

Waste prevention country profile

Ireland

April 2023



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European Environment Agency



Country profile: Ireland

General information

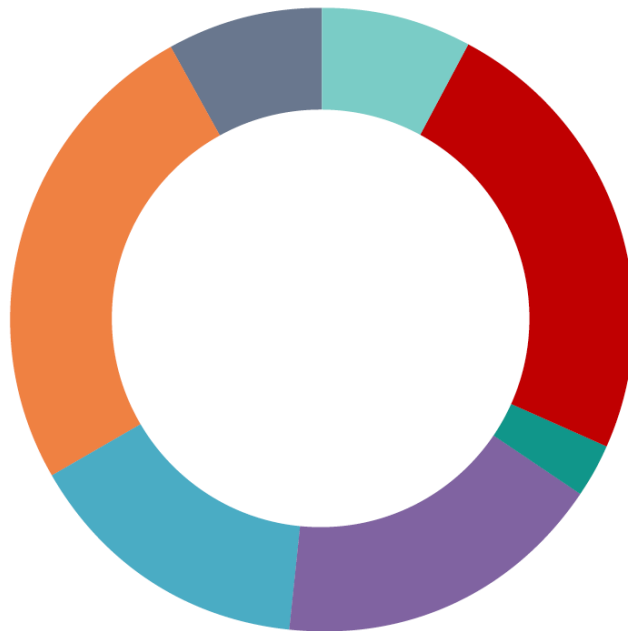
Name of the country/ region	Ireland
Coverage of the waste prevention programme (national/ regional)	National
Type of programme (stand alone or integrated into waste management plan)	Stand-alone programme
Title of programme and link to programme	The National Waste Prevention Programme Developed for year 2021, available at Resources Environmental Protection Agency (epa.ie) . It has been incorporated into The Circular Economy Programme (CEP) 2021 - 2027.
Duration of programme	The National Waste Prevention Programme came in force in 2004. The Circular Economy Programme includes the National Waste Prevention Programme and has a six-year duration up to 2027.
Language	English
Contact person in the country/region	Warren Phelan, Programme Manager w.phelan@epa.ie + 353 o.lebolloch@epa.ie, +353 53 916 0600 Environmental Protection Agency (EPA) of Ireland, Circular Economy Programme, Office of Environmental Sustainability http://www.epa.ie/
Development process of the programme/ revision	Ireland's National Waste Prevention Programme (NWPP) was established in 2004. The programme has been reviewed periodically over the years. In 2018, a review of the programme aligned its vision to the circular economy policy agenda. 21. Since December 2021 the NWPP is incorporated in the national Circular Economy Programme, a statutory programme under the Circular Economy Act 2022 ¹ . The vision of the Circular Economy Programme is “An Ireland where the Circular Economy ensures that everyone uses less resources and prevents waste to achieve sustainable economic growth.” The Circular Economy Programme works under four pillars – Delivering through partnerships; Innovation & demonstration; Advocacy, Data, Insights & Coordination and Regulation for Circularity.

¹ [pdf \(irishstatutebook.ie\)](#). Reference Section 10.

Foreseen budget for implementation of the project

The annual report 2021 includes a detailed overview on expenditure in of the National Waste Prevention Programme. In 2021, the total expenditure was 1.896 mill. EUR. Its breakdown is shown in the chart below (Figure 1)

Figure 1



- Sponsorship, Communication & Outreach
- Agriculture
- Food Waste Prevention
- Plastics
- Resources and Raw Materials
- Innovations and Demonstrations
- Local Waste Prevention

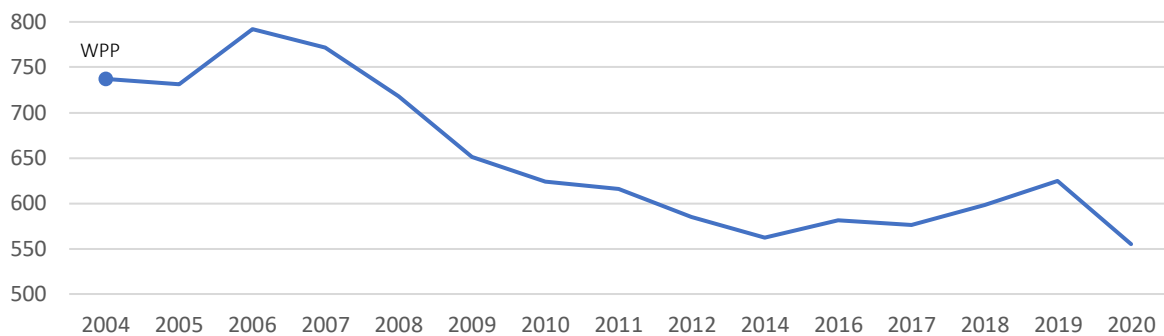
WASTE GENERATION

The following figures illustrate the progress towards waste prevention and decoupling of waste generation from economic growth in Ireland:

MSW

- The generation of municipal waste per capita has decreased over the course of the implementation of the waste prevention programme, from 737 kg per capita in 2004 to 555 kg per capita in 2020 (see Figure 2).
- Although municipal waste generation is influenced by many factors (population, household expenditure), the stringent implementation and repeated update of the national waste prevention programme might explain the positive trend in waste generation, particularly from 2007.

Figure 2: Municipal waste generation in Ireland per capita, 2004-2020

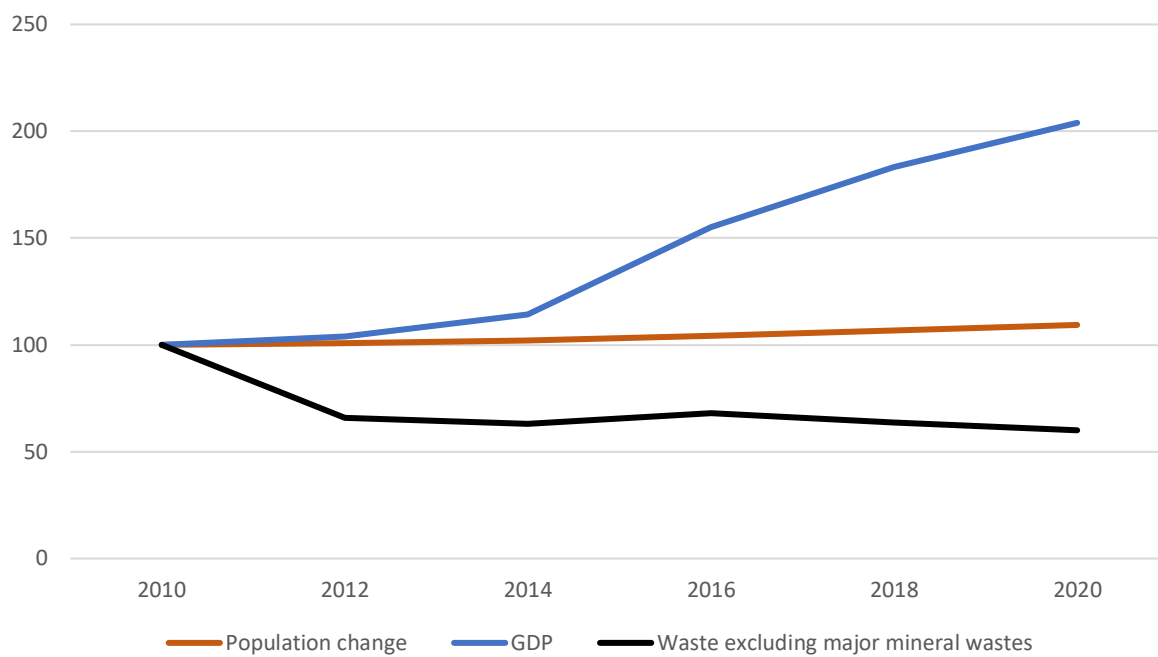


Source: Eurostat [ENV_WASMUN]

Total waste

- The economic crisis had a profound impact on Ireland's economic growth. Hence, its total waste generation decreased particularly fast between 2010 and 2012 (see Figure 3). Remaining quite steady until 2013, its GDP yet started increasing significantly the years after.
- This increase in GDP, however, had little impact on Ireland's waste generation, indicating a decoupling trend between its economic growth and the generation of waste.
- A link between waste generation and population growth, which increased slowly but steadily within this period, cannot be observed.
- Similar to municipal waste, the measures in Ireland's WPP might partially explain the overall positive total waste generation trend.

Figure 3: Growth rate of waste (excluding major mineral wastes) (data not available for 2020), GDP (main GDP aggregates, chain linked), and population, 2010-2020, (2010=100).



Source: Eurostat [ENV_WASGEN, NAMA_10_PC, DEMO_GIND]

WASTE PREVENTION PROGRAMME

Objectives and priorities

1. Waste prevention objectives of the Programme - quantitative objectives (waste reduction) - qualitative objectives (reduction of hazardous substances/ environmental impacts)	<p>The NWPP is Ireland’s primary initiative with regard to developing the circular economy.² This emerging economic model looks to minimise the consumption of resources and energy by keeping products and materials in use for longer. It is founded on the waste hierarchy, which identifies waste prevention as the primary approach; followed by reuse; repair; and recycling.</p>
	<p>More specifically, the NWPP aims to</p> <ul style="list-style-type: none">• Reduce wasteful consumption of material, water and energy resources by changing behaviours in businesses, households and the public sector;• enhance competitiveness and reduce business costs by delivering programmes that stimulate resource efficiency and the circular economy;• support sustainable growth and employment in the green economy - including re-use enterprises;• minimise generation of hazardous wastes through efficient practices and use of safer alternatives;• manage hazardous substances in products through efficient regulation;• inform and influence evidence-based decision-making by compiling and publishing high quality data on waste.
	<p>However, it should be noted that since 2020 there has been several significant policy /legislative developments to develop circular economy. This includes, for example, the Waste Action Plan for a Circular Economy (2020) and Whole of Government Circular Economy Strategy (2021) as well as the Circular Economy Act 2022.</p>
	<p>Local authorities are responsible for waste management planning, and at the time of preparing this country profile, a National Waste Management Plan for a Circular Economy is expected to be published soon for public consultation in Ireland. Local authorities also play a role in developing/delivering circular economy.</p>
2. Sectors covered	<ul style="list-style-type: none">• Agriculture;• construction and Infrastructure;• manufacturing & industry;• retail;• households;• service activities;• hospitality;• public services (including procurement).

3. Priority waste types	See above on sectors covered
4. Target groups	The Irish NWPP explicitly involves working with various stakeholders. Through innovation & demonstration funding supports and working in partnership with national level organizations, it supports initiatives that develop and showcase best practice in an Irish context. Specific interactions are tailored to engage with the general public, commercial enterprises or public bodies, with an emphasis on evidence-driven messaging.

Targets, indicators and monitoring

1. Indicators proposed	<p>Waste prevention in Ireland is measured at a project level with indicators indicated in the NWPP. Available data are verified as appropriate and aggregated by sector or by other means in order to indicate:</p> <ul style="list-style-type: none"> • the volume of resources conserved (tonnes of materials, cubic metres of water, kilowatt-hours of energy), with measurements made before and after the intervention (e.g., production of residual waste per person); • the quantity of waste prevented (tonnes of waste generated), with measurements made before and after the intervention; • money saved (the difference in Euros in waste, water and/or energy costs after the intervention or change). <p>All specific prevention projects undertaken under the National Waste Prevention Programme have built-in metrics. Indicators are quantitative where possible and qualitative where appropriate. Examples of such indicators also include the number of businesses or communities contacted by the different waste prevention projects.</p>
2. Quantitative targets	<p>For the purposes of waste management planning, Ireland is divided into three regions (Southern, Eastern-Midlands and Connacht-Ulster). The regional waste management plan 2015-2021 foresees a 1% reduction per cap/y for the quantity of household waste generation within that period of time.</p> <p>The NWPP collaborates and provides funding and support for waste prevention activities by local authorities in these regions through the Local Authority Prevention Network (LAPN).</p> <p>Other quantitative targets include:</p> <ul style="list-style-type: none"> • national target for a 50% reduction in food waste by 2030

3. Monitoring of programme	<p>The Irish Environmental Protection Agency publishes annual progress reports that provide detailed information on successfully implemented waste prevention measures as well as strategic considerations on future waste prevention priorities (https://www.epa.ie/pubs/reports/waste/prevention/reports/).</p> <p>A National Waste Prevention Committee (NWPC) was convened in 2004 to monitor the development of the National Waste Prevention Programme and to provide strategic directions for the EPA in implementing it. The governance for the Circular Economy Programme (which now contains the NWPP) is set out in the programme document EPA Circular Economy 2021 Programme Apr22 Web.pdf</p> <p>The EPA provides the chairperson & secretariat for the committee, further members are drawn from governmental, non-governmental, business & sectoral interest groups.</p>
4. Evaluation of the programme	<p>The annual progress reports include assessments of specific projects and waste prevention measures. In addition, technical oversights are provided by the National Waste Prevention Committee. Partnership activities are subject to ongoing evaluation to ensure objectives and activities align to strategic objectives of the Circular Economy Programme.</p>

Prevention measures

Implemented prevention measures according to Article 9	<p>The Annual Waste Prevention Report 2021 highlights successfully implemented prevention measures in the following areas:</p> <ol style="list-style-type: none"> 1. Innovation and demonstration 2. Delivering through partnerships 3. Advocacy and communications <p>Detailed information on specific measures can be found in the following overview (see Table 1).</p>
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Table 1: Specific waste prevention measures structured according to Art 9 WFD

Promote and support sustainable consumption models	<p><i>Circular Campus</i>: Together with the Irish Universities Association (IUA), the potential of waste prevention and behavioral change on Irish university campuses shall be explored (NWPP, p. 13).</p> <p>The <i>Roscommon Women’s Network</i> helps visualize the potential of the local circular economy by offering training to upcycle textiles (p. 11).</p> <p>In collaboration with RTÉ, a podcast on the circular economy in Ireland has been produced (p. 26).</p>
Encourage the design, manufacturing and use of products that are resource-efficient ,	Operating within the envelope of the NWPP, the Controlled Substances and Producer Responsibility

<p> durable (including in terms of life span and absence of planned obsolescence), reparable, re-usable and upgradable.</p>	<p>unit inter alia supports Producer Responsibility Initiatives (PRIs) under the WEEE and Batteries Regulations that places significant emphasis on prevention in the design phase.</p>
<p>Target products containing critical raw materials to prevent that those materials become waste.</p>	<p>Not specifically addressed in the NWPP.</p>
<p>Encourage the re-use of products and the setting up of systems promoting repair and re-use activities, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and products.</p>	<p><i>Community Resources Network Ireland</i>: this is a network for reuse and repair organizations in Ireland. It represents the reuse and repair efforts for the national and EU policy developments. The members of this network have reused over 24,000 t of materials (p. 19).</p>
<p>Encourage, as appropriate and without prejudice to intellectual property rights , the availability of spare parts, instruction manuals, technical information, or other instruments, equipment or software enabling the repair and re-use of products without compromising their quality and safety.</p>	<p>A specific tool funded by the NWPP is repairmystuff.ie. It creates connections between repair business and consumers in Ireland to promote repairing for reuse within the circular economy approach (p. 13).</p>
<p>Reduce waste generation in processes related to industrial production, extraction of minerals, manufacturing, construction and demolition, taking into account best available techniques.</p>	<p>The <i>Green Enterprise: Innovation for the circular economy</i>’ is a competitive funding programme/ flagship initiative of the NWPP that created opportunities for innovations in the priority areas <i>plastic waste, construction and demolition waste, food waste, and resources and materials</i> in 2019. The program promoted case studies that explored circular economy opportunities and scenarios for Irish businesses and organizations as well as demonstration projects to apply research ideas (NWPP p. 10f.).</p> <p><i>Resource Efficiency Tools</i>: online tools like TREE help companies watch their internal processes and household actions to make efficient use of water, energy and materials (p. 13).</p> <p><i>Irish Manufacturing Research</i>: This three-year partnership (2020-2022) is intended for CIRCULÉIRE, the National Platform for Circularity Manufacturing to develop CE models and offer innovation funding. The goal is to measure performance on GHG emissions and waste generation (p. 17).</p> <p>The Circular Economy Programme, working with Environmental Licensing, will explore the further integration of the circular economy, waste and resource efficiency within the environmental regulatory framework and EPA licences as a means of promoting circularity in industrial processes, and contribute to a reduction in industrial waste generation. This could result in materials being used</p>

	<p>in a more beneficial way, for example anaerobic digestion plants producing biogas (CEP 2021-2027, p. 13).</p>
<p>Reduce the generation of food waste in primary production, in processing and manufacturing, in retail and other distribution of food, in restaurants and food services as well as in households as a contribution to the United Nations Sustainable Development Goal to reduce by 50 % per capita global food waste at the retail and consumer levels and to reduce food losses along production and supply chains by 2030.</p>	<p>The national campaign on food waste prevention aims to deliver through collaboration, impact and measurement. The programme works across three core areas of Household, Supply chain and Hospitality (CEP 2021-2027, p. 8).</p> <p>Initial actions on food waste in supply chain and hospitality businesses are focused on (i) the roll-out of a standardised measurement methodology to measure food waste and develop national sectoral benchmarks and (ii) building capacity for action on food waste prevention through upskilling and case studies (p. 8).</p> <p>Roadmap for key waste streams to be developed by CEP and Department of the Environment, Climate and Communications and other stakeholders, the initial focus of which is on food waste. These roadmaps will be target-driven and will articulate specific objectives and activities to be undertaken to achieve positive change for the identified sector. The goals of these roadmaps will also be underpinned by pacts and sectoral pledges where appropriate - such as the EPA's Food Waste Charter (p. 9).</p>
<p>Encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and the reprocessing into non-food products.</p>	<p>As a national campaign, <i>Stopwoodfaste.ie</i> raises awareness to households on food waste issues. Via the <i>Food Waste Charter</i>, businesses are accelerated to act on prevention and reporting of food waste in Ireland. With their social media initiatives, they gained a 57 % increase in social media followers in order to reach a wider audience on food waste among consumers. In addition, a media campaign on food waste ran for two weeks through both radio and social media reaching over 1,6 million listeners (p. 24).</p>
<p>Promote the reduction of the content of hazardous substances in materials and products, without prejudice to harmonised legal requirements concerning those materials and products laid down at Union level, and ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council provides the information pursuant to article 33(1) of that regulation to the European Chemicals Agency as from 5 January 2021.</p>	<p>Not specifically addressed in the NWPP. However, One of the roles under the Circular Economy Programme is the implementation of the National Hazardous Waste Management Plan 2021 – 2027 and this includes actions (Resources Environmental Protection Agency (epa.ie))</p>
<p>Reduce the generation of waste, in particular waste that is not suitable for preparing for re-use or recycling.</p>	<p><i>Partnership with the rediscovery center</i>: the national center for circular economy supports the Irish transition toward a circular economy.</p>

	The project Rezero by ZeroWaste.ie demonstrates a deposit-return system for food retailers (p. 11).
Identify products that are the main sources of littering, notably in natural and marine environments, and take appropriate measures to prevent and reduce litter from such products, where Member States decide to implement this obligation through market restrictions, they shall ensure that such restrictions are proportionate and non-discriminatory.	Not specifically addressed in the NWPP.
Aim to halt the generation of marine litter as a contribution towards the United Nations Sustainable Development Goal to prevent and significantly reduce marine pollution of all kinds.	Not specifically addressed in the NWPP.
Develop and support information campaigns to raise awareness about waste prevention and littering.	<p><i>Local Authority Prevention Network:</i> the LAPN advances the priority efforts of the NWPP in order to prevent local waste and to advance local prevention measures in communities (p. 17).</p> <p>Within the DCCAE-led <i>Green Government</i>, the NWPP provides a guidance document on Resource Efficiency Action Plans. This can serve governments to save water, energy and materials, prevent food waste and raise recycling rates in their work environment. This activity is supported by the <i>TREE</i> online resource efficiency tool (p. 25).</p>

Additional implemented prevention measures, not covered by Article 9

A single-use plastics project by Polymer Alloy Technology demonstrates the capacity of plastics to be remoulded into pallets in a circular economy (NWPP p. 11)

A Hexafly project demonstrates the conversion of waste to proteins that can be used for animal and aquaculture feed (p. 11).

An Irish Manufacturing Research project called SymbioBeer reduces food waste by using waste bread as a secondary raw material to produce beer, while beer waste is used for the production of bread (p. 11).

Analysis of waste characteristics and national waste data to inform policy, behavioural change interventions and awareness campaigns with a view of waste prevention in the circular economy (CEP 2021-2027, p. 9).

FOOD WASTE PREVENTION

Food waste generation

There has been a food waste prevention programme with activities under the NWPP since 2009/2010. Stop Food Waste, managed under Circular Economy Programme, is the national food waste prevention campaign for householders and activities to prevent food waste in business/supply chain are also actioned.

A Food Waste Prevention Roadmap 2023 – 2025 was published by the government in Nov 2022 – there are a number of roles for the EPA/circular economy programme within this roadmap. This roadmap is referenced as the [gov.ie - National Food Waste Prevention Roadmap 2023-2025 \(www.gov.ie\)](https://www.gov.ie/en/publications-and-statistics/publication/2022-11-22-food-waste-prevention-roadmap-2023-2025/)

In 2020 Ireland generated about 770 000 tonnes of food waste (Eurostat ENV_WASFW), most of which is generated by households (31% of total generation), followed by manufacturing and processing (29%) and restaurants and food services (23%). Household and commercial food waste is of concern due to its high volume of embedded carbon and other natural resources and its various waste collection mechanisms. Separate collection from food processing operations is, for example, much easier than from households.³

Measures to prevent food waste

‘EPA Stop Food Waste’ is the national food waste prevention campaign providing guidance and resources to help consumers reduce food waste. Through a combination of education, training, local champions and national promotion (media and social), the programme aims to raise consumer awareness and empower citizens in order to change their behaviour towards food waste reduction.

Through the ‘Food Waste Charter’, the EPA is leading a collaborative programme that supports businesses throughout the food supply chain in reducing food waste. The EPA also hosts the ‘Forum on Food Waste’ that brings together key actors across the food chain to discuss the issues and challenges in relation to food loss and waste in Ireland.

REUSE OF PRODUCTS

Data

Reuse and life time extension of products are considered as key strategies towards waste prevention. The revised Waste Framework Directive (WFD) puts a specific emphasis on measures related to this topic. Article 9 of the revised WFD requires Member States to monitor reuse on the basis of methodology to be developed by the Commission.

In 2019, the Q2REUSE project was financed by the Environmental Protection Agency of Ireland to investigate methodologies to assess and measure the Irish reuse sector. A systematic review of the reuse landscape in Ireland was undertaken, providing insights into how the sector can be quantified, developed and compared to other EU Member States. The project identified practitioners of reuse in Ireland and carried out quantitative and more detailed qualitative surveys. The project found that over 1 200 businesses, social enterprises and charities are reusing products such as clothes, furniture, media, bikes and others. In 2020, 32 000 tonnes of material were reused averaging at 6.5 kg per person.⁴

³ <https://www.epa.ie/waste/nwpp/foodwasteprevention/> and <https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/food/#d.en.101376>

⁴ <https://ctc-cork.ie/projects/qualifying-and-quantifying-the-reuse-sector-in-ireland-q2reuse/>

With regard to the Commission Implementing Decision (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.010.01.0001.01.ENG&toc=OJ%3AL%3A2021%3A010%3ATOC), this section will be updated by the EEA accordingly.

Measures to support reuse

The ‘Local Authority Prevention Network’ provides various good practice examples as well as tools and guidelines for the support of reuse and repair of products.

Monaghan County Council has been working with County Councils from Galway, Kilkenny, Limerick, Meath, South Dublin, and Wicklow to develop an online Repair Directory. This follows on from the success of the Kilkenny Repair Directory developed in 2015 and which has been replicated on paper in other counties. The directory is available on the website: <http://www.repairmystuff.ie/>

Galway County Council and Galway City Council have co-hosted The Galway Reuse and Repair Initiative. This event was designed to showcase best practice examples of reuse, repair and upcycling currently being undertaken by businesses, organisations, voluntary groups, and others in Galway and beyond. The event boosted waste prevention and resource efficiency within the region, created awareness and increased the profile of existing practice examples in the community.

Best practice examples

Green Enterprise is the NWPP’s flagship innovation funding call which supports organisations to develop and demonstrate new circular economy business models and approaches. For the 2021 call the thematic areas were Plastics; Construction & Demolition; Food; and Resources & Raw Materials. A total of EUR 710 000 was granted to support eight projects, which included projects to demonstrate circular economy opportunities for furniture, textiles and related products/material streams, quantification of GHG emissions related to surplus food redistribution and food waste reduction initiatives in commercial kitchens (NWPP Annual Report 2021, p. 13).

Another example is a project completed in 2019, where the Green Enterprise programme provided €55,000 funding for University of Limerick to demonstrate ‘Greening IT’ — a circular economy approach to campus information technology services. The project was the first national campus plan to improve the resource and energy efficiency of IT equipment across each stage of the product life cycle. The outcomes of the project included:

- Demonstrating reduced energy use of campus IT equipment which included optimising cooling and investigating opportunities for reducing up to 90% of campus carbon emissions by moving onsite services to the cloud;
- Including Green Public Procurement criteria in tender documents;
- Encouraging and promoting campus reuse through existing informal reuse exchange systems;
- Engaging suppliers through Extended Producer Responsibility (EPR) schemes and promoting recycling through student ‘end of semester’ WEEE collection events;
- Upskilling the project team with local training on repairing phones and engaging the campus community on life-cycle impacts and opportunities for extending the use phase of electronic equipment through repair events;
- Hosting a pop-up shop for refurbished IT equipment. Over a two month period, 150 items were sold to staff and students.

A key learning from this study was the importance of gaining support from senior management at the outset to establish cross-departmental motivation and support to undertake the project. Benefits of the

project have continued past completion, such as hosting further repair education events and annual end of semester WEEE recycling events, continuing close engagement with suppliers to enact EPR schemes, increasing the activity and use of existing onsite exchange and reuse systems and using opportunities to reduce campus IT carbon emissions by moving onsite services to the cloud.

Links to circular economy

Waste prevention is an integral part of the comprehensive transformation towards a circular economy. It reduces the input of natural resources into the economy as well as the necessary efforts to collect and recycle waste.

Approaches for improving circularity are often highly interlinked with successful waste prevention. The following table shows which circular strategies are explicitly integrated into the Irish waste prevention programme.

Topic	Addressed in the programme	Comments
Eco-design	No	N/A
Repair, refurbishment and remanufacture	Yes	Several initiatives that focus on extending the use phase of products.
Recycling	Yes	E.g. cooperation with recovery programmes.
Economic incentives and finance	Yes	Detailed and transparent budget for waste prevention efforts.
Circular business models	Yes	Support for local networks on sharing and leasing.
Eco-innovation	Yes	Stimulating innovations for efficiency as one of the key pillars.
Governance, skills and knowledge	Yes	Focus on enabling local actors, e.g. by the Local Local Authority Prevention Network and national actors e.g. Community Resources Network Ireland, or the Irish University Association on campus project