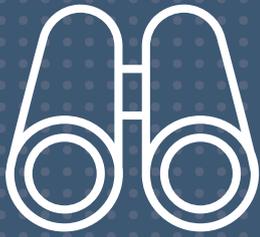




# THE CIRCULAR ECONOMY PROGRAMME 2021-2027

The Driving Force for Ireland's  
Move to a Circular Economy



## OUR VISION

An Ireland where the Circular Economy ensures that everyone uses less resources and prevents waste to achieve sustainable economic growth.

# PROGRAMME OVERVIEW

## THE CIRCULAR ECONOMY PROGRAMME

Leadership

Supports

Knowledge

Opportunity

### THE DRIVING FORCE FOR IRELAND'S MOVE TO A CIRCULAR ECONOMY:

where businesses, citizens and the public sector reduce resource use, prevent waste and achieve sustainable economic growth.



#### ADVOCACY, INSIGHTS, DATA & COORDINATION



- > Policy support
- > Education & Awareness
- > Roadmaps & Reporting

#### INNOVATION & DEMONSTRATION



- > Green Enterprise: Innovation for Circular Economy
- > Green Public Procurement
- > Local Authority Prevention Network

#### DELIVERING THROUGH PARTNERSHIPS



- > Local Authority Sector
- > Public Engagement & Social Enterprises
- > Embedding circular business models
- > Ireland's Reuse & Repair sector
- > Sectoral Partnerships

#### REGULATORY FRAMEWORK FOR CIRCULARITY



- > End-of-Waste & By-Products
- > Regulation of Industry & Waste Management Activities
- > Chemicals & the Non-toxic Environment

## OUR PRIORITY AREAS



Packaging



Plastics



Textiles



Food, Water & Nutrients



Construction & Buildings



Electronics & ICT



Batteries & Vehicles

# INTRODUCTION

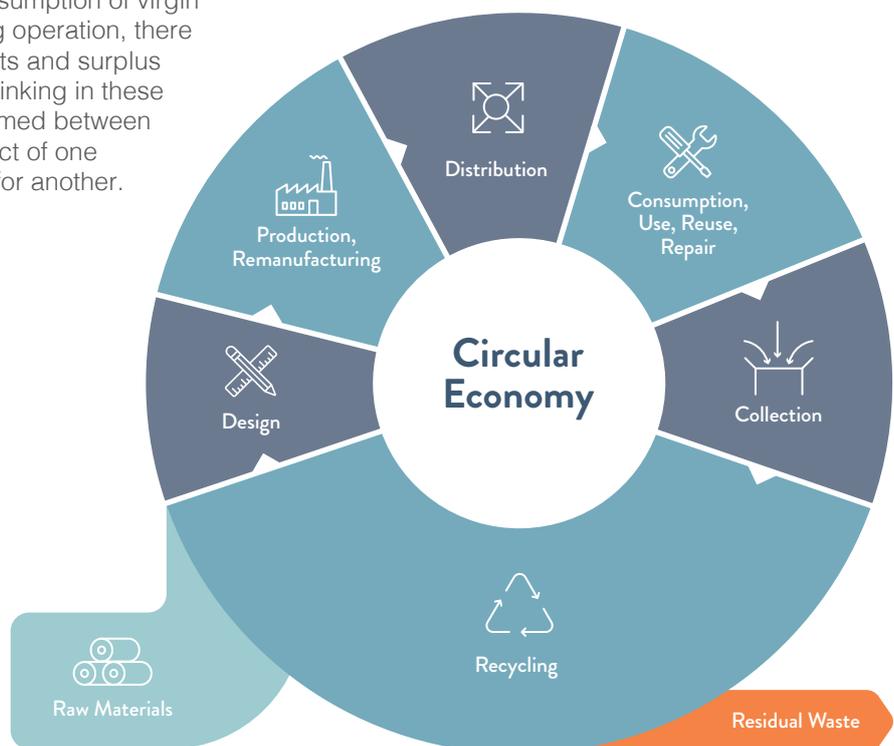
**This document outlines Ireland's The Circular Economy Programme which will be led by the Environmental Protection Agency (EPA). The Circular Economy Programme incorporates and builds upon the previous National Waste Prevention Programme<sup>1</sup> to support national-level, strategic programmes to prevent waste and drive the Circular Economy in Ireland. The development of the Circular Economy Programme responds to the commitment within the national policy document *The Waste Action Plan for a Circular Economy* to reconfigure the National Waste Prevention Programme into Ireland's The Circular Economy Programme.**

In a circular economy, economic activity is maintained and can grow, while the extraction and consumption of virgin raw materials is reduced, and waste is prevented and reduced at all stages from the design process through to managing end-of-life of products and materials. A circular economy is based firmly on the waste hierarchy and the proposition that preventing waste in the first place is the most effective way to reduce consumption of resources.

Resource efficiency is a fundamental element of circularity whereby businesses ensure that materials and processes are optimised to maximise utility, prevent waste and reduce the consumption of virgin materials. Often in a manufacturing operation, there can be by-products such as off-cuts and surplus production. By applying circular thinking in these instances, partnerships can be formed between companies such that the by-product of one process become the raw material for another.

Within a circular economy, the products and goods already in circulation are carefully managed to ensure their maximum productive life is obtained through reuse, repair, and remanufacturing. This reverses the trend seen in recent years for products to be offered at relatively low initial selling costs based on driving frequent product replacement. This can be driven by marketing and fashion stimuli; by design approaches that form barriers to repair; or even through deliberate planned obsolescence. For items that can no longer be used or repaired, these are dismantled to recycle the components in the product and/or the materials it is made from. Through careful segregation and processing, these wastes can then be safely returned to manufacturers as a cost-effective raw material stream.

Increased sharing of products both at personal level and through commercial product-as-a-service models allows greater usage of products without needing additional manufacturing. As seen with urban car-sharing schemes, this approach can offer new economic opportunities through leveraging digitalisation and smart technology to serve customers with seamless, efficient services that eliminate the need for product ownership.



<sup>1</sup> [www.epa.ie/environment-and-you/circular-economy/](http://www.epa.ie/environment-and-you/circular-economy/)

# THE CIRCULAR ECONOMY PROGRAMME

## POLICY AND LEGISLATIVE BASIS

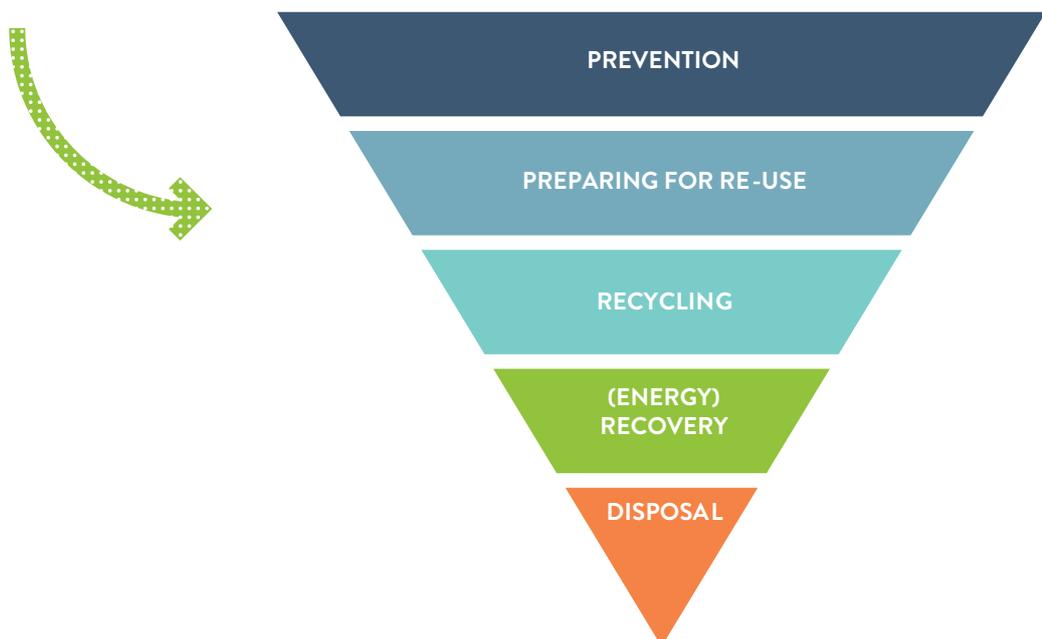
The government's national waste policy Waste Action Plan for a Circular Economy sets out that *"We will reconfigure the existing National Waste Prevention Programme to make it Ireland's Circular Economy Programme. Led by the EPA, it will have a designated coordinating role to support the Department's Circular Economy Unit in overseeing national, regional and local activities to improve coherence and alignment of national and local activities and ensure maximum impact."*

The Circular Economy Programme will be a statutory programme when the Circular Economy Bill is enacted and shall incorporate the existing statutory National Waste Prevention Programme. The Circular Economy Programme sits under the whole of government Circular Economy Strategy and supports this national strategy. On establishment of the programme, the EPA will provide a copy of the programme to the Minister for the Environment, Climate and Communications, each local authority and other public bodies that in the opinion of the EPA would have an interest. The programme shall be reviewed not less than once in each six-year period.

Applying the waste hierarchy priority order will be central to the Circular Economy Programme, where *Prevention* is identified as the priority approach (including reuse), followed by *Preparing for reuse* (including repair); *Recycling*; *Recovery* (energy recovery and other recovery such as backfilling); and finally *Disposal*.

Ireland's National Waste Prevention Programme was established in 2004 and has been recognised as an exemplary programme in the EU. The programme has been reviewed periodically and most recently in 2018. It focuses on national level strategic programmes with high visibility, impact and influence to prevent waste and drive the circular economy in Ireland. The programme does this by funding innovation and demonstration projects; by partnering with organisations to deliver national initiatives; and by advocating for waste prevention.

The overall approach to the Circular Economy Programme, which will incorporate the National Waste Prevention Programme, is to influence behavioural change, support sustainable choices and inform policy toward the implementation of a circular economy. Legislation (including the Waste Management Act 1996 as amended, and Statutory Instruments transposing the Waste Framework Directive) provide examples of waste prevention measures, and these have been considered in the preparation of this programme. For example, the requirement to adopt specific food waste prevention programmes, the promotion of eco-design, the use of awareness programmes, the provision of funding supports, the promotion of reuse and/or repair, and the integration of waste prevention criteria into public and private procurement.



## CLIMATE LINKAGES

The circular economy is at the core of the transition to a low-carbon economy and has a critical role to play in achieving climate targets at national and global levels. Influencing consumption and production patterns is critical for controlling greenhouse gas emission levels as well as reducing waste generation and will be an integral part of this programme. The Circular Economy Programme will work closely with stakeholders including the Department of the Environment, Climate and Communications to realise the potential of circularity as a climate action.

## OBJECTIVES

The Circular Economy Programme will be the driving force for Ireland's move to a circular economy, where businesses, citizens and the public sector reduce resource use, prevent waste and achieve sustainable economic growth.

The Circular Economy Programme will support the whole of government Circular Economy Strategy and play a central role in Ireland's circular transition. The Programme will look beyond waste management, to promote circularity as an economic model and to enhance coherence and alignment among national, regional and local activities. It will provide for a competitive programme of circular economy supports through innovation grants, sponsorships and seed-funding. The Programme will also improve the national knowledge base and provide an evidence base to inform circular economy development in Ireland.

The Circular Economy Programme works with others to deliver programmes and engage with industry & enterprise, research organisations, local authorities and other public sector bodies, social enterprises, product designers and representative bodies. The desired outcome is to mobilise businesses, individuals and the public sector to realise the economic and environmental opportunities presented by increased circularity.

Over the course of its six-year duration, the programme will:

<p><b>Provide LEADERSHIP</b> on the circular economy to improve coherence and alignment of national, regional and local circular economy activities and ensure maximum impact.</p> <p>1</p>	<p><b>Maintain a competitive programme of SUPPORTS</b> to drive the circular economy through providing innovation grants and seed-funding to nationally relevant initiatives.</p> <p>2</p>
<p><b>Implement actions that build KNOWLEDGE</b> and an evidence base to inform circular economy development in Ireland, and to report on progress towards greater circularity</p> <p>3</p>	<p><b>Realise the enterprise OPPORTUNITY</b> of a circular economy by supporting new business models; promoting resource efficiency; and retaining material value through enhanced use of secondary/ recycled materials, applying the appropriate regulatory framework.</p> <p>4</p>

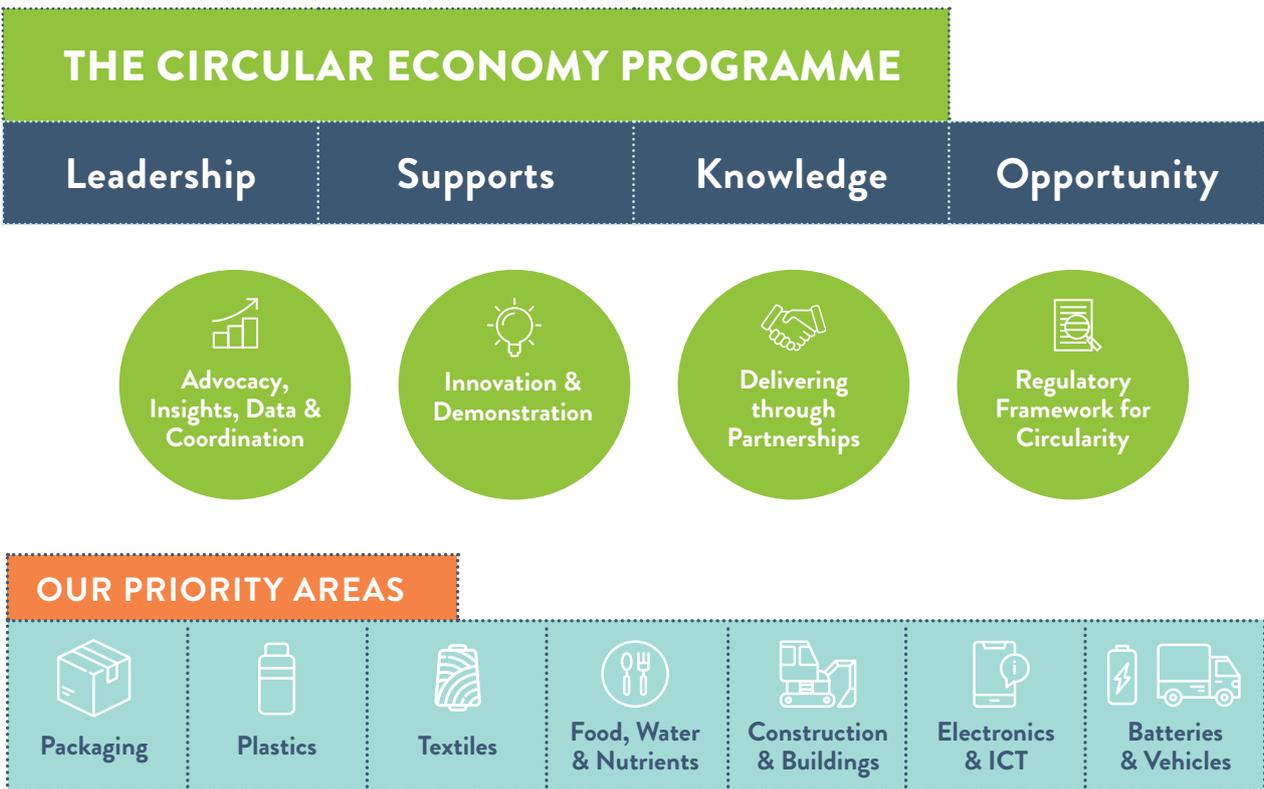
# PROGRAMME STRUCTURE

The Circular Economy Programme represents the EPA's contribution to delivering Ireland's ambitions on the circular economy. The programme will support the whole of government Circular Economy Strategy, incorporate the National Waste Prevention Programme and reflect national policy on the circular economy including:

- > Prioritising waste prevention (including reuse) and repair activities, while also expanding down the waste hierarchy to encompass recycling.
- > Supporting the realisation of the economic aspects of circularity including for example through digitisation, the sharing economy and bioeconomy.<sup>2</sup>

The programme provides **Leadership, Supports, Knowledge and Opportunity** to promote and amplify circularity in Ireland for business sectors, citizens and the public sector. The Circular Economy Programme will launch in 2021 and operate for six years (2021 to 2027).

The Circular Economy Programme is based on a four-pillar structure as shown below, with a focus for 2021-2027 on the priority areas as articulated in national waste policy documents and the European Green Deal: Packaging, Plastics, Textiles, Food, water & nutrients; Construction & buildings, Electronics & ICT, Batteries & vehicles. Annual work programmes will reflect the programme activities and priorities for a given year.



<sup>2</sup> Recognising that there is a National Policy Statement on the Bioeconomy (2018) and a National Bioeconomy Implementation Group, which is co-chaired by the Department of Agriculture, Food and Marine and Department of the Environment, Climate and Communications

# OPERATIONAL PILLARS

## 1 ADVOCACY, INSIGHTS, DATA & COORDINATION



### THE CIRCULAR ECONOMY PROGRAMME



Advocacy,  
Insights, Data &  
Coordination



Innovation &  
Demonstration



Delivering  
through  
Partnerships



Regulatory  
Framework for  
Circularity

Policy Support | Education & Awareness | Roadmaps & Reporting

**The Circular Economy Programme builds on the work of the National Waste Prevention Programme as a strong advocate for circular economy and waste prevention in Ireland. The programme is designed to communicate solutions based on behavioural insights that can be scaled-up for the greatest impact and gathers data and evidence to inform robust policy development and report on progress.**

#### POLICY SUPPORT

Policy support is a core element of the Circular Economy Programme and its designated role to support government's Circular Economy Unit. The EPA provides advice, assessments and national statistics to support the development and implementation of national circular economy policy. This work - informed by the EPA's circular economy expertise and engagement with an extensive network of counterparts at an international level including the OECD, European Commission and the European Environment Agency - informs and supports national circular economy implementation.

Through a 'Circular Insights' initiative, the EPA commissions studies on emerging and priority topics to build evidence and fill knowledge gaps to support circular economy policy. These are intended to form a published series of 'Circular

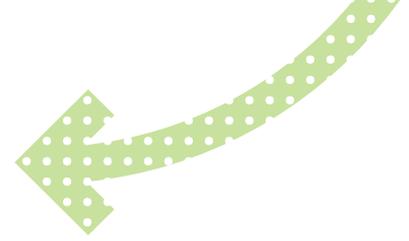
Insights' studies that offer economic, social and technical insights relevant to policy makers, business and other circular economy practitioners.

#### NATIONAL FOOD WASTE PREVENTION PROGRAMME

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.

Action on household food waste will achieve widespread public awareness of environmental and social issues around wasted food; and a significant increase in the number of people taking action on the issue, with a view to achieving the national target for a 50% reduction in food waste by 2030.

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.



## EDUCATION & AWARENESS

Education and awareness at all levels of society, including the formal education system, professional CPD programmes and within public sector organisations is essential to the Circular Economy Programme.

This extends from general awareness of the circular economy, to specific training and awareness raising of students and professionals, to sectoral guidance produced by the Circular Economy Programme. A multi-channel approach to delivery is taken through direct EPA campaigns and events; the strategic partnerships with organisations such as the Rediscovery Centre; national training and development organisations such as SOLAS and sectoral and Government networks.

The Programme engages with the Department of the Environment, Climate and Communications and the Local Authority Sector and supports the public facing MyWaste web portal through the provision of content to raise awareness on waste prevention including household food waste.

## BEHAVIOURAL INSIGHTS

Behavioural insight is a foundation of the Circular Economy Programme, 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 these insights support engagement at a local and community level.

## ROADMAPS

Connecting the Programme's policy support work, expertise and knowledge and co-ordination role, the Circular Economy Programme will work with the Department of the Environment, Climate and Communications and other stakeholders to develop circularity roadmaps for key waste streams, with an initial focus 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.

## DATA & REPORTING

The EPA supports the development of relevant data gathering, monitoring, assessment, indicator and reporting systems and protocols to meet national and European Circular Economy reporting requirements. The EPA compiles official statistics on waste generation and treatment in Ireland. These are used for reporting on Ireland's performance in meeting its legal obligations, for policy and waste management planning purposes and to inform the general public. Data are compiled through surveys of waste operators and administrative data sources, in cooperation with other public authorities.

## RESEARCH

The EPA manages an environmental research programme that delivers essential scientific support for environmental policy development, implementation and broader decision making.

**The EPA Framework for Research 2021 to 2030** is built on four interconnected research hubs, one of which is 'Facilitating a Green and Circular Economy'. Research under this hub will contribute 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 Circular Economy Programme supports the EPA Research programme in a number of ways including developing research call topics and participating in research steering groups.



## THE CIRCULAR ECONOMY PROGRAMME



**Green Enterprise: Innovation for Circular Economy |  
Green Public Procurement | Local Authority Prevention Network**

### GREEN ENTERPRISE: INNOVATION FOR A CIRCULAR ECONOMY

This established and successful innovation funding scheme is being maintained to support business and industry to develop and demonstrate new circular economy approaches. A circular economy contributes to a climate-neutral, resource-efficient economy and circular business models offer competitive opportunities for Irish businesses. Funding is aligned to selected themes, with eco-design, stimulation of repair and reuse activities, the sharing economy, and finding uses for by-products signalled as priority areas. To reinforce its position as supporting economic development through circularity, the Circular Economy Programme is developing greater linkages with the enterprise support sector.

### GREEN PUBLIC PROCUREMENT

The Circular Economy Programme supports the public sector in its leadership of the transition to the circular economy. The programme will also strive to realise the significant potential for the public sector to stimulate a critical mass of demand for more sustainable goods and services, while reducing the environmental/carbon impact of providing public services. Working at a cross-government level, activities are intended to support both purchasers and suppliers to engage with green procurement; and undertake monitoring to report up-take and impact.

### THE CIRCULAR ECONOMY NETWORK

The well-established Local Authority Prevention Network will be relaunched in 2022 as the Circular Economy Network to ensure a good alignment with the Circular Economy Programme and local authority needs and circular economy priorities.

The Circular Economy Programme will provide seed-funding and expertise to establish “Demonstration Hubs”, targeted projects to demonstrate circular economy actions at county-scale, as a model for national roll-out. Potential future initiatives could include supporting introduction of reusable packaging in towns/ events; establishing schemes to promote reuse of reconditioned white goods; or demonstrators of best practice for construction & demolition site waste management. These initiatives will be time-bound and based on an open sharing of learnings.



## THE CIRCULAR ECONOMY PROGRAMME



Local Authority Sector | Public Engagement & Social Enterprises |  
Embedding circular business models |  
Establishing Ireland's Reuse & Repair sector | Sectoral Partnerships

**Collaboration with national organisations to deliver programmes and solutions for the circular economy in Ireland is important for successful delivery of the Circular Economy Programme. These partnerships target priority areas of the economy, working with established leaders to promote and realise the benefit from adopting circular practices among large networks. Partners make a tangible contribution to the partnership, through co-funding or in-kind input. Effectiveness of partnership activities are measured against agreed targets and indicators e.g., awareness, investment in circular practices and savings arising. The Circular Economy Programme partnerships will be based on the following areas:**

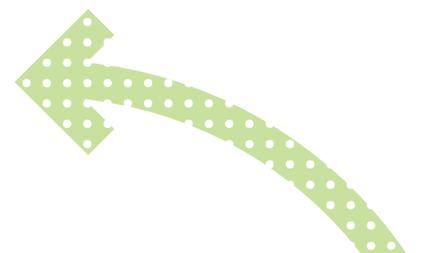
### LOCAL AUTHORITY SECTOR

Local authorities are a key partner in the realisation of circular economy ambitions for Ireland. With responsibilities in climate action and mitigation, local enterprise support, rural and urban community development as well as waste management planning, local authorities can realise a holistic vision of what the circular economy can mean for citizens in their communities. The Circular Economy Programme will provide national-level direction, data and materials for use in community, local and regional scale activities, as well as

funding for collaborative projects. The Local Authority Prevention Network is an example of an established programme under the Innovation & Demonstration pillar. However, it is recognised that there are opportunities to partner with the local authority sector on other initiatives. A partnership agreement will provide clarity on the roles of the Circular Economy Programme and the Local Authority Sector.

### PUBLIC ENGAGEMENT & SOCIAL ENTERPRISES

The EPA's partnership with the Rediscovery Centre (National Centre for the Circular Economy) has built a strong foundation in this area. Work with this sector will be expanded to raise awareness of the circular economy; and supporting social enterprises working with circular business models.



### **EMBEDDING CIRCULAR BUSINESS MODELS**

The current Circuléire partnership supports innovation for circular manufacturing in SMEs and large companies ends in 2022 and the Circular Economy Programme will review its outcome in advance of new partnerships within this sector. Opportunities for future development in this area include additional focus on the service sector and new circular business models (Product-Service Systems).

### **ESTABLISHING IRELAND'S REUSE & REPAIR SECTOR**

A new partnership area to promote a national reuse & repair culture, and to overcome barriers to the take-up of pre-owned/refurbished goods and product repair. This initiative will align to measures in waste policy requiring producer responsibility

schemes to record existing reuse practices and expand reuse activity. Current example of funding in this area includes Community Resources Network Ireland.

### **SECTORAL PARTNERSHIPS**

Collaboration with targeted organisations and business representative groups to promote circular economy on a wide scale. Current examples include the Smart Farming partnership with the Irish Farmers Association, and the Irish Universities Association for a Campus 'Living Labs' Sustainability project.





## THE CIRCULAR ECONOMY PROGRAMME



**End-of-Waste & By-products | Regulation of Industry & Waste Management Activities | Chemicals & the Non-toxic Environment**

Circular economy techniques often involve altering resource flows towards reuse/recycling of products, components or materials after their initial productive life. Much of this would traditionally be regarded as waste and its movement is tightly regulated. There is a challenge to accommodate innovation and trialling of new options and processes without compromising critical human health and environmental protections. The EPA will develop its responses in this area through its wide regulatory experience including that related to end-of-waste and by-products.

### END-OF-WASTE & BY-PRODUCTS

The Agency continues to apply and streamline its decision-making processes regarding End-of-Waste & By-products to ensure that human health and the environment are protected, as well as ensuring a level playing field and a positive experience for operators. The EPA supports the measures outlined in national waste policy to optimise Article 27 notifications and Article 28 applications. These include a potential role for local authorities in the assessment of certain by-product notifications and end-of-waste applications; the introduction of fees; and national end-of-waste applications for identified priority waste streams. The EPA promotes the appropriate use of the Article 27 process to minimise the volume of material entering waste facilities which could be put to productive use elsewhere.

### REGULATION OF INDUSTRY AND WASTE MANAGEMENT ACTIVITIES

Implementation of EU waste policies places increasing emphasis on the higher tiers of the

waste hierarchy: prevention and minimisation, preparation for reuse and recycling. However, the overall increase in quantities of hazardous and non-hazardous waste transfers suggests that there is scope for improvement in resource use and consumption in industrial facilities.

While the Industrial Emissions Directive and earlier legislation have delivered concrete achievements in reducing pollution, a transition to a greener industrial sector will require integrated approaches, with stronger control of pollution at source and the use of innovative technologies. 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 in a more beneficial way, for example anaerobic digestion plants producing biogas.

### CHEMICALS & THE NON-TOXIC ENVIRONMENT

The EPA has prepared a Chemicals Strategy which specifically addresses the role of better regulations of existing chemicals and a move to the 'safe-by-design' chemicals to support circular economy initiatives and the development of safer secondary raw materials markets. The Circular Economy Programme will engage in and contribute to the delivery of the Chemicals Strategy as this will increase knowledge and assist in reducing the risks posed by chemicals to national circular economy initiatives.

# GOVERNANCE

The EPA Board of Directors maintain an oversight and approval role for the Circular Economy Programme activities. The delivery of the programme will be referenced with appropriate monitoring and reporting arrangements within the Performance Delivery Agreement between the EPA and the Department of the Environment, Climate and Communications.

A mid-term review will be undertaken to evaluate the effectiveness of the programme; to check alignment to current policy; and to provide an assessment of the value generated by the programme. In line with the current statutory requirement for national waste prevention programmes, the Circular Economy Programme will be revised within six years of the date of its publication.

A Circular Economy Advisory Committee, with secretariat support provided by the EPA, will bring together a focussed group of national stakeholders working within an agreed Terms of Reference to provide advice on how the programme can best drive the national transition to a Circular Economy. Action-focussed sub-groups for priority areas will be formed as required to supplement the work of this committee.

The Circular Economy Programme sits within the broader national governance framework for the delivery of Ireland's Circular Economy Strategy.

The EPA will work with the Department of the Environment, Climate and Communications to ensure clarity of roles and responsibilities across local, regional, and national bodies.

The programme will issue an annual report on its activities and minutes of the Circular Economy Advisory Committee meetings will be made publicly available.

## TARGETS

The Circular Economy Programme will develop targets for its programmes to track progress and provide direction.

Setting national targets that integrate with monitoring frameworks being developed to capture and report circularity including those within the whole of government Circular Economy Strategy, the EU Circular Economy Action Plan and legislative reporting requirements will be considered and developed in close collaboration with the Department of the Environment, Climate and Communications. Other key stakeholders in this process include the European Environment Agency, the Central Statistics Office and the Regional Waste Management Planning Offices. These will be developed from 2022 onwards.

## NATIONAL IDENTITY

The Circular Economy Programme branding will be applied across all projects and initiatives delivered and funded by the Programme as well as communications, shared resources and events.

The **EPA website** will host The Circular Economy Programme webpages. Programme outputs will be published, and links provided to other main circular economy stakeholders. Coherence and impact will be maximised by making the outputs of the Circular Economy Programme available for use by other stakeholders.

The Programme will host an annual conference to update on national progress and share best practices in the circular economy.





## TO FIND OUT MORE:

Email us: [cep@epa.ie](mailto:cep@epa.ie)

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