and Construction and Demolition (C&D).

The **National Food Waste Prevention Roadmap 2023-2025**²³ was launched in November 2022 to steer efforts to reduce food waste by 50% by 2030 in line with the United Nations Sustainable Development Goals²⁴.

At EU level, a targeted revision of the **Waste Framework Directive**, entered into force on 16 October 2025, with new provisions on food and textile waste, including binding food waste reduction targets to be achieved at national level by 2030. These new provisions will be significant in shaping several of the key actions in the next **National Food Waste Prevention Roadmap**, which will be prepared in 2026 on a statutory basis, following the publication of this Strategy.

The **National Bioeconomy Action Plan 2023-2025**²⁵ is our first comprehensive strategy to develop and promote our bioeconomy. The plan contains 33 actions across seven pillars, focused on bringing sustainable scientific practices, technologies, and biobased innovations into use on farms and in biobased industries. A new **Bioeconomy Strategy and Action Plan** for 2026 to 2030 is currently under development.

The **Buying Greener: Green Public Procurement Strategy and Action Plan 2024-2027**²⁶ was published in 2024 and aims to drive the implementation of green and circular procurement practices across the public sector.

The **Circular Economy Programme (2021 – 2027)**, led by the **Environmental Protection Agency (EPA)**, has delivered a diverse range of activities including producing national circular economy and waste statistics and surveys, implementing the national food waste prevention programme for consumers and businesses, regulating for circularity through end-of-waste and by-products decisions, supporting Green Public Procurement (GPP) implementation, licensing nationally important waste infrastructure, providing innovation and demonstration funding and delivering a behavioural insights and evidence programme.

The scale of the challenge to become circular requires change at every level of our society. Innovation and demonstration projects which can serve to simplify, de-risk and deliver circular innovation are of particular importance in promoting the transition to a more circular society. In that context, the **Circular Economy Innovation Grant Scheme (CEIGS)**²⁷ was introduced in 2021 to provide support to projects which work in the circular economy space.

23 [National Food Waste Prevention Roadmap 2023-2025](#)

24 [THE 17 GOALS | Sustainable Development](#)

25 [Bioeconomy Policy](#)

26 [Green Public Procurement Strategy and Action Plan 2024-2027](#)

27 [Circular Economy Innovation Grant Scheme \(CEIGS\)](#)

Ireland also continues to recognise the potential of circular manufacturing through its support for CIRCULÉIRE²⁸. Now in its fifth year, CIRCULÉIRE is a cross-sectoral industry-led national innovation platform and supports industry on their journey from linear to circular business models through knowledge exchange, capacity building, baselining action plan development, thematic working groups, sectoral guides and circular innovation pilots.

The directive for promoting the repair of broken or defective goods, known as the **Right-to-Repair Directive**²⁹, will make it easier for consumers to repair instead of replacing products. It gives manufacturers the incentive required to make products that last longer and can be repaired, reused, and recycled. This directive complements other EU legislation to promote sustainable consumption and circularity, such as the **Ecodesign for Sustainable Products Regulation (ESPR)**³⁰. The framework regulation is a cornerstone of the 2020 Circular Economy Action Plan and aims to transform how products are designed, produced and consumed. It introduces mandatory requirements for product durability, repairability, reusability and recyclability. It establishes the **Digital Product Passport (DPP)**: a key tool to improve transparency and traceability across the value chain. By embedding circularity into product design, ESPR ensures that reuse and repair are integrated into the products whole life-cycle. ESPR also works in tandem with revisions to **EU product legislation on Batteries**³¹, **End-of-Life Vehicles**³² and **Packaging**³³, creating a coherent framework for sustainable products across the EU.

Ireland is leveraging these important developments to support the development of a more vibrant repair and reuse ecosystem in Ireland. **The National Reuse and Repair Network (NRRN)**³⁴, established by the EPA in 2024, is bringing together public bodies and national organisations to facilitate knowledge sharing and engagement to support and scale reuse and repair in Ireland. We need to ensure that reuse and repair skills are building within the population, and opportunities exist to develop skills and employment; that barriers to reuse and repair are removed and that reuse and repair are standard practice in priority areas.

28 [CIRCULÉIRE - Irish Manufacturing Research](#)

29 [Directive on repair of goods - European Commission](#)

30 [Ecodesign for Sustainable Products Regulation - European Commission](#)

31 [Batteries - European Commission](#)

32 [End-of-Life Vehicles - European Commission](#)

33 [Packaging waste - European Commission](#)

34 <https://www.epa.ie/our-services/monitoring--assessment/circular-economy/leading-by-example/>

1.4 Recent Measures to Accelerate Ireland's Transition to a Circular Economy

Since its introduction in 2002, the **landfill levy**³⁵ has been hugely successful in affecting behavioural change of waste disposal, driving a steep decline in the number of municipal landfills in operation from 39 in 2002 to just three in 2026.

The **waste recovery levy**³⁶ was introduced in Ireland in 2023 to encourage a shift away from waste recovery (like incineration or backfilling) towards higher-value practices like reuse and recycling, supporting the national goal of a circular economy.

In Ireland, Construction and Demolition (C&D) waste³⁷ has consistently been the largest waste stream in terms of both volume and weight, with 81% comprising soil and stones. However, only a small percentage (approximately 11%) of total C&D waste is recycled or reused, with 75% being backfilled. Given that substantial volumes of this waste are potentially preventable, re-usable or recyclable, it represents a significant opportunity for Ireland to reduce its circularity gap. Therefore, after significant consultation with the waste and construction industries, the **Department of Climate, Energy and the Environment (DCEE)** amended the **Waste Recovery Levy Regulations**³⁸ to phase out the levy exemptions for this waste stream over an 18-month period.

In 2024, DCEE introduced regulatory mechanisms, applied by the EPA, to support Ireland's transition to a circular economy, including criteria/decisions under **Article 27**³⁹ (**by-products**) and **Article 28**⁴⁰ (**end-of-waste (EOW)**). The purpose of these regulations⁴¹ is to enhance the circular economy by making EOW criteria clearer and encourage the use of waste as a resource. These mechanisms provide clarity on when materials can be used as resources rather than treated as waste. As a result, they are delivering cost savings for construction and other sectors.

About 1.9 billion drinks are consumed in single use bottles and cans each year in Ireland. These drinks containers are typically consumed on the go and are often thrown away in mixed waste or littered rather than being recycled. A national **Deposit Return Scheme**⁴² (**DRS**) was introduced in February 2024 to incentivise more people to recycle plastic bottles and cans. A key objective of DRS is the achievement of Ireland's EU separate collection target for plastic beverage bottles as mandated by the Single Use Plastics Directive⁴³ – 90% by 2029.

35 [Introduction of new environment levies will incentivise recycling and help Ireland meet our EU waste targets](#)

36 [Circular Economy \(Waste Recovery Levy\) Regulations 2023](#)

37 [Construction & Demolition Waste Statistics for Ireland | Environmental Protection Agency](#)

38 [S.I. No. 441/2024 - Circular Economy \(Waste Recovery Levy\) Regulations 2024](#)

39 [By-products Regulation 27 | Environmental Protection Agency](#)

40 [End-of-Waste \(Art. 28\) | Environmental Protection Agency](#)

41 [S.I. No. 660/2024 - Waste Management Act 1996 \(End-of-Waste\) Regulations 2024](#)

42 [Ireland's Deposit Return Scheme is live](#)

43 [Single-Use Plastics](#)

1.5 Alignment with existing plans and strategies

In developing this Whole-of-Government Circular Economy Strategy, we have considered and aligned with several key existing national plans and strategies including:

- The National Human Rights Strategy for Disabled People 2025-2030⁴⁴
- The Roadmap for Social Inclusion 2020 – 2025⁴⁵
- The UN Sustainable Development Goals (SDGs)⁴⁶
- Project Ireland 2040: Ireland's long-term strategy to '*make Ireland a better country*'⁴⁷
- The National Planning Framework⁴⁸
- The National Marine Planning Framework⁴⁹
- Ireland's 4th National Biodiversity Action Plan⁵⁰

⁴⁴ [The National Human Rights Strategy for Disabled People 2025-2030](#)

⁴⁵ [Roadmap for Social Inclusion 2020-2025](#)

⁴⁶ [THE 17 GOALS | Sustainable Development](#)

⁴⁷ [Project Ireland 2040](#)

⁴⁸ [Home - The National Planning Framework](#)

⁴⁹ [National Marine Planning Framework](#)

⁵⁰ [Ireland's 4th National Biodiversity Action Plan 2023-2030](#)

2

Towards a Circular Economy: A Strategic Vision for Ireland informed by the 2024 Circularity Gap Report



2. Towards a Circular Economy: A Strategic Vision for Ireland informed by the 2024 Circularity Gap Report

Charting a Pathway to Resilience, Prosperity, and Environmental Stewardship

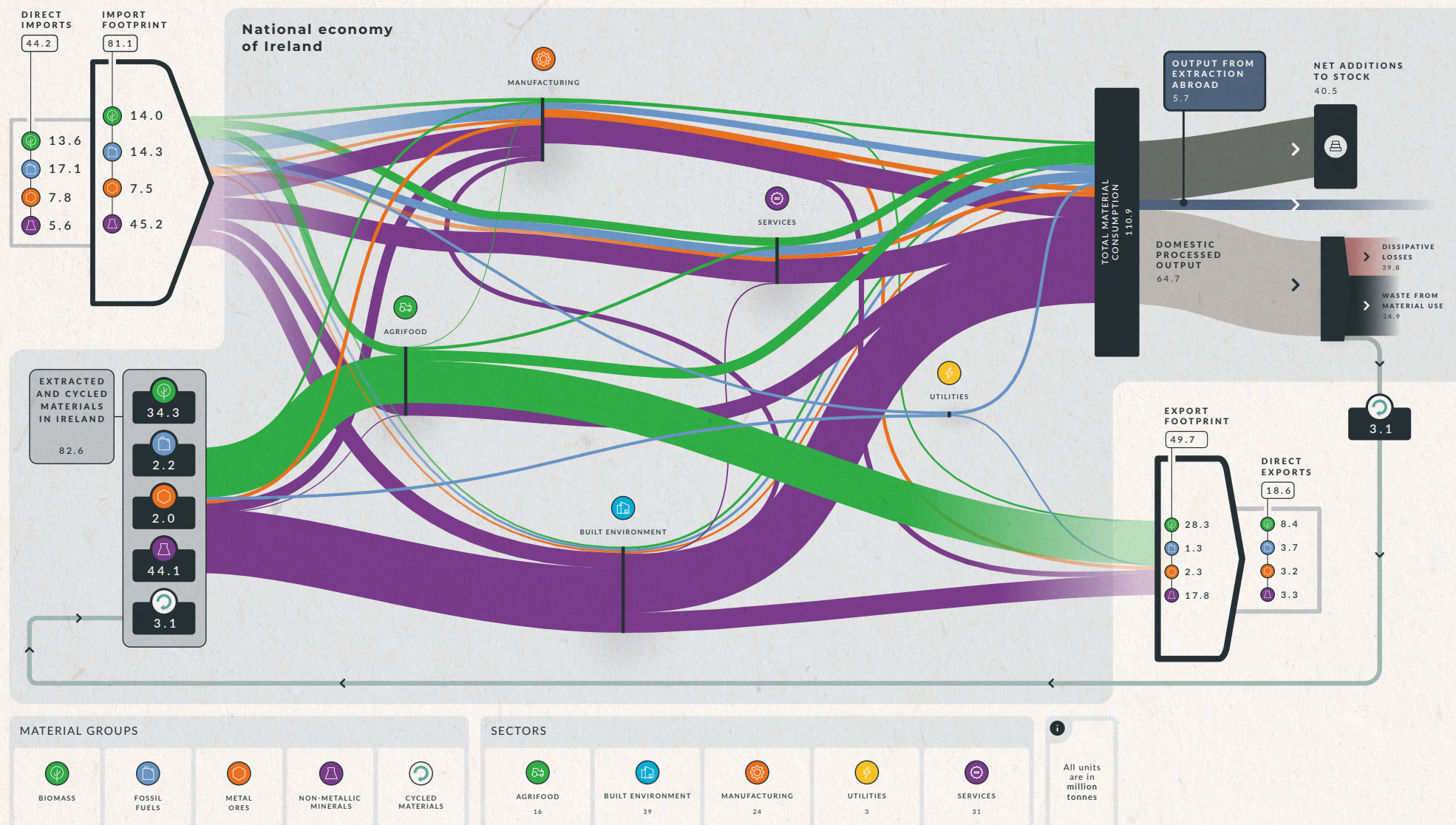
Ireland stands at a pivotal crossroads: the nation's current patterns of resource consumption and waste generation are increasingly unsustainable. This is threatening environmental health, the reduction of GHG emissions and long-term economic resilience. In this context, DCEE commissioned the preparation of a **Circularity Gap Report for Ireland**⁵¹.

The purpose of the Circularity Gap Report, published in September 2024, was to enable a better understanding of the levers for change in moving to a circular economy and the benefits that these levers could bring. The report provides a comprehensive and detailed analysis of Ireland's national material flows and level of circularity based on a methodology that allows for international comparisons of our performance relative to peer countries.

It allows us to analyse Ireland's circularity gap to understand further how raw materials are processed and assembled to become the products that address the country's needs. Understanding what happens at end-of-life sheds light on the accumulation of materials in products, goods and the built environment around us. Furthermore, it reveals the extent to which we are recycling resources into the economy, enabling us to identify where different sectors and supply chains should focus their strategies to reduce environmental impacts and increase secondary material use, ultimately narrowing our circularity gap. Figure 1 provides a visual aid in understanding our national material flows.

51 Circularity Gap Report Ireland, CEF, 2024 ([accessible here](#))

Figure 1. Ireland's Socioeconomic Metabolism: Economy-wide Sankey to visualise physical throughputs and environmental footprints



The report underscores that the circular economy has transformative potential for Ireland. Our continued growth, both in terms of GDP and population, has come at a material cost with the need to provide new housing and infrastructure, along with more food, services, and manufactured goods. In that context, our material use continues to grow in a manner which is incompatible with our circular economy and climate goals.

Reversing this trend is a necessity: by embracing circular economy strategies across key sectors, we can ensure that the needs of our people are being met while our environment is preserved. Shifting away from the linear 'take-make-waste' paradigm can also facilitate resilience to the geo-political and supply chain shocks of the last number of years, fostering stability within Ireland, and strengthening our economy consequently.

The challenge we face is commensurate with the potential returns. The Circularity Gap Report Ireland, for the first time, established Ireland's Technical Cycling rate⁵² (Circularity rate) at only 2.7%, with a global average⁵³ in 2021 of 6.9%, meaning that the vast majority (97%) of the materials flowing through our economy come from virgin sources. The Gap Report notes that this percentage could be higher when accounting for informal reuse activities as well as those that are not currently measured or captured by official statistics.

Embedding circular economy practices into production and consumption systems is fundamental to realising Ireland and Europe's shared ambition for a net-zero carbon and circular future. The 2019 European Green Deal made a transition to the circular economy a necessity to making Europe the first climate-neutral continent by 2050. Ireland has followed suit in publishing the first Circular Economy Strategy and enshrining the Circular Economy Act in law, solidifying the circular economy as the foundation pillar of Ireland's climate and economic development agendas into the future. This is why it is so crucial to build upon the successful measures and accompanying sectoral targets under the Climate Action Plans⁵⁴ which are driving down our emissions.

The Gap Report reveals that the economy currently operates in a predominantly linear fashion. Resources are extracted, used, and then disposed of, rather than recirculated.

52 The Technical Cycling rate is part of a wider set of indicators using a specific methodology, while the CMUR is a stand-alone, EU established metric.

53 [CGR 2025](#)

54 [Climate Action Plan 2025](#)

The report makes three key high-level recommendations:

- Focus on key, high-impact sectors.
- Prioritise wellbeing over GDP-based growth.
- Keep momentum with strong policy support.

The Circularity Gap Report is an important evidence-based tool that was used in the development of this Strategy which will reduce our dependency on primary raw materials, enhance our competitiveness, support job creation, and strengthen our national resilience.

3

Implementation Roadmap



3. Implementation Roadmap

This Strategy is focused on practical delivery. Implementation will be coordinated across Government utilising existing governance structures, ensuring that actions are embedded within current policy, investment and regulatory frameworks.

Departments and agencies will reflect relevant circular economy commitments within their annual business planning processes as appropriate, ensuring that measures are incorporated into existing work programmes and regulatory agendas.

Governance and Coordination

As set out in Chapter 4, delivery will be overseen by a cross-departmental high-level oversight group, chaired by DCEE. The group will:

- Coordinate action across departments and agencies
- Monitor progress against agreed sectoral targets
- Identify barriers to implementation
- Ensure alignment with EU legislative developments

This approach builds on established interdepartmental coordination mechanisms and does not create additional layers of administrative oversight.

Reporting and Transparency

Progress under this Strategy will be reported annually. An Annual Circular Economy Progress Report will be prepared and laid before the Oireachtas, providing transparency on:

- Sectoral target progress
- Regulatory developments
- Investment alignment
- Key implementation milestones

This ensures accountability while maintaining streamlined governance.

Alignment with National Investment Frameworks

Implementation will be integrated with existing investment and capital planning processes, including:

- The National Development Plan (NDP)
- Relevant sectoral capital programmes
- Green Public Procurement commitments

Actions under this Strategy will be sequenced in line with these frameworks to ensure policy coherence and delivery certainty.

Funding and Fiscal Alignment

Implementation will be aligned with the Circular Economy Fund, existing Exchequer allocations, and National Development Plan investment frameworks.

Where additional measures are explored, these will be subject to standard budgetary processes and impact assessment in line with Government decision-making procedures.

This approach ensures that delivery remains fiscally responsible and sustainable.

Roadmap

a) Foundation and Capacity Building

- Establish a national **Circular Economy Advisory Group** to coordinate policy delivery.
- Continue to map material flows and track progress against the circularity baseline established for key sectors.
- Roll out flagship pilot projects.
- Build stakeholder capacity through training, support, and advisory services.

b) Scaling and Mainstreaming

- Mandate **Extended Producer Responsibility (EPR)**⁵⁵ for priority sectors; expand to cover emerging waste streams.
- Support platforms (material hubs) for secondary materials trading and certification.
- Fully integrate circular economy criteria into procurement processes.
- Expand financial supports for circular SMEs, start-ups, and social enterprises.

55 [Extended Producer Responsibility \(EPR\)](#)

c) Research, Innovation and Scaling Up

- Set sector-specific circularity targets and review regulatory frameworks.
- Scale up successful pilots and replicate best practices nationwide.
- Foster research, development, and demonstration of breakthrough circular technologies.
- Review progress and update the Strategy considering new evidence and stakeholder feedback.

d) Monitoring, Reporting, and Governance

A robust monitoring framework will underpin delivery of the Strategy:

- Annual Circular Progress Reports to be published by DCEE.
- Establishment of a **cross-government high level oversight group** to monitor progress towards implementation of the Strategy.
- Regular stakeholder forums to ensure inclusive participation and knowledge sharing.

e) Enabling Conditions

Effective delivery of the circular economy Strategy depends on the following enablers:

- **Policy Coherence:** Align circular economy policies with, for example, climate, biodiversity, innovation, and social strategies.
- **Legislation:** Use ESPR provisions such as Digital Product Passports to strengthen legislative foundation for circular economy goals.
- **Finance and Investment:** Encourage public and private investment for circular infrastructure, innovation, and skills development.
- **Skills and Education:** Support the integration of circular economy concepts in school curricula, university courses, continuing professional development and vocational training.
- **Digitalisation:** Support digital tools for material traceability, resource optimisation, and consumer engagement.
- **Research and Innovation:** Promote applied research into new business models, materials, and technologies that drive circularity.

Implementation will be guided by proportionality, evidence and competitiveness considerations, ensuring that actions support Ireland's economic resilience and social wellbeing.

4

Governance



4. Governance

To realise the full potential of the circular economy, Ireland requires ongoing leadership, inclusive governance, a long-term vision and continued collaboration across Government, as well as the Irish public, regulatory and state organisations, environmental groups, business and the academic community. A research report produced by the **Institute of Public Administration** under the EPA Research programme entitled **‘A Review of Circular Economy and Bioeconomy Governance in Ireland’** assessed governance arrangements for both the circular economy and the bioeconomy and makes recommendations for improvements⁵⁶. The findings point to the considerable importance of robust governance arrangements in addressing the complex challenge of developing the circular economy and bioeconomy.

First and foremost, structures are required; however, good governance is not only about structures. It also requires clarity about roles and responsibilities and an emphasis on leadership and capacity building. Stakeholder engagement and knowledge transfer are essential to enrich and inform policy, while regulation, monitoring and effectiveness evaluation are required to review progress, and to ensure appropriate sanction and corrective action when needed.

To deliver on the ambition of this Strategy and realise the associated environmental, economic and social benefits, there is a need to review current governance arrangements for the circular economy. Ensuring the arrangements are fit for purpose to drive delivery, that roles and responsibilities are clearly understood to focus on implementation and that they are aligned with other government-wide policy objectives including climate, energy and housing is key.

56 [Review of Circular Economy and Bioeconomy Governance in IrelandResearch_Report-479.pdf](#)

4.1 Roles and Responsibilities

4.1.1 The Department of Climate, Energy and the Environment

DCEE lead the national transition to a circular economy by setting policy, overseeing the **EPA's Circular Economy Programme**, coordinating national efforts in funding innovation, and driving public awareness to keep resources in use longer, reduce waste, and support sustainable growth, focusing on reuse, repair, and recycling.

Key Roles and Responsibilities:

- **Policy and Strategy:** Develop national strategies like the WAPCE, Circular Economy Strategies and sectoral roadmaps to move away from disposal and towards waste prevention, sustainable consumption and keeping materials in productive use.
- **Coordination:** Works with the EPA and local authorities to align circular economy activities across national, regional, and local levels.
- **Funding and Support:** Provides grants and supports for circular innovation, new business models, and resource efficiency initiatives.
- **Knowledge and Data:** Supports evidence-gathering, research and monitoring through the EPA to inform policy and track progress.
- **Public Engagement:** Partners with **Waste Regional Offices** to deliver education and awareness campaigns on waste prevention, sustainable consumption, and the benefits of circularity.
- **Regulatory Framework:** Ensures appropriate regulations support the circular economy, including licensing and extended producer responsibility.

4.1.2 The Environmental Protection Agency

The **Environmental Protection Agency (EPA)** will drive the circular economy by building knowledge, funding innovation, influencing behaviour, and informing policy through its **Circular Economy Programme**, supporting new models, reducing waste, and showcasing best practices in areas like plastics, food waste, and repair. They act as advocates, gather data, and partner with organisations to achieve national circularity goals.

Key Roles and Responsibilities:

- Targeted programmes to support the development of novel solutions for the circular economy.
- Share learnings and showcase best-practice for enterprises and organisations transitioning towards circularity.

- Collaborate with all stakeholders to deliver programmes and solutions for the circular economy in Ireland.
- Advocates for waste prevention and the circular economy in Ireland, including working with the public on priority topics such as food waste and plastics.
- Communicate solutions based on behavioural insights that can be scaled up for the greatest impact.
- Gather data and evidence to inform robust policy development and report on progress.

4.1.3 Local Authorities

Local authorities have a crucial role in the circular economy by implementing waste management policies, enforcing environmental laws, public procurement for sustainable goods, supporting local enterprise transitions, and driving community engagement through awareness campaigns and training. Local Authorities also coordinate with other national bodies for a joined-up approach to resource efficiency, planning, and green infrastructure.

Key Roles and Responsibilities:

- Implementing waste management plans and enforcing regulations against litter and pollution.
- Managing local recycling, composting, and waste prevention initiatives to keep materials in use.
- Using their purchasing power to promote circular products and services.
- Helping local businesses shift to circular models, addressing skills gaps, and fostering new green jobs.
- Collaborating with enterprise agencies (like **Local Enterprise Offices** and **Enterprise Ireland**) and research institutions to build circular innovation.
- Integrating circular principles into local development plans, zoning, and urban design to build sustainable communities.
- Developing infrastructure for reuse, repair, and resource sharing.
- Running awareness campaigns to change consumption patterns.
- Supporting community-led environmental projects and providing training.
- Aligning local efforts with national circular economy strategies

4.2 Strategic Oversight

Given their respective leading roles in promoting the circular economy, the strategic engagement between DCEE/EPA/local authorities will be enhanced in line with the commitment set out in the **National Waste Management Plan for a Circular Economy (NWMPCE)** to ensure focus is on the achievement of long-term circular economy opportunities with all activities coordinated and aligned to this objective.

A **National Coordinating Group for Waste and the Circular Economy**, between the local government sector, DCEE and EPA will be established to ensure the integrated delivery of policies, measures and actions contained in this Strategy, the WAPCE, the NWMPCE, and the Circular Economy Programme.

The **Waste Advisory Group**, which was established by DCEE to facilitate stakeholder consultation in the preparation for the Waste Action Plan for a Circular Economy and to support ongoing implementation of the plan, will be reconstituted as the **Circular Economy Advisory Group (CEAG)**. The CEAG will consist of experts and representatives from all sectors and will be established to provide strategic advice and recommendations on the implementation of this Strategy and accelerating action for the circular economy.

DCEE will coordinate the implementation of the actions set out in this Strategy across government. Given the breadth of action encompassing a range of departments, much of this engagement will be on a bilateral basis across key strategic sectors.

In addition, a cross-government **Circular Economy Strategy Oversight Group** will be established, chaired at Ministerial level, to oversee implementation of the Strategy, reviewing progress in implementing actions set out in this Strategy and identifying any obstacles to progress. It is envisioned that this group will meet at six monthly intervals and will have responsibility for:

- High level oversight of the development and implementation of this Strategy.
- Overseeing the development of a comprehensive set of performance indicators.
- Monitoring progress in policy implementation.
- Supporting ongoing evaluation and updating of policy.
- Engagement to ensure policy coherence for the circular economy across government.

The Oversight Group will invite the **Bioeconomy Implementation and Development Group**⁵⁷ to advise on matters related to the development of circular bioeconomy policy in Ireland.

57 [Bioeconomy Stakeholder Coordination & Consultative Groups](#)

To ensure alignment and close integration with the development of climate policy, the circular economy will be represented on the **Climate Action Programme Board**, established by DCEE in 2025. This group, with cross departmental representatives at Assistant Secretary level, collaborate on the development of climate policy and actions, where there are many synergies with opportunities for the circular economy. The work of this group feeds into the **Senior Officials Group on Climate and Environment**.

The key ambition of this Strategy is to set the priorities and policy framework to ensure the transition to a circular economy is accelerated, and as such, it establishes a number of high-level actions which must be implemented to drive delivery. The implementation of the Strategy will be reviewed annually, and an Annual Circular Economy Progress Report will be submitted to government. This annual report will:

- Track the progress of actions established throughout this Strategy.
- Determine if new actions are required.
- Propose new pilots, policies and measures.
- Reflect cross government policy developments.
- Reflect stakeholder engagement and feedback and emerging research.

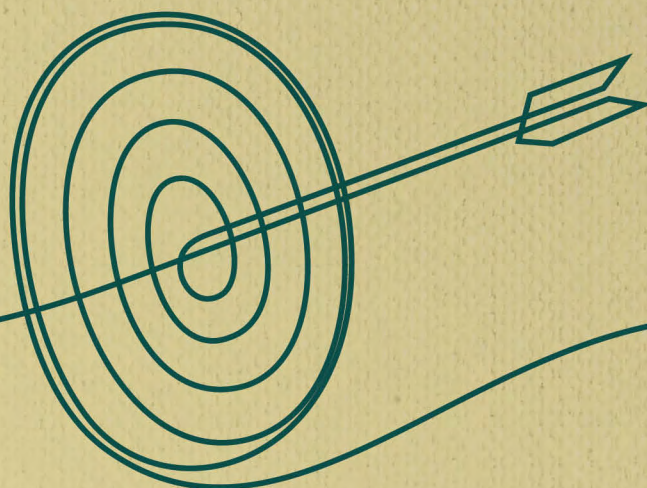
4.3 Actions and Targets

Action	Governance
A1	Ensure that the Circular Economy Advisory Group is delivering on its mandate with multi-stakeholder participation.
A2	Effective 'Whole-of-Government' participation in the Circular Economy Strategy Oversight Group.
A3	Integrated delivery of policies, measures and actions in this Circular Economy Strategy, the WAPCE, the NWMPCE, and the Circular Economy Programme through the National Coordination Group.

Target	Governance
T1	Establishment of a Circular Economy Advisory Group.
T2	Establishment of a Circular Economy Strategy Oversight Group.
T3	High-level governance on circular economy represented via the Climate Action Programme Board and the SOG on Climate and the Environment.

5

Sectoral Focus: Actions and Targets



5.1

Construction

(The Built Environment)



5. Sectoral Focus: Actions and Targets

5.1 Construction (The Built Environment)

5.1.1 Why the Built Environment Matters

The built environment comprises everything people live in and around, such as housing, commercial buildings, transport, infrastructure and public spaces. It also encompasses urban design and land-use planning, as well as the interplay between physical structures, social dynamics and nature. The built environment is deeply intertwined with mobility and energy systems. It influences the wellbeing of people and communities, affecting their physical and mental health, mobility, social interactions and participation in public life⁵⁸.

The built environment is responsible for almost 40% of global energy-related CO₂ emissions and produces about one-third of the world's waste, figures that continue to rise with new waves of construction and retrofitting⁵⁹. Over one-quarter of global CO₂ emissions come from building operations alone⁶⁰. While the concept of circularity has gained traction across various industries, the built environment has yet to adopt these practices at scale. Circular principles could abate 13% of the built environment's embodied carbon emissions in 2030 and nearly 75% in 2050⁶¹.

The lack of circularity within the construction industry, the embedded carbon footprint, and the use of non-circular building materials puts significant pressure on our resources and the environment. The construction sector accounts for 36-40% of the EU's total climate footprint, with approximately one-third stemming from the construction process itself, particularly from the manufacturing of materials used in construction⁶². Additionally, the construction industry is a significant consumer of natural resources such as sand, gravel, clay, metals, and wood, contributing to 50% of global material extraction⁶³.

Looking into a future where resource scarcity is a reality and where reductions in resource consumption are crucial for addressing the climate crisis, the current model of the construction sector is unsustainable. The UN's annual status report on the construction

58 [Built Environment through a Well-being Lens | OECD](#)

59 [Embodied Carbon - World Green Building Council](#)

60 [Embodied Carbon - World Green Building Council](#)

61 [Sustainability and construction in the built environment | McKinsey](#)

62 [Analysis of Life-Cycle Greenhouse Gas Emissions of EU Buildings and Construction.](#)

63 [Global Resources Outlook 2024](#)

sector from 2022 also highlights the lack of measures and focus on material consumption and the climate footprint of materials as primary reasons why construction is currently not on the right track⁶⁴. As such, the sector, globally, is significantly off course from achieving decarbonisation by 2050, and the gap between its actual climate performance and the decarbonisation path is widening⁶⁵.

5.1.2 The National and EU Policy Landscape for the Circular Built Environment

The Irish construction sector is a significant employer (as of Q1 2025, employment in the construction sector reached 177,000, the highest level in over a decade)⁶⁶ and engine of Ireland's economic output and plays a crucial role in achieving Ireland's current and future national development and infrastructure needs. However, the sector operates within a linear economy, with a high material footprint, accounting for nearly half of all domestic material extraction, generating almost two thirds of the country's waste, the vast majority of which is not reused or recycled and producing significant embodied and operational emissions⁶⁷.

Ireland's construction sector has shown significant growth⁶⁸ in several areas: the number of new enterprises, overall sector turnover, as well as the number of people employed, have all shown an increasing trend over the past few years. This growth is driven by a rapidly growing population, resulting in critical residential housing demand as well as non-residential and civil infrastructure markets⁶⁹.

A radically different approach to our currently linear 'take-make-waste' economic model is needed if the sector is to align with Ireland's sustainability ambitions, whilst simultaneously delivering the significant housing and infrastructure ambitions set out in key national development plans and strategies such as the **Delivering Homes, Building Communities 2025-2030: An Action Plan on Housing Supply and Targeting Homelessness**⁷⁰, the **Accelerating Infrastructure Report and Action Plan 2025**⁷¹, which sets out a comprehensive programme of reforms to speed up the pace of infrastructure delivery, the **National Development Plan (NDP)**, which was subject to a review in mid-2025 and the **National Planning Framework**, which underwent a revision process in April 2025 (all of which combine to form **Project 2040**⁷²).

The new housing plan: **Delivering Homes, Building Communities 2025-2030: An Action Plan on Housing Supply and Targeting Homelessness**⁷³ promotes the use of

64 [2022 Global Status Report for Buildings and Construction | UNEP - UN Environment Programme](#)

65 [The reality gap in achieving net zero | McKinsey](#)

66 [National Development Plan Review 2025](#)

67 [Circularity Gap Report, Ireland, 2024. Construction Sector Group, 2024. Circular Buildings Coalition, 2024.](#)

68 [Observatory - European Commission](#)

69 [EIB Investment Report: Transforming for competitiveness](#)

70 [Delivering Homes, Building Communities 2025-2030: An Action Plan on Housing Supply and Targeting Homelessness](#)

71 [Accelerating Infrastructure Report and Action Plan](#)

72 [Project Ireland 2040 - NPF](#)

73 [Delivering Homes, Building Communities](#)

Modern Methods of Construction⁷⁴ (MMC) which significantly reduce construction waste and facilitate the use of low carbon and recycled materials. MMC, which is a broad term used to describe a range of offsite manufacturing processes and onsite techniques that provide alternatives to traditional construction and aims to deliver high quality housing with reduced delivery times and reduced costs. The delivery of housing and essential infrastructure remains a national priority. Circular construction measures under this Strategy will be implemented in a proportionate and phased manner, aligned with housing supply targets and existing capital programmes. Measures will support, and not impede, timely housing delivery.

The government is actively working to reduce the overall cost of construction. The **Total Development Cost Report**⁷⁵ published by the **Department of Housing, Local Government and Heritage (DHLGH)** in December 2025, specifically examines the costs associated with residential construction in Ireland and provides costs for various dwelling typologies. The government has also taken decisive actions to reduce the overall cost of apartment construction, which will promote more delivery of apartments at scale in our urban cores.

These measures aim to address long-term homelessness, increase social and new housing delivery, address vacancy and the efficient use of existing stock.

The **Planning and Development Act 2024**⁷⁶ is designed to modernise and enhance Ireland's planning system, aiming to bring greater clarity, consistency and certainty to how planning decisions are made. Given the scale of infrastructure needs, including the significant demand for concrete and aggregates⁷⁷, embodied carbon is expected to increase five-fold by 2030 from 2010 levels if business continues as usual, potentially accounting for up to 40% of territorial emissions⁷⁸. The Circularity Gap Report for Ireland highlights the necessity of reducing the consumption of virgin materials and embedding sustainable construction practices in the sector to avoid this⁷⁹.

The C&D sector in Ireland generated an estimated 9 million tonnes of waste in 2023, up from 8.3 million tonnes in 2022⁸⁰, which is half of all the waste generated in Ireland. C&D waste includes all the waste produced by the construction and demolition of buildings, and road infrastructure such as concrete, bricks, wood, glass, metals and plastics. C&D waste is the largest waste stream in Ireland in terms of volume and weight. 2025 data from the EPA for 2023 shows that most C&D waste treated in Ireland was recovered by backfilling⁸¹ (75%), while 12% went for disposal and only 11% was recycled⁸².

74 [Modern Methods of Construction Introductory Guide](#)

75 [Insights into Total Development Costs 2025](#)

76 [Planning and Development Act 2024](#)

77 [ICF_Essential_Aggregates_Report-2025-Final.pdf](#)

78 [CGR Ireland](#)

79 [Annual Review and Report | Climate Change Advisory Council](#)

80 [Construction & Demolition Waste Statistics for Ireland | Environmental Protection Agency](#)

81 [Backfilling legal definition under the EU Waste framework Directive](#)

82 [Construction & Demolition Waste Statistics for Ireland | Environmental Protection Agency](#)

CASE STUDY: Improving Circularity in C&D Waste

NATIONAL END-OF-WASTE AND BY-PRODUCT CRITERIA:

The EPA's National By-Product criteria provide rules for the safe reuse of greenfield soil and stones and **prevents these resources from becoming waste**. In 2023, 292 by-product notifications were assessed by the EPA, and 2,731,700 tonnes of soil and stones were determined as by-products. The 2024 National criteria for greenfield soil and stone now negates the need to make a by-product notification to the EPA for determination.

The EPA's National End-of-Waste criteria for recycled aggregates supports the recycling of C&D waste. This in turn diverts waste from landfill disposal, keeping it in the economy as a resource, which can reduce the environmental

impacts arising from primary material extraction and waste management.

Preventing waste and promoting reuse are integral to the circular economy. While this applies to all economic sectors, it is particularly relevant for the construction sector which generates large volumes of materials, such as soil and stones. Successful implementation of circular economy measures, such as the by-product regulation and end-of-waste criteria in this sector could lead to millions of tonnes of resources being beneficially reused or diverted from the waste management system every year.



There is growing focus on circularity in the construction sector at a national and European level. In recent years, policies on circular buildings and resource consumption in the construction industry are gaining momentum. The **EU Joint Research Centre** is currently working on developing EU End-of-Waste Criteria for recycled aggregates⁸³, which is a significant material stream that is a priority for greater circularity.

In 2024, the EU adopted the recast **Energy Performance of Buildings Directive**⁸⁴ (EPBD). The **Sustainable Energy Authority of Ireland (SEAI)**, on behalf of DHLGH has developed the calculation methodology **Whole Life-Cycle Greenhouse Gas Emissions** to be in place from 1 January 2028 for new buildings larger than 1000m², which is a key requirement of the EPBD. In addition, declarations of embodied carbon in **Building Energy Rating (BER)** certificates are required from January 2028 for new buildings larger than 1000m² and for all other new buildings from January 2030 under the **EPBD**.

Public procurement will play a supportive role in advancing circular construction practices. Government will progressively integrate circular material considerations into procurement guidance, ensuring alignment with harmonised European standards and market readiness.

Consistent with the EPBD, in September 2024, the government approved the Department of Enterprise Trade and Employment (DETE) report **Procurement guidance for public bodies: Reducing embodied carbon in construction**⁸⁵. This requires that as of September 2025, public bodies that are commencing design for new buildings for projects in receipt of exchequer funding in excess of €10 million in the case of non-residential buildings, or in excess of €60 million in the case of residential buildings, should produce or procure a Whole Life-Cycle Greenhouse Gas Emissions assessment in accordance with technical guidance as provided by the SEAI.

Subject to a review of the first step, from 1 June 2026, projects in receipt of exchequer funding in excess of €5 million in the case of non-residential buildings, or in excess of €30 million in the case of residential buildings, should produce such an assessment. Projects below this scale should also consider implementing this assessment.

The above requirement was reissued by the **Department of Public Expenditure, Infrastructure, Public Service Reform and Digitalisation (DPEIPSRD)** in July 2025.

83 [Construction and demolition waste - Joint Research Centre](#)

84 [Energy Performance of Buildings Directive](#)

85 [Procurement guidance for public bodies: Reducing embodied carbon in construction - DETE](#)

Furthermore, the EU has adopted a series of initiatives focusing on circularity and resources, such as the **EU Taxonomy for Sustainable Activities**⁸⁶, the **CEAP**, the **Construction Products Regulation**⁸⁷ (CPR), the **ESPR**⁸⁸, the **Corporate Sustainability Reporting Directive**⁸⁹ (CSRD), and the **European Sustainability Reporting Standards**⁹⁰ (ESRS).

Despite these efforts – both politically and from industry – circular buildings and construction are still far from being the norm across Ireland and the rest of the EU. There is still a long way to go in terms of effective regulation and sectoral acceptance. Circular construction remains underdeveloped, and the market for circular building materials requires advancement.

Recycled aggregates are derived from the reprocessing of materials originally used in construction and are predominately derived from C&D waste. They include sand, gravel, crushed stone, asphalt and concrete which are crushed to a specific aggregation specification. In 2023, an EPA commissioned report⁹¹ found that the demand for aggregates in Ireland (12 tonnes per capita), is double the average demand in other EU countries. The report also found that the use of recycled aggregates in products used in civil and construction projects is becoming of significant interest to customers, from a sustainability and embodied carbon perspective. The report highlighted the importance of good source segregation of C&D material on the site of origin and found that this was a very important factor in the preparation of consistent, quality-controlled material.

According to the **Climate Change Advisory Council 2025 Annual Review of the Built Environment, Industry and Waste**⁹², *‘there is a growing market and demand for recycled aggregates for use in structural applications, with such uses permitted in other Member States but not in Ireland. These limitations are directly in conflict with the principles of a circular economy. The Government must develop a comprehensive and appropriate recertification system for the C&D waste stream, ensuring that the standards of materials align with those of the insurance sector. This will require the updating of pre-existing standards, such that there are no inhibiting factors for the inclusion of end-of-waste and by-product materials in construction where appropriate, as well as a new national end-of-waste decision for aggregates, to expand recycled aggregate utilisation to include structural purposes in line with other EU Member States’.*

This Strategy supports the development of a well-functioning market for recycled aggregates by improving regulatory clarity, engaging with national and European updated standards, and facilitating collaboration between regulators, insurers and industry stakeholders to ensure their safe use in all applications (including

86 [EU taxonomy for sustainable activities](#)

87 [Construction Products Regulation](#)

88 [Ecodesign for Sustainable Products Regulation](#)

89 [Corporate Sustainability Reporting Directive](#)

90 [The Commission adopts the European Sustainability Reporting Standards - Finance](#)

91 [Analysis of Aggregates Market in Ireland](#)

92 [Annual Review and Report | Climate Change Advisory Council](#)

for example, structural). The **National Standards Authority of Ireland (NSAI)**⁹³ standards are crucial in this regard to provide guidance on the manufacture and specification of recycled aggregates for specific intended uses, as well as requirements for the procurement, haulage, storage and handling, traceability and record management from the original manufacturer to its place of final end-use where it is incorporated into the construction works.

The EPA **Best Practice Guidelines for the preparation of resource & waste management plans for Construction & Demolition Projects**⁹⁴ are a key means by which to drive circular practices. These guidelines are currently being updated to reflect fast-changing practices and update policy and legislation. The Strategy will aim to ensure that the updated guidelines are used at the development planning stage.

Sectoral Focus: the EU Construction Products Regulation (CPR)

The European Green Deal Communication, the Circular Economy Action Plan and the Renovation Wave Communication highlighted the role of the CPR as part of efforts towards energy and resource efficient buildings and renovations, and in addressing the sustainability of construction products.

A new Construction Products Regulation (EU) 2024/3110 entered into force on January 7, 2025. It repeals the previous CPR as of 8 January 2026, except for certain articles which will continue to apply until 8 January 2040⁹⁵.

The CPR 2024 is the legal basis to ensure reliable implementation of environmental sustainability in marketing construction products (including recycled aggregates) and will mandate the declaration of environmental characteristics. Criteria for the safe reuse of construction products will also be established.

The European Commission has established a working group known as the **CPR Acquis Expert Group**⁹⁶ which aims to collect the technical and regulatory needs from stakeholders and Member States to create detailed standardisation requests, delegated acts, product requirements and product information. This process facilitates the updating of all existing harmonised standards under CPR 2011 and extending their scope to cover new products.

93 [NSAI - NSAI | National Standards Authority of Ireland](#)

94 [Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects](#)

95 [Construction Products Regulation 2024](#)

96 [Acquis - Internal Market, Industry, Entrepreneurship and SMEs](#)

The first **CPR Working Plan for 2026-2029**⁹⁷ was published on 16 December 2025.

The CPR Acquis process is the appropriate vehicle to formulate new standardisation requests, ensure they respond to national regulatory needs, including environmental impacts and circularity, and will consider the need for an appropriate level of oversight of the manufacturing processes commensurate to the risk.

This will ultimately lead to a comprehensive suite of harmonised technical specifications which are fit for purpose and has alignment with forthcoming EU End-of-Waste criteria on recycled aggregates.

It will be important that Ireland actively contributes to the CPR Acquis process to ensure that future European Commission standardisation requests are fit for purpose.

5.1.3 Challenges and Opportunities in a Circular Economy

In 2024 the DPEIPSRD convened **Construction Sector Group (CSG)** published its report entitled '**Supporting the Circular Economy Transition in the Irish Construction Sector**'⁹⁸ and in 2025, the **Irish Green Building Council (IGBC)** published its '**Building a Circular Ireland**'⁹⁹ Roadmap. Both reports demonstrate the pathway required for the Irish construction sector to become more circular.

Over the longer term, the financial, environmental, and social benefits from making the required changes will outweigh any transitional costs (which will be measured in the development of a Circularity for the Construction Sector Roadmap and associated mitigating measures identified) and, in that context, it is important for the construction sector to take a long-term view.

A more circular built environment would shift the value chain from a linear model to a closed-loop system in which resources and materials are continually reused and repurposed. The goal is to adopt efficient design and prioritise better use of existing building stock, minimise waste and optimise resources.

97 [\(First\) CPR Working Plan for 2026-2029](#)

98 [Whats On | News | RIAI.ie](#) (The Royal Institute of the Architects of Ireland)

99 [Building A Circular Ireland - Roadmap - Irish Green Building Council](#)

In the built environment, a circular approach would reduce embodied carbon, lower costs through material recovery, and reduce reliance on carbon offsets or cross-border adjustment mechanisms. Circularity could enhance residual asset value, improve material availability, and streamline project timelines, ultimately increasing efficiency and reducing reliance on virgin materials.

Residential retrofit supports Ireland's circular economy by extending the life of buildings, reducing the need for new materials by improving energy efficiency and reducing energy demand, and by fostering a circular supply chain through the reuse and repair of building components. It also creates local, labour-intensive jobs, supports economic growth, and enhances the resilience of Ireland's energy system by enabling more efficient use of renewable energy sources.

Residential retrofit is a central component of the approach to achieve Ireland's residential sectoral emissions ceiling and to meet Ireland's international climate commitments. The **Climate Action Plan**¹⁰⁰ sets residential retrofit targets of 120,000 dwellings retrofitted to BER B2 by 2025, and 500,000 dwellings by 2030 and 45,000 existing dwellings using heat pumps by 2025, and 400,000 by 2030.

These targets are being delivered by the **National Retrofit Plan**¹⁰¹, via grant schemes administered by the SEAI and funded by DCEE. These grant schemes support homeowners to improve the energy efficiency of their properties. Capital spend (2019-2024) is €1.42 billion on 198,395 homes with 62,666 B2 BER homes delivered, and 19,066 heat pumps delivered.

The EPA funded Building a Circular Ireland Roadmap from the IGBC identifies bio-based materials as having "*lower embodied carbon to produce ... than concrete, steel, or plastic-based alternatives*" and notes that in France, all new public buildings must be built with at least 50% timber or other bio-based materials.¹⁰²

In the Netherlands, the organisation Building Balance, has received large-scale funding from multiple Ministries to deliver bio-based homes that meet their housing needs, and within their carbon budget. This has also created a stable new market for farmers seeking to diversify their income streams.¹⁰³

In Ireland, Kore Retrofit will retrofit 10 homes using a bio-based plastic alternative to standard foam insulation as part of the broader **European Circular Reno project**¹⁰⁴, while companies such as Ecocel, based in Cork, offer insulation made from cellulose derived from recycled newspaper¹⁰⁵.

100 [Climate Action Plan](#)

101 [National Retrofit Plan](#)

102 [Building a Circular Ireland](#)

103 [Building Balance](#)

104 [European Circular Reno](#)

105 [Ecocel: Sustainable Warmth Insulation from Recycled Newspaper](#)

Work is underway to promote the use of timber as a construction material in new buildings. This is led by the **Timber in Construction Steering Group**¹⁰⁶, where the use of a 'whole life-cycle assessment is a key recommendation'.

C&D waste management often operates project-by-project with limited coordination, resulting in valuable materials being disposed of from one site, while similar materials are sourced new for nearby developments. The mismatch between when materials become available and when they are needed creates barriers to their use. Dedicated storage facilities would mean that reusable materials would not be discarded due to immediate disposal pressures, when they could serve future projects. A strategic, regional approach would enable economies of scale, reduce transportation distances, and create viable markets for secondary materials by aggregating supply and demand across wider areas.

The circular transition of the built environment and construction sector is thus a prerequisite if Ireland and the EU are to deliver on their climate ambitions and achieve circularity in the construction sector by 2050.

Building on the work of the CSG and the IGBC, DCEE will publish a '**Circularity Roadmap for the Construction Sector**' as set out in Table 5.1.4 List of Actions. The roadmap will provide the basis for circular construction considering all life cycle phases (planning, production, use and waste management). The focus will be to promote a long service life, flexibility of use, modular construction, separability, reuse of components, ability to recycle the construction materials used and the use of the highest possible share of sustainable construction materials and recycled (secondary) materials.

106 [Timber in Construction Steering Group](#)

5.1.4 Actions and Targets

Action	Construction/Built Environment
A4	Support the EPA on the updating of their Best Practice Guidelines for the preparation of resource and waste management plans for C&D projects with the intention of ensuring that, <i>inter alia</i> , the Guidelines are used at the development planning stage.
A5	Support the work of the European Commission CPR Acquis process which will align JRC end-of-waste criteria for recycled aggregates via new standardisation requests under the EU Construction Products Regulation 2024.
A6	Develop a plan across government in line with A5 to support the safe use of recycled aggregates in the construction sector which ensures that inappropriate recycled aggregates cannot be placed on the market.
A7	Implement the criteria set out for the construction sector in the Green Public Procurement Strategy and Action Plan 2024-2027.
A8	Support local authorities to adopt a long-term approach by establishing material storage facilities and facilitating secondary raw materials depots and marketplaces.
A9	Develop a National Building Renovation Plan as part of the implementation of the recast Energy Performance of Buildings Directive. A final National Building Renovation Plan will be submitted by 31 December 2026.

Target	Construction/Built Environment
T4	Publication of the Circularity Roadmap for the Construction Sector in 2026.
T5	45% reduction in GHG emissions (against 2018 levels) by 2030 for commercial and public buildings.
T6	By 2030, achieve a 12% reduction of C&D waste arisings.
T7	Maintain the GPP Target of a minimum proportion of construction materials procured by public bodies under new contract arrangements to comprise recycled materials. From 2028 at least 10%, by weight, of construction materials procured by public bodies for infrastructure projects and public non-residential buildings under new contract arrangements comprise recycled materials ¹⁰⁷ .
T8	By 2027, a sectoral compact partnership will be agreed between the government and construction industry to accelerate circular practices in that sector.

¹⁰⁷ The T7 target may be further updated following publication of the Circularity Roadmap for the Construction Sector.

CASE STUDY: Arcology System



www.arcologysystem.com

Source: <https://www.circuleire.ie/case-studies-1/arcology>

Arcology System delivers a smart, modular interior construction solution that embeds circular economy principles into commercial fit-outs for REITs, developers, and end users.

THE CHALLENGE

Buildings account for 39% of global annual greenhouse gas emissions, with 11% arising from construction materials and activities. In Ireland, the construction and demolition sector generates around 9 million tonnes of waste each year, with limited reuse or high-value recycling. Although REITs and landlords increasingly retrofit existing buildings to meet regulatory and climate requirements, addressing embodied carbon remains a significant challenge.

THE CIRCULAR SOLUTION

Arcology uses post-consumer recycled aluminium profiles to create an adaptable “smart grid” that integrates doors, walls, ceilings, lighting, and other components. Clients can purchase modules outright or adopt Product as a Service leasing models. Embedded Internet

of Things sensors gather real-time data on environmental conditions, occupancy, and asset performance, feeding into an AI-assisted operations platform and integrated workplace management system. This enables design optimisation using existing modules, reducing demand for virgin materials and preventing waste.

CLIMATE & CIRCULAR IMPACT

The system is designed for disassembly, allowing repeated reconfiguration of interior spaces using the same materials, substantially reducing embodied carbon impacts. Arcology estimates that 80% of buildings targeted for retrofit can operate as adaptive, circular “material banks,” supporting long term resource efficiency and the achievement of net-zero targets by 2050.

IN A NUTSHELL



Buildings account for 39% of global annual greenhouse gas emissions.



Every year in Ireland, construction and demolition generate waste equal to the weight of 12,857 Boeing 747s.



Arcology System is a data-led construction system delivering modular, reusable components for circular commercial fit-outs.



Their system reduces waste and extends the lifespan of buildings.

5.2

The Bioeconomy (including Agriculture)



5.2 The Bioeconomy (including Agriculture)

5.2.1 Why the Bioeconomy Matters

The bioeconomy covers all sectors that rely on biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), their functions and principles. It includes and interlinks land and marine ecosystems and the services they provide; all primary production sectors that use and produce biological resources (agriculture, forestry, fisheries and aquaculture); and all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services. See Figure 2 for more information.

Biomass represents 41% of Ireland's total material extraction¹⁰⁸. In 2023, 40.9 million tonnes of raw materials were extracted in Ireland from Agriculture, Forestry and Fishing, representing 42.4% of total resource extraction. As such, improvements in resource efficiency within this sector have significant potential to contribute to national circularity performance.

Preventing avoidable waste across retail, food processing, food services and households enhances resource efficiency, lowers disposal costs and strengthens competitiveness across the agri-food supply chain. Ireland is committed to reducing food waste in line with national and EU obligations, and this Strategy supports a prevention-first approach consistent with the food waste hierarchy, as shown in Figure 3.

The bioeconomy is recognised as a key area for progress to be made in circularity and sustainability with the potential to drive the renewal of our industries, the modernisation of our primary production systems, the protection of the environment and the enhancement of biodiversity.

The bioeconomy encompasses all sectors, associated services, and investments that conserve, produce, regenerate, process, distribute or consume biological resources including related ecosystem services, knowledge, science, technology, and innovation¹⁰⁹

Ireland's agri-food sector remains one of the country's largest indigenous export sectors and a cornerstone of rural employment. The circular bioeconomy provides opportunities to strengthen value chains, support innovation and enhance income diversification, particularly through bio-based products and renewable energy generation.

The **National Policy Statement**¹¹⁰ and **Action Plan**¹¹¹ on the bioeconomy have a focus on developing a national systemic policy for the bioeconomy.

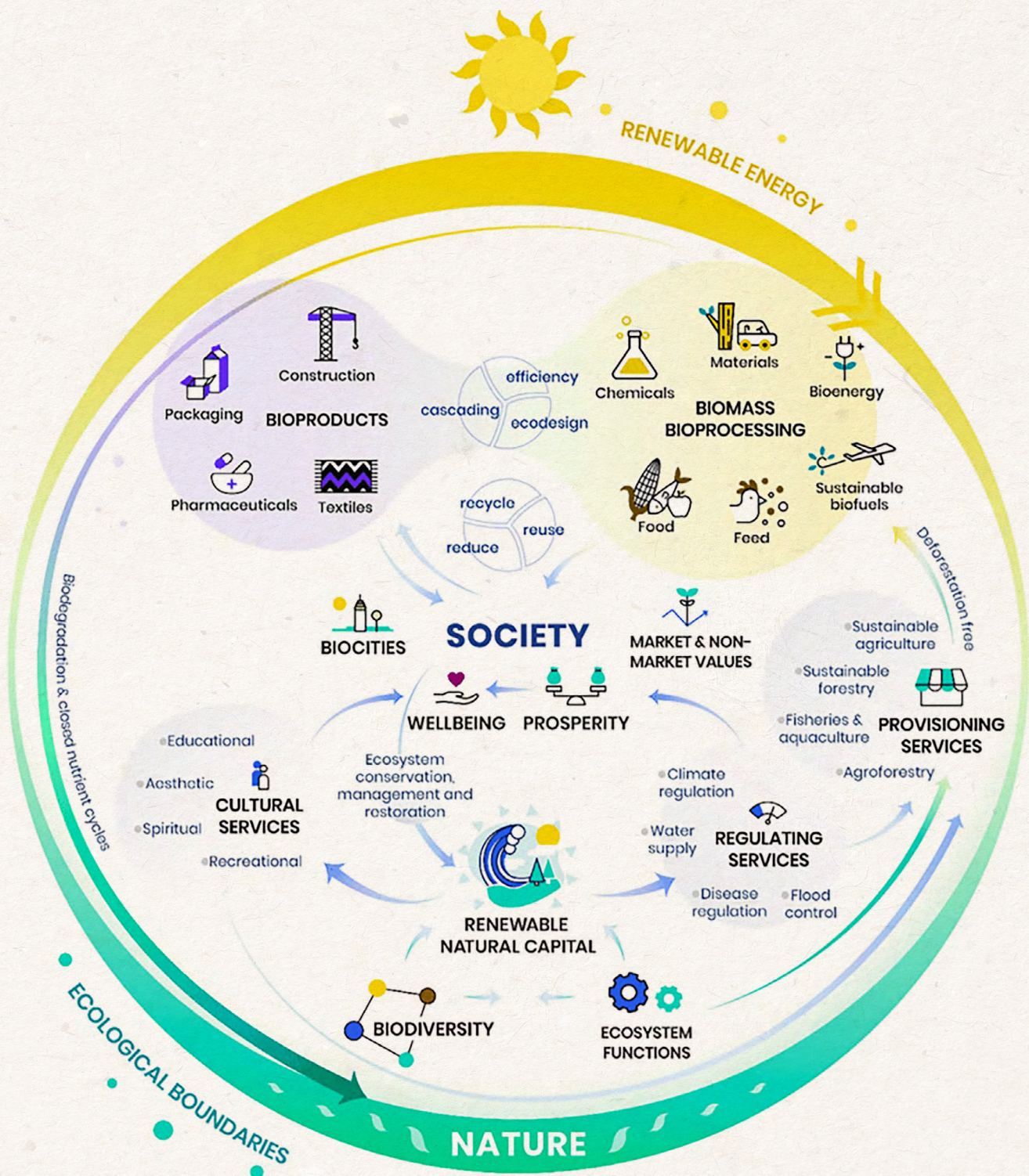
¹⁰⁸ [CGR Ireland](#)

¹⁰⁹ [Bioeconomy Policy](#)

¹¹⁰ [National Policy Statement on the Bioeconomy](#)

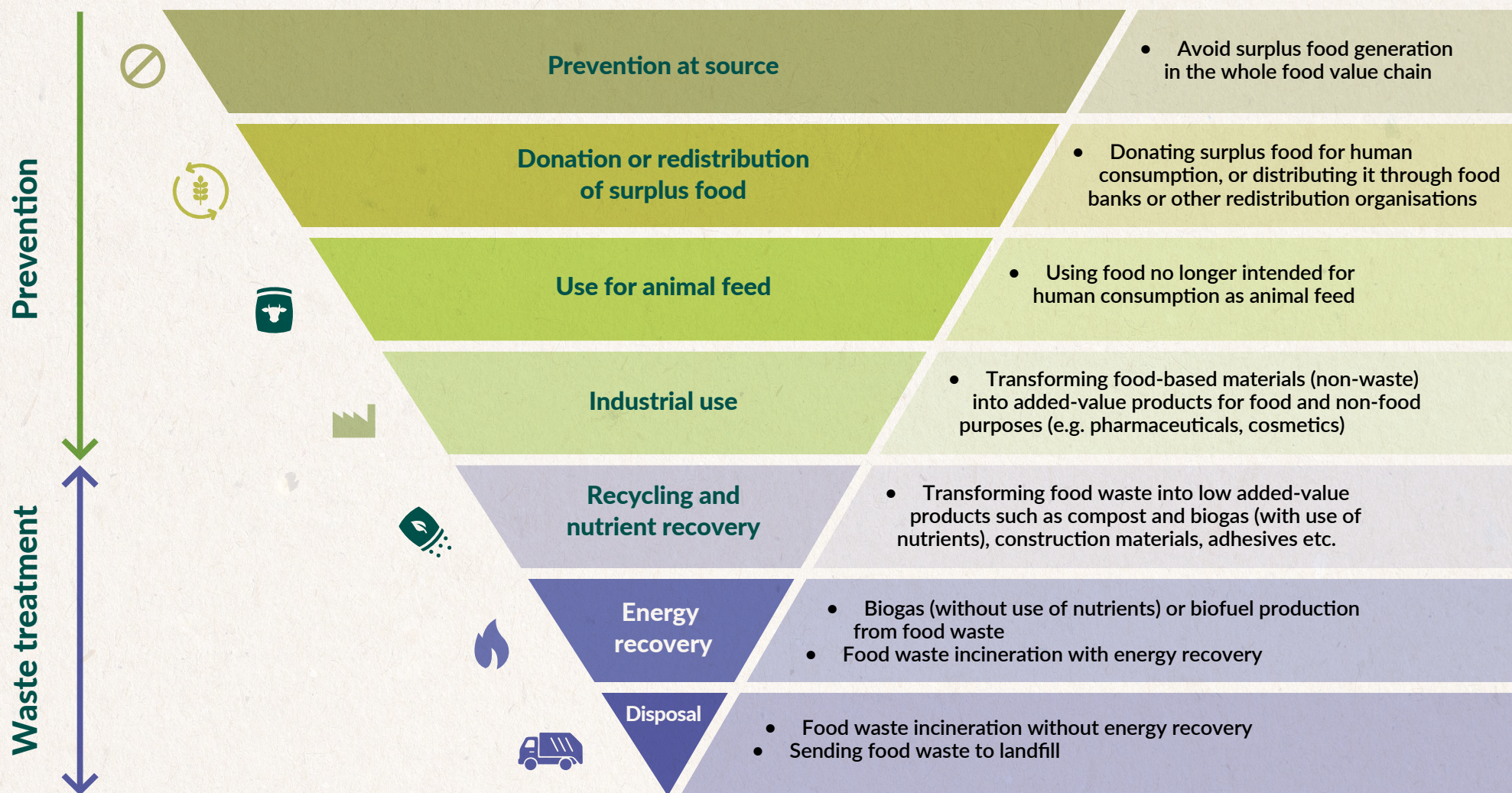
¹¹¹ [Bioeconomy Action Plan 2023-2025](#)

Figure 2. What is a Circular Bioeconomy?



Source: Circular Bioeconomy Alliance.

Figure 3. EU - Food Use and Waste Hierarchy



Source: The European Commission.

5.2.2 The National and EU Policy Landscape for the Bioeconomy

Ireland's bioeconomy policy is framed by national climate, circular economy and rural development strategies, alongside evolving EU legislation. The first **Whole of Government Circular Economy Strategy** and successive Climate Action Plans identify the bioeconomy as a key contributor to Ireland's resource efficiency and emissions reduction objectives.

At EU level, the revised **Waste Framework Directive**¹¹² introduces binding food waste reduction targets to be achieved by 2030. In line with these requirements, measures under this Strategy will prioritise prevention and improved management across retail, processing, food services and households. Primary production will be addressed in accordance with future EU developments concerning food loss measurement methodologies.

The **National Biomethane Strategy**¹¹³ provides a framework for the development of an indigenous anaerobic digestion sector capable of producing up to 5.7 TWh of biomethane annually by 2030. Delivery of this target supports energy security, rural enterprise development and emissions reduction in hard-to-abate sectors. Implementation of the Strategy will continue in line with the **Biomethane Sustainability Charter**, ensuring environmental integrity and best practice standards.

The forthcoming National Bioeconomy Strategy (2026–2030) will further strengthen the policy, infrastructure and regulatory framework required to support sustainable bio-based innovation and value-added production.

The **National Policy Statement on the Bioeconomy 2018** outlined Ireland's long-term vision, guiding principles and strategic objectives for developing the bioeconomy. The policy statement provided an important policy signal to national, EU and international stakeholders regarding Ireland's vision to capitalise on the potential of the bioeconomy in line with strategic objectives on sustainable development, climate action, circular economy, competitiveness, and rural and regional development.

Bioeconomy policy is led by DCEE and the **Department of Agriculture, Food, and the Marine (DAFM)** and serves as a cross-cutting theme in several national strategies, aligning with the seven pillars of the **Bioeconomy Action Plan 2023-2025**. The plan, coordinated by the Bioeconomy Implementation and Development Group, identifies priority actions to accelerate the deployment of bio-based innovation.

At the local level, **Local Authority Climate Action Plans**¹¹⁴ have integrated the bioeconomy across all 31 plans, with targeted actions to support its development.

112 [Revised Waste Framework Directive enters into force - Environment](#)

113 [National Biomethane Strategy](#)

114 [Local Authority Climate Action Plans \(LA CAPs\) - CARO](#)

Similarly, Our Rural Future¹¹⁵ has embedded the bioeconomy within rural development policy.

The **Irish Bioeconomy Forum** provides a voice for a broad range of stakeholders, including industry, community groups, NGOs and relevant state bodies to promote, support and advocate for the sustainable development of the bioeconomy in Ireland. Government agencies such as **Enterprise Ireland**, **Teagasc**, **Taighde Éireann – Research Ireland**, and the **EPA** have supported research and demonstration projects, while initiatives like **BiOrbic**¹¹⁶ and **AgriBio**¹¹⁷ have begun piloting new value chains. In Ireland there are regional bioeconomy clusters in operation in both the South-West and North-East of the country while the **Irish Bioeconomy Foundation**¹¹⁸ (**IBF**) operates as the national bioeconomy association and innovation cluster. The **National Bioeconomy Campus** (developed by the IBF) in Lisheen, Co. Tipperary is a model for rural economic development advancing industrial development, through collaboration between industries and between industry and research organisations.

At an EU level, the **Bioeconomy Strategy 2018**¹¹⁹ and the **Circular Economy Action Plan 2020** promote sustainable bio-based value chains. The new **Strategic Framework for a Competitive and Sustainable EU Bioeconomy**¹²⁰, charts a way forward to build a clean, competitive and resilient European economy. According to the EU Commission, *‘by using renewable biological resources from land and sea and providing alternatives to critical raw materials, the EU will move forward towards a more circular and decarbonised economy and can decrease dependence on fossil imports’*.

5.2.3 Challenges and Opportunities in a Circular Economy

Ireland has many of the core elements needed for a strong and sustainable bioeconomy: including a strong, globally recognised agri-food sector, world-class research institutions, emerging regional clusters, and growing enterprise interest. However, further development is required to scale bio-based markets and enhance resource efficiency.

Challenges:

Despite significant potential and progress, the transition to a sustainable and circular bioeconomy in Ireland faces multiple challenges:

- **Fragmented:** Bioeconomy initiatives remain dispersed across sectors, with limited integration of circularity and cascading use principles.

115 [Our Rural Future: Rural Development Policy 2021-2025](#)

116 [BiOrbic Research Ireland Centre for Bioeconomy](#)

117 [AgriBio Systems](#)

118 [Irish Bioeconomy Foundation](#)

119 [Bioeconomy Strategy - European Commission](#)

120 [Commission presents new Bioeconomy Strategy](#)

- **Regulatory uncertainty:** Novel bio-based products and waste-derived materials face unclear pathways for classification, permitting and market entry.
- **Insufficient market demand:** Many bio-based alternatives lack sufficient demand to scale production competitively.
- **Limited awareness** of the bioeconomy among consumers and SMEs and among professionals. Education and training pathways are lacking which could affect labour supply.
- **Underdeveloped infrastructure** for bio-waste collection, processing, and valorisation in addition to an infrastructure deficit for anaerobic digestion, and biorefineries.

Addressing these challenges will be critical to unlocking the environmental, social, and economic benefits of a thriving circular bioeconomy in Ireland. Despite these obstacles, Ireland has a unique opportunity to build a high-value sustainable and circular bioeconomy that supports rural jobs, climate goals, and economic resilience.

Opportunities:

Despite these challenges, the bioeconomy holds significant potential to contribute to Ireland's circular transition. A whole-of-government approach can accelerate a shift towards circularity in the bioeconomy. Key opportunity areas include:

- **Leadership in agri-food innovation:** Leverage Ireland's global standing to drive sustainable and circular bio-based exports.
- **Carbon farming and biogenic carbon sinks, capture and storage:**
- **New models** can reward sustainable land management, carbon sequestration and biogenic carbon-cycle innovation.
- **Bio-based replacements:** Develop viable, scalable and innovative alternatives to fossil-derived inputs in nutrients, plastics, packaging, construction, and textiles.
- **Rural and regional prosperity and coastal development:** Support community bioeconomy hubs to create local jobs and circular value chains.
- **Public procurement:** Use government purchasing power to create stable demand for bio-based products.

Together, these opportunities can support climate goals, strengthen supply chains, and diversify Ireland's enterprise base.

Biomethane Strategy

The development of biomethane and other bio-based industries presents an opportunity to diversify farm incomes, create rural employment and enhance domestic energy resilience. Application of the cascading principle ensures that biological resources are directed towards the highest value uses first, consistent with climate and sustainability commitments.

To assist in the achievement of our national and EU climate and energy targets, the government has committed to supporting the production of up to 5.7 TWh of indigenously produced biomethane annually by 2030. Delivery of this target, using organic waste and agricultural feedstocks, and the use of biomethane within our energy system will have multiple cross-sectoral benefits for Ireland's economy, energy security and emissions profile. It promotes a circular bioeconomy by converting farm waste into a sustainable energy source, which also supports the agricultural sector and decarbonises hard-to-abate sectors like industry and transport. The **National Biomethane Strategy**¹²¹ aims to build a scalable Anaerobic Digestion (AD) industry through policy measures, economic incentives, and a focus on farmer engagement to create a sustainable, homegrown energy supply.

The Strategy sets out a pathway to achieving Ireland's biomethane production target, addresses the challenges that need to be overcome, and outlines the necessary supports and policy enablers needed to drive growth across the sector. Implementation of the **National Biomethane Strategy** is an ongoing process of collaboration across key government departments and agencies.

A **Biomethane Implementation Group**¹²² has been established to oversee implementation of the Strategy and delivery of the 25 key strategic actions to ensure the necessary infrastructure and supports are in place to underpin development of an indigenous biomethane industry of scale. In 2025, the **Biomethane Sustainability Charter**¹²³ was established, as part of the **National Biomethane Strategy**. The Charter ensures that biomethane is sustainably produced by setting out best practices that participants in the industry should commit and adhere to during plant design, construction and operational phases of production.

The **NWAPCE** seeks to realise the AD and composting potential of Ireland's food waste resource, recognising that AD and composting provide opportunities for regional development with sales of locally generated energy and compost and other high value products.

Ongoing food waste prevention measures being taken at national level in addition to obligations to achieve 2030 food waste reduction targets, are expected to

121 [National Biomethane Strategy](#)

122 [Biomethane Implementation Group](#)

123 [Biomethane Sustainability Charter](#)

constrain the long-term availability of this resource, limiting the potential scale of biomethane production from food waste. This underscores the importance of applying both the food waste hierarchy and the cascading principle, whereby biological resources are directed first to higher-value applications, such as human consumption or material reuse, before their allocation to energy or fuel generation. This approach will allow Ireland to derive the maximum value from its bioresources.

Bioeconomy Focus: Food Waste

Food waste remains a significant challenge across the supply chain. Addressing inefficiencies in retail, processing and household consumption patterns represents a practical and proportionate pathway to improving material productivity without imposing additional burdens on primary producers. Tackling food waste is one of the key steps we can all take to help us to achieve sustainability, combat climate change, and to support our transition to a circular economy. Ireland is committed to reducing food waste by 50% by 2030, in line with the **United Nations Sustainable Development Goal 12.3**¹²⁴. The government's National Food Waste Prevention Roadmap 2023-2025, launched in November 2022, set out a number of priority actions to bring the focus on food waste prevention, across key sectors in the food supply chain, together in a coherent manner, and to steer efforts to meet food waste reduction commitments.

Key Roadmap actions delivered include a revised **Food Waste Charter**¹²⁵, annual national food waste statistics reporting by the EPA, new legislation introduced in relation to commercial and household waste collection, food waste awareness activities such as an annual **National Stop Food Waste Day** and a **National Food Waste Recycling Week**, Research and Innovation funding, and updated Green Public Procurement policy that includes a strong focus on food waste segregation and prevention.

Targeted Revision of the Waste Framework Directive

At EU level, a targeted revision of the Waste Framework Directive entered into force on 16 October 2025 that includes the following binding food waste reduction targets to be achieved at national level by 2030:

124 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

125 [Food Waste Charter](#)

(a) reduction of the generation of food waste in processing and manufacturing by 10% in comparison to the amount of food waste generated as an annual average between 2021 and 2023.

(b) reduction of the generation of food waste per capita, jointly in retail and other distribution of food, in restaurants and food services and in households, by 30% in comparison to the amount of food waste generated as an annual average between 2021 and 2023.

A review of the targets is to be completed by the European Commission before the end of 2027 which may result in modifying the targets and/or extending targets to other stages of the food supply chain, and the consideration of setting new targets beyond 2030.

To help address knowledge gaps in the primary production sector, the review will also include an assessment of the extent and causes of food waste and losses in primary production and an identification and an assessment of feasibility of appropriate levers to reduce such waste and losses.

The next iteration of the National Food Waste Prevention Roadmap, which will cover the period 2026-2028, will be prepared on a statutory basis in accordance with the Circular Economy and Miscellaneous Provisions Act 2022 and will be published in 2026. The recently revised Waste Framework Directive will be particularly important in shaping a number of the key actions in the next Roadmap.

Improving nutrient efficiency, soil health and resource productivity within agriculture can strengthen long-term competitiveness while supporting environmental objectives. This Strategy does not introduce production restrictions beyond existing national and EU climate commitments. Rather, it supports innovation, value-added processing and improved material management across the sector.

5.2.4 Actions and Targets

Action	The Bioeconomy
A10	Determine the rate of reuse, recovery and recycling of bio-based materials, including biowastes, across sectors.
A11	Work with the NSAI and other key stakeholders ¹²⁶ to develop and adopt standards for the use of secondary biological resources in Ireland such as compost, digestate from anaerobic digestion and biowastes.
A12	Develop monitoring and measurement systems to map circular bioeconomy activity, track circular bio-based material flows, and evaluate environmental, social, and economic impacts, in line with the EU Bioeconomy Monitoring System ¹²⁷ and the upcoming Irish National Bioeconomy Strategy.
A13	Invest in infrastructure to support the valorisation of biowaste. Place particular focus on assisting communities without access to municipal brown bin collections to develop the alternatives, and on assisting communities seeking to link community-scale anaerobic digestion, composting and small biorefinery facilities with local reuse, repair and sharing initiatives.
A14	Review the biowaste regulatory framework to enable the valorisation and reuse of bio-based materials including biowaste, for example for composting and anaerobic digestion.
A15	By June 2027, transpose the revised Waste Framework Directive which includes binding food waste reduction targets to be achieved at national level.

Target	The Bioeconomy
T9	Establish the baseline level of reuse, recycling and recovery of bio-based materials, including biowastes, and commit to increase these levels to contribute to Ireland's CMUR.
T10	Publish a National Bioeconomy Strategy in 2026 that will support the development of a sustainable and more circular bioeconomy.
T11	Publication in 2026 of the National Food Waste Prevention Roadmap, which will cover the period 2026-2028.
T12	By 2030, reduce food waste and food losses in line with United Nations Sustainable Development Goal 12.3.
T13	By 2030, reduce the generation of food waste in processing and manufacturing by 10% in comparison to the amount of food waste generated as an annual average between 2021 and 2023 ¹²⁸ .

¹²⁶ Including EU and International partners, as referred to in the [new EU Bioeconomy Strategy](#)

¹²⁷ [EU Bioeconomy Monitoring System | Knowledge for policy](#)

¹²⁸ Subject to confirmation of the reference period.

CASE STUDY: EcoROOTS

www.ecoroot.co

Source: <https://www.circuleire.ie/case-studies-1/ecoroots>



EcoRoots, Ireland's first mycelium company, produces mycelium-based biomaterials from agricultural and industrial waste, replacing plastic and polystyrene in protective packaging for fragile goods like cosmetics, beverages, and pharmaceuticals. This is enabled through Ecoroots' proprietary digital manufacturing tool, which optimises production, ensures material consistency, and supports traceable, decentralised circular manufacturing.

THE CHALLENGE

Plastic packaging waste poses severe environmental threats, contributing to pollution, climate change, and biodiversity loss. In 2019, global plastics production emitted 1.8 billion tonnes of greenhouse gas (GHG), equivalent to 3.4% of global emissions, with 90% stemming from fossil fuel extraction and processing. Packaging dominates the plastics market at around 60% of end-use demand, yet EU recycling rates for plastic packaging hover below 40%. In Ireland, only 30% of plastic packaging waste was recycled in 2023, leaving approximately 250,000 tonnes unrecycled and triggering €200 million in EU levies.

THE CIRCULAR SOLUTION

EcoRoots grows mycelium - the root network of mushrooms - on waste substrates like spent grain from whiskey distilleries, forming a strong, mouldable bio-foam that is 100% compostable. The company employs a closed-loop process using waste heat and rainwater for zero-waste production. Its digital platform delivers end-to-end traceability by analysing waste inputs,

optimising growth conditions (temperature, humidity, CO₂), preventing drying defects, storing recipes, enabling predictive adjustments, triggering parameter alerts, and generating batch-level QA, traceability records, and ESG reports. This supports modular on-site grow-units, allowing partners like distilleries to convert residues into custom packaging.

CLIMATE & CIRCULAR IMPACT

EcoRoots diverts agricultural waste from landfills - Ireland's whiskey production alone creates 350,000 tonnes of spent grain annually, with each tonne landfilled emitting 513 kg CO₂e. Mycelium materials decompose in 3-6 weeks in home compost, enriching soil without microplastics. Compared to polystyrene, mycelium production emits far fewer GHGs, sequesters carbon, and cuts energy use by 90%. By displacing non-recyclable plastics, EcoRoots curbs landfill methane and incineration emissions while valorising waste streams, supported by EU directives like the Packaging and Packaging Waste Regulation.

IN A NUTSHELL



Plastic packaging waste drives emissions, pollution, and landfill levies due to poor recycling rates.



EcoRoots grows mycelium biomaterials from waste, replacing plastic and polystyrene in protective packaging.



Its closed-loop process and digital traceability platform ensure zero-waste, high-efficiency production.



The model cuts emissions, sequesters carbon and turns industrial residues into valuable circular feedstock.

5.3

Retail



5.3 Retail

5.3.1 Why Retail Matters

According to Retail Ireland, the retail sector is Ireland's largest indigenous industry, employing over 300,000 people¹²⁹. Retail plays a central role in improving the local communities in which it operates. In every region, it is either the largest or second largest employer, with its share of employment typically ranging from 12% to 15.5%¹³⁰. The retail sector generates €30 billion in annual sales¹³¹ and has perhaps the broadest scope of all sectors set out in this Strategy, providing an array of products and services such as furniture, clothing, food and beverage, electronics in addition to services such as hairdressing and laundry. The retail landscape in Ireland is continually evolving, with a significant shift towards e-commerce and omnichannel offerings (SMS, phone, email, and social media channels) and has shown resilience and adaptability following on from Brexit and the COVID-19 pandemic.

Despite a growing emphasis on reducing environmental impact, short lifespan and single use goods continue to be produced and imported at scale, leading to substantial waste and unsustainable resource use. The transition to more circular retail practices presents opportunities to strengthen supply chain resilience, improve resource efficiency and enhance competitiveness across the sector.

Measures under this Strategy will be implemented in a manner that supports retail competitiveness and takes account of margin pressures within the sector, particularly for small and medium-sized enterprises.

5.3.2 National and EU Policy Landscape for Retail

The broad definition of retail encompasses a wide variety of 'stores', such as department stores, supermarkets and specialist outlets. A primary area affecting the retail sector, external to market forces, are EU and national policies, programmes, initiatives and schemes that influence the sector. The retail sector is regulated by a continuum of legislation, such as consumer and employment rights, occupational safety and product standards. There have been several important legislative and policy developments that have had an impact on the retail sector over the past number of years. Perhaps the most significant of these is **Project Ireland 2040: National Development Plan (NDP) 2021-2030**¹³², which sets out the state's national and regional investment priorities and aims to provide the investment needed to meet the goals of the **National Planning Framework**. The NDP, which underwent a mid-2025 review, places a particular focus on priority solutions to strengthen housing, climate action, transport, healthcare, jobs growth

¹²⁹ [Ireland's retail sector](#)

¹³⁰ [A sustainable future for Irish retail - IBEC](#)

¹³¹ [Future of the Irish Retail Sector](#)

¹³² [National Development Plan 2021-2030](#)

in every region and economic renewal for the years ahead. The NDP is aligned with the challenges that are facing the retail sector such as digital transformation, sustainability and labour and skills.

Retail Focus: Food Waste Prevention

One of the key actions in the National Food Waste Prevention Roadmap that has been delivered is the launch of the revised Food Waste Charter¹³³ in 2023 which calls on all businesses and State Agencies operating across the food supply chain to sign up and commit to reducing food waste. Businesses are asked to commit to monitor and track their food waste, identify and take at least one target-based action to reduce food waste, and report annually to the EPA on progress towards measurable outcomes and achievements. Organisations such as government departments, State Agencies, representative bodies for the food supply chain sector and other organisations are also invited to sign the Charter as a supporting organisation. Key commitments for supporting organisations include championing the Charter through their activities and networks. To date 95 (as of January 2026) organisations, including major retailers, have signed up to the Charter. The EPA has developed a suite of resources for measuring and monitoring food waste to help support the Charter's members.

DCEE is also funding the Food Circle Project¹³⁴, a two-year grant agreement that was established with FoodCloud in August 2024. Supported by the Circular Economy Fund, the main purpose of the project is to promote, and identify further actions to support surplus food donation and redistribution, therefore reducing food waste. This includes examining international best practices around food donation and redistribution and engaging with Irish food business stakeholders to understand how differing scenarios might work in an Irish context.

There is also a strengthened focus on surplus food donation in the revised Waste Framework Directive where measures will need to be taken to ensure that economic operators, who have a significant role in the prevention and generation of food waste, propose donation agreements to food banks and to other food redistribution organisations so as to facilitate the donation of surplus food that is safe for human consumption, and at a reasonable cost to economic operators.

¹³³ [Food Waste Charter](#)

¹³⁴ [Food Circle - CTC Cork](#)

National Food Waste Prevention Roadmap 2026-2028

Targeted actions in the next iteration of the Food Waste Prevention Roadmap will be particularly focused on the sectors that are subject to the legally binding targets, namely processing and manufacturing, retail and other distribution, restaurants and food services, and households.

Furthermore, the outputs from the Food Circle project, in addition to recommendations included in a Global Food Donation Policy Atlas project report¹³⁵, published by Harvard Law School Food Law and Policy Clinic¹³⁶, to overcome barriers to promote greater food donation, will also inform key actions to be included in the next Roadmap.

Actions that will likely be considered include, for example:

- The potential introduction of proportionate reporting measures, consistent with EU requirements, will be examined in consultation with affected sectors.
- Provision of technical and financial supports, as appropriate, for food businesses to tackle food waste, including, for example, food waste measurement and reporting.
- Measures to ensure identified economic operators establish surplus food donation arrangements with food banks and redistribution organisations.
- Measures to enhance clarity in relation to liability protection for food donors and intermediary organisations.
- Introduction of fiscal incentives and removal of tax barriers related to food donation.

Work on the preparation of the next iteration of the National Food Waste Prevention Roadmap will involve consultation with key stakeholders prior to its publication in 2026.

5.3.3 Challenges and Opportunities in a Circular Economy

For a sector pressured by both margin and economic uncertainty, the rationale for a more circular retail sector is urgent now more than ever before. With elements of best practices beginning to emerge in some sub-sectors, accelerating the transition to a circular economy is expected to come from harnessing collaboration to learn from those ahead — moving collectively at the speed of the fastest. It is here that circularity can bring with it significant opportunities for the retail sector to reimagine the future.

¹³⁵ [The Global Food Donation Policy Atlas](#)

¹³⁶ [Ireland: Food Donation Law and Policy](#)

Challenges

Where regulatory measures and incentives aim to accelerate the shift towards a circular economy, inconsistencies in the pace of adoption across this broad sector highlight the complexities in aligning operational practices with circularity goals. These complexities are borne from the dynamic tension between companies' own pledges, consumer expectations and global externalities. While company commitments are well-intended, they typically lack the underlying infrastructure and oversight to deliver on their circular intentions. Well-established and traditional linear processes tend to prevail in favour of profit margin and market demand, which can limit available funds and resources to strategize and invest in new circular initiatives and innovations.

Developing circular business models often requires significant upfront investment and may not be immediately profitable. Retailers need to adapt their financial models to support these initiatives. Shifting consumer habits from ownership to shared or rented products can be challenging. Retailers, with supports, must educate consumers about the benefits, including cost savings, of circular practices. Managing product flows, quality control, and logistics for returned or recycled products adds complexity to operations.

Opportunities

Ireland's retail sector has shown resilience and adaptability, with many retailers expanding their online presence to stay competitive. Data published by the Central Statistics Office (CSO) indicates that since 2019, there has been a considerable increase in the proportion of turnover generated by online sales, increasing from 3.3% in 2019 to 7.2% by 2021¹³⁷.

A key trend is the focus on sustainability across retail channels as Irish consumers have become increasingly environmentally conscious in recent years. Consumers are holding retailers responsible for their corporate environment responsibility, with this becoming a determining factor when choosing where to shop. A recent survey by Retail Ireland identified that its members agree that more leadership on sustainability within the sector is required – from greener supply chains and promoting best practice to improving energy efficiency and the reduction of plastic use, a broad range of initiatives and activities were referenced¹³⁸. In 2024, more than a third of Irish households bought clothing from a second-hand shop, according to the CSO¹³⁹. Second-hand small electronic items were less popular, with 16% of households buying or receiving them as a gift during this period.

137 [Central Statistics Office](#)

138 [A sustainable future for Irish retail - IBEC](#)

139 [Household Environmental Behaviours - Waste and Recycling 2024 - Central Statistics Office](#)

Ireland is in line with many other jurisdictions in the rising popularity of resale platforms in the apparel and footwear industry – again, showing that consumers are becoming more environmentally conscious. The growing trend towards sustainability in retail, with consumers increasingly supporting brands that prioritise eco-friendly practices and products, is one of the new and exciting developments in retail. The retail sector will be crucial to delivering increased rates of repair and reuse in the consumer economy, increased recycling rates and better waste management, and building solutions to reduce food waste.

The circular economy presents a transformative opportunity for the retail sector, enabling businesses to operate sustainably while meeting the evolving demands of consumers. By embracing circular practices, retailers can not only reduce their environmental impact but also enhance their profitability and brand loyalty in a competitive market. As the landscape continues to evolve, those who adapt to these changes will be better positioned for long-term success.

Retail Focus: Packaging

As the main route by which goods are presented and sold to the public, there is significant overlap between the retail and packaging sectors. The recently agreed **Packaging and Packaging Waste Regulation (PPWR)** (Chapter 5.4 on Packaging), contains several measures that will impact on the retail sector and its circular footprint, including measures relating to reuse and refill, and bans on specific packaging formats.

Implementation of reuse and refill obligations will proceed in accordance with the timelines set out in the PPWR. Ireland will not introduce unilateral requirements beyond agreed EU frameworks.

In recognition of the complexity of retooling supply chains, implementation of the PPWR is staggered over several years. Bans on specific packaging formats, addressing mainly single use plastic packaging formats such as packaging for unprocessed fruit and vegetables, single-serve condiment portions in eat-in environments, and single-use packaging for grouping items for sale, will be banned from 1 January 2030. Similarly, refill and reuse targets affecting the retail sector apply from 1 January 2030.

Retail sector adaptation to refill and reuse obligations will proceed in line with the phased implementation timelines established under EU legislation.

As a small island economy at the end of supply chains, reuse obligations pose different challenges here than in countries closer to the European core. Good examples of packaging reuse exist in Ireland, but overall, the area is not well developed. In preparation for the 2030 targets, further analysis of reuse practice in an Irish context is required, including identification of existing systems that are working here and any barriers to mainstreaming.

Earlier requirements apply in respect of refill and reuse in the Hotel, Restaurant, and Catering (HORECA) sector, with re-fill obligations arising from early 2027, and reuse obligations from early 2028.

The Government will engage with retailers and representative bodies to support practical implementation and minimise administrative burden.

Separately, full rollout and enforcement of the mandatory 3-bin system across the retail sector will help improve its circularity performance by raising recycling rates through improved segregation of packaging waste.

DCEE is also progressing a range of initiatives to reduce single use plastic consumption across all mandated products targeted by the **EU Single Use Plastic Directive**.

On single use cups, in 2022, DCEE undertook a public consultation on the introduction of a levy on single use cups for hot beverages. It was envisaged at the time that the levy would be collected in a similar way to the plastic bag levy – i.e. at the point of sale in a retail premises. Following further engagement with the Revenue Commissioners, an alternative collection model – i.e. collecting the levy when cups are first placed on the market by producers or importers was agreed. Options to reduce single-use cup consumption continue to be assessed, informed by updated regulatory impact analysis and stakeholder engagement. Any future measures will be subject to government decision and standard budgetary processes.

In addition, DCEE has commissioned an update to the 2022 regulatory impact analysis which will explore the potential impacts of the revised collection model as well as any other policy measures to reduce single use cup consumption effectively.

Other actions which require continued focus include enforcement of the ban on single use plastics. Market research undertaken on behalf of DCEE shows that prohibited single use plastic items such as plastic straws and plastic cutlery remain on the market in Ireland. Regulatory oversight will continue to ensure compliance and to maintain a level playing field for compliant businesses.

Particular consideration will be given to the capacity of small and medium-sized enterprises when sequencing implementation measures as outlined in this chapter.

5.3.4 Actions and Targets

Action	Retail
A16	Enhance dialogue between retailers and the public sector regarding upcoming EU product legislation, such as the Right to Repair Directive, Ecodesign for Sustainable Products Regulation and its use of Digital Product Passports, which will address many consumer goods categories.
A17	Subject to cost assessment, engage with retailers to identify practical circular supports that facilitate repair, reuse and recycling activities.
A18	Explore mechanisms to encourage community-based repair and reuse, including pilot initiatives and awareness measures, aligned with existing enterprise supports to make circular goods more accessible for consumers.
A19	Continue supporting initiatives such as the EPA's National Reuse and Repair Network, which aims to build reuse and repair skills within the population, namely by delivering repair clinics and repair series workshops nationally.
A20	Monitor skills gaps in sectors like circular design, repair, refurbishment, remanufacturing and recycling, following up on the work already developed by Skillnet Ireland and Solas to bridge the skill gap in key circular sectors and alleviate labour shortages.
A21	Further investment in awareness-raising measures targeting the public and relevant business sectors, as well as supporting enforcement measures by regulatory authorities against those placing these products on the market illegally.
A22	Publication of the final Food Circle Project reports in H1 2026.
A23	Promotion of voluntary recycling labelling systems for producers, manufacturers and retailers and development of new labelling system to demonstrate the circularity and/or sustainability of products ¹⁴⁰ .

140 [MyWaste - Voluntary on pack labels](#)

Target	Retail
T14	By February 2027: Food service providers (HORECA sector - hotels, restaurants, cafés, and takeaway shops) must give consumers the option to bring their own containers for hot or cold beverages and ready-prepared food at no extra cost or under less favourable conditions than single-use options. They must also inform consumers about this option. These obligations arise under EU legislation and will be implemented in accordance with the agreed European timelines.
T15	By February 2028: HORECA establishments must also offer their own reusable packaging options (within a system for reuse) for takeaway items, with no surcharge compared to single-use alternatives. These obligations arise under EU legislation and will be implemented in accordance with the agreed European timelines.
T16	By 2030, reduce food waste and food losses in line with United Nations Sustainable Development Goal 12.3. By 2030 achieve the following legally binding target: Reduction of the generation of food waste <i>per capita</i>, jointly in retail and other distribution of food, in restaurants and food services and in households, by 30% in comparison to the amount of food waste generated as an annual average between 2021 and 2023¹⁴¹.
T17	Over 150 organisations signed up to the Food Waste Charter.

141 Subject to confirmation of the reference period

CASE STUDY: Shareclub

www.weareshareclub.com

Source: <https://www.circuleire.ie/case-studies-1/shareclub>



Shareclub is a multi-award-winning Irish company offering smart reusable solutions to help offices, canteens, events, and cafes replace disposable cups and bowls with reusable alternatives.

THE CHALLENGE

In 2021, Ireland produced the most plastic packaging waste in the EU at 73 kg per person. Ireland discards approximately 22,000 disposable takeaway cups every hour—that's 528,000 a day or 200 million annually, translating to 3,700 tonnes of single-use cup waste every year. Most cups are made from paper lined with polyethylene (PE), which paper mills cannot recycle. As a result, most end up in landfill, incineration, or coastal litter where they break down into microplastics harming marine life and entering the human food chain.

THE CIRCULAR SOLUTION

Shareclub provides businesses with reusable hot drink cups, reusable cold drink pint cups and reusable bowls through flexible borrowing systems such as RFID tags for canteens or

borrow & return apps for campuses. They offer branded purchase options and manage full service including delivery, collection, and washing. Shareclub's digital technology tracks borrowed items and provides customised impact dashboards with CO₂ savings, waste reduction metrics, and sustainability data crucial for CSRD reporting.

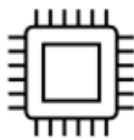
CLIMATE & CIRCULAR IMPACT

Shareclub has saved over 15,000 disposable cups and prevented more than 5,700 kg of CO₂e emissions. Their system produces 90% less waste and cuts procurement and waste expenses by 65%, with a 98% return rate. Proven at Dublin Coffee Festival, Guinness Enterprise Centre, and Dublin City Council, Shareclub's model demonstrates scalable digital reuse supporting waste prevention and behavioral change toward circular systems.

IN A NUTSHELL



Ireland discards 200 million single use cups annually, fueling a significant plastic waste crisis.



Shareclub replaces single use cups and bowls with a digitally managed reusable system for workplaces, cafes and events.



Shareclub technology tracks borrowing, providing clients with crucial data for sustainability reporting.



Their system achieves a 98% return rate, drastically cutting waste, CO₂ emissions and costs.

5.4

Packaging



5.4 Packaging

5.4.1 Why Packaging Matters

Packaging plays a vital role in the protection, transport, and presentation of goods, but it is also a major contributor to environmental degradation and resource use, consuming 40% of the plastics and 50% of the paper used in the EU. Packaging waste represents one of Ireland's most pressing circular economy challenges, with approximately 1.2 million tonnes generated in 2023¹⁴². Ireland has among the highest levels of plastic packaging waste per capita in the EU (approximately 65 kg per person in 2022¹⁴³) yet recent increases in recycled tonnages have been outstripped by packaging waste generation.

As part of the overall agreement on the post-2020 (post-Brexit) Financial Framework, the EU agreed a plastic-based contribution (POR – plastics own resources) to the EU budget. POR is calculated according to the quantity of plastic packaging waste that is not recycled per year. It is calculated at a call rate of €0.80 per kilogram and applied from 1 January 2021. To date, Ireland has paid approximately €792 million in POR from the Central fund of the Exchequer. Reducing avoidable plastic packaging waste can therefore reduce future Exchequer liabilities and strengthen Ireland's fiscal position.

This liability provides additional incentive to reduce the consumption of plastic packaging, design packaging to be recyclable, foster recycling and boost the circular economy. A large proportion of packaging waste, particularly plastics, continues to be exported where it is recycled or used in energy recovery as solid or refuse derived fuel.

Packaging is also one of the most visible contributors to litter, with the **National Litter Pollution Monitoring System** results highlighting that it makes up 19% of litter pollution in Ireland¹⁴⁴. In a circular economy, necessary packaging would be reused multiple times or designed for efficient recycling, thereby reducing emissions, virgin material use, and waste volumes.

5.4.2 The National and EU Policy Landscape for Packaging

Packaging is governed at EU level by the **Packaging and Packaging Waste Regulation**¹⁴⁵ (PPWR). The PPWR, which was published in January 2025 and applies from 12 August 2026, introduces binding requirements for packaging reduction, reuse, recyclability, and recycled content. It retains the material-specific recycling targets from the previous **Packaging and Packaging Waste Directive (PPWD)**, as detailed below, but complements them with horizontal measures such as rules to minimise empty space, obligations to enable reuse

142 [Packaging | Environmental Protection Agency](#) (data subject to Eurostat validation)

143 [EPA \(2022\) Packaging Waste Statistics, Producer Motivations and Consumer Behaviour](#)

144 [Minister Dillon publishes 2024 National Litter Pollution Monitoring System results](#)

145 [Packaging and Packaging Waste Regulation](#)

systems, and restrictions on certain single-use packaging formats. The regulation also advances harmonised labelling and stronger EPR frameworks. Ireland will implement the requirements of the PPWR in accordance with agreed EU timelines. Implementation will be phased to allow industry adaptation and to provide regulatory certainty for producers and retailers.

Nationally, Ireland's Waste Action Plan for a Circular Economy (2020–2025) and Circular Economy and Miscellaneous Provisions Act (2022) align with this direction of travel through commitments to packaging prevention, eco-modulation of EPR fees, and infrastructure development.

The headline target of the PPWR is to reduce packaging waste by 15% by 2040 per Member State, *per capita*, compared to 2018. The PPWR sets binding waste reduction targets for Member States: 5% by 2030, 10% by 2035, and 15% by 2040, all measured as a per capita reduction from 2018 levels, focusing on reducing packaging generation at the source, alongside mandates for recyclability, reuse, minimisation (for example, 50% empty space limit for e-commerce), and recycled content in plastics.

Overall recycling targets remain unchanged from the PPWD, and are set out in the following table:

Table 1

Material	By 2025	By 2030
All Packaging	65%	70%
Plastic	50%	55%
Wood	25%	30%
Ferrous Metal	70%	80%
Aluminium	50%	60%
Glass	70%	75%
Paper and Cardboard	75%	85%

Rather than increasing these targets, PPWR is more focused on the harmonised enabling measures noted above. Ireland will prepare for the introduction of reuse and refill obligations as set out under the PPWR, working closely with producers, retailers and supply chain partners to support practical compliance.

The challenges that Ireland faces in relation to packaging recycling targets that were in place for 2025, highlighted by the EPA, are driven largely by difficulties

with plastic packaging waste. Ireland is not alone in facing difficulties in this area, with the **European Environment Agency (EEA)** warning in 2023 that 19 Member States, including Ireland, were in danger of missing the 2025 plastic packaging recycling target. The largest component of packaging waste in Ireland is paper and cardboard, followed by plastic, glass, wood and metal. As per the EPA's publication of the waste packaging statistics for 2025¹⁴⁶ (reference year 2023), Ireland's overall packaging waste recycling rate is 59% and is at risk of not meeting the recycling rate target of 65% by 2025 (these statistics are reported later). This is largely due to the poor performance of plastic, with other materials more likely to reach their individual targets in 2025.

Ireland has undertaken a number of measures to enhance packaging waste performance particularly through EPR schemes and the rollout of the DRS, which has significantly improved the aluminium can and PET plastic (polyethylene terephthalate) bottle collection rate. In keeping with the polluter pays principle, EPR schemes have a key role in meeting national collection and recycling targets and in supporting investment to ensure that as much as possible can be recycled and recovered domestically.

Repak¹⁴⁷, the extended producer responsibility scheme for packaging, and Return, who operate the Deposit Return Scheme, are both working with investors to maximise the recycling of all types of plastic packaging in Ireland. Repak has recently been granted a 10-year approval until 30 September 2035 with a view to providing longer term certainty around governance and funding for the management of packaging waste. The EPA and industry stakeholders have supported pilot initiatives on packaging minimisation, eco-design, and increased recycled content. The National Waste Action Plan for a Circular Economy includes measures such as mandatory segregation for commercial waste, financial incentives for high-quality recyclables, and restrictions on unnecessary packaging. However, despite some success in boosting recovery rates, overall packaging waste volumes have continued to rise, outpacing recycling efforts.

A **public drinking water fountain scheme**¹⁴⁸ to improve our public drinking water infrastructure and reduce the use of single-use plastic bottles is being activated by DCEE. The department is working with relevant partners, including Uisce Éireann, local authorities and the **National Federation of Group Water Schemes (NFGWS)** to identify opportunities for the rollout. The department has committed to providing grant funding (subject to funding availability) over a three-year period to NFGWS, to install 252 outdoor drinking water fountains within a number of Group Water Schemes. 43 fountains were installed in 2025, with a commitment to install 84 fountains in 2026 and a further 84 in 2027.

¹⁴⁶ [Packaging Waste Statistics for Ireland | Environmental Protection Agency](#)

¹⁴⁷ [Repak](#)

¹⁴⁸ [Minister Smyth and Minister O'Brien launch public drinking water fountain scheme](#)

5.4.3 Challenges and Opportunities in a Circular Economy

Problems Ireland faces in the generation, and management of packaging waste, reflect a wider European problem, with packaging waste across the EU rising by more than 20% over the ten years to 2022 and forecast to rise by another 19% by 2030 in a do-nothing scenario. The introduction of the PPWR is a direct response to the failures of the PPWD to curb this growth. One of these failures was the varying methods of implementation of the directive in different Member States, which fragmented the market and interfered with cost-efficient waste management. The shift away from a directive to a regulation recognises that packaging supply chains are complex and international, and the greatest and most efficient impact is to be delivered by harmonisation of regulation across the single market.

Like in all Member States, Ireland's packaging sector faces significant changes over the coming years, as a result of the introduction of the new regulation. Many of the details of implementation remain to be elaborated in secondary legislation (implementing and delegated Acts) to be agreed at a European level. A key focus for policymakers and regulators is to ensure that national measures are aligned with the new harmonising legislation, while also taking account of our position as a small island economy.

Challenges

- **Scaling reuse systems remains difficult.** While the PPWR sets binding reuse and refill targets by 2030, including for takeaway food and beverage containers, Ireland currently lacks widespread reuse infrastructure. This is particularly challenging for small operators and geographically dispersed supply chains.
- **Packaging design complexity persists.** Many packaging formats still rely on multi-material packaging designs that are difficult to recycle. The PPWR's requirements in relation to 'design for recycling' and 'recycled at scale' will demand significant reform in packaging design.
- **Recycled content targets create compliance pressure.** The PPWR sets minimum recycled content thresholds in plastic packaging. Supply of high-quality recyclates may be a challenge. For example, due to high contamination rates in recycling bins, complex multi-material packaging designs that are difficult to separate, and a heavy reliance on exporting plastic waste, according to reports by the EPA.
- **Retail and producer readiness is mixed.** Adapting to obligations such as the 50% empty space limit in grouped and e-commerce packaging may require redesign. Some businesses may be more prepared than others. For example, small businesses and ones that deal solely in e-commerce may be less prepared as they could use a 'one-size-fits-all' shipping box.

- **Infrastructure gaps remain a barrier.** Although the PPWR incentivises investment in collection and sorting, Ireland's reliance on export markets and its small domestic market limits economies of scale.
- **Administrative complexity and exemptions may create inconsistency.** The PPWR introduces conditional derogations from reuse targets and DRS obligations (e.g. for Member States exceeding recycling benchmarks or micro-enterprises), which could lead to uneven implementation and investment signals.

Opportunities

- **The establishment of a reuse matchmaker platform,** potentially developed by Repak, modelled on international best practice (Fostplus, Belgium - [MatchMaker](#)), to connect businesses generating reusable packaging flows with those seeking supply. This provides a useful opportunity to collaborate across supply chains and help reuse move beyond pilot projects.
- **Clear market direction supports investment.** While the requirements of PPWR presents a number of challenges for businesses as outlined above, the PPWR provides regulatory certainty and creates market demand in areas such as innovation in packaging design, reuse logistics, refillable systems, and high-efficiency recycling.
- **Reuse targets unlock new business models.** Multiple sectors have reuse targets under the PPWR. For example, takeaway services must offer reusable packaging for takeaway items, at no extra cost, by 2028, creating a clear commercial opportunity for reusable container providers, cleaning logistics firms, and refill infrastructure innovators.
- **Recyclability scoring offers transparency.** These tools will help track packaging composition and end-of-life instructions, enabling higher-quality sorting, reducing contamination, and aligning producers with circular design principles.
- **Restrictions on single-use formats reduce waste at source.** Prohibitions on items like miniature toiletry bottles and certain single-use food packaging will directly cut waste generation and encourage innovation in zero-waste alternatives.
- **Bio-based and compostable packaging innovation remains open.** While not fully resolved, the European Commission's obligation to revisit the role of bio-based content in packaging by 2028 creates space for Irish innovation in this emerging field, especially in agri-derived materials.

5.4.4 Actions and Targets

Action	Packaging
A24	Progress towards PPWR targets as set out in Table 1 above.
A25	Promote reusable and refillable packaging systems as provided for in the PPWR.
A26	Continue to support design innovation for packaging formats e.g. through Repak.
A27	Funding for demonstration pilots for reusable packaging formats.
A28	Implement refill obligations under PPWR.
A29	Work with waste collection companies and the National Waste Collection Permit Office (NWCPO) to enhance kerbside and commercial collection of packaging waste to optimise recycling.
A30	Enhance the regulatory conditions required to promote further investment in packaging waste sorting systems.
A31	Effective and timely implementation of a harmonised labelling system for packaging as provided for in the PPWR.
A32	Support the continued installation of public water fountains, as per the Single Use Plastic Directive, with grant aid from the Circular Economy Fund.
A33	Support the work of the European Commission Joint Research Centre in developing EU end-of-waste criteria for plastics.
A34	Increase the level of correct waste sorting behaviour and consumer awareness.

Target	Packaging
T18	Establish a reuse matchmaker platform, which connects businesses generating reusable packaging flows with those seeking supply.
T19	Achieve the PPWR material stream recycling targets (as set out in Table 1).
T20	SUPD Target: Separate collection target for plastic bottles: • 77% by 2025 • 90% by 2029.
T21	By end of 2026, develop KPIs with Repak for reductions in overall packaging waste to progress towards the following PPWR Waste Reduction Targets: • 5% reduction by 2030. • 10% reduction by 2035. • 15% reduction by 2040.
T22	Roll-out of outdoor drinking water fountains through NFGWS, with the following targets: • 84 fountains in 2026 • 84 fountains in 2027.

CASE STUDY: Rebox

www.re-box.ie

Source: <https://www.circuleire.ie/case-studies-1/rebox>



Reuse #we take recycling
to the next level

Rebox is a Dublin-based company pioneering a reuse-first approach to cardboard packaging. Established in 2010, it collects used but reusable boxes from large manufacturers and distributors in sectors such as food, beverages, and pharmaceuticals, including companies like Diageo and Glenpatrick Spring.

THE CHALLENGE

Globally, around 405 million tonnes of paper and paperboard are produced each year, requiring large amounts of raw materials, water, and energy. In Ireland, more than 1.2 million tonnes of packaging waste were generated in 2023, with paper and cardboard making up the largest share at 483 thousand tonnes. The national recycling rate for cardboard is relatively high at 75%, but much of this recycling occurs abroad. Across all packaging types, only 18% is recycled within Ireland, meaning cardboard is exported for recycling. There are also limits on how many times cardboard can be recycled; the fibres break down after 5-7 cycles.

THE CIRCULAR SOLUTION

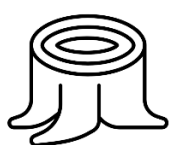
Once collected, the boxes are sorted, cleaned, and graded to check their condition and

suitability for reuse. Larger pieces of cardboard are die-cut and reshaped to create boxes in standard sizes. The refurbished boxes are sold mainly to small and medium-sized enterprises, offering a lower-cost packaging option while reducing demand for new cardboard. By keeping cardboard in use for longer, Rebox avoids the energy and water consumption of recycling processes.

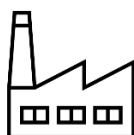
CLIMATE & CIRCULAR IMPACT

Rebox's cardboard reuse model offers strong environmental benefits. By keeping boxes in use longer, it avoids the transport abroad, energy, water and emissions associated with recycling. Reuse also avoids the emission from creating a new box, thereby improving resource efficiency.

IN A NUTSHELL



Cardboard packaging generates waste and requires a lot of energy, water and resources to produce.



Rebox collects used cardboard boxes from businesses in sectors like food, beverages and pharmaceuticals for resale to SMEs.



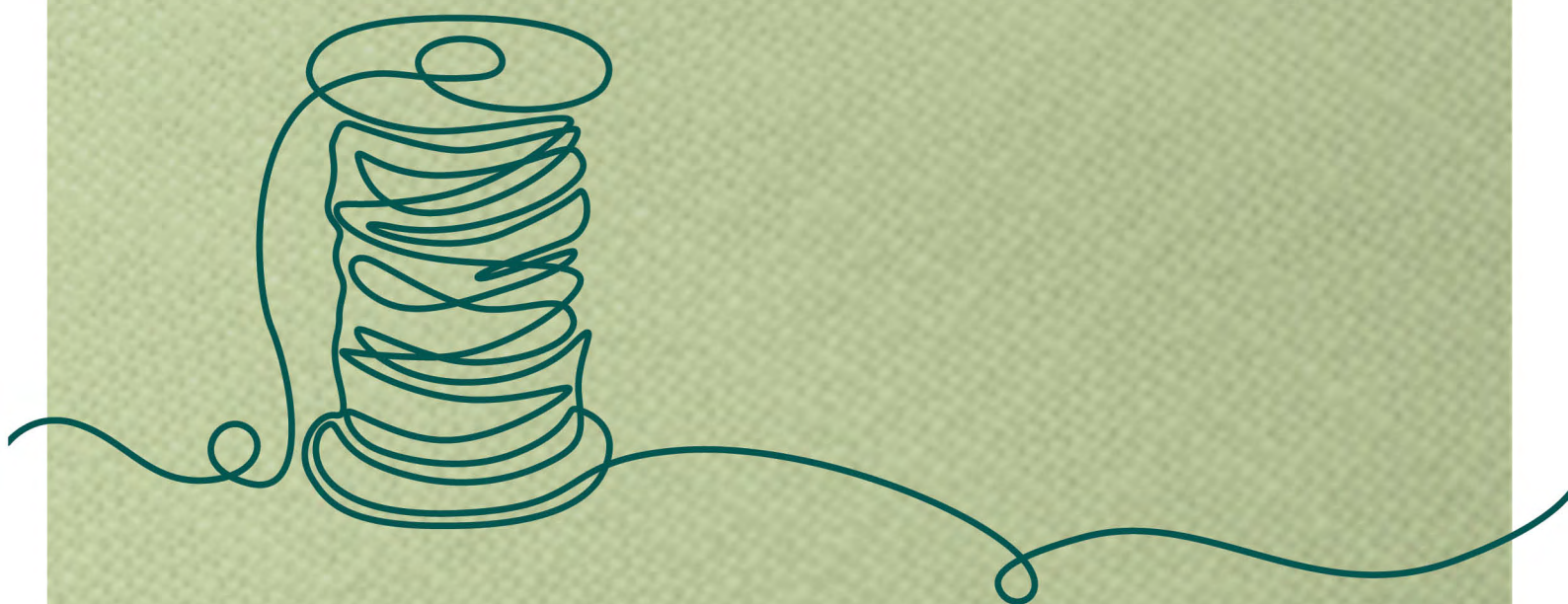
Collected boxes are sorted, cleaned, graded and reshaped into standard sizes, extending their lifecycle.



Reuse avoids the transport and resource impacts of recycling, as well as the emissions to create new boxes.

5.5

Textiles



5.5 Textiles

5.5.1 Why Textiles Matter

Textiles represent one of the most environmentally damaging value chains globally, associated with high carbon emissions, water consumption, chemical pollution, and a source of microplastic pollution. Globally, the sector is characterised by overproduction and fast fashion, with clothing items often worn only a few times before being discarded.

Overconsumption of textiles is a key problem in Ireland and globally. Ireland consumes a large volume of new textiles each year – some 292,000 tonnes of textiles were imported to Ireland in 2019 of which 65% were clothing and footwear.¹⁴⁹ Ireland has one of the highest per capita consumption rates of textile products in the EU, consuming 53kg per person per year¹⁵⁰ The EPA **Textiles: National Attitudes and Behaviour Study** (2025)¹⁵¹ reported that 46% of people in Ireland buy clothes monthly or more frequently which is a rapid pace of consumption. See Figure 4 for more information.

Current trends in textile production and consumption present major environmental challenges, locally and globally. There have been steep reductions in uses per garment, a reduction in the overall quality and a sharp increase in discarded textiles. An estimated 4-9% of all textiles placed on EU market are destroyed before use¹⁵². In response, the EU has introduced a ban on the destruction of unsold apparel and footwear under the ESPR¹⁵³, aiming to reduce unnecessary waste, and promote more sustainable business models. The sharp increase in the overall number of garments and collections placed on the market contributes to this challenge by driving the overconsumption of textiles.¹⁵⁴ The textiles industry currently operates in a linear 'take-make-waste' model, and it is widely recognised that this type of economic model is unsustainable. This is why textiles are a key priority area for action to realise Ireland's circular economy ambitions.

In 2021, there were 12,652,000 textile items reused (3,771 tonnes) and textiles account for 73% of all second-hand purchases/exchanges in Ireland in 2021, illustrating the circular potential for this stream. In July 2023, the EPA reported the first reuse statistics for Ireland¹⁵⁵ as required under **Commission Implementing Decision (EU) 2021/19**.

149 [Nature and extent of post-consumer textiles in Ireland](#)

150 [Nature and extent of post-consumer textiles in Ireland](#)

151 [EPA Textiles: National Attitudes and Behaviour Study \(2025\)](#)

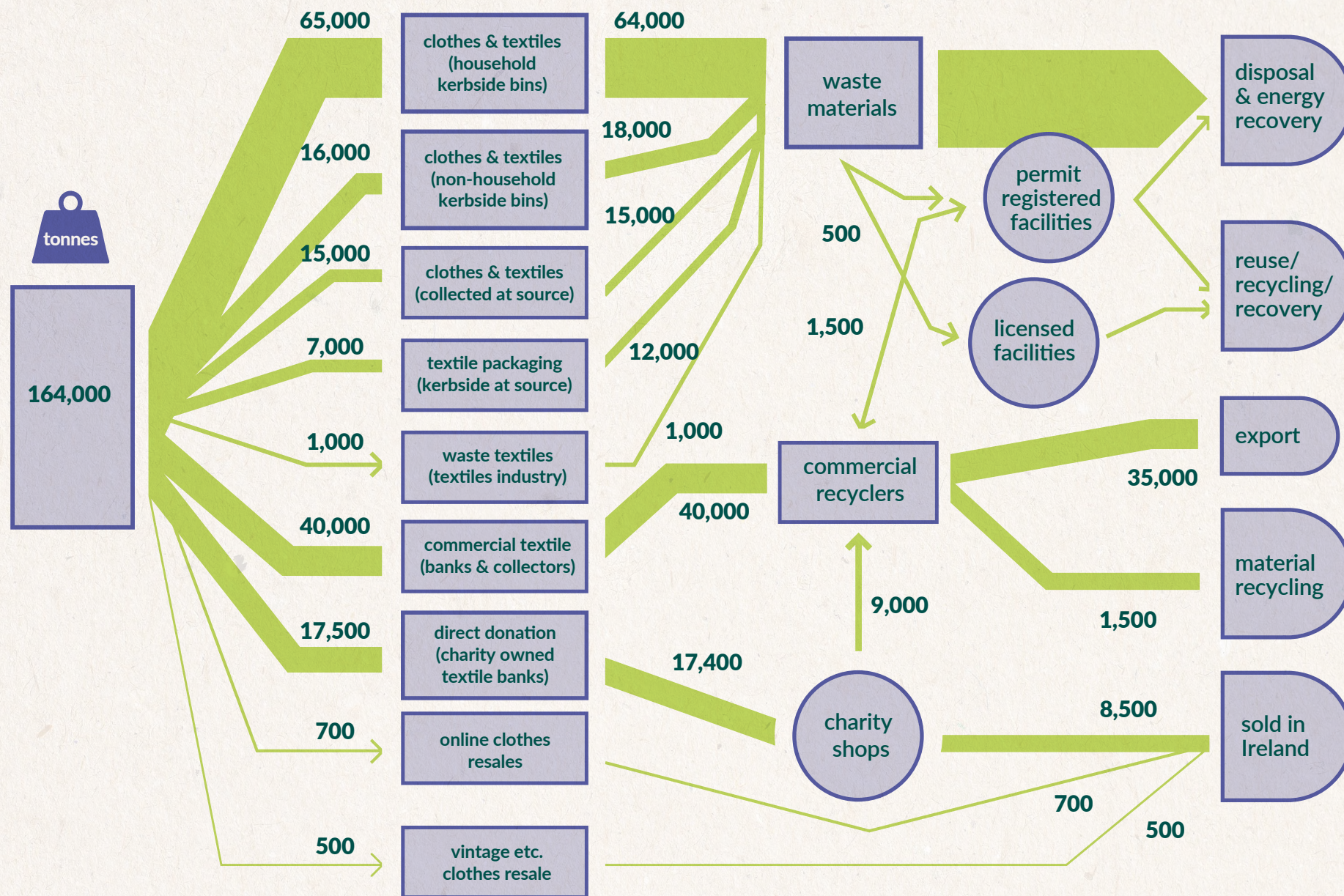
152 [The destruction of returned and unsold textiles in Europe's circular economy | European Environment Agency](#)

153 [New EU rules to stop destruction of unsold clothes and shoes - Environment](#)

154 [The environmental price of fast fashion | Nature Reviews Earth & Environment](#)

155 [Reuse Statistics for Ireland](#)

Figure 4. Summary of Post-Consumer Flows of Textile Outputs in Ireland



Source: EPA Report on the Nature and Extent of Post Consumer Textiles in Ireland.

A more circular approach to textiles presents a major opportunity to reduce consumption, prevent waste, design more durable textiles and stimulate new social and economic activity. Repair, reuse, and upcycling can support local jobs, while innovative design and fibre-to-fibre recycling can support low-carbon enterprise.

5.5.2 The National and EU Policy Landscape for Textiles

Ireland's national direction on circular textiles is set out in the draft **National Policy Statement and Roadmap on Circular Textiles**¹⁵⁶ (2025). This outlines a system-level approach focused on prevention, reuse, separate collection, and EPR.

At EU level, textiles are a priority under the **Circular Economy Action Plan**¹⁵⁷ (2020) and the **EU Strategy for Sustainable and Circular Textiles**¹⁵⁸ (2022). New legislation includes the **ESPR**¹⁵⁹, which establishes the foundation for Digital Product Passports, and revisions to the **Waste Framework Directive**¹⁶⁰. The forthcoming mandatory EPR scheme for textiles will shift financial responsibility onto producers, helping to fund circular infrastructure and incentivise better design.

Textiles is one of the priority products under the ESPR 2025 – 2030 Working Plan: *'Textiles have a high potential to improve product lifetime extension, material efficiency and to reduce impacts on water, waste generation, climate change and energy consumption. Information requirements under the ESPR will work in synergy with the Textile Labelling Regulation¹⁶¹, currently under review. Indicative timeline for adoption of product-specific requirements for textiles is expected in 2027'.*

DETE is responsible department for the **ESPR** and is currently developing a national **ESPR** implementation plan that will be published in 2026.

Since the publication of the WAPCE and the first Whole of Government Circular Economy Strategy in 2022, DCEE has taken a leading role in advancing circularity in Ireland's textile sector. Initial work focused on delivering WAPCE commitments, including baseline research on textile flows and extensive stakeholder engagement.

In 2022, DCEE established the **Textiles Advisory Group** (a multi-stakeholder forum bringing together industry, community and regulatory representatives) to inform policy development and support system-wide collaboration. Building on this work, DCEE prepared a draft National Policy Statement and Roadmap on Circular Textiles (2025), which sets out a long-term vision and priority actions

¹⁵⁶ [Public Consultation on draft National Policy Statement and Roadmap on Circular Textiles](#)

¹⁵⁷ [Circular Economy Action Plan - European Commission](#)

¹⁵⁸ [Sustainable and Circular Textiles Strategy - European Commission](#)

¹⁵⁹ [Ecodesign for Sustainable Products Regulation - European Commission](#)

¹⁶⁰ [Revised Waste Framework Directive enters into force - Environment](#)

¹⁶¹ [Textile Label - Your Europe](#)

to address challenges across the textile value chain. Throughout this period, DCEE has also supported public awareness efforts (for example, the ‘*Reverse the trend*’ campaign¹⁶²) and sectoral capacity-building, while ensuring alignment with broader policy frameworks including the Circular Economy and Miscellaneous Provisions Act 2022, the WAPCE, and the National Waste Management Plan for a Circular Economy. DCEE has been engaged in EU policy developments, most notably the negotiations on revision to WFD with respect to textiles and working to prepare foundations for an EPR scheme for textiles.

The EPA’s Circular Economy Programme has prioritised textiles as a key area for intervention, supporting a range of initiatives to address Ireland’s growing textile waste challenge. Through its Green Enterprise funding, the EPA backed a national pilot to test new textile collection and reuse systems in towns across Wicklow, Cork, and Donegal, aiming to divert significant volumes of textiles from landfill and incineration. This practical work has been underpinned by consumer behaviour research, including national surveys on second-hand clothing, attitudes toward clothing rental and reuse, and broader reuse practices, which help shape targeted policy and communications.

In parallel, the EPA has supported innovation in textile waste valorisation, including an 18-month pilot with the **Irish Wood & Interiors Network** to repurpose upholstery waste. This work aligns with evolving EU policy on textiles, including extended producer responsibility and separate textile collections by 2025. Together, these actions lay the groundwork for a more circular textile system in Ireland.

Rediscover Fashion is the **Rediscovery Centre’s** original textile social enterprise, founded in 2008 to breathe new life into unwanted fabrics. Through repairing, restoring, redesigning, and upcycling, the programme creates 100% repurposed clothing, accessories, and homeware. These items are sold via the Centre’s Eco Store, with all revenue reinvested to support training and employment, especially for the long-term unemployed.

Beyond production, Rediscover Fashion delivers hands-on workshops, courses, lectures, and repair services to empower individuals with circular design skills. The programme prevents textiles from reaching landfill, reusing around 1 tonne of textiles per year and provides practical community education in sustainability.

Additionally, the annual **Relove Fashion** competition invites young people in secondary-schools and youth groups nationwide to redesign preloved materials into wearable outfits. With guided workshops and a grand finale at the Centre, the initiative fosters creativity and sustainable fashion awareness among young people.

162 [Reverse the trend](#)

5.5.3 Challenges and Opportunities in a Circular Economy

Ireland's textile system faces a number of challenges, as outlined below. A more comprehensive list of the challenges identified by the Textile Advisory Group will be available in the forthcoming **National Policy Statement & Roadmap on Circular Textiles**.

Challenges

- **Limited collection and sorting infrastructure:** Existing textile waste collection is fragmented and often not separately sorted, limiting recycling and reuse.
- **Destruction of returned and unsold textiles:** Destruction of textile products represents the inefficient 'take-make-waste' linear consumption model, leading to significant avoidable negative impact on climate and environment.
- **Data gaps:** Lack of comprehensive, real-time data on textile flows, waste generation, and reuse limits effective policy design and impact measurement.
- **Funding and capacity constraints:** Social enterprises and local authorities face challenges scaling reuse, repair, and collection services due to limited resources.
- **Design and innovation barriers:** Irish designers and manufacturers lack widespread access to circular design tools, funding, and technical expertise.
- **Consumer awareness and behaviour:** Consumers may be unaware or unmotivated to choose circular textile options, requiring ongoing education and engagement efforts.
- **Regulatory complexity:** Aligning national actions with evolving EU regulations (ESPR, EPR, WFD) requires coordination and agility from all stakeholders.
- **Lack of outlets for sorted and unsorted textiles.** Markets have not recovered from COVID-19; there is a lot of material in circulation and Ireland is particularly vulnerable to market fluctuations as we are dependent on export for further sorting and recovery.

Addressing these challenges will be critical to unlocking the environmental, social, and economic benefits of circular textiles in Ireland.

Opportunities

A whole-of-government approach can accelerate a shift towards circularity in textiles. Key opportunity areas include:

- **Producer Responsibility:** Designing EPR to apply the 'polluter pays principle' while creating a more robust economy for textile collection, sorting, reuse

and recycling in a way that funds high-value reuse and engages stakeholders across the value chain.

- **Reuse and Repair:** Expanding the capacity and visibility of social enterprises, training programmes, and community initiatives.
- **Design for Circularity:** Supporting Irish designers and SMEs to adopt circular principles, with access to data, funding, and research.
- **Green Public Procurement:** Embedding circularity in public sector purchasing of uniforms, workwear, and furnishings.
- **Public Engagement:** Targeted communications to promote behavioral change and raise awareness of sustainable alternatives.

The circular transition in textiles will require sustained effort, collaboration, and innovation but will deliver significant environmental, social, and economic returns.

5.5.4 Actions and Targets

Action	Textiles
A35	Transpose Directive (EU) 2025/1892 amending the Waste Framework Directive as it relates to textiles.
A36	Assist DETE in the implementation of the ESPR to promote textile circular design including the introduction of Digital Product Passports.
A37	Support the work of the European Commission Joint Research Centre in developing EU end-of-waste criteria for textiles.
A38	Drive GPP of textiles through the implementation of the Green Public Procurement Strategy and Action Plan.
A39	Develop baseline data on textile consumption and post-consumption to establish targets on textile waste prevention, collection, reuse and recycling.
A40	Enhance cross-sector collaboration and implementation through the Textiles Advisory Group.
A41	Deliver evidence based and targeted public awareness campaigns to educate on textile waste prevention, conscious textile consumption and responsible post consumption.

Target	Textiles
T23	Publish the National Policy Statement and Roadmap on Circular Textiles and initiate progress on identified actions in 2026.
T24	Develop an EPR Scheme for textiles and associated Collection System, to be established by April 2028 as per the revised Waste Framework Directive.
T25	By 2031, to reduce to 4% the volume of textiles in household residual waste and recycling bins, as determined by EPA waste characterisation from a volume of 6% in 2022.
T26	Full and enhanced coverage of circular separate collection system for textiles in place across Ireland by 2030.
T27	By 2027, polyester fibre products procured by public sector bodies under new contract arrangements must be manufactured using a minimum recycled content of 20%, where possible and proportionate.
T28	Established baseline data on textile consumption and post-consumption by 2027.

CASE STUDY: Rezero

www.rezero.ie

Source: <https://www.circuleire.ie/case-studies-1/rezero>



Rezero recycles cellulose acetate (CA) from seized cigarette butts into premium fashion accessories such as buttons, eyewear frames, and yarn fibres, turning hazardous waste into valuable circular materials.

THE CHALLENGE

The fashion industry is responsible for approximately 10% of global carbon emissions. Around 80% of all CA production is used to make cigarette filters. In 2023, more than 600 million illegal cigarettes were seized in EU operations. In 2024, 112 million illegal cigarettes were seized in Ireland. Typically, seized cigarettes are destroyed by incineration but this wastes valuable material and contributes to air pollution and greenhouse gas emissions. Approximately 700 billion unconsumed cigarettes are incinerated around the globe annually.

THE CIRCULAR SOLUTION

Working with customs in Ireland and several EU countries, Rezero recycles cellulose acetate from seized cigarette butts using a mechanical, chemical-free recycling process. This produces OEKO-TEX Standard 100 certified acetate that is free from harmful substances. The

company turns recycled CA into high-quality fashion accessories, including buttons, frames for glasses, and yarn fibres. They have also developed Re-Fil Fibre for wadding, insulation and acoustic panels. Rezero supply customers with raw material and aims to become the leading EU button and fashion accessory provider.

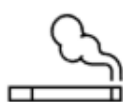
CLIMATE & CIRCULAR IMPACT

For every 100kg of cellulose acetate fibre manufactured by Rezero they prevent the felling of one tree and avoid up to 184 kg of CO₂ emissions from incineration. Since 2021, Rezero have saved over 160 million units of cigarettes from incineration and are aiming to recycle 1 billion filters by 2026. By repurposing low-value cigarette butts into high-value accessories, Rezero reduces reliance on virgin resources while promoting sustainable practices within the fashion industry.

IN A NUTSHELL



The fashion industry's vast environmental impact creates huge demand for quality recycled materials.



Irish company Rezero sources high-quality cellulose acetate from millions of seized illegal cigarettes.



Using a chemical-free process, they recycle cigarette butts into premium buttons and accessories.



They turn a vast waste stream into high-value material saving trees and CO₂ emissions.

5.6

Electronics and Electronic Equipment



5.6 Electronics and Electronic Equipment

5.6.1 Why Electronics matter

Electronics permeate daily life and the wider economy, from consumer devices and ICT to industrial, medical and automotive applications. This brings opportunity supporting productivity, connectivity and public services but also concentrates environmental pressure along complex, globalised supply chains. High raw-material demand, energy-intensive manufacturing and short usage cycles translate into growing volumes of **waste electrical and electronic equipment (WEEE)**, much of which still escapes optimal collection and treatment. A circular approach prioritising longevity, repair, refurbishment, remanufacture and high-value recycling can curb material demand, reduce emissions and improve security of supply for critical raw materials, while maintaining the benefits that digitalisation brings to citizens and businesses.

5.6.2 National and EU Policy Landscape for Electronic Equipment

In Ireland, the consumption of electronic goods has been on the rise, and this trend is generally linked to economic prosperity. The growth in the Irish economy in recent years has led to large increases in WEEE being collected and recovered. In 2023, 63,946 tonnes of WEEE were collected for treatment in Ireland, down from 66,018 tonnes (a 3.1% decrease) in 2022, and down again from the 2021 figure, when over 71,000 tonnes were collected. The demand for electronic products has continued, reflecting the transition to remote working and the ongoing digitalisation of society.

The amount of WEEE generated every year in the EU continues to increase rapidly, growing at 2% annually, and it is one of the fastest growing waste streams globally. Of this, only 40% gets collected annually, with the remainder managed sub-optimally. WEEE includes a large range of devices such as mobile phones, computers, household appliances, lamps, medical devices and photovoltaic panels, all of which have disparate life spans, and contain a complex mixture of materials, some of which are hazardous. These can cause major environmental and health problems if discarded and not managed properly. Further, modern electronics also contain rare and expensive resources, including critical raw materials (see section 6.1). These can be reused and recycled only if the product or waste is effectively managed. The European Commission are currently gathering evidence to support the potential inclusion of wind turbines and recovery of strategic and/or critical raw materials within its scope.

EU rules address environmental and other issues caused by the growing number of discarded electronics in the EU. The aim is to contribute to their sustainable production and consumption by

- preventing the creation of WEEE

- contributing to the efficient use of resources and the retrieval of secondary raw materials through reuse, recycling and other forms of recovery
- improving the environmental performance of all actors involved in the lifecycle of EEE

The primary EU legislation that regulates the environmentally sound management of waste electronics is the **WEEE Directive**¹⁶³. This aims to promote reuse, recycling and other forms of recovery of waste electrical and electronic equipment (WEEE) to reduce the quantity of such waste to be disposed of and to improve the environmental performance of the economic operators involved in the treatment of WEEE. The WEEE Directive sets criteria and targets for the collection, treatment and recovery of WEEE.

Ireland achieved a collection rate of 43.6% in 2023¹⁶⁴ meaning that large volumes may be sub-optimally managed. This is a significant drop from the previous collection rates of 51.2% in 2022 and 63.8% in 2021¹⁶⁵. All recycling, recovery and reuse targets were achieved across all categories of WEEE in 2022.

At 43.6%, Ireland, along with most other EU Member States, has yet to achieve the EU WEEE collection target of 65%¹⁶⁶. While it is important that we continue to increase our efforts to separately collect WEEE, stakeholders have questioned whether the current collection rate calculation method is fit for purpose. The current methodology which is based on the average EEE placed-on-market in the three preceding years does not take account of the varying lifecycles of certain electrical and electronic equipment e.g. washing machines and refrigerators which can have a lifespan of 10-15 years, as well as photovoltaic panels (20-40 years), and heat pumps (15-20 years). This means that the collection rate may appear lower due to recent wide adoption of this long-life equipment. The collection rate has also been critiqued as being ill-suited for measuring circularity. This is because extension of the lifespan of an electronic product through reuse or repair is not captured by the metric currently used.

The European Commission published their evaluation of the **WEEE Directive (2012/19/EC)** in July 2025¹⁶⁷, which highlighted several shortcomings in the directive, including low rates of recovery of **critical raw materials (CRMs)**. The evaluation further highlighted fragmented implementation of EPR schemes. In August 2025¹⁶⁸, the European Commission, in its call for evidence for a forthcoming EU Circular Economy Act, plans to revise the **WEEE Directive**¹⁶⁹ to

163 [WEEE Directive](#)

164 [WEEE Statistics for Ireland | Environmental Protection Agency](#)

165 [WEEE Statistics for Ireland | Environmental Protection Agency](#)

166 [Waste statistics - electrical and electronic equipment - Statistics Explained - Eurostat](#)

167 [Final Report: Study supporting the evaluation of Directive 2012/19/EU on waste electrical and electronic equipment \(WEEE\) - Environment](#)

168 [Commission launches consultation for upcoming Circular Economy Act - Environment](#)

169 [Final Report: Study supporting the evaluation of Directive 2012/19/EU on waste electrical and electronic equipment \(WEEE\) - Environment](#)

ensure effective collection and recycling of this waste stream and to generate market demand for the secondary critical raw materials they contain. Existing provisions on scope, metrics and standardisation may also need to be revised to make them fit-for-purpose and simpler.

Ireland uses the EPR model for dealing with several waste streams and has developed two producer responsibility initiatives (**PRIs**), based on the 'producer pays' principle. DCEE is conducting a review of extended producer responsibility and the PRIs for the WEEE and batteries sectors. This review will be aligned with the upcoming EU revision of the EPR systems on harmonisation of rules in addition to a targeted amendment of the WEEE Directive in a proposed **EU Circular Economy Act** which is expected to be published in the second half of 2026.

The EU **ESPR** builds on the approach successfully implemented under the EU's current **Ecodesign and Energy Labelling** framework. It is estimated that these requirements achieved a 12% reduction in final energy consumption in 2023, avoiding 145 million tonnes of CO₂ emissions¹⁷⁰. It is also beneficial to businesses as 93% of consumers recognise the energy label and retailers see an increase in demand for higher performance products.

The ESPR aims to replicate the success of preceding framework on far broader scale by enabling setting eco-design requirements for a much wider range of products, beyond energy-using products. It also aims to improve the sustainability of products placed on the EU market by increasing their circularity, energy performance, recyclability, repairability and durability, while improving the Single Market and strengthening the competitiveness and resilience of the EU economy. In April 2025, the EU Commission published the **Ecodesign Working Plan 2025 – 2030**¹⁷¹, setting out the product groups it will prioritise for new standards, including "horizontal requirements" on repairability (2027) and recycled content and recyclability of electronics (2029).

The ESPR will open new opportunities for Irish manufacturers and designers by making sustainability a core element of product development. Companies that embrace circularity and consider the full life cycle of their products will gain a competitive edge in both EU and global markets. Irish businesses that invest early in sustainable design and innovation will not only meet future regulatory requirements but also position themselves as leaders in a growing market for environmentally responsible products. **DETE** is currently developing a national **ESPR** implementation plan that will be published in 2026.

The EU Directive on Common Rules Promoting the Repair of Goods or '**Right to Repair Directive**' will make it easier for consumers to seek repair instead of replacement and repair services will become more accessible, transparent

¹⁷⁰ [ESPR Working Plan 2025 - 2030](#)

¹⁷¹ [ESPR Working Plan 2025 - 2030](#)

and attractive. This directive which came into force in July 2024 and is due to be transposed by Member States by 31 July 2026 with the aim to encourage the repair of consumer goods, both within and beyond their liability period. It tackles obstacles that discourage consumers from repairing goods due to inconvenience, lack of transparency or difficulty accessing suitable repair services. It therefore encourages repair as a more sustainable consumption choice, which contributes to the climate and environmental objectives under the **European Green Deal**.

The new rules under the directive aim to ensure that manufacturers provide timely and cost-effective repair services and inform consumers about their rights to repair. The rules aim to strengthen the EU repair market and reduce repair costs for consumers.

Rules on electronic sustainability have already commenced. From June 2025, a new EU-wide energy label for smartphones and tablets was introduced. This label will, for the first time, assess not just energy efficiency but also reliability, durability, and repairability.

5.6.3 Challenges and Opportunities in a Circular Economy

Challenges

Among the challenges to implementing the circular economy for electrical and electronic equipment are the prevailing market conditions and cost structures. Equipment prone to failure, software obsolescence, new technology trends and consumer demand for new products drive increasing consumption of electrical and electronic equipment.

Repairs are often not carried out due to factors including design features that prevent repair, poor product quality and poor conditions for independent repair businesses, including issues on insurance and indemnity. High repair costs compared to the purchase price of new, often cheaper products and the low residual value of the product to be repaired discourage consumers from choosing repair. Additionally, a lack of care during collection and take-back, as well as incomplete pre-treatment, separation and sorting of waste devices and their fractions, can result in inadequate removal of pollutants and separation of valuable recyclable materials. The recovery of all raw materials (some of which are critical and strategic) is not economically viable under current recycling methods, especially when these materials are present in low concentrations. There is however, a need for enhanced circularity to ensure reuse and recycling of these metals in the economy. This will also lead to lower environmental impacts like pollution of GHG emissions, due to reduced dependency on primary mining and processing of materials.

Opportunities

Improving the collection, treatment and recycling of WEEE at the end of its life can increase resource efficiency and support the shift to circular electronics. It can also contribute to security of supply for critical raw materials, ultimately enhancing the EU's strategic autonomy¹⁷².

Transitioning to a circular economy requires breaking the link between economic activity and resource consumption. Improvements in design to extend product lifetimes and to allow for repair, refurbishment and reuse are needed to ensure that electronic products remain in circulation for longer and can be repaired, remanufactured and recycled at their end of their life.

There is a clear business case for circularity within the electronics industry, with emerging policy and legislation demonstrating that circular electronics can generate value both from a climate and cost effectiveness perspective. Transitioning to circular electronics presents a solution to many of the challenges facing the industry without diminishing the positive impacts of electronics on business and consumers.

A product is truly circular when the following three attributes apply:¹⁷³

- **The product is made from verified circular resources.**
- **The product is designed for use-phase optimisation and material recovery.**
- **The product's use phase is optimised, and materials are recovered at end of life.**

See Figure 5 for more information.

¹⁷² [New measures to secure raw materials and strengthen the EU's economic security - European Commission](#)

¹⁷³ [Shared definition of what constitutes circular products and services - CEP | Circular Electronics Partnership](#)

Figure 5. The Circular Electronics System Map



Remanufacturing is an industrial process that restores used products or components to a like-new condition by disassembling, cleaning, repairing and reassembling them. Remanufacturing is becoming a critical component to the circular economy as a method to prevent waste generation and reduce the extraction of raw materials. Remanufacturing enables end-of-life products to be sold and used again, thereby extending the product's lifespan.

The **Office of Government Procurement (OGP)** launched a new framework in 2024 that allows public bodies to purchase remanufactured laptops. This is the first arrangement of its kind in the EU and can be availed of by all public service bodies regardless of size. The contract has an estimated value of up to €30 million and fully supports the circular economy objectives set out in the **Green Public Procurement Strategy and Action Plan 2024-2027**¹⁷⁴. The laptops are subject to rigorous manufacturing and testing standards and devices supplied under the new framework come with up to three years of warranty.

Ireland has entered into a **voluntary agreement** to co-operate with other bodies, internationally, to improve the sustainability of ICT procurement. Known as the **Circular and Fair ICT Pact**¹⁷⁵ (CFIT), this voluntary initiative is an international procurement-led partnership with a remit to accelerate circularity, fairness, and sustainability in the ICT sector.

The **National Reuse and Repair Network 2024 – 2026** (NRRN) was established to facilitate knowledge sharing and engagement to support and scale reuse and repair activities in Ireland. The EPA, DCEE and local authority sector lead a Steering Group and members of the NRRN include Repak, ERP Ireland, WEEE Ireland, SOLAS, Irish Manufacturing Research/CIRCULÉIRE, Rediscovery Centre, Charity Retail Ireland and Community Resources Network Ireland. The NRRN has five strategic outcomes:

- Ireland has an effective system for reporting on reuse and repair.
- Reuse and repair skills are building within the population, and opportunities exist to develop skills and employment.
- Barriers to reuse and repair are removed, and opportunities are readily available.
- Repair and reuse are standard practice in priority areas.
- The network has delivered effective communications on reuse and repair.

The network is focused on electronic equipment among other products and provides a constructive platform for the promotion of reuse and repair, which is a key principle of circularity.

¹⁷⁴ [Green Public Procurement Strategy and Action Plan 2024-2027](#)

¹⁷⁵ [Circular & Fair ICT \(CFIT\) Pact](#)

In December 2025, the EPA published a study¹⁷⁶ to support the future development of the national repair directory: **Repairmystuff.ie**. The study reviewed key legislation (including the requirements under the Right to Repair Directive), examined other repair directories in EU Member States, conducted a review of content, digital architecture and user experience design of repairmystuff.ie, that included engagement with key stakeholders. The report's recommendations for the future development of the directory are being considered by the relevant regulatory authorities, cognisant that the directory could play a role in the implementation of the **EU Right to Repair Directive**.

The electronics sector is uniquely positioned to raise awareness of circularity and to make it tangible for citizens. Nearly everyone is connected to an ICT device, reflecting an opportunity, but also the responsibility this sector faces. It has the potential to significantly contribute to enhance people's lives, but it also needs to ensure responsible action along the value chain. Incorporating circular thinking and value into electrical equipment and services allows us to responsibly maintain the growing prominence of technology while enabling society to remain resilient, innovative and sustainable.

¹⁷⁶ [Study to support future development of the National Repair Directory RepairMyStuff.ie | Environmental Protection Agency](#)

5.6.4 Actions and Targets

Action	Electronic Equipment
A42	DCEE to review the operating models of the two EPR schemes to ensure that they are performing optimally with respect to target attainment and the transition to improved circularity.
A43	DCEE will support DETE in the ongoing transposition of the Right to Repair Directive including on the operation of a national platform for repair by July 2027.
A44	Engage in the EU WEEE Directive amendment process as part of the proposed new EU Circular Economy Act.
A45	Continue to support the OGP in facilitating centralised procurement of remanufactured electronic equipment, and increased acquisition of long-life, repaired, refurbished electronics through centralised framework arrangements that support green public procurement objectives.
A46	DCEE to ensure producers enhance their awareness raising activities so that WEEE is separately collected through all available channels to improve Ireland's collection rate.
A47	Support the further development of circular electronic business models (lending, renting, leasing, repair and servicing) and communicate successful models and best practices.
A48	Undertake to achieve the five strategic outcomes of the National Reuse and Repair Network by the end of 2026, with a view to further expanding the uptake of green skills in ICT in addition to broadening repair and reuse practice in other (non-priority) areas.
A49	Provide support to repair cafes for electronics, sharing platforms/ pay as a service schemes and local resource hubs/second-hand markets.
A50	Develop a circular roadmap for the Irish EEE and Battery Sector with dedicated resources for industry through a National Centre for Excellence.
A51	Support the formation of a centralised registry for r-strategy operators, including repairers, refurbishers and remanufacturers active throughout Ireland.

Target	Electronic Equipment
T29	By 2027, OGP will have launched a new framework for the management of ICT equipment to ensure reuse is prioritised.
T30	Maintain the GPP target for a minimum of 80% of ICT end user products (desktop computers, portable computers and mobile phones) procured by public sector bodies under new contract arrangements are certified to EPEAT Gold Standard (or equivalent), TCO Certified (or equivalent) or will have been remanufactured.
T31	Ensure that EEE contributes proportionally to the National Waste Management Plan for a Circular Economy target of 20kg per person, per annum of reuse.

CASE STUDY: Votechnik

www.votechnik.com

Source: <https://www.circulareire.ie/case-studies-1/votechnik-alr4000>



Votechnik has developed innovative robotic technologies—most notably the ALR4000—to transform LCD recycling and resource recovery from waste electrical and electronic equipment (WEEE).

THE CHALLENGE

WEEE contributed 580 million tonnes of CO₂ emissions globally in 2020, equivalent to emissions from 153 coal power plants. Only 44% of electronics entering the EU market are collected for recycling. LCDs in laptops, TVs, and tablets contain hazardous mercury lamps and sharp components posing health risks. Despite containing valuable resources worth USD \$65 billion globally (gold, silver, copper, indium), inefficient dismantling leaves much unrecovered, with Irish LCDs previously exported for disposal.

THE CIRCULAR SOLUTION

The ALR4000 automates safe depollution, removing hazardous substances and edges using KUKA KR QUANTEC robots—processing 60-80 devices per hour vs 5 manually. This plug-and-play system ensures EU WEEE Directive and EN50625 compliance. Depolluted materials

enable metal/plastic recovery for reuse.

Votechnik's IND2000 recovers indium from glass panels. The emerging SUP2000 extends automation to solar panels and battery black mass.

CLIMATE & CIRCULAR IMPACT

The ALR4000 now processes 80% of Ireland's LCDs domestically at KMK Metals Recycling in KMK's Kilbeggan Facility, cutting transport emissions and generating revenue from recovered materials. The 90% recyclable robot reduces virgin material dependence. Votechnik transforms hazardous waste into economic value while advancing circularity, replicable across EV batteries (Comau), wind turbines (BladeBUG), and industrial remanufacturing for scaled resource recovery.

IN A NUTSHELL



E-waste is a fast growing hazardous waste stream with low recycling rates and billions in unrecovered materials



Irish company Votechnik developed the ALR4000 robotic technology to safely automate LCD screen recycling.



The robot rapidly depollutes and segregates hazardous materials, protecting workers from hazardous mercury lamps.



This process makes recycling profitable, turning a hazardous waste stream into valuable recovered materials.

6

Cross-Cutting Measures Required to Accelerate Action



6. Cross-Cutting Measures Required to Accelerate Action

6.1 Regulatory enablers for Circularity in Ireland: EU Critical Raw Materials Act

The sourcing, processing and recycling, and substituting of critical raw materials (**CRMs**) in Ireland and Europe, and securing supply chains, are some of the challenges ahead to meet circular and climate objectives. CRMs are raw materials indispensable for a wide range of technologies, products and goods that support strategic sectors such as digitalisation, decarbonisation, space and defence. For example, lithium, cobalt and nickel are used to produce batteries; gallium is used in solar panels; raw boron is used in wind technologies; and titanium and tungsten are used in the space and defence sectors. The risk of potential CRM supply disruption, particularly for battery production, could impede efforts in moving electricity generation away from fossil fuel dependency.

Table 2: Examples of EU dependence on raw material imports

63%	97%	100%	98%
of the world's cobalt, used in batteries, is extracted in the Democratic Republic of Congo	of EU's magnesium supply is sourced from China	of the rare earths used for permanent magnets are refined in China	of EU's supply of borate is provided by Türkiye

Source: European Commission

As set out in Table 2, Ireland and the EU are dependent on the import of many raw materials, including CRMs. Resource efficiency is insufficient at both national and EU levels while environmental externalities from the linear economy are not internalised. To reduce this dependence, improve competitiveness, and reduce pressures on the environment, a circular economy is essential.

With the **European Critical Raw Materials Act**¹⁷⁷ (CRMA), the EU aims to ensure secure and sustainable supply of critical raw materials for Europe's industry and significantly lower the EU's dependency on imports from single country suppliers. The Act will do so by improving the EU's preparedness and its ability to withstand disruptions in relevant supply chains.

There is also a new emphasis being placed on the EU's need to strengthen its CRMs resilience not only to underpin the green and digital transitions, but also to support the EU's industrial development and competitiveness enhancement ambitions, as well as the more recently announced defence readiness and stockpiling plans.

The CRMA is intended to complement existing legislation on treatment of raw materials including the **EU Extractive Waste Directive**¹⁷⁸, the **Waste Framework Directive**, the **WEEE Directive**, the **End-of-Life Vehicles** and **EU Batteries Regulations**¹⁷⁹. Accordingly, the circularity measures set out in the CRMA are intended to provide a new baseline for managing waste products with significant CRMs recovery potential.

In December 2025, the European Commission launched the **RESourceEU Action Plan**¹⁸⁰, a major initiative in securing the EU's autonomy over CRMs. The plan outlines a coordinated, accelerated effort to reduce reliance on non-EU suppliers, while enhancing the EU's capacity to extract, process, and recycle CRMs. It builds on the foundations laid by the CRMA in 2024 and comes amid increasing geopolitical instability and growing concerns over supply disruptions.

177 [European Critical Raw Materials Act - European Commission](#)

178 [Extractive Waste Directive](#)

179 [EU Batteries Regulation](#)

180 [New measures to secure raw materials and strengthen the EU's economic security - European Commission](#)

Action	Critical Raw Materials Act
A52	Ireland will adopt a national circularity programme under Article 26 of the EU CRMA to improve the circularity and sustainability of CRMs. The programme will include promoting CRM circularity, focusing on the collection of CRM rich WEEE and waste batteries, CRM recovery, and circular design.
A53	In accordance with Article 27 of the EU CRMA, Ireland will promote the recovery of CRMs from extractive waste . This will entail the characterisation of the quantities of CRMs in extractive waste and a database of closed abandoned extractive waste sites that have economically recoverable amounts of CRMs which is to be made publicly accessible.
A54	In accordance with Articles 28 and 29 of the EU CRMA, Ireland will implement measures in relation to certain products containing permanent magnets, to identify products containing permanent magnets and their content of recycled permanent magnets.

Target	Critical Raw Materials Act
T32	Ireland will adopt and implement national measures on circularity in relation to critical raw materials in accordance with EU CRMA and report on its progress to the European Commission in 2026 and annually thereafter.
T33	Ireland will adopt and implement measures to promote the recovery of CRMs from extractive waste by 24 November 2027.
T34	Ireland will adopt and implement measures to appropriately identify products containing permanent magnets as specified by, and within two years of the entry into force of, implementing acts of the EU CRMA relating to permanent magnets.

6.2 Addressing Financial and Administrative Barriers for Reuse and Repair

The low cost of new goods and high labour costs associated with handling, reusing and repairing used items are major barriers to the circular economy, distorting the market against reuse or repair. As highlighted in the new EPA study on **Business-to-consumer (B2C) repair enterprises in Ireland**¹⁸¹, the operating cost of repair is a significant challenge in Ireland with “enterprises in certain subsectors struggling to break even”. European behavioural studies have also found that the price of repair (and especially the price gap between repair and replacement) can be the most important factor influencing a decision to repair¹⁸².

VAT is charged in Ireland on second-hand goods - though the margin scheme means that dealers in certain second-hand goods, works of art, antiques and collectors' items can pay VAT on the difference between the sale price and the purchase price of the goods. The scheme goes some way to support second hand retail.

The **EU VAT Labour-Services Directive** (2009)¹⁸³ enables Member States to experiment and implement targeted reduction of VAT for labour-intensive services including small repairs. There is potential in Ireland to seek to encourage greater repair by implementing a reduced rate for repair services, noting that the minimum allowed by the EU Directive is 5%.

In 2016, Sweden reduced its VAT rate from 25% to 12% for small repairs of bicycles, shoes, leather goods, clothes, and linen. In 2019, the Netherlands reduced its vat rate for repair services from 21% to 9%. In addition to reduced VAT for repair services, multiple EU countries have implemented repair voucher schemes (Austria, Germany) and in December 2022, France introduced a repair bonus scheme linked to their Extended Producer Responsibility Schemes¹⁸⁴.

However, it is important to note that existing VAT reductions schemes for repair services and repair voucher schemes across Europe tend to be targeted towards place-based micro enterprise who can find the reporting requirements burdensome. In addition, studies seeking to understand the impact of the VAT reduction on these schemes indicate that it works well in some but not all consumer goods categories and the perceived value of the product impacted willingness to repair.

181 [Business-To-Consumer Repair Enterprises in Ireland – EPA Circular Insights Series](#)

182 [Behavioural study on consumers' engagement in the circular economy - Publications Office of the EU](#)

183 [Council Directive 2009/47/EC](#)

184 [Republique Francais. Entreprendre. Serice-Public,fr – Repair bonus – pass it onto your customers.](#)

Repair in Ireland is subject to the lower-services level VAT 13.5% - specifically bicycles, clothes, shoes - though electronic and electrical goods are subject to the higher VAT rate of 23% when repaired.

As highlighted in the EPA study, repair “retains” rather than “adds” the value of goods already in the market and so it could be argued that repair services should not qualify for VAT. The same argument can be applied to reuse.

Further research providing a holistic overview of taxes and subsidies to identify a suitable combination of VAT and complementary and/or alternative tax measures to incentivise prevention, reuse and repair is required and will be undertaken by DCEE.

Product reuse and repair are building blocks of a circular economy and can contribute to climate change mitigation by preventing resource depletion, diverting products and materials from landfills and incineration (therefore preventing associated emissions), and reducing energy demand.

As previously referenced, the NRRN, established by the EPA, plays a key role in bringing together public bodies and national organisations to facilitate knowledge sharing and engagement to support and scale reuse and repair in Ireland.

Certain countries in the EU have introduced discount schemes for repair services, often referred to as ‘vouchers’, allowing citizens or repair enterprises to claim back part of the cost of repair services for eligible product categories. Examples include the Austrian and French repair bonus schemes, and the Amsterdam discount scheme for clothing repair.

Ireland’s transition to a circular economy has been supported by funding innovative projects and establishing initiatives like repairmystuff.ie, an online directory to find local repair services for items like appliances, furniture, and clothes. The EPA **Circular Economy Programme** has also been pivotal in the transition, and as described above, the **Business-to-Consumer (B2C) repair enterprises in Ireland**¹⁸⁵ highlights the need for greater repair sector development to encourage product longevity and reduce consumption.

As a joint initiative of the EPA, Monaghan County Council, WEEE Ireland and the White Goods Association, in 2020 and 2021, ‘authorised repairers’ were identified on the RepairMyStuff.ie online directory of repairers. ‘Authorised Repairer’ status is now clearly displayed with a green ‘stamp’ on individual listings of particular EEE and white goods repairers on the directory. The status is validated based on the WEEE Ireland Compliance scheme and the registered producers in Ireland. This registry has the potential to be developed further, particularly in the context of introducing a repair voucher scheme and the implementation of the **EU Right to Repair Directive**.

185 [Business-To-Consumer Repair Enterprises in Ireland – EPA Circular Insights Series](#)

The **Circular Economy Innovation Grant Scheme**¹⁸⁶ (CEIGS) is a Government of Ireland initiative led by DCEE. This scheme provides funding for innovative projects focused on themes such as waste prevention, plastics, and C&D waste to advance the circular economy in Ireland. By funding these projects and enterprises, the CEIGS directly supports the growth of the circular economy in Ireland and provides high-profile examples of best practice.

The CEIGS was established by the department in 2021, and since that first call, CEIGS funding totalling €1.79 million has been awarded to 36 projects covering a wide range of circular economy themes including food waste, plastics, EEE, single-use plastics, packaging, construction, textiles and general waste.

As mentioned in the introduction, from 2026, annual CEIGS funding will increase from €650,000 to €1.5M and a portion of this funding will be ring-fenced to provide financial and technical support to small businesses specialising in repairing electronics.

Circular Economy Fund

The **Circular Economy Fund**¹⁸⁷ (CEF) was established by the **Circular Economy and Miscellaneous Provisions Act 2022**, with effect from 1 July 2023. The CEF replaced the Environment Fund allowing for greater alignment of the Fund activities to further promote circular economy principles. The CEF's revenue is derived from environmental levies that were introduced in respect of plastic bags (currently 22 cent), landfill (currently €85/tonne) and low-value recovery activities (currently €10/tonne).

In 2025 over €30 million has been allocated from the CEF to a variety of circular initiatives including:

- The Circular Economy Innovation Grant Scheme (CEIGS), which supports projects that promote waste prevention and advance the circular economy
- EPA Circular Economy Programme (2021–2027): Focused on licensing, data monitoring, and implementation, this programme builds the evidence base for circular economy policy and practice
- Anti-Dumping Initiative¹⁸⁸ (ADI): Since 2017, the ADI has funded local clean-up and prevention projects. In 2024 alone, 224 projects were delivered, including bulky waste collections and hazardous waste amnesties
- Irish Environmental Network¹⁸⁹: A coalition of environmental NGOs that promotes sustainability through education, citizen science, and policy development

¹⁸⁶ [Circular Economy Grants Announced - Community Foundation Ireland](#)

¹⁸⁷ [€27 million to accelerate Ireland's circular economy transition](#)

¹⁸⁸ [Anti-Dumping Initiative](#)

¹⁸⁹ [Homepage - Irish Environmental Network](#)

- Food Circle Project¹⁹⁰: Supports Ireland's **National Food Waste Prevention Roadmap (2023–2025)**, with a focus on food donation and redistribution, food waste measurement, and innovation
- Community Resources Network Ireland¹⁹¹: The only community reuse and recycling network in Ireland, it has, along with its members, the potential to play a unique and valuable role in the development of resource efficiency and circular economy initiatives at both local and national levels.

As revenues to the CEF increase, it will be important that it supports measures that are aligned with this Strategy, including an enhanced focus on reuse and repair of consumer products. In that context a National pilot Repair Voucher Scheme will be introduced with support from the CEF. The pilot scheme will be designed through the NRRN, to be rolled out no later than 2027. This is intended to facilitate a shift in conventional consumer roles from purchasers to stewards of products and devices by reducing repair costs, elevating the perceived value of old devices and signalling societal support for repair, thus supporting everyday device care.

New Solutions Social Innovation Scaling Grants

The **New Solutions Social Innovation Fund**¹⁹² aims to enhance the social innovation ecosystem in Ireland. It has been established by the Department of Rural and Community Development and the Gaeltacht and is co-funded through the European Social Fund + 2021-2027, a European initiative aimed at reducing the risk of poverty and social exclusion, with an emphasis on disadvantaged groups.

The overarching objective for New Solutions is to enhance the social innovation ecosystem in Ireland by 'fostering active inclusion, promoting equal opportunities, non-discrimination and active participation, and to improve employability, for disadvantaged groups including through the social enterprise business model.'

Applicants were eligible to apply for a minimum of €250,000 to a maximum of €300,000 in funding under the most recent call and were required to provide match-funding of a minimum of 10% of the grant amount requested.

The Rediscovery Centre were successful in their application and received funding to scale further by establishing Circular Economy hubs in a further three regions of Dublin. In October of 2025 the Rediscovery Centre signed a Memorandum of Understanding (MOU) with Dún Laoghaire-Rathdown County Council¹⁹³ (DLR), marking an important step in its work to promote the circular economy. As part of this new partnership, DLR and the Rediscovery Centre will work together to

¹⁹⁰ [Food Circle](#)

¹⁹¹ [Home - Community Resources Network Ireland](#)

¹⁹² [New Solutions Social Innovation Fund – creating better outcomes](#)

¹⁹³ [DLR and Rediscovery Centre Sign Agreement to Launch Local Circular Economy Hub | Dún Laoghaire-Rathdown County Council](#)

set up a local hub in the Dún Laoghaire-Rathdown area to encourage community action and support sustainable living.

Further Challenges:

The cost of product liability insurance has been identified as a challenge for repair enterprises in Ireland particularly for enterprises providing repair services for certain product categories including EEE, bicycles and furniture.

Certification/accreditation with a third-party quality mark or standard, can serve to mitigate this problem but there remains an underlying problem of the cost of the accreditation process, and the high insurance premiums for enterprises, many of which are socially orientated already challenged by high operating costs. This has impacted the operation of “repair cafés” negatively as if a repair café is run without product liability insurance, then the repair café organiser may be liable to personally pay compensation for any harm or damage caused by the repair café activities.

Removing insurance barriers to repair involves several key approaches, including professionalising repair organisations by implementing robust health and safety policies and volunteer screening, and creating group insurance schemes to achieve economies of scale. Ongoing reforms of insurance legislation and enhancing the powers of bodies like the Competition and Consumer Protection Commission are required to address high costs and foster competition within the insurance market.

At EU level, there is an acknowledgement of the need for insurance reform to support the circular economy. The **Product Liability Directive**¹⁹⁴ has been revised to support circular business models, noting that “existing product liability rules do not define who should be liable for defects resulting from changes to products after they are put into circulation”.

DCEE will support DETE in the transposition of the EU ‘Product Liability’ and ‘Right to Repair’ Directives to investigate mechanisms that could be introduced through legislation, with the potential to reduce the liability of repair cafés and enterprises or increase the stringency of requirements for successful legal action on the basis of loss or damage resulting from defects in repaired products.

DCEE will support the Regional Waste Management Planning Office (RWMPO) in the delivery of its Repair Target Roadmap: the actions set out below may assist in the delivery of this Roadmap.

¹⁹⁴ Product Liability Directive

Action	Repair/Reuse
A55	Undertake research to provide an overview of taxes and subsidies to identify a suitable combination of VAT and complementary and/or alternative tax measures to incentivise prevention, reuse and repair. Such research will include examining VAT on donations of goods prohibited from being destroyed under the ESPR.
A56	Introduction of a pilot Repair Voucher Scheme.
A57	Increased allocation to the CEIGS from €650,000 to €1.5 million.
A58	Ringfenced support from the CEIGS to provide financial and technical support to small businesses specialising in repairing electronics.
A59	Work with representative reuse and repair organisations, insurance bodies and other departments in identifying and implementing insurance reforms to support the development of more reuse cafés and associated repair infrastructure.
A60	Undertake a mapping exercise to identify all circular economy funding opportunities at both national and EU levels and engage with stakeholders to ensure that these are fully utilised.

Target	Repair/Reuse
T35	VAT and Subsidies study completed and informing policy decisions.
T36	Introduction of targeted pilot initiatives to encourage repair and reuse activities, subject to normal budgetary processes and evaluation of cost-effectiveness.
T37	Increase in CEIGS funding in place and directly supporting repair and reuse organisations.

6.3 Circular Economy Infrastructure

Civic Amenity Sites

There are 96 local authority Civic Amenity Sites (CAS) which play a significant role in waste management in Ireland. The CAS are designed to cater for waste streams outside current kerbside collection systems such as household hazardous, WEEE, batteries, wood, metals, paints, furniture, green waste and 'higher order' activities such as reuse and education. CAS are designed to complement, and in some instances provide an alternative option to, kerbside collection of household wastes. CAS are essential recovery infrastructure for items that are not collected or are costly to collect at kerbside. They continue to play a central role in Ireland's waste infrastructure and in delivering targets. The sites, together with bring banks, collect 15% of household waste and achieve high recycling rates driven by good onsite segregation of materials.

The CAS provide options for responsible waste management and additional services, many of which are not available elsewhere. They serve as convenient public facilities where people can dispose of waste, but increasingly also act as collection points for materials that could be channelled into new businesses and social enterprises, supporting the circular economy's goal of minimising waste and maximising resource value.

CAS have a record of innovative waste acceptance approaches, often being the only public recycling option for certain waste streams. This innovative and customer facing approach has significant potential in developing the circular economy throughout Ireland. However, higher order waste activities including repair and reuse, and associated educational activities, are currently inconsistent and unintegrated across the network.

One of the objectives of this Strategy is to transform CAS into circular economy hubs that encourage and facilitate the donation, repair, and reuse of items such as furniture, textiles, EEE and bicycles, and which fosters partnerships with social enterprises, charities or businesses. Such partnerships can bring nationally aligned benefits and help commence, deliver and sustain activities that are socially, environmentally and financially sustainable, and bring new approaches in materials acceptance and management.

DCEE will work with and financially support the local authority sector to develop an integrated, consolidated, coordinated public circular economy infrastructure network that responds sustainably to consumer needs, and supports the ecosystem of reuse and repair organisations and businesses, as well as the circular bioeconomy, to deliver the objectives and aims of a circular economy.

Circular Economy Demonstration and Outreach Hubs

The Rediscovery Centre¹⁹⁵ is a national centre for the circular economy in Ireland. The Centre supports four reuse social enterprises: Rediscover Furniture, Rediscover Fashion, Rediscover Paint and Rediscover Cycling. These businesses use unwanted materials for new product development and design, demonstrating effective resource efficiency, reuse and low carbon living. The Centre acts as an innovation hub, delivering education, providing research and enabling policy, citizen engagement and collaboration to support community action.

There is potential to scale up and expand the geographical presence of the Rediscovery Centre through Circular Economy Demonstration and Outreach Hubs (CEDOHs) across Ireland. This would provide locally based centres for circular economy knowledge with associated opportunities for circular employment, training, education activities, and access to circular business outputs including reuse, repair and sharing of products. Such regional scale up and expansion is aligned with the recommendations set out in the Organisation for Economic Co-operation and Development's (OECD) 2025 **Report on the Circular Economy in the Western Region, Ireland**¹⁹⁶.

DCEE is supporting the Rediscovery Centre through the Circular Economy Innovation Grants Scheme in undertaking a feasibility study to inform the design of delivery models for CEDOHs with a view to the production of an evidence-informed Strategy for establishing new regional CEDOHs that will build local awareness of circular economy principles to ultimately reduce consumption and waste generation in Ireland.

¹⁹⁵ [The Rediscovery Centre](#)

¹⁹⁶ [The Circular Economy in the Western Region, Ireland | OECD](#)

Action	CE Infrastructure
A61	Review the Waste Management (Facility Permit and Registration) Regulations and seek to introduce appropriate authorisations for circular economy activities.
A62	Develop proposals for an interconnected network of Circular Economy Hubs during the lifetime of the National Waste Management Plan for a Circular Economy.
A63	Support the local authority sector in undertaking Enhancement of the Operation of the Civic Amenity Site Network Project.
A64	DCEE to fund appointment of a Project Manager as per A64 and participate on the Project Board.
A65	Support the Rediscovery Centre in finalisation of a feasibility study to establish a network of CEDOHs, due to conclude in June 2026.
A66	Continue to support the Rediscovery Centre in the national rollout of CEDOHs.

Target	CE Infrastructure
T38	Establishment of at least one local authority circular economy hub in each of the waste management regions.
T39	At least three CEDOHs subject to Pilot Programmes in place by end of 2028.

6.4 All Island Circular Economy Opportunities

The government's Shared Island Initiative has driven a step change in island-wide investment cooperation. The government has allocated more than €550 million to date to projects and programmes that deliver benefits and connect people across both jurisdictions on the island.

This includes the **North South Research Programme (NSRP)**¹⁹⁷, which commenced in 2021, to support collaborative basic and strategic research, innovation and development. The NSRP supports research, innovation and development activity between individuals, research teams (in and between disciplines) as well as between higher education institutions on the island. In the case of the latter, this includes support up to and including all-island emerging hubs of excellence focusing on shared challenges such as, for example, those identified within Horizon Europe's mission-based approach and the United Nations SDGs.

The governments of Ireland and Northern Ireland are committed to fostering sustainable development and implementing circular economy strategies to achieve environmental and economic benefits. Both Ireland and Northern Ireland align with the European Commission's CEAP, providing a framework for a consistent approach to circular economy practices.

Through collaborative action, the circular economy presents a transformative opportunity for the island of Ireland. By prioritising innovation, resource reuse, and cross-sector collaboration, businesses can reduce environmental impacts while boosting growth and profitability.

In Ireland, a 5% improvement in resource efficiency across the economy would deliver over €2.3 billion annually¹⁹⁸. Meanwhile, in Northern Ireland, circular economy activity in priority sectors could contribute an additional £474 million in gross value added¹⁹⁹.

In 2024, InterTrade Ireland published a report identifying circular economy opportunities on the island of Ireland²⁰⁰. The findings underscore how circular principles can influence key areas, including resource efficiency, waste management, skills development, innovation, and climate change. A key takeaway is that resource efficiency, including industrial symbiosis – the use of waste from one production process as raw material for another – will play a crucial role in achieving carbon reduction targets. For an island of this size, collaboration between both jurisdictions is important to reach the economies of scale that will allow the circular economy to compete against the linear economy.

197 [Taoiseach and Minister Lawless announce outcomes of the second call for the North-South Research Programme | News | Higher Education Authority](#)

198 [Intertrade Ireland](#)

199 [Report: Identifying Circular Economy Business Opportunities on the Island of Ireland](#)

200 [Report: Identifying Circular Economy Business Opportunities on the Island of Ireland](#)

The report also highlights the need for strong collaboration between policymakers across the island to maximise these opportunities. To facilitate this dialogue, InterTrade Ireland has established an **All-Island Circular Economy Forum** where issues such as harmonisation of waste regulations, establishing green public procurement frameworks, and creating a shared resource matching service, can be explored.

Industrial symbiosis presents an opportunity to optimise resource use, reduce waste, and drive innovation within industrial ecosystems. To realise this opportunity a feasibility study will be undertaken to assess the viability and potential of implementing industrial symbiosis initiatives across the island of Ireland.

The objectives of the feasibility study are to:

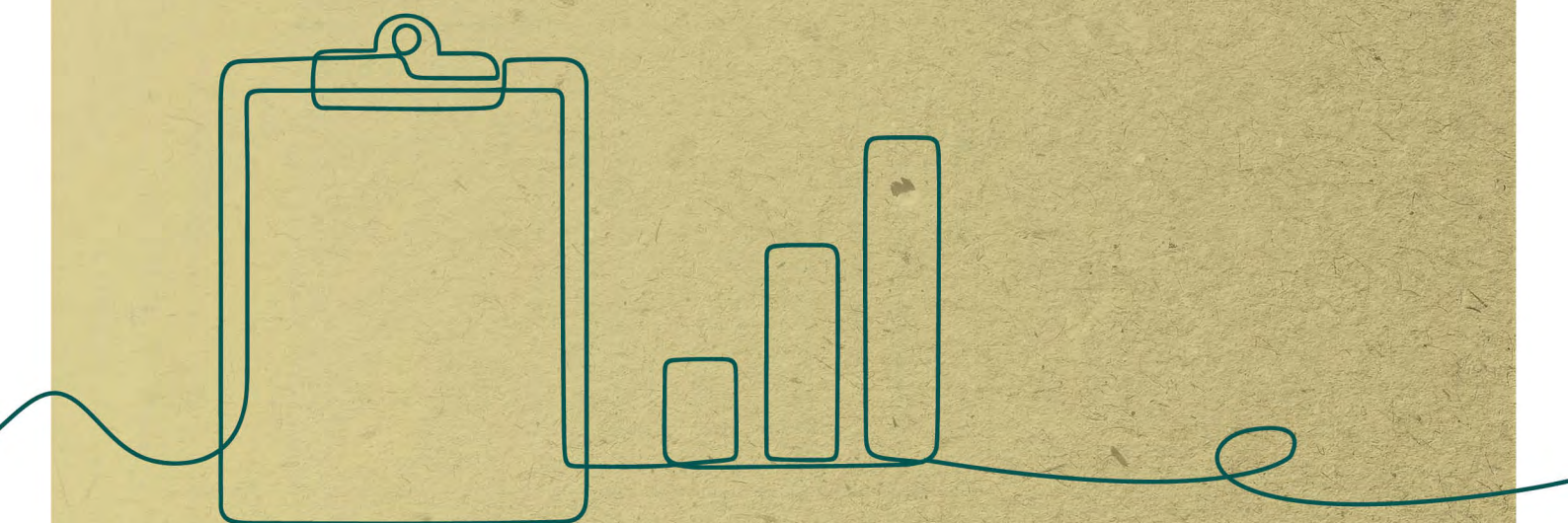
- Evaluate the current industrial landscape and identify key sectors and stakeholders across Ireland and Northern Ireland.
- Assess the potential for industrial symbiosis within and between sectors, including manufacturing, agriculture, energy, and waste management.
- Identify opportunities for resource sharing, waste exchange, and collaborative innovation among industries.
- Evaluate the environmental, economic, and social benefits of implementing industrial symbiosis initiatives.
- Develop a roadmap outlining strategic actions, policies, and investments required to promote industrial symbiosis and achieve circular economy goals.
- Provide recommendations for governance structures, funding mechanisms, and stakeholder engagement strategies to support the implementation of industrial symbiosis projects.

Action	Towards an All-Island Circular Economy
A67	Active participation, across sectors, on the All-Island Circular Economy Forum to maximise opportunities in developing an All-Island Circular Economy.
A68	Undertake a feasibility Study for Industrial Symbiosis on the Island of Ireland with a view to establishing an All-Island digital platform for enabling industrial symbiosis across key sectors.
A69	Utilise Shared Island Funds to develop All Island circular economy opportunities, including the development of a network of circular economy hubs in Dublin and Belfast and measures to coordinate and evolve existing circular economy supports in Dublin, Belfast and along the corridor between the two capital cities.

Target	Towards an All-Island Circular Economy
T40	All Island digital industrial symbiosis platform established.

7

Monitoring Framework



7. Monitoring Framework

Introduction

A robust monitoring framework is essential to track progress on Ireland's circular economy goals, to ensure accountability, and to guide policy. Monitoring uses clear actions and targets aligned with the Strategy, in some cases, using quantitative or qualitative metrics. The monitoring framework for this Strategy combines economy-wide metrics with sector-specific measures.

As the **CMUR** will be a key metric in measuring our circularity, it should be noted that research funded by the EPA²⁰¹ has found that the calculation of the CMUR metric has a disproportionately negative impact on Ireland. The most significant limitation for Ireland's CMUR, relates to the use of the Domestic Material Consumption²⁰² (DMC) metric. DMC measures material consumption, but not the total material footprint of that consumption. Raw Material Consumption²⁰³ (RMC) is an alternative metric to DMC which is a more accurate representation of the material footprint of consumption.

This Strategy includes targeted sectoral interventions for improving our circularity. In relation to the limitations of the CMUR, Ireland will continue to engage with Eurostat on methodological challenges around measuring the consumption and trade of waste for recycling, and inconsistency in the interpretation of definitions across the EU relating to specific material recycling or recovery to develop further and improved indicators. With respect to monitoring progress, the CMUR will be calculated with DMC and RMC as part of a National Circularity Dashboard.

Objectives and Targets

The Strategy has set sectoral actions and targets (for construction, agriculture (the bioeconomy), retail, packaging, textiles and electronic equipment) covering aspects such as reductions in resource use and increases in reuse/repair. The monitoring framework thus includes metrics that directly measure those target areas (e.g. material consumption or virgin material use by sector, reuse/repair rates) so that government can track each sector against its associated actions and targets.

201 [Research 458: A Critical Analysis of Ireland's Circular Material Use Rate \(CAIR\) | Environmental Protection Agency](#)

202 [Glossary: Domestic material consumption \(DMC\) - Statistics Explained - Eurostat](#)

203 [Raw material consumption | Waste prevention | Circularity Metrics Lab \(EEA\)](#)

Government will assess progress towards the Strategy policy goals using actions and some fixed, binding targets. Each set of sectoral actions and targets includes metrics, where appropriate, that translate broad strategic objectives into measurable trends.

In this way, monitoring focuses on direction of travel and policy relevance rather than reporting exclusively against a rigid checklist of targets. Actions and targets can be reviewed to see whether progress is trending positively, stagnating, or worsening. This allows the frameworks to guide policy adjustments, to identify areas where measures are lagging, and to track the contribution to broader goals such as the Green Deal, SDGs, and climate neutrality objectives.

The actions and targets provide a consistent baseline against which progress can be monitored and compared. Metrics are needed to support certain targets. Some metrics proposed measure the process of the circular economy transition, while others measure the impact of the transition. Some provide insights into the processes taking place in Ireland, while others provide a picture of the outputs and changes in the Irish economy. Metrics proposed measure both what happens nationally and, in some cases, include flows beyond Ireland.

Some actions and targets use existing data. Others may require new data collection (e.g. surveys of business circular activities, tracking of reuse/repair businesses, or digital waste reporting systems). Qualitative actions and targets include tracking the number of circular economy initiatives funded, corporate circular economy pledges, R&D projects, or public awareness campaigns in sectors. There is a need for both “output/performance” indicators (e.g. products recycled, patents in circular technology) and “process” indicators (e.g. policies enacted, funding disbursed).

Monitoring

The measurement process relies primarily on official statistical data (e.g. Eurostat, national statistical institutes.), supplemented by modelled or derived data where direct measurements are not available (e.g., material footprints). Each action and target’s metric can be updated regularly as new data are reported, ensuring comparability across Member States and over time.

EU and International Monitoring Protocols

The EU’s **Circular Economy Monitoring Framework**²⁰⁴ (CEMF) uses five thematic areas (production/consumption; waste management; secondary raw materials; competitiveness/innovation; global sustainability) with ~11 headline indicators (with sub-indicators). The structure of the CEMF is shown in Figure 6 below.

204 [Monitoring framework - Circular economy - Eurostat](#)

Figure 6: EU Circular Economy Monitoring Framework has indicators in five dimensions

Circular Economy Monitoring Framework				
Production and consumption	Waste management	Secondary raw materials	Competitiveness and innovation	Global sustainability and resilience
- Material footprint - Resource productivity - Green public procurement - Total waste generation - Waste generation – excluding major mineral waste - Municipal waste generation - Food waste - Packaging waste generation - Plastic packaging waste generation	- Recycling rate of municipal waste - Waste recycling rate – excluding major mineral wastes - Recycling rate of overall packaging - Recycling rate of plastic packaging - Recycling rate of WEEE separately collected	- Circular material use rate - End-of-life recycling input rates – aluminium - Imports from non-EU countries - Export to non-EU countries - Intra EU trade	- Private investments - Persons employed - Gross value added - Patents related to waste management and recycling	- Consumption footprint - GHG emissions from production activities - Material import dependency - EU self-sufficiency for raw materials – aluminium

Source: Eurostat, 2023d.

As noted in a 2025 EPA research report²⁰⁵ “Ireland is not yet tracking all of the indicators deemed relevant to the circular economy in the EU’s Circular Economy Monitoring Framework. Similarly, with the bioeconomy, there is a need to develop and monitor performance in respect of a range of new indicators. ...A priority ... should be to build on the work done to date on capturing data on the circular economy and bioeconomy, in particular the identification of suitable key performance indicators to track progress in both policy areas in terms of broader outcomes.”

The EU publishes data from the CEMF²⁰⁶, which helps evaluate Ireland’s progress towards a circular economy by displaying an overview of relevant material flow indicators. The visualisation of Ireland’s CEMF indicators (e.g. in 2024 as set out in Figure 7) allows exploration of the simplified life cycle of materials in Ireland from the start through to material processing to their different uses and final stages.

International guidelines (UNECE/OECD 2024²⁰⁷) also recommend a structured approach: a conceptual framework with indicators. The **World Economic Forum/UN PACE Scoreboard**²⁰⁸ proposes indicators that measure transition (e.g. number of circular projects, policy adoptions) and others measure outcomes (e.g. tonnes recycled, jobs in circular sectors).

For bioeconomy, the **EU Bioeconomy Monitoring System**²⁰⁹ (BEMS) offers a comprehensive overview of European trends in indicators related to the EU Bioeconomy. Selected indicators from the BEMS (e.g. food waste, biowaste, circularity) are relevant and will be adopted in the Strategy framework.

Ireland intends to align its Strategy monitoring with the CEMF²¹⁰, the BEMS²¹¹ and the **Circular Cities and Regions Initiative**²¹² adopting the EU indicators (which address for example material footprint, consumption footprint, resource productivity and GHG emissions from production as part of a circularity dashboard. Ireland will also align with other appropriate global frameworks, as appropriate.

National Monitoring

Ireland will also use existing related national indicators and targets that can be linked into the circular economy framework. The **National Waste Management Plan for a Circular Economy (2024-2030)** set quantitative targets (e.g. 0% net waste growth per person, 50% food waste reduction by 2030). The public sector climate action plan mandates now require tracking specific items (e.g. measuring food waste, paper use, and green public procurement compliance).

205 [A Review of Circular Economy and Bioeconomy Governance in Ireland](#)

206 [Monitoring framework - Circular economy - Eurostat and data visualisation](#)

207 [Monitoring Progress towards a Resource-Efficient and Circular Economy | OECD](#)

208 [Circular Indicators for Governments | Platform for Accelerating the Circular Economy](#)

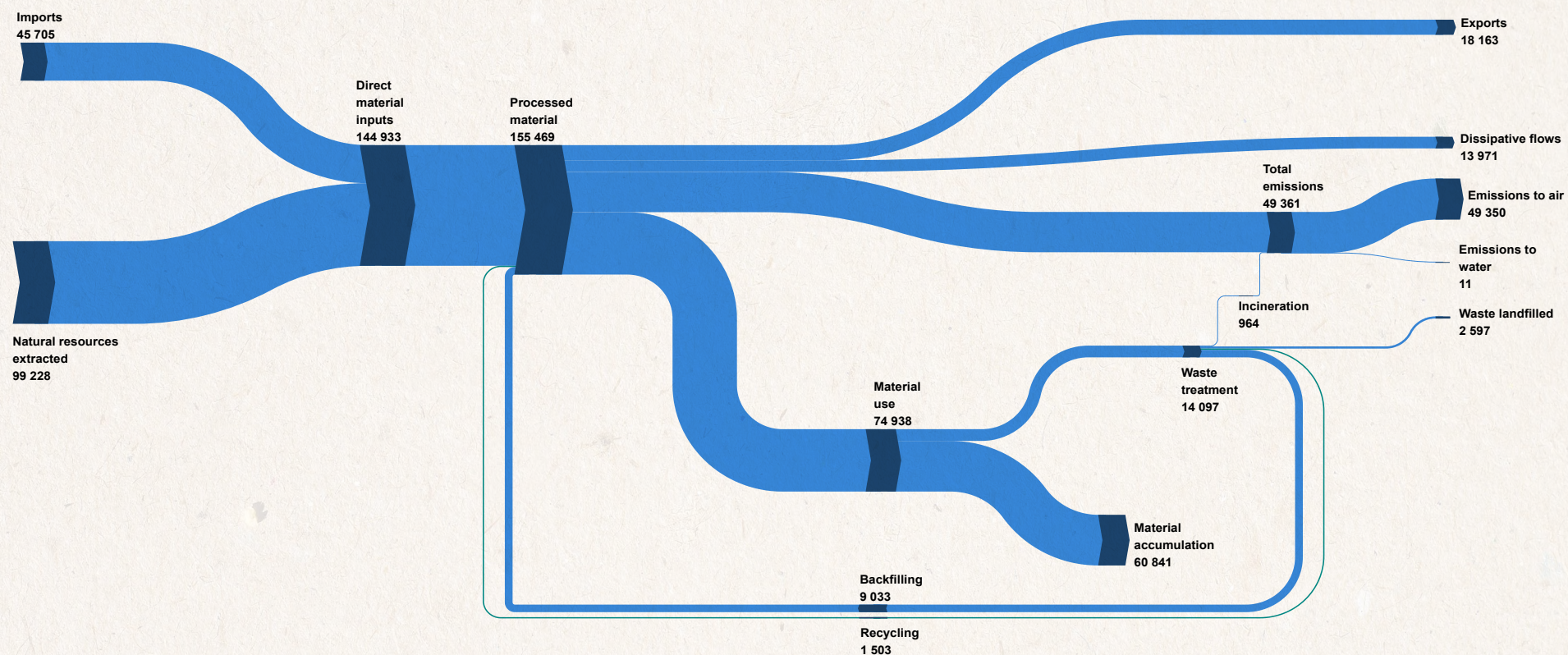
209 [EU Bioeconomy Monitoring System](#)

210 [Monitoring framework - Circular economy - Eurostat](#)

211 [EU Bioeconomy Monitoring System | Knowledge for policy](#)

212 [Circular Cities and Regions Initiative | Circular Cities and Regions Initiative](#)

Figure 7. CEMF Visualisation of Ireland's 2024 Material Flows ('000s Tonnes)



Source: Ireland's State of the Environment Report, EPA, 2024.

The EPA's **Circular Economy Programme** embeds metrics in all projects: it collects data on waste arisings and treatment and reports annually on progress, and the EPA compiles national waste and recycling statistics for EU reporting. Ireland has aligned its monitoring Strategy with the appropriate national monitoring protocols.

Reporting

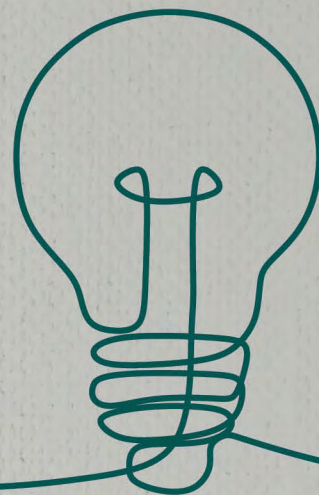
As required by the **Circular Economy and Miscellaneous Provisions Act 2022**, an Annual Circular Economy Progress Report will be published on an annual basis on the progress made on the implementation of the Strategy and progress made in relation to actions and target attainment as set out in Chapter 3.

Such reporting will be frequent enough to capture trends (annual is typical for most circular economy statistics) and tied to policy review cycles. The **EU Circular Economy Action Plan** envisions annual Green Deal Dashboard updates using CE indicators. In a similar fashion, Ireland will publish a public “Circularity Dashboard” in its reporting, summarising progress on actions and targets with narrative analysis.

Action	Monitoring Framework
A70	DCEE and EPA to continue discussions with the European Environment Agency (EEA) on the issues regarding the use of CMUR as a metric and the disproportionate effect it has on certain Member States, including Ireland.
A71	DCEE to engage with CSO in 2026 to develop a ‘circularity dashboard’ to monitor progress on increasing circularity.

8

Research and Innovation



8. Research and Innovation

Introduction

Research and innovation are central to Ireland and the EU's efforts to transition towards a circular economy. Our ambition, as set out in the first **Whole of Government Circular Economy Strategy 2022-2023**, was for *'Ireland to be an EU and global leader in the circular economy transition, protecting our natural resources, environment and health while also assisting in the journey to climate neutrality by 2050. This in turn will make a significant contribution to delivering sustainable and regionally targeted economic and employment opportunities. The achievement of our climate and environment objectives is also a key step in ensuring further progress in relation to the Sustainable Development Goals'*.

EU and National Research and Innovation Landscape

Horizon Europe²¹³ is the EU's key funding programme for research and innovation with a funding amount for the period 2021-2027 of €93.5 billion. The programme addresses climate change, helps to achieve the UN's SDGs and boosts the EU's competitiveness and growth.

The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports creating and better dispersing of excellent knowledge and technologies. In addition, it creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.

Its powerful instruments and innovative governance aim to drive the necessary systemic changes to reach climate neutrality and ensure an inclusive ecological and economic transition. In synergy with other EU programmes, Horizon Europe is key to leveraging national public and private investment. Together, they foster

²¹³ [Horizon Europe the EU's funding programme for research and innovation](#)

new technologies, sustainable solutions and disruptive innovation and spread successful new solutions across Europe and the world.

In July 2025, the European Commission put forward its proposal for the **Horizon Europe Framework Programme (2028–2034)**²¹⁴, which will operate in close connection with the new European Competitiveness Fund²¹⁵. With a proposed €175 billion budget, the programme will boost Europe's productivity and competitiveness, while also improving the well-being of millions of people across the continent. Interinstitutional negotiations between the European Parliament, Council and Commission will now take place on the proposal.

The **EU LIFE Programme's Circular Economy subprogramme**²¹⁶ supports the transition to a sustainable, circular and resilient economy by funding projects that demonstrate innovative technologies and solutions for resource recovery, waste reduction, eco-design and circular business models. It aligns closely with the **EU Circular Economy Action Plan and the European Green Deal**, targeting priority sectors such as textiles, electronics and bioeconomy. The LIFE Programme promotes upscaling of best practices, policy implementation and circular governance, encouraging integration of circular principles.

These principles compliment Ireland's Circular Economy Strategy, working across product lifecycles to reduce environmental impacts and enhance resource efficiency. The future of the EU LIFE Programme is under consideration under the Commission's proposal for the next Multi-Annual Financial Framework.

Impact 2030²¹⁷, Ireland's national strategy for research and innovation (R&I), aims to maximise the benefits of R&I in addressing our social, economic, and environmental challenges. It acknowledges the role of R&I as critical enablers to support delivery of Ireland's climate action targets, and to identify and support actions to address Ireland's environmental and sustainability challenges. It emphasises the role of public research funding in strengthening Ireland's fundamental research and knowledge base including interdisciplinary research activity to deliver on these critical areas. It aims to embed R&I at the centre of public policy development, and to strengthen a culture of innovation across the public service. Impact 2030 also highlights the opportunities presented by taking a mission-oriented or challenge-based approach to deliver tangible impact for society in the form of practical solutions.

In 2022, DETE published an updated **Smart Specialisation Strategy**, covering the period to 2027, and embracing a regional approach to addressing Ireland's research, development and innovation challenges. The Strategy emphasised the

214 [Horizon Europe 2028 - 2034: twice bigger, simpler, faster and more impactful - European Commission](#)

215 [European Competitiveness Fund](#)

216 [Circular economy and quality of life - European Climate, Infrastructure and Environment Executive Agency](#)

217 [Impact 2030: Ireland's Research and Innovation Strategy](#)

circular economy as a strategic driver for innovation and outlines a range of R&D projects aimed at fostering the development of circular products and services.

In 2024 DCEE launched its inaugural **Research and Innovation Strategy**. The R&I Strategy sets out a series of actions across five goals with the overall aim of putting research and innovation at the heart of DCEE's work. The **Research and Development Budget 2022 to 2023**²¹⁸ identifies DCEE as the fifth largest investing government department in research and innovation. This R&I Strategy sets out a strategic approach to facilitate ambitious engagement in R&I across all areas of the department. It recognises the transformational potential of R&I and endeavours to harness that potential to achieve the department's strategic goals, including on the circular economy.

The EPA manages an environmental research programme that delivers essential scientific support for environmental policy development, implementation and broader decision making. The **EPA Research 2030 Framework**²¹⁹ is built on four interconnected research hubs, one of which is '**Facilitating a Green and Circular Economy**'. Research under this hub contributes to the mainstreaming of sustainable management of natural resources and waste, unlocking the potential of the circular and bio-economies, and boosting competitiveness, through resource efficiency and deployment of innovative technologies and solutions. The EPA's Circular Economy Programme and national Steering Committee supports the EPA Research programme in several ways including developing research call topics and participating in research steering groups.

Taighde Éireann – Research Ireland²²⁰, was established in 2024 following an amalgamation of Science Foundation Ireland and the Irish Research Council. It is Ireland's largest competitive funder of research and innovation. Research Ireland and its predecessor agencies have made several investments in circular economy research and innovation projects. Notably, Research Ireland has made a multi-million Euro investment in **BiOrbic**²²¹, the **Research Ireland Centre for Bioeconomy**. BiOrbic brings together over 200 researchers across 12 Irish research performing organisations to co-create knowledge and develop competitive real world sustainable circular bioeconomy solutions through interdisciplinary research collaboration and innovation. Research Ireland is an agency of the Department of Further and Higher Education, Research Innovation and Science working in collaboration with higher education institutions and other state agencies such as the Higher Education Authority, IDA Ireland and Enterprise Ireland.

²¹⁸ [The Research and Development Budget 2022 to 2023](#)

²¹⁹ [EPA Research 2030](#)

²²⁰ [Research Ireland](#)

²²¹ [Biorbic](#)

Enterprise Ireland supports industry-led R&I activity through programmes and infrastructure, many of which are advancing product design in circular economy and bioeconomy R&I projects. This includes technology centres, the Technology Gateway Network and various R&I funding programmes which encourage industry-academic R&I collaboration. The **Technology Centre Irish Manufacturing Research** provides the Secretariat for CIRCULÉIRE. Enterprise Ireland also manages the **Disruptive Technologies Innovation Fund (DTIF)** on behalf of DETE. The DTIF invests in industry-led research and innovation, bringing together academia and industry to develop and deploy disruptive technologies and applications. These programmes are addressing the **Impact 2030** goals to broaden and deepen enterprise innovation capability and cultivate industry-academic collaboration and research commercialisation. The transition to a circular economy will be supported by easier industry access to the public research system and a greater number of innovation-driven start-ups emerging from it.

The DAFM **Research Funding Programme** has funded several bioeconomy research initiatives. This includes co-funding bioeconomy projects with a link to energy with SEAI and cross-border funding for bioeconomy demonstrator projects (see 'Supporting Circular Economy Innovation').

Key Circular Economy Research Areas

Research creates a path for generating new ways of doing things and has an important role in informing policy making and the technological advances that will be required to support the achievement of a circular economy. To get the best outcomes, circular economy research should be interdisciplinary and cross-sectoral, bringing together academic researchers with enterprise and/or civil society organisations. From a societal perspective, there is potential for job creation, a social dividend and environmental value from the transition to a circular economy. Advancing our knowledge in the areas of production, consumption and disposal patterns, of materials and chemicals and their influence on the circularity of products, of societal and human behaviour and how change might best be achieved, and of the interactions between the bioeconomy and the circular economy will be vital to achieving our desired outcomes.

Key DCEE circular economy research needs have been identified and include:

- Life Cycle Assessment of Recyclable Washing Practices.
- Construction Waste Material Flows.
- Research to support the development of an All-Ireland circular economy.
- How do we encourage a single market for circular activities like reuse, recycling, refurbishing.

- Further embedding of the circular principle into the Irish economy – how do we overcome social and cultural barriers to reduce consumption to support the circularity principle.
- Research on imagined circular economy communities of the future.
- The impacts on environmental policies and community interaction on Irish people's daily lives.
- How to incentivise the reduction of the use of plastic in Irish food packaging.
- How to encourage a transition away from fast fashion by Irish consumers and support the Irish fashion industry to become more sustainable.
- How to embed the cascading principle for secondary biological resources and other biowastes.
- Determine the circular material use rate for biological resources in Ireland, including imports and exports.
- How to encourage Irish use of sustainable material inputs and sustainable energy to support the transition to a circular economy.
- Development of a smart circularity roadmap, with pilot schemes in logistics, waste tracking, industrial symbiosis, and material traceability.

Supporting Circular Economy Innovation

Innovation in the circular economy focuses on new technologies, materials, and business models that keep products and materials in use for as long as possible, minimizing waste and resource depletion. Key areas include eco-design, promoting repair and reuse, developing smart recycling technologies, and creating sharing/leasing platforms to extend product life cycles. Governments and organisations in Ireland support circular economy innovation through schemes like the CEIGS which funds projects to develop a more circular economy. Enterprise Ireland's suite of enterprise support programmes, including the new Smart Regions Enterprise Innovation Scheme²²² can be used by companies from across sectors in their transition to a circular economy.

CIRCULÉIRE is Ireland's industry-led innovation network for the circular economy, established by **Irish Manufacturing Research** to accelerate the transition to a net-zero carbon economy through innovation. It achieves this through funding provided by DCEE through the CEF by fostering cross-sectoral collaboration, providing innovation funding for projects on circular systems and business models, offering mentorship for scaling circular ventures, and supporting the development of Industry 4.0 digital technologies. Key activities include

222 [Smart Regions Enterprise Innovation Scheme](#)

supporting circular action plan development, baselining and impact measurement, the **Circular Venture Accelerator**, and the deployment of an **Innovation Pilot Project Fund** over 2020-2022.

CIRCULÉIRE is a key strategic partner for DCEE with a reach which extends beyond normal circular economy programmes, impacting the practices both on the floor and in the boardrooms of their members; adding value while reducing costs through the range of circularity business supports it offers including their circularity maturity toolkit and customised circular economy action plan development. They have co-designed and delivered multi-sector, multi-stakeholder thematic working groups in collaboration with national and international experts tackling topics of strategic importance, including circular design, packaging, plastics and procurement as well as topics as diverse as industrial symbiosis and the bioeconomy.

This engagement has enabled them to deliver on their core objective- to de-risk, de-mystify and deliver circular innovation which is critical to mainstreaming circular thinking across industry.

DCEE has made funding of €5.4 million available to **CIRCULÉIRE** since its inception in 2020. This funding will be enhanced over the lifetime of this Strategy to establish CIRCULÉIRE as a centre for excellence for circular innovation and deliver on the shared objectives to:

- Target reductions in CO2 and in waste across collective network members through product redesign; business model innovation; industrial symbiosis; materials substitution and other circularity strategies
- Raise awareness and increase understanding of circularity in Ireland
- Identify barriers to implementation and strategies to overcome them
- Develop frameworks, toolkits and deep demonstrations to de-risk and prove the value of a circular economy
- Inform Irish circular economy policy innovation.
- Close the gap between research demonstration and piloting, and scale-up and market deployment, including through industry-led demonstrator projects.

This investment in **CIRCULÉIRE** has the potential to deliver significant Economic Value Add to Irish industry including:

- Improved competitiveness of Irish manufacturers and their supply chains
- Reduced reliance on raw material imports
- Reduced supply scarcity and price volatility

- Improved recovery and retention of value
- Improved resilience of supply chain through diversification of sources
- The potential to safeguard as well as create new jobs in Ireland through circular manufacturing models and new business models

Innovation in the circular bioeconomy continues to be a focus area. Enterprise Ireland has funded a dedicated **Circular Bioeconomy Cluster**²²³, supporting 80 members across Ireland with R&D, bioproduct commercialisation, and circular economy training. The Irish Bioeconomy Foundation is supported through the **Regional Enterprise Development Fund** to develop a state-of-the-art National Bioeconomy Innovation and Piloting Facility encompassing flexible, modular, pilot-scale multi-purpose chemical & biological infrastructure. The **Shared Island Bioeconomy Demonstration Initiative** has invested €9 million in two bioeconomy demonstration initiatives with partners from across the island of Ireland.

Regulatory Sandboxing

As stated previously, in 2024 DCEE introduced regulatory mechanisms to support Ireland's transition to a circular economy, including criteria/decisions under Article 27 (by-products) and Article 28 (EOW) While these mechanisms have provided clarity on when materials can be used as resources rather than treated as waste, business would benefit from early-stage regulatory pathways that would allow companies to safely and responsibly test circular materials and processes before they are expected to meet the full evidentiary burden of proving market or demand as required under the **Waste Framework Directive**. This has the potential to undermine confidence and discourage innovation. A space is required to allow for research and trialling of innovative solutions by developers under specific circumstances.

Trial-friendly regulatory mechanisms can create the essential “safe testing space” needed for innovators, SMEs, and regulators to build the evidence base that the Waste Framework Directive and Ireland’s wider circular innovation goals requires. These could be tailored for circular economy projects in key sectors to validate feasibility and could lead to a pipeline of projects which could accelerate circular economy projects.

In that context DCEE, in collaboration with other regulatory stakeholders, will design a **Circularity Sandbox Programme** where members from across agencies meet companies to discuss project feasibility and to allow for research and trialling of innovative solutions by product developers under specified conditions.

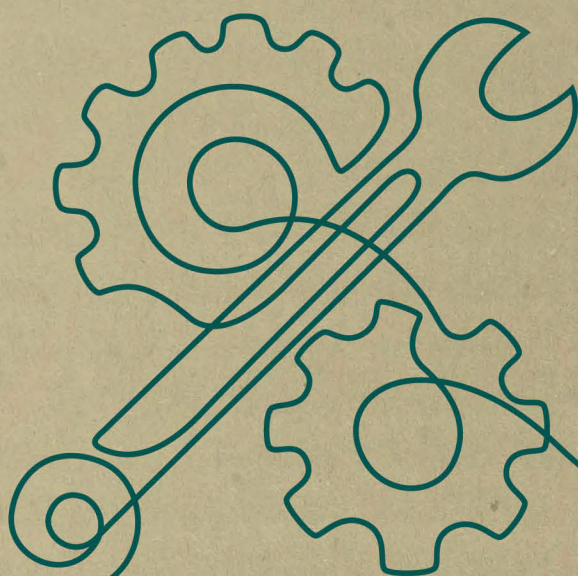
223 [Circular Bioeconomy Cluster](#)

Action	Research & Innovation
A72	Development of project to establish CIRCULÉIRE as a centre of excellence for circular innovation in Ireland.
A73	Support CIRCULÉIRE in building a coalition across enterprise sectors, research and training to scale and deliver industrial impact.
A74	Establish a Circular Economy Research and Innovation Stakeholder Forum.
A75	Ensure that circular economy research and innovation priorities are met in the 3-yearly DCEE R&I Strategy 'Research Needs Statement' and in the EPA's Research Programme.
A76	Design a Circularity Sandbox Programme to allow companies to safely and responsibly test circular materials and processes in a collaborative environment.

Target	Research & Innovation
T41	Establishment of CIRCULÉIRE as a Centre of Excellence for the circular economy in Ireland.
T42	Introduce a dedicated Statutory Instrument to support the simplification of the classification of by-products, in line with evolving EU legislation, ²²⁴ and using best practice learnings from across the EU.

224 For example, the EU Biotech Acts, referred to in the [new EU Bioeconomy Strategy](#)

Skills for the Circular Economy



9. Skills for the Circular Economy

Building the Skills for a more Circular Economy

The government continues to progress reforms of Ireland's skills and training provisions, underpinned by the recommendations arising from the **OECD Skills Strategy for Ireland**²²⁵. High level reforms include the establishment of a new **National Skills Council**, bringing together representatives from enterprise, the social partners, the community and voluntary sector, and other stakeholders from outside of government.

In Budget 2025, a package of approximately €1.5 billion from the **National Training Fund**²²⁶, was allocated over a six-year period to 2030, comprising both current and capital investment, to better fund research, further and higher education, skills and development and decarbonisation initiatives, and will benefit projects which relate to the circular economy.

Work is also underway on meeting specific sectoral skills needs for construction, green skills, ICT, early learning and childcare, education, and health and social care. Given the current – and future – investment priorities outlined in this plan, a clear focus will continue to be put on construction related skills and training.

A new **Apprenticeship Action Plan for 2026-2030**²²⁷, which will set a strategic vision for the sector, is expected to launch in 2026. A new **Further Education and Training Strategy** is also currently being finalised by SOLAS, with a renewed focus on inclusion and learner diversity.

Central to the success of the transition to a circular economy is the cultivation of green skills within the workforce. The **Circularity Gap Report Ireland**²²⁸ highlights that the circular transition will be driven by innovation, work and workers. Skills gaps need to be bridged, and labour shortages filled in pivotal sectors for advancing circularity, including data management, automation, smart technology, electrical engineering, construction, reverse logistics, bioeconomy development and traditional craftsmanship.

225 [OECD Skills Strategy Ireland | OECD](#)

226 [An Overview of the National Training Fund \(NTF\)](#)

227 [Public Consultation on the Action Plan on Apprenticeship 2026 - 2030](#)

228 <https://www.circularity-gap.world/ireland>

The report estimates that approximately 5.5% of jobs are contributing to the circular economy in Ireland, with the vast majority of the workforce still operating in the linear economy. The highest rate of circular jobs occurs in the utilities sector, which includes activities in renewable energy, waste recovery and repair and maintenance. Boosting circularity will be key in the largest employing sectors, such as services and manufacturing, which currently have low rates of circular jobs. By adopting circular economy and bioeconomy initiatives, Ireland has the potential to increase employment opportunities, future-proof occupations and contribute to rural regeneration. This can create quality, reliable job opportunities in rural areas throughout the country.

The **Green Skills 2030 National Further Education and Training (FET) Strategy**²²⁹ for the green transition is poised to play a pivotal role in empowering individuals, industries, and communities to embrace circularity.

“Green skills” are the knowledge, abilities, values, and attitudes needed to live in, develop, and support a sustainable and resource-efficient society. They encompass technical abilities (e.g., energy management, sustainable construction, resource recovery), soft skills (e.g., systems thinking, problem-solving, collaboration), and sector-specific expertise.

For the circular economy, green skills are needed at every stage—from product design and manufacturing to logistics, repair, remanufacturing, and resource management. Upskilling and reskilling the workforce in these areas are essential to adopt new business models, comply with changing regulations, and implement sustainable practices.

The Green Skills 2030 Strategy is a forward-looking national framework aimed at aligning further education and training with the needs of a low-carbon, resource-efficient future. Core elements include:

- Curriculum reform: Embedding sustainability principles and circular economy concepts in vocational and technical education.
- Workforce development: Providing targeted training and upskilling programs for workers in both traditional and emerging sectors.
- Stakeholder collaboration: Building partnerships between education providers, industry, government, and communities.
- Innovation and entrepreneurship: Supporting learners and businesses to develop and implement circular solutions.
- Continuous professional development: Enabling ongoing learning to keep pace with technological advances and evolving green practices.

229 [Green Skills 2030](#)

How the Strategy Supports the Circular Economy

- **Embedding Circular Economy Principles in Education**

By integrating circular economy concepts into curricula²³⁰, the Strategy ensures that learners at all levels understand the importance of resource stewardship, waste reduction, product longevity, and systemic thinking. This foundational knowledge is critical for preparing graduates who can contribute to circular business models and innovation.

- **Upskilling and Reskilling for Green Jobs**

The transition to a circular economy creates new roles (such as resource auditors, repair technicians, and materials scientists) while transforming existing ones (such as manufacturing operatives, construction workers, and logistics managers). The Green Skills 2030 Strategy identifies emerging needs and delivers specific training modules, certifications, and apprenticeships that empower workers to thrive in a circular economy.

- **Fostering Lifelong Learning and Adaptability**

Circularity requires adaptability and a commitment to lifelong learning, as technologies and best practices continually evolve. The Strategy emphasises modular, flexible training pathways that allow individuals to update their skills, enabling industries to remain competitive while reducing waste and resource use.

- **Supporting Innovation and Entrepreneurship**

A vibrant circular economy depends on innovators who can rethink products, services, and systems. The Strategy encourages entrepreneurial thinking, providing learners with tools to design circular products, create sharing platforms, or develop remanufacturing enterprises. Incubators and innovation hubs within the FET system can nurture start-ups focused on circular solutions.

- **Building Cross-Sectoral Collaboration**

Circularity encompasses multiple sectors, manufacturing, construction, agriculture, transport, and more. The Strategy promotes collaboration between educational institutions, businesses, local authorities, and civil society, ensuring that skills development aligns with sectoral needs and regional opportunities. Such partnerships can drive localized circular economy initiatives, from repair cafes to industrial symbiosis projects.

- **Promoting Awareness and Attitudinal Change**

Changing entrenched linear habits requires more than technical know-how; it demands a shift in values, attitudes, and behaviours. Through outreach, community learning, and public campaigns, the Strategy can foster a culture that values sustainability, responsible consumption, and resource recovery.

230 [Integrating Circular Economy Education into Education for Sustainable Development: A Conceptual Advancement and Typology of Integration Strategies | United Nations University](#)

Case Examples: Circular Economy Skills in Practice

- **Construction Sector:** Training programs in sustainable design, deconstruction, and material reuse enable the creation of buildings that are easier to dismantle, repair, or repurpose, significantly reducing C&D waste.
- **Manufacturing:** Technicians learn to apply eco-design principles, use recycled materials, and maintain equipment for longevity, supporting closed-loop supply chains.
- **Retail and Services:** Employees are trained in reverse logistics, repair, and refurbishment, extending product lifespans and reducing dependence on virgin resources.

Addressing Challenges and Barriers

While the Green Skills 2030 Strategy offers significant opportunities, it must also address potential challenges:

- **Skills gaps:** Mapping current and future needs across sectors to avoid bottlenecks in the transition.
- **Access and inclusion:** Ensuring all learners, including those in disadvantaged or rural communities, can benefit from green skills training.
- **Employer engagement:** Encouraging businesses to invest in training and to recognize and reward new competencies.
- **Measurement and evaluation:** Tracking progress to ensure that skills development results in tangible circular economy outcomes.

Long-Term Impacts

By equipping the workforce with relevant green skills, we can:

- Accelerate the green transition by enabling businesses to adopt circular models and technologies.
- Drive regional and national competitiveness by positioning the country as a leader in sustainable innovation.
- Create high-quality jobs that are resilient to future disruptions and aligned with environmental goals.
- Reduce environmental impact by cutting waste, emissions, and resource extraction.

The Green Skills 2030 National Further Education and Training Strategy for the Green Transition stands as a linchpin in the journey towards a circular economy. By embedding circularity into the heart of the education and training system, it ensures that individuals, businesses, and communities are empowered with the

knowledge, skills, and mindsets required to thrive in a resource-efficient, low-carbon future. Through a commitment to inclusive, lifelong, and forward-thinking education, society can unlock the full potential of the circular economy—fostering prosperity that is in harmony with the planet.

The primary and secondary education system can also play a key role in ensuring that our young people are equipped with the knowledge and skills required to apply circular thinking in their lives. This Strategy acknowledges the potential of delivering targeted circular economy education, within the formal education sector. This can be enhanced through ongoing curriculum development and continuous professional development opportunities designed for and delivered to school leadership and staff. There are further opportunities to work with the teacher education colleges to equip their students with the knowledge and skills to integrate the circular economy into their teaching after college and to engage with the Department of Education and Youth and associated statutory bodies to ensure that the circular economy is embedded within curriculums.

Action	Skills
A77	Through the NRRN, continue to support SOLAS in the implementation of the Green Skills Strategy.

10

Communications



10. Communications

Context

The **Circular Economy 2025 Key Insights Report**²³¹ highlights that recognition of the circular economy is growing. In 2021, when awareness levels were investigated, just 25% of people in Ireland had heard of the term ‘circular economy’. In 2023 this rose to 41%, before reaching 55% in 2024. Research also shows that the percentage increase in recognition of the term ‘circular economy’ significantly outperformed other common environmental terms including sustainability, greenhouse gas and biodiversity.

However, the report also points out that levels of understanding remain low even when the circular economy is explained as follows: *an economy that keeps products in use for as long as possible and avoids waste generation*. Describing the circular economy in these common terms does not appear to result in a significant increase in the levels of understanding within the general population.

New ways of communicating the circular economy and bringing it to life in a way that is relevant, easily understandable and resonant with the public are needed to effect real change. It is important to maintain active and targeted engagement with disadvantaged and marginalised groups as part of achieving a Just Transition.

Circular.ie

It is in this context and in partnership with the Rediscovery Centre that we have established a new national communications platform for the circular economy — **Circular.ie**²³² — a digital platform, that will establish a knowledge centre for excellence in circular economy communications to drive citizen engagement and action.

DCEE, and other strategic circular economy partners, will be members of the **Project Advisory Committee** which will provide strategic guidance, recommendations, and industry insights to enhance the impact, reach, and effectiveness of Circular.ie. This will include a particular focus on insights dissemination and effective monitoring and evaluation frameworks.

²³¹ [Circular Economy 2025 Key Insights Report](#)

²³² [Circular.ie](#)

Based on foundational and ongoing research the key outputs are the establishment of a national circular economy website launched in September 2025, and the design and implementation of circular economy awareness campaigns and community programmes.

These activities will provide the identified supports needed to enhance circular activity communications in communities across Ireland to further drive understanding and increase public engagement in Ireland's drive towards the circular transition.

This will be achieved through:

- **Awards:** The Full Circle Awards celebrate and recognise circular activities undertaken by people across the country.
- **Grants:** [Circular.ie](https://circular.ie) will provide grants for organisations to better tell their circular story, enabling improved communications right across the ecosystem.
- **Sharing Success Stories:** Providing a platform for sharing best practices, case studies, and inspiring stories in Ireland.
- **Research:** Producing cutting-edge research on barriers, enablers, and opportunities in communications around Ireland's transition to a circular economy.

The four strategic goals of Circular.ie are to accelerate behaviour change, increase awareness and expand knowledge, support public engagement and strengthen networking and collaboration for the circular economy.

The associated outcomes include greater awareness of the circular economy in Irish society, tangible actions and events to assist behaviour change and demonstrate circularity and enhanced competitiveness and international recognition.

These goals will be delivered under four work programmes:

- **National Gateway Platform (Circular.ie)**

The National Gateway Platform will constitute a low carbon digital platform and associated branding, PR, social media and other assets that build capability for service users. It will be designed to enable knowledge-sharing, highlighting supports, sharing events, prompting calls to action and fostering connections.

- **Campaigns**

Campaigns will be delivered both independently and in collaboration with Acceleration Partners and will be underpinned by PR, media and digital tools. Campaigns designed will be underpinned by evidence-based research, behaviour change frameworks and service design principles and will provide the motivation to energise and direct behaviour.

- **Cultivating Communities of Practice**

Public engagement services will build on the power of community in Ireland, cultivating with community partners the capacity to communicate and engage citizens at a small and large scale. This will underpin the “opportunity”, in line with the principles of the COM-B model. The actions set out provide a phased approach to cultivating communities of practice, starting with engaging and supporting existing communicators and leading to the development of communities of practice.

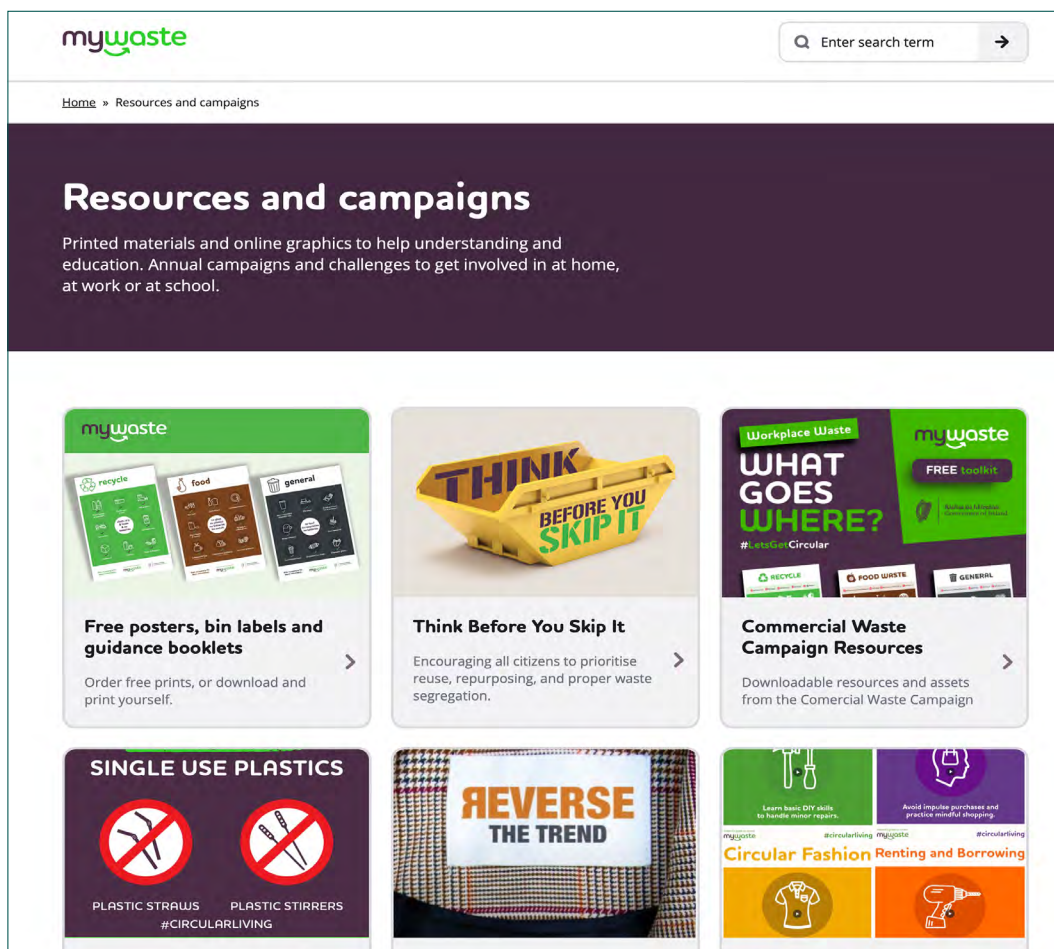
- **Research and Insights**

Data and insights will inform all work to ensure activities are evidence based, effective and provide value for money. These insights will also be widely disseminated for use by partners and help to build further capacity for excellence in communications and public engagement in a circular economy.

Circular.ie will be a single platform which will complement ongoing work of circular economy communications partners, to provide a mix of ongoing media engagement, advertising, public events and community projects.

This approach builds on the existing circular community network in Ireland and cultivates the capacity to communicate and engage citizens at small and large scale. Where work is already ongoing, the platform will make it more impactful and will act as a support for existing infrastructure. The partnership model on which the platform will be operated will contribute to this objective. Lack of awareness of circular economy practices and principles has been found to be a barrier to successfully effecting the behavioural change required to achieve a circular transition. Circular.ie will significantly contribute to shifting behaviour to more circular options and achieving our strategic objective of establishing a circular economy.

The Regional Waste Management Planning Offices have established the website mywaste.ie as a single platform for all waste related information for the public and have also developed a space on the platform for business. The website contains information on how to deal with waste at home, in the workplace and in schools. The website also has useful advice on waste reduction in addition to promotional campaigns and other resources.



It's Time to Get Circular

Since 2022 DCEE has run a general awareness campaign focusing on key messaging around the circular economy, preventing waste, reusing and recycling, with other priority messaging rotating in and out such as the DRS and textiles. From 2025 onwards DCEE communications campaigns is focused on highlighting the benefits of the Circular Economy Fund.

Reverse the Trend

DCEE launched a targeted digital and social public awareness campaign on textiles [Reverse the Trend](#) focusing on reducing consumption and use in October 2024. The EPA **Textiles: National Attitudes and Behaviours Survey 2024**²³³ found that 71% of people agree that primary and secondary school curricula should include lessons on sustainable consumption and reuse of textiles.

EPA Behavioural Insights

Behavioural Insights²³⁴ is a foundation of the Circular Economy Programme,

233 [Textiles: National Attitudes & Behaviours surveys | Environmental Protection Agency](#)

234 [Behavioural Insights | Environmental Protection Agency](#)

providing evidence to inform policy, behavioural change interventions and awareness campaigns. Activities include:

- baseline information studies.
- nationally representative surveys on behaviours and attitudes.
- analysis of waste characterisations and national waste data.

These ongoing engagements across Irish business and society support national targeted behavioural change campaigns with consistent messaging used by all stakeholders. Delivered annually with a focus on key materials, behaviours or businesses, these insights inform promotion of national guidance on the circular economy by the EPA and through dissemination and collaboration with others, will continue to support engagement at a local and community level.

Action	Communications
A78	Circular.ie launched and recognised as Ireland's definitive source of information for the circular economy.
A79	Create a Circular Economy Communications Framework for all partners to maximise impact and increase awareness.
A80	Commit to effective communication strategies to ensure circular economy and media stream are impactful.

Target	Communications
T43	Continue to grow awareness rates of the circular economy by 5 percentage points year on year for the lifetime of this Strategy, from 59% in 2025.

11

Enabling the Circular Digital Transition



11. Enabling the Circular Digital Transition

Digitalisation is a powerful catalyst for Ireland's circular transition.

The use of real-time data, connected systems, and intelligent automation enables higher-value resource recovery, more efficient production processes, transparent supply chains, and deeper citizen engagement. Over the last decade, digital tools have transformed sectors such as finance, energy, agriculture and education; this Strategy recognises their equivalent potential to accelerate Ireland's shift toward a fully circular, low-carbon economy.

Digital technologies significantly boost the efficiency and productivity of circular economy practices, make the access to data easier for both the producer and the consumer, and facilitate and enhance resource efficiency in industrial processes. For instance, the Internet of Things (IoT) enables machines and systems to communicate and optimize their operations, leading to predictive maintenance that reduces downtime and lowers the need for spare parts.

Digital technologies play a pivotal role in enhancing the efficiency and sustainability of each phase of the product lifecycle, from extraction to production, distribution, use, and the eventual return of materials back into the production cycle. By integrating technologies such as the IIoT, artificial intelligence (AI), blockchain, and big data analytics, businesses can optimise processes, reduce waste, and support the principles of the circular economy. Applying these technologies to circular economy practices requires transparent and traceable data. The foundation to a modern pro-active data driven environment is trust among stakeholders and along supply chains, that often goes beyond jurisdictions. New technologies like digital watermarks, (DPP), Radio-frequency identification (RFID) tags, and blockchain can help to enable real-time tracking and data verification across product lifecycles. Blockchain is highlighted for its secure, decentralized data storage, though challenges like energy consumption and uptake cost remain²³⁵.

Achieving a comprehensive and inclusive digital transition is central to advancing Ireland's economic, environmental and social ambitions. The government is committed to ensuring Ireland continues to be a digital leader in Europe, and

235 [Circular Economy and Digitalization | Global Alliance on Circular Economy and Resource Efficiency](#)

globally by harnessing the digital and AI revolution to deliver effective and modern public services and to grow the economy.

The European Commission proposed the **Digital Networks Act²³⁶ (DNA)** to modernise, simplify and harmonise EU rules on connectivity networks. The current rules must be updated to create the conditions for operators to invest in rolling out advanced fibre and mobile networks. The widespread availability of advanced connectivity for people and businesses across the EU is the foundation of Europe's competitiveness. Building upon the EU Electronic Communications Code (EECC) adopted in 2018, the DNA proposal has been adopted as of 21 January 2026. In light of technology transformation and the geopolitical context, a cutting-edge digital infrastructure is fundamental for Europe's economy and society. To address those challenges, the DNA aims to create a simplified and more harmonised legal framework, which boosts innovation and investment in resilient and advanced digital infrastructure.

The DNA is merging four legal acts into one directly applicable regulation, replacing the EECC, the BEREC Regulation, the Radio Spectrum Policy Programme and the core parts of the Open Internet Regulation. It will deliver the following key measures:

- **Strengthening a single market for connectivity:** the proposal ensures maximum legal harmonisation across the Union through the proposed regulation. To facilitate pan-European operations and service provision, the DNA will introduce a "Single Passport" authorisation, with notification in only one Member State, and an EU-level satellite spectrum authorisation.
- **Achieving simplification:** the DNA will reduce regulatory and administrative burden across all DNA provisions, especially allowing more flexibility for business-to-business relations, while keeping a high level of consumer protection.
- **Boosting innovation in the broader digital ecosystem:** introducing a mechanism to clarify Open Internet rules for innovative services and a voluntary ecosystem cooperation mechanism on IP interconnection, traffic efficiency, and other emerging areas.
- **Strengthening resilience and preparedness:** the DNA introduces an EU-level Preparedness Plan to tackle the rising risks of natural disasters and foreign interference in networks and radio signals. In addition, the common mechanism for selecting pan-EU satellite communications will incorporate criteria focused on security and resilience.

236 [The Digital Networks Act | Shaping Europe's digital future](#)

The national digital strategy, **Harnessing Digital – The Digital Ireland Framework**²³⁷, reflects Ireland's ambition to remain a European and global digital leader, and the strong commitment to progressing the digital transformation of the economy and society. It aims to maximise the economic and societal benefits from digitalisation and to ensure that all are in a position to enjoy those benefits by making connectivity available to everyone; providing digital skills for all; ensuring widespread access and use of inclusive digital public services; helping small businesses benefit from digital opportunities; investing in cyber-security; ensuring a modern and well-resourced regulatory framework; and playing a leading role in Europe right across the digital agenda.

In line with the Programme for Government, the government confirmed that it will update the **National Digital Strategy**²³⁸, setting out coherent and ambitious vision for digital and AI, to ensure continued growth and investment over the coming years. The Strategy will outline the government's vision to ensure Ireland is positioned to maximise the benefits and opportunities of AI and other technologies. The updated cross-government Strategy will continue to align with the EU's **Digital Decade and Digital Compass**²³⁹ covering infrastructure, enterprise, skills, and public services, with more ambitious national targets in key areas, along with several priority deliverables. It will also outline Ireland's ambition in developing our domestic AI capabilities, including accelerating the adoption of AI to drive public service delivery and reform.

The **National Broadband Plan**²⁴⁰ (NBP) is the government's initiative to deliver high speed broadband services to all premises in Ireland. This will be delivered through investment by commercial enterprises coupled with intervention by the State in those parts of the country where private companies have no plans to invest.

The State Intervention area includes:

- over 560,000 premises
- 1.1 million people
- over 65,000 farms
- 44,000 non-farm businesses
- 679 schools

The NBP is a key aspect of government strategy across areas including climate, agriculture, education, transport, tourism, sustainable growth, jobs and health.

²³⁷ [Harnessing Digital - The Digital Ireland Framework](#)

²³⁸ [Updated National Digital Strategy 2025](#)

²³⁹ [Europe's Digital Decade | Shaping Europe's digital future](#)

²⁴⁰ [National Broadband Plan](#)

Since the publication of the NBP in 2012, the commercial telecommunications sector has invested over €3.3 billion. At the time, 30% of Irish premises had access to high-speed broadband.

Investment was spent primarily on upgrading and modernising networks which support the provision of Gigabit broadband and mobile telecommunications services. Significant additional investment is expected over the coming years. Now, of the 2.4 million premises in Ireland, 94% can access commercially available high-speed broadband services of more than 30 Mbps.

Key public sector initiatives include ongoing development of the **Digital Public Services Plan 2030**²⁴¹ setting out actions to be taken across the public sector to ensure the digital transformation of key public services in the years ahead to meet a target of 100% of key public services being available online, and 90% of key public services consumed online, by 2030. The Public Service Data Strategy 2030²⁴² is also being developed to deliver a modern public service data ecosystem where high quality public administrative data is routinely used for policy and service planning and delivery for Better Public Services outcomes.

As part of DCEE's plan to develop a '**Circularity Roadmap for the Construction Sector**' as set out in Section 4.1, work will be undertaken to create a national-level digital marketplace for secondary construction materials.

Action	Enabling the Circular Digital Transition
A81	Examine the feasibility to create a national digital marketplace for secondary construction materials, providing real-time information on availability, quality, and certification and in line with DPP requirements in the EU Construction Product Regulation.

²⁴¹ [Digital Public Services Plan 2030](#)

²⁴² [Better Public Services - Public Service Transformation 2030 Strategy](#)

12

Appendices

12. Appendices

12.1 Appendix I – Compendium of Actions

Action	Governance
A1	Ensure that the Circular Economy Advisory Group is delivering on its mandate with multi-stakeholder participation.
A2	Effective 'Whole-of-Government' participation in the Circular Economy Strategy Oversight Group.
A3	Integrated delivery of policies measures and actions in this Circular Economy Strategy, the WAPCE, the NWMPCE, and the Circular Economy Programme through the National Coordination Group.
Action	Construction/Built Environment
A4	Support the EPA on the updating of their Best Practice Guidelines for the preparation of resource and waste management plans for C&D projects with the intention of ensuring that, inter alia, the Guidelines are used at the development planning stage.
A5	Support the work of the European Commission CPR Acquis process which will align JRC end-of-waste criteria for recycled aggregates via new standardisation requests under the EU Construction Products Regulation 2024.
A6	Develop a plan across government in line with A5 to support the safe use of recycled aggregates in the construction sector which ensures that inappropriate recycled aggregates cannot be placed on the market.
A7	Implement the criteria set out for the construction sector in the Green Public Procurement Strategy and Action Plan 2024-2027.
A8	Support local authorities to adopt a long-term approach by establishing material storage facilities and facilitating secondary raw materials depots and marketplaces.
A9	Develop a National Building Renovation Plan as part of the implementation of the recast Energy Performance of Buildings Directive. A final National Building Renovation Plan will be submitted by 31 December 2026.

Action	The Bioeconomy
A10	Determine the rate of reuse, recovery and recycling of bio-based materials, including biowastes, across sectors.
A11	Work with the NSAI and other key stakeholders ²⁴³ to develop and adopt standards for the use of secondary biological resources in Ireland such as compost, digestate from anaerobic digestion and biowastes.
A12	Develop monitoring and measurement systems to map circular bioeconomy activity, track circular bio-based material flows, and evaluate environmental, social, and economic impacts, in line with the EU Bioeconomy Monitoring System ²⁴⁴ and the upcoming Irish National Bioeconomy Strategy.
A13	Invest in infrastructure to support the valorisation of biowaste. Place particular focus on assisting communities without access to municipal brown bin collections to develop the alternatives, and on assisting communities seeking to link community-scale anaerobic digestion, composting and small biorefinery facilities with local reuse, repair and sharing initiatives.
A14	Review the biowaste regulatory framework to enable the valorisation and reuse of bio-based materials including biowaste, for example for composting and anaerobic digestion.
A15	By June 2027, transpose the revised Waste Framework Directive which includes binding food waste reduction targets to be achieved at national level.
Action	Retail
A16	Enhance dialogue between retailers and the public sector regarding upcoming EU product legislation, such as the Right to Repair Directive, Ecodesign for Sustainable Products Regulation and its use of Digital Product Passports, which will address many consumer goods categories.
A17	Subject to cost assessment, engage with retailers to identify practical circular supports that facilitate repair, reuse and recycling activities.
A18	Explore mechanisms to encourage community-based repair and reuse, including pilot initiatives and awareness measures, aligned with existing enterprise supports to make circular goods more accessible for consumers.
A19	Continue supporting initiatives such as the EPA's National Reuse and Repair Network, which aims to build reuse and repair skills within the population, namely by delivering repair clinics and repair series workshops nationally.

²⁴³ Including EU and International partners, as referred to in the [new EU Bioeconomy Strategy](#)

²⁴⁴ [EU Bioeconomy Monitoring System | Knowledge for polic](#)

A20	Monitor skills gaps in sectors like circular design, repair, refurbishment, remanufacturing and recycling, following up on the work already developed by Skillnet Ireland and Solas to bridge the skill gap in key circular sectors and alleviate labour shortages.
A21	Further investment in awareness-raising measures targeting the public and relevant business sectors, as well as supporting enforcement measures by regulatory authorities against those placing these products on the market illegally.
A22	Publication of the final Food Circle Project reports in H1 2026.
A23	Promotion of voluntary recycling labelling systems for producers, manufacturers and retailers and development of new labelling system to demonstrate the circularity and/or sustainability of products ²⁴⁵ .
Action	Packaging
A24	Progress towards PPWR targets as set out in Section 5.4, Table 1.
A25	Promote reusable and refillable packaging systems as provided for in the PPWR.
A26	Continue to support design innovation for packaging formats e.g. through Repak.
A27	Funding for demonstration pilots for reusable packaging formats.
A28	Implement refill obligations under PPWR.
A29	Work with waste collection companies and the National Waste Collection Permit Office (NWCPO) to enhance kerbside and commercial collection of packaging waste to optimise recycling.
A30	Enhance the regulatory conditions required to promote further investment in packaging waste sorting systems.
A31	Effective and timely implementation of a harmonised labelling system for packaging as provided for in the PPWR.
A32	Support the continued installation of public water fountains, as per the Single Use Plastic Directive, with grant aid from the Circular Economy Fund.
A33	Support the work of the European Commission Joint Research Centre in developing EU end-of-waste criteria for plastics.
A34	Increase the level of correct waste sorting behaviour and consumer awareness.

245 [MyWaste - Voluntary on pack label](#)

Action	Textiles
A35	Transpose Directive (EU) 2025/1892 amending the Waste Framework Directive as it relates to textiles.
A36	Assist DETE in the implementation of the ESPR to promote textile circular design including the introduction of Digital Product Passports.
A37	Support the work of the European Commission Joint Research Centre in developing EU end-of-waste criteria for textiles.
A38	Drive GPP of textiles through the implementation of the Green Public Procurement Strategy and Action Plan.
A39	Develop baseline data on textile consumption and post-consumption to establish targets on textile waste prevention, collection, reuse and recycling.
A40	Enhance cross-sector collaboration and implementation through the Textiles Advisory Group.
A41	Deliver evidence based and targeted public awareness campaigns to educate on textile waste prevention, conscious textile consumption and responsible post consumption.
Action	Electronic Equipment
A42	DCEE to review the operating models of the two EPR schemes to ensure that they are performing optimally with respect to target attainment and the transition to improved circularity.
A43	DCEE will support DETE in the ongoing transposition of the Right to Repair Directive including on the operation of a national platform for repair by July 2027.
A44	Engage in the EU WEEE Directive amendment process as part of the proposed new EU Circular Economy Act.
A45	Continue to support the OGP in facilitating centralised procurement of remanufactured electronic equipment, and increased acquisition of long-life, repaired, refurbished electronics through centralised framework arrangements that support green public procurement objectives.
A46	DCEE to ensure producers enhance their awareness raising activities so that WEEE is separately collected through all available channels to improve Ireland's collection rate.
A47	Support the further development of circular electronic business models (lending, renting, leasing, repair and servicing) and communicate successful models and best practices.
A48	Undertake to achieve the five strategic outcomes of the National Reuse and Repair Network by the end of 2026, with a view to further expanding the uptake of green skills in ICT in addition to broadening repair and reuse practice in other (non-priority) areas.

A49	Provide support to repair cafes for electronics, sharing platforms/ pay as a service schemes and local resource hubs/second-hand markets.
A50	Develop a circular roadmap for the Irish EEE and Battery Sector with dedicated resources for industry through a National Centre for Excellence.
A51	Support the formation of a centralised registry for r-strategy operators, including repairers, refurbishers and remanufacturers active throughout Ireland.
Action	Critical Raw Materials Act
A52	Ireland will adopt a national circularity programme under Article 26 of the EU CRMA to improve the circularity and sustainability of CRMs. The programme will include promoting CRM circularity, focusing on the collection of CRM rich WEEE and waste batteries, CRM recovery, and circular design.
A53	In accordance with Article 27 of the EU CRMA, Ireland will promote the recovery of CRMs from extractive waste. This will entail the characterisation of the quantities of CRMs in extractive waste and a database of closed abandoned extractive waste sites that have economically recoverable amounts of CRMs which is to be made publicly accessible.
A54	In accordance with Articles 28 and 29 of the EU CRMA, Ireland will implement measures in relation to certain products containing permanent magnets, to identify products containing permanent magnets and their content of recycled permanent magnets.
Action	Repair/Reuse
A55	Undertake research to provide an overview of taxes and subsidies to identify a suitable combination of VAT and complementary and/ or alternative tax measures to incentivise prevention, reuse and repair. Such research will include examining VAT on donations of goods prohibited from being destroyed under the ESPR.
A56	Introduction of a pilot Repair Voucher Scheme.
A57	Increased allocation to the CEIGS from €650,000 to €1.5 million.
A58	Ringfenced support from the CEIGS to provide financial and technical support to small businesses specialising in repairing electronics.
A59	Work with representative reuse and repair organisations, insurance bodies and other departments in identifying and implementing insurance reforms to support the development of more reuse cafés and associated repair infrastructure.

A60	Undertake a mapping exercise to identify all circular economy funding opportunities at both national and EU levels and engage with stakeholders to ensure that these are fully utilised.
Action	CE Infrastructure
A61	Review the Waste Management (Facility Permit and Registration) Regulations and seek to introduce appropriate authorisations for circular economy activities.
A62	Develop proposals for an interconnected network of Circular Economy Hubs during the lifetime of the National Waste Management Plan for a Circular Economy.
A63	Support the local authority sector in undertaking Enhancement of the Operation of the Civic Amenity Site Network Project.
A64	DCEE to fund appointment of a Project Manager as per A64 and participate on the Project Board.
A65	Support the Rediscovery Centre in finalisation of a feasibility study to establish a network of CEDOHs, due to conclude in June 2026.
A66	Continue to support the Rediscovery Centre in the national rollout of CEDOHs.
Action	Towards an All-Island Circular Economy
A67	Active participation, across sectors, on the All-Island Circular Economy Forum to maximise opportunities in developing an All-Island Circular Economy.
A68	Undertake a feasibility Study for Industrial Symbiosis on the Island of Ireland with a view to establishing an All-Island digital platform for enabling industrial symbiosis across key sectors.
A69	Utilise Shared Island Funds to develop All Island circular economy opportunities, including the development of a network of circular economy hubs in Dublin and Belfast and measures to coordinate and evolve existing circular economy supports in Dublin, Belfast and along the corridor between the two capital cities.
Action	Monitoring Framework
A70	DCEE and EPA to continue discussions with EEA on the issues regarding the use of CMUR as a metric and the disproportionate effect it has on certain Member States, including Ireland.
A71	DCEE to engage with CSO in 2026 to develop a 'circularity dashboard' to monitor progress on increasing circularity.
Action	Research and Innovation
A72	Development of project to establish CIRCULÉIRE as a centre of excellence for circular innovation in Ireland.
A73	Support CIRCULÉIRE in building a coalition across enterprise sectors, research and training to scale and deliver industrial impact.

A74	Establish a Circular Economy Research and Innovation Stakeholder Forum.
A75	Ensure that circular economy research and innovation priorities are met in the 3-yearly DCEE R&I Strategy 'Research Needs Statement' and in the EPA's Research Programme.
A76	Design a Circularity Sandbox Programme to allow companies to safely and responsibly test circular materials and processes in a collaborative environment.
Action	Skills
A77	Through the NRRN, continue to support SOLAS in the implementation of the Green Skills Strategy.
Action	Communications
A78	Circular.ie launched and recognised as Ireland's definitive source of information for the circular economy.
A79	Create a Circular Economy Communications Framework for all partners to maximise impact and increase awareness.
A80	Commit to effective communication strategies to ensure circular economy and media stream are impactful.
Action	Enabling the Circular Digital Transition
A81	Examine the feasibility to create a national digital marketplace for secondary construction materials, providing real-time information on availability, quality, and certification and in line with DPP requirements in the EU Construction Product Regulation.

12.2 Appendix II – Compendium of Targets

Target	Governance
T1	Establishment of a Circular Economy Advisory Group.
T2	Establishment of a Circular Economy Strategy Oversight Group.
T3	High-level governance on circular economy represented via the Climate Action Programme Board and the SOG on Climate and the Environment.
Target	Construction/Built Environment
T4	By 2026, publication of the Circularity Roadmap for the Construction Sector.
T5	45% reduction in GHG emissions (against 2018 levels) by 2030 for commercial and public buildings.
T6	By 2030, achieve a 12% reduction of C&D waste arisings.
T7	Maintain the GPP Target of a minimum proportion of construction materials procured by public bodies under new contract arrangements to comprise recycled materials. From 2028 at least 10%, by weight, of construction materials procured by public bodies for infrastructure projects and public non-residential buildings under new contract arrangements comprise recycled materials ²⁴⁶ .
T8	By 2027, a sectoral compact partnership will be agreed between the government and construction industry to accelerate circular practices in that sector.
Target	The Bioeconomy
T9	Establish the baseline level of reuse, recycling and recovery of bio-based materials, including biowastes, and commit to increase these levels to contribute to Ireland's CMUR.
T10	Publish a National Bioeconomy Strategy in 2026 that will support the development of a sustainable and more circular bioeconomy.
T11	Publication in 2026 of the National Food Waste Prevention Roadmap, which will cover the period 2026-2028.
T12	By 2030, reduce food waste and food losses in line with United Nations Sustainable Development Goal 12.3.
T13	By 2030, reduce the generation of food waste in processing and manufacturing by 10% in comparison to the amount of food waste generated as an annual average between 2021 and 2023 ²⁴⁷ .

246 The T7 target may be further updated following publication of the Circularity Roadmap for the Construction Sector.

247 Subject to confirmation of the reference period.

Target	Retail
T14	By February 2027: Food service providers (HORECA sector - hotels, restaurants, cafés, and takeaway shops) must give consumers the option to bring their own containers for hot or cold beverages and ready-prepared food at no extra cost or under less favourable conditions than single-use options. They must also inform consumers about this option. These obligations arise under EU legislation and will be implemented in accordance with the agreed European timelines.
T15	By February 2028: HORECA establishments must also offer their own reusable packaging options (within a system for reuse) for takeaway items, with no surcharge compared to single-use alternatives. These obligations arise under EU legislation and will be implemented in accordance with the agreed European timelines.
T16	By 2030, reduce food waste and food losses in line with United Nations Sustainable Development Goal 12.3. By 2030 achieve the following anticipated legally binding targets: Reduction of the generation of food waste per capita, jointly in retail and other distribution of food, in restaurants and food services and in households, by 30% in comparison to the amount of food waste generated as an annual average between 2021 and 2023²⁴⁸.
T17	Over 150 organisations signed up to the Food Waste Charter.
Target	Packaging
T18	Establish a reuse matchmaker platform, which connects businesses generating reusable packaging flows with those seeking supply.
T19	Achieve the PPWR material stream recycling targets (as set out in Table 1).
T20	SUPD Target: Separate collection target for plastic bottles: 77% by 2025 90% by 2029.

248 Subject to confirmation of the reference period.

T21	By end of 2026, develop KPIs with Repak for reductions in overall packaging waste to progress towards the following PPWR Waste Reduction Targets: • 5% reduction by 2030. • 10% reduction by 2035. • 15% reduction by 2040
T22	Roll-out of outdoor drinking water fountains through NFGWS, with the following targets: • 84 fountains in 2026 • 84 fountains in 2027
Target	Textiles
T23	Publish the National Policy Statement and Roadmap on Circular Textiles and initiate progress on identified actions in 2026.
T24	Develop an EPR Scheme for textiles and associated Collection System, to be established by April 2028 as per the revised Waste Framework Directive.
T25	By 2031, to reduce to 4% the volume of textiles in household residual waste and recycling bins, as determined by EPA waste characterisation from a volume of 6% in 2022.
T26	Full and enhanced coverage of circular separate collection system for textiles in place across Ireland by 2030.
T27	By 2027, polyester fibre products procured by public sector bodies under new contract arrangements must be manufactured using a minimum recycled content of 20%, where possible and proportionate.
T28	Established baseline data on textile consumption and post-consumption by 2027.
Target	Electronic Equipment
T29	By 2027, OGP will have launched a new framework for the management of ICT equipment to ensure reuse is prioritised.
T30	Maintain the GPP target for a minimum of 80% of ICT end user products (desktop computers, portable computers and mobile phones) procured by public sector bodies under new contract arrangements are certified to EPEAT Gold Standard (or equivalent), TCO Certified (or equivalent) or will have been remanufactured.
T31	Ensure that EEE contributes proportionally to the National Waste Management Plan for a Circular Economy target of 20kg per person, per annum of reuse.

Target	Critical Raw Materials Act
T32	Ireland will adopt and implement national measures on circularity in relation to critical raw materials in accordance with EU CRMA and report on its progress to the European Commission in 2026 and annually thereafter.
T33	Ireland will adopt and implement measures to promote the recovery of CRMs from extractive waste by 24 November 2027.
T34	Ireland will adopt and implement measures to appropriately identify products containing permanent magnets as specified by, and within two years of the entry into force of, implementing acts of the EU CRMA relating to permanent magnets.
Target	Repair/Reuse
T35	VAT and Subsidies study completed and informing policy decisions.
T36	Introduction of targeted pilot initiatives to encourage repair and reuse activities, subject to normal budgetary processes and evaluation of cost-effectiveness.
T37	Increase in CEIGS funding in place and directly supporting repair and reuse organisations.
Target	CE Infrastructure
T38	Establishment of at least one local authority circular economy hub in each of the waste management regions.
T39	At least three CEDOHs subject to Pilot Programmes in place by end of 2028.
Target	Towards an All-Island Circular Economy
T40	All Island digital industrial symbiosis platform established.
Target	Research & Innovation
T41	Establishment of CIRCULÉIRE as a Centre of Excellence for the circular economy in Ireland.
T42	Introduce a dedicated Statutory Instrument to support the simplification of the classification of by-products, in line with evolving EU legislation, ²⁴⁹ and using best practice learnings from across the EU.
Target	Communications
T43	Continue to grow awareness rates of the circular economy by 5 percentage points year on year for the lifetime of this Strategy, from 59% in 2025.

249 For example, the EU Biotech Acts, referred to in the [new EU Bioeconomy Strategy](#)

12.3 Glossary of acronyms

AD - Anaerobic Digestion
ADI - Anti-Dumping Initiative
BEMS - Bioeconomy Monitoring System
BER - Building Energy Rating
C&D - Construction and Demolition
CAS - Civic Amenity Sites
CEAG - Circular Economy Advisory Group
CEAP - Circular Economy Action Plan
CEDOH - Circular Economy Demonstration and Outreach Hub
CEF - Circular Economy Fund
CEIGS - Circular Economy Innovation Grant Scheme
CMF- Circular Economy Monitoring Framework
CMUR - circular material use rate
CPR - Construction Products Regulation
CRM - critical raw materials
CRMA - Critical Raw Materials Act
CRNI - Community Resources Network Ireland
CSG - Construction Sector Group
CSO - Central Statistics Office
CSRD - Corporate Sustainability Reporting Directive
DAFM - Department of Agriculture, Food, and the Marine
DCEE - Department of Climate, Energy and the Environment
DETE - Department of Enterprise, Tourism and Employment
DHLGH - Department of Housing, Local Government and Heritage

DLR - Dún Laoghaire Rathdown

DMC - Domestic Material Consumption

DNA - Digital Networks Act

DPEIPSRD - Department of Public Expenditure, Infrastructure, Public Service Reform and Digitalisation

DPP - Digital Product Passport

DRCDG - Department of Rural and Community Development and the Gaeltacht

DRS - Deposit Return Scheme

DTIF - Disruptive Technologies Innovation Fund

EECC - EU Electronic Communications Code

EEE - Electronics and Electronic Equipment

EOW - End-of-waste

EPA - Environmental Protection Agency

EPBD - Energy Performance of Buildings Directive

EPR - Extended Producer Responsibility

ESPR - Ecodesign for Sustainable Products Regulation

ESRS - European Sustainability Reporting Standards

GPP - Green Public Procurement

IBF - Irish Bioeconomy Foundation

IGBC - Irish Green Building Council

IoT - Internet of Things

MMC - Modern Methods of Construction

NBP -National Broadband Plan

NDP - National Development Plan

NFGWS -National Federation of Group Water Schemes

NRRN - National Reuse and Repair Network

NRSP - North South Research Programme

NSAI - National Standards Authority of Ireland

NWCPO - National Waste Collection Permit Office

NWMPCE - National Waste Management Plan for a Circular Economy

OGP - Office of Government Procurement

PET - polyethylene terephthalate

POR - Plastics own resources

PPWD - Packaging and Packaging Waste Directive

PPWR - Packaging and Packaging Waste Regulation

PRI - Producer Responsibility Initiatives

R&I - Research and Innovation

RMC - Raw Materials Consumption

RWMPO - Regional Waste Management Planning Office

SDG - Sustainable Development Goal

SEAI - Sustainable Energy Authority of Ireland

SME - Small and Medium Enterprises

WAPCE - Waste Action Plan for a Circular Economy

WEEE - Waste electrical and electronic equipment



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