



# Circular Economy Programme 2021-2027

Public Consultation, March 2021



# Programme Overview



## Circular Economy Programme

*Leadership :: Supports :: Knowledge :: Opportunity*

*A driving force for Ireland's move to a circular economy by business, citizens & the public sector, characterised by behaviours and business models that design-out waste; ensure resource recycling; and deliver sustainable economic growth.*

### Advocacy, Insights & 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

- *Regional Waste Mgmt Offices*
- *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*

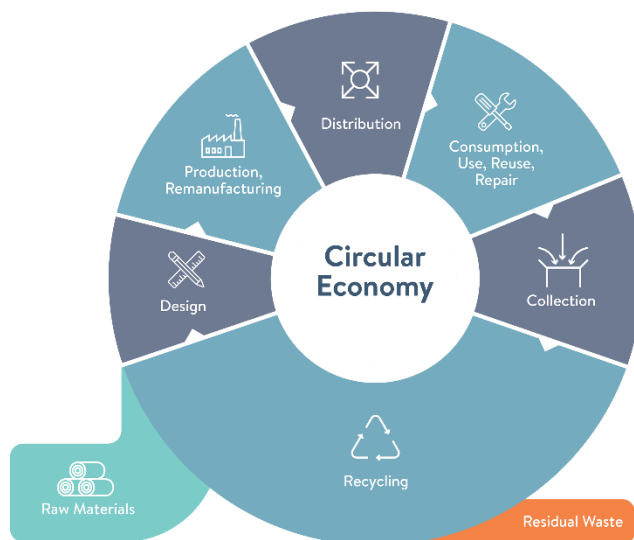
Priority Areas aligned to European Green Deal:

*Packaging :: Plastics :: Textiles :: Food, water & nutrients*

*Construction & buildings :: Electronics & ICT :: Batteries & vehicles*

## Introduction

The circular economy concept encompasses a system that seeks to maintain and grow economic activity though at the same time reducing the extraction and consumption of virgin raw materials. It 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. 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.

Resource efficiency is also 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 materials 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 products 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.

The National Waste Prevention Programme (NWPP) supports national-level, strategic programmes to prevent waste and drive the Circular Economy in Ireland. The recently published national policy document “Waste Action Plan for a Circular Economy” calls for the NWPP to be established as a Circular Economy Programme<sup>1</sup>. In this paper, the EPA sets out the new planned Circular Economy Programme which incorporates the National Waste Prevention Programme.

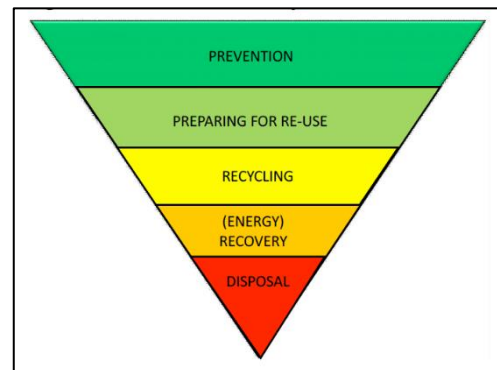
<sup>1</sup> “We will reconfigure the existing National Waste Prevention Programme to make it Ireland’s Circular Economy Programme. Led by the EPA, it will have a designated coordinating role to support the Departments’ circular economy unit in overseeing national, regional and local activities to improve coherence and alignment of national and local activities and ensure maximum impact.”

# Circular Economy Programme

## Overview

The Waste Management Act requires that the EPA establishes a waste prevention programme in accordance with: a) *Article 1 of the Waste Directive (to lay down measures to protect the environment and human health...)*; and b) *the waste hierarchy*. Ireland's National Waste Prevention Programme (NWPP) 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.

This new programme represents an evolution of the NWPP to be a driving force for Ireland's move to a circular economy by business, citizens & the public sector, characterised by behaviours and business models that design-out waste; ensure resource recycling; and deliver sustainable economic growth. As with the NWPP, it is founded on the waste hierarchy which identifies Prevention as the primary approach, to be followed by: Re-Use & Repair; Recycling; Recovery (including energy recovery); and finally Disposal. The new programme described in this paper also incorporates Ireland's 'National Waste Prevention Programme' and its establishment will be notified as such to the minister.



The overall approach is to influence behavioural change, support sustainable choices and inform policy toward the implementation of a circular economy. The legislation

also provides examples of waste prevention measures and these have been considered in the preparation of this programme. With regard to food waste prevention in particular, it is also noted that Article 29 of the Waste Framework Directive also states that "Member States shall adopt specific food waste prevention programmes within their waste prevention programmes".

In addition to reducing wastage and environmental impact, the programme also embraces the business case for circularity as a source of economic innovation and growth. It supports the take-up of 'Circular Business Models' which are characterised by reducing consumption of natural resource input to deliver fundamentally different ways of using/selling goods and services. Digitalisation offers good potential for the circular economy to leverage utilise the power and pervasiveness of big-data and smart devices to facilitate these new business models. Manufacturing is a significant component of Ireland's economy, and highly relevant to circularity as it is a source of environmental pressures including consumption of resources; waste generation; and greenhouse gas emissions. The programme recognises that moving towards increased circularity presents challenges to businesses but it also provide opportunities that strengthen Ireland's ability to achieve a sustainable, carbon-neutral economy.

## *Objectives*

Circular Ireland will place a continued emphasis on working with others to deliver programmes and engage with industry & enterprise, research organisations, public sector bodies, local authorities, 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:

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

## *Targets*

An early task for Circular Ireland will be the development of quantitative targets to provide direction and allow progress to be tracked. Programme targets will integrate with monitoring frameworks being developed to capture and report circularity, and will support Circular Economy Package reporting requirements. They will be developed in close collaboration with DECC, and other stakeholders including the European Environment Agency. These will be developed early in 2021, and could include:

- Reducing per capita food waste to below EU averages.
- Reducing per capita residual municipal waste levels (and other targeted waste streams) to below EU averages.
- Improved positioning in EU circularity rankings.
- Increased recycling levels across priority waste streams, captured through EPA national waste statistics and waste characterisation studies.
- Awareness of circular economy, measured through annual behaviour & attitudes surveys.
- Reuse and Repair metrics, in-line with emerging European Commission requirements.

## *Programme Structure*

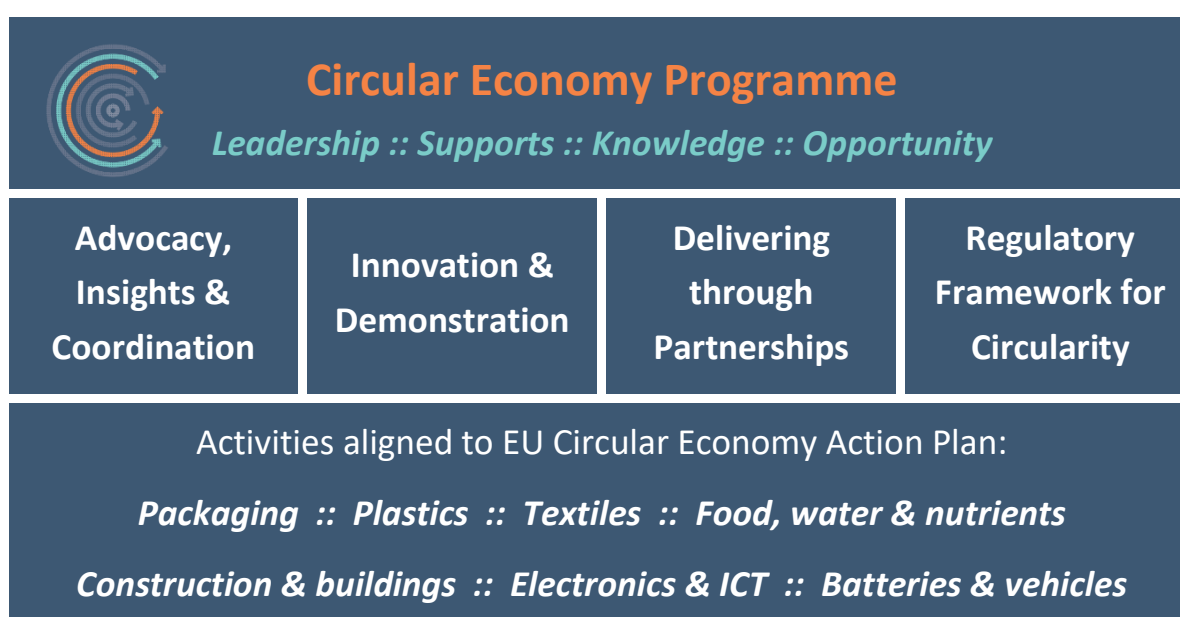
The current structure of the NWPP has been revised into the new Circular Economy Programme under a working title of ***Circular Ireland***. This new programme represents EPA's contribution to delivering Ireland's ambitions on the circular economy. Reflecting recent policy on the circular economy, the programme has broadened in two significant ways:

- While continuing to prioritise prevention, the remit of the programme will expand further down the waste hierarchy to encompass recycling, as well as reuse and repair.

- The programme will also embrace a broader view beyond waste management to realise the economic aspects of circularity – for example, digitisation & the sharing economy.

Overall, the programme will be built around providing **Leadership, Supports, Knowledge** and **Opportunity** to promote and amplify circularity in Ireland for business sectors and across the public and government. The Circular Economy Programme will launch in 2021, and operate for six years.

It is proposed that the programme will be based on a four-pillar structure – as shown below. Programme activities will be developed with regard to the sectors that use most resources and where the potential for circularity is high. The EU Circular Economy Action Plan commits to focussing on: *electronics & ICT; batteries & vehicles; packaging; plastics; textiles; construction & buildings; and food; water & nutrients*. Work plans for the programme will be developed to reflect these topics, along with current and emerging national priorities. It will also have regard to other national programmes and organisations active in related areas.



### *National Identity*

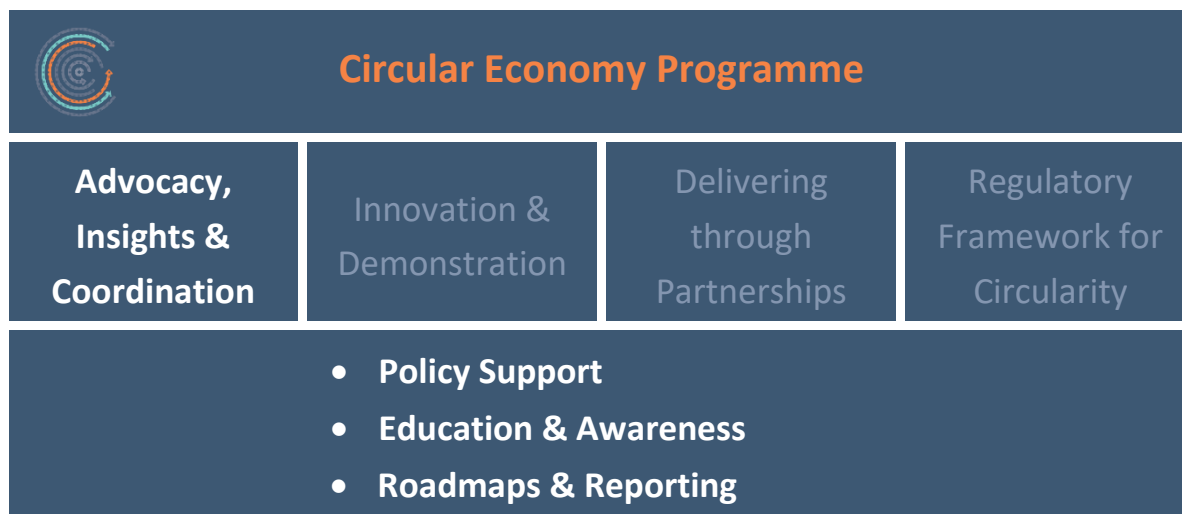
EPA will develop a national ‘brand’ for Circular Ireland to be applied across all projects and initiatives delivered and funded by the Programme as well as communications, shared resources and events. Circular Ireland will also host an annual conference to update on progress and share best-practices in the circular economy. Coherence and impact will be maximised by making the outputs of Circular Ireland available for use by other stakeholders. The EPA website will host Circular Ireland webpages which will host programme knowledge outputs and link to other main stakeholders.

### *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 and the carbon footprint of these factors along with looking to reduce waste generation will be an integral part of this programme. Circular Ireland will work closely with stakeholders including DECC to realise the potential of circularity as a climate action.

## Operational Pillars

### (i) Advocacy, Insights & Coordination



Circular Ireland will continue to be a strong advocate for the circular economy and waste prevention in Ireland. It will communicate solutions based on behavioural insights that can be scaled-up for the greatest impact and also gather data and evidence to inform robust policy development and report on progress.

- Policy support

Policy support will be a core element of the national circular economy programme and its designated role to support the government circular economy unit. The EPA will provide advice, assessments and national statistics to support the development and implementation of national circular economy policy.

A new 'Circular Insights' initiative within the programme will commission studies on priority topics to build evidence and fill knowledge gaps to support circular economy policy. It will deliver timely expert assessments through a published series of 'Circular Insights' studies that will be offer economic, social and technical insights relevant to circular economy policy.

The EPA has articulated a ten-year high-level framework for the EPA's research programming which identifies "*Facilitating a green and circular economy*" as one of four hubs around which the programme is structured. Research funded by the EPA in this area 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 EPA also has extensive connections and networks with counterparts at international level such as the OECD, European Commission and the European Environment Agency. Through the Circular Ireland programme, the EPA will leverage these networks to inform and support national circular economy implementation.

- Education & Awareness

The national campaign on food waste prevention is currently operated from within the NWPP. It was reviewed during 2020 to strengthen the approach through enhanced collaboration, impact and measurement. Work 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. With regard to food waste in supply chain and hospitality businesses, initial actions will focus on roll-out of a standardised measurement methodology and building capacity for action on food waste prevention through upskilling and case studies.

Behavioural insight is a foundation of the Programme, providing evidence to inform policy, behavioural change interventions and awareness campaigns. This will include:

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

These will facilitate ongoing engagement across Irish business and society and support national targeted behavioural change campaigns with consistent messaging used by all stakeholders. A number of these will be delivered annually focusing on key materials, behaviours or businesses. These will be led by the EPA in collaboration with the Regional Waste Management Planning Offices engaging at a community level to disseminate and promote national guidance on the circular economy.

Building on EPA experience, the Programme will promote education and awareness at all levels of society, including the formal education system and professional CPD programmes, but also the public sector. This work will be achieved through direct EPA actions and also through the programme's strategic partnerships with organisations such as the Rediscovery Centre. The programme will also engage with DECC and the RWMOs to support the public-facing MyWaste portal by providing content to raise awareness on waste prevention including household food waste.

- Roadmaps & Reporting

Connecting the Programme's policy support work, expertise and knowledge and co-ordination role; *Circular Ireland* will work with DECC and other stakeholders to develop circularity roadmaps for key waste streams, with an initial focus on: *Food Waste* and *Plastics*. 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.

Monitoring and reporting protocols for circularity are still in development, *Circular Ireland* will support work by DECC and EPA to fulfil national reporting requirements – including data submissions and narrative input. In particular, the programme will support the development of relevant data gathering, monitoring, assessment, indicator and reporting protocols which will support Circular Economy Package reporting requirements.



## *(ii) Innovation & Demonstration*



- Green Enterprise: Innovation for a Circular Economy

This ongoing successful scheme is being maintained to support innovators develop and demonstrate business-ready solutions in the circular economy. Funding will continue to be aligned to selected themes, with eco-design will be signalled as a fundamental principle. To reinforce its position as supporting economic development through circularity, the EPA will seek support / co-funding for Green Enterprise from the enterprise support sector.

- Green Public Procurement

The programme will support 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. The EPA will work on a cross-government level, building on the work of the existing NWPP in the area of Green Public Procurement. The approach will support both purchasers and suppliers to engage with green procurement; and will undertake monitoring to report take-up and impact.

- Local Authority Prevention Network

The well-established programme support to local authorities has been reviewed and will be refreshed to ensure a good alignment with organisational needs and circular economy priorities. Through the LAPN, Circular Ireland 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. Examples of suitable 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 C&D site waste management. These initiatives would be time-bound and based on an open sharing of learnings.

*(iii) Delivering through Partnerships*



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

- **Regional Waste Management Planning Offices:** Circular Ireland will provide national-level direction, data and materials for use by the Regional Waste Management Planning Offices (RWMPOs) in undertaking community and regional scale activities, as well as funding for collaborative projects. A partnership agreement will be signed to provide clarity on the roles of Circular Ireland and RWMPOs.
- **Public Engagement & Social Enterprises:** The current partnership with Rediscovery Centre (National Centre for the Circular Economy) ends in mid-2021. This will be re-examined in the context of Circular Ireland supporting work on raising awareness of the circular economy; and supporting social enterprises working with circular business models.
- **Embedding Circular Business Models:** The ongoing Circuléire partnership will continue to support innovation for circular manufacturing in SMEs and large companies. 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.

- **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 a new partnership in development with the Irish Universities Association for a campus sustainability demonstration programme.

*(iv) Regulatory Framework for Circularity*



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 Agency 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 will continue to apply and streamline its decision-making processes with regard to 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 will support the measures outlined in national waste policy for 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 will also promote 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 of prevention and minimisation, reuse, recycling, recovery and disposal. 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 promote 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 strategy on chemicals in the environment 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

Governance of the Circular Economy Programme will lie with the Board of Directors of the EPA who will maintain an oversight and approval role for the programme's activities and its budget.

In addition, a formal agreement will be put in place with DECC to facilitate collaboration on programme development & delivery; and to ensure alignment between programme activities and national circular economy strategy.

A mid-term review will be undertaken to evaluate the effectiveness of the programme; to check on 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, *Circular Ireland* will be revised within six years of the date of its publication.

A Circular Economy Steering Committee will also be formed - with secretariat support provided by the EPA. This committee will bring together a focussed group of national stakeholders and will be tasked with advising on how best the programme can drive the transition to a Circular Economy. It is proposed that action-focussed sub-groups for priority areas will be formed as required to supplement the direction and assessment work of this committee.

The Circular Economy programme will fit within the broader national governance framework for the delivery of Ireland's circular economy strategy. The EPA will work with DECC in designing and implementing these arrangements 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 Steering Committee will be made publicly available.

A pre-screening exercise has been undertaken to determine if Strategic Environmental Assessment (SEA) is required for the Circular Economy Programme (incorporating the National Waste Prevention Programme). The pre-screening check indicates that this programme does not provide the framework for future development consent of projects. It is therefore determined that the Circular Economy Programme does not require SEA.

oOo