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# Advisory Group Waste Action Plan for a Circular Economy

Discussion Topic: Waste Actions for a Circular Economy  
21/05/2020

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Senior Circular Economy Programme Manager @ IMR

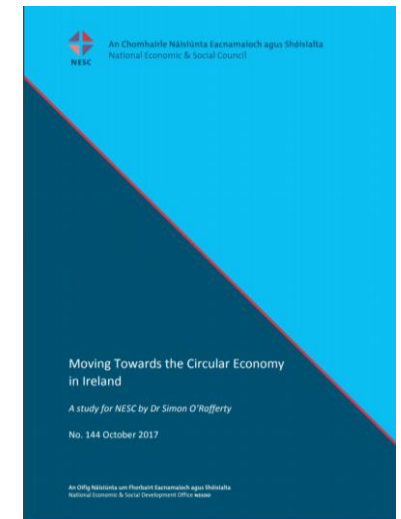
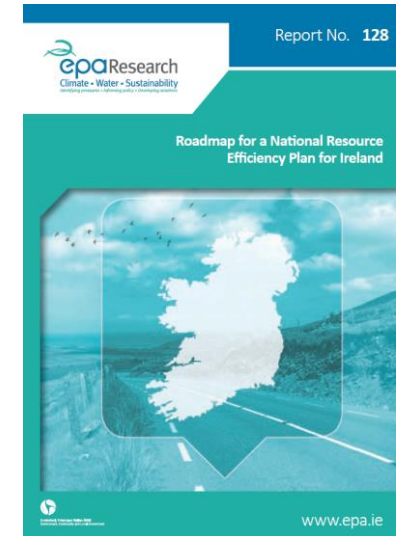


Roinn Cumarsáide, Gnómhaithe  
ar son na hAeraíde & Comhshaoil  
Department of Communications,  
Climate Action & Environment



# Circularity Innovation Gap in Ireland

- >100 million tonnes of materials used annually in Irish economy (EPA, 2019)
- 5% material improvement could yield €2.32bn p.a. for Ireland Inc. (Coakley et al., 2013)
- “full potential of circular economy in Ireland has yet to be identified, never mind realised” (NESC, 2017)
- “...need for brokers to bring sectors together, tailored institutional supports and new networks to foster cross-sector collaboration...” (NESC, 2017)
- €2.32bn per annum opportunity largely uncaptured to date (Murphy et al., 2019)
- Circularity knowledge, capacity building and implementation gaps



# CIRCULÉIRE: National Platform for Circular Manufacturing

## Vision:

- Industry led €4.5 million public-private partnership to accelerate the transition towards a net zero-carbon circular economy in Ireland (2020-2022).

## Mission

- Using manufacturing companies and their supply-chains as a role model for the transition across the entire Irish economy.
- De-mystify, de-risk and deliver circular economy (CE) concepts through large scale systems-level innovation and test-beds.

## Novelty

- Innovation network seeking to address the “circularity innovation gap” in Ireland
- Co-creating innovative solutions with industry - starting with 25 Industry Founding Members
- Ring-fenced innovation fund



# CIRCULÉIRE's Objectives

- #1 - Targeting reduction in CO2 & reduction in waste across network members  
*through product redesign; business model innovation; industrial symbiosis; material substitution and other circularity strategies*
- #2 - Raise awareness and increase understanding of circularity in Irish Industry
- #3 - Identify barriers to implementation and strategies to overcome them
- #4 - Develop frameworks, toolkits + deep demonstrations to de-risk & prove value of CE
- #5 - Inform Irish CE policy innovation
- #6 - Increase Ireland's CE relevance internationally
  - *“Leverage Ireland’s natural resources, enterprise strengths and innovative capacity to be a global leader in the circular and bioeconomy” (DBEI’s Future Jobs Ireland, 2019)*
  - *National Climate Action Plan (DCCAE, 2019)*



# CIRCULÉIRE: Founding Industry Members



DePuy Synthes  
COMPANIES OF Johnson & Johnson

Johnson & Johnson VISION



Liquidation Furniture

Farrell  
making furniture work better



Wisetek™



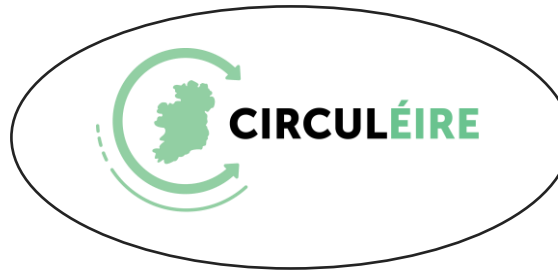
Hovione



FreeFoam  
Building Products

ARYZTA®  
Passion for good food

Wyeth® Nutrition



DAWN MEATS



WEENER  
PLASTIC PACKAGING GROUP



Gannon Eco  
Material Reprocessing

Keogh's  
Grown with love in Ireland

The Culinary  
Food Group



P Carney Aluminium

REPAK

weee  
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Department of Communications,  
Climate Action & Environment

epa  
Environmental Protection Agency

eit Climate-KIC



IRISH  
MANUFACTURING  
RESEARCH



# Associate Membership: Irish Innovation Ecosystem

## Opportunities through participation in Thematic Working Groups

### Objectives & Activities:

- State of the Art Review (SoAR)
- SPRINT to develop innovation ideas
- SoAR + SPRINT = White Paper

### 2020 Topics

- Circular Bioeconomy
- Industrial Symbiosis
- Circular Procurement

**Call closes midnight 27<sup>th</sup> May 2020**



**20 May Invitation to join CIRCULÈIRE's 2020 Thematic Working Groups**

Find out more@ <https://imr.ie/2020/05/20/invitation-to-join-circuleires-2020-thematic-working-groups/>

# **CIRCULÉIRE: welcomes all current / planned measures**

## **Planned policy measures:**

- Re-constitute EPA NWPP as Ireland's Circular Economy Programme;
- Replace Regional Waste Management Plans with Regional Circular Economy Strategies;
- All of Government engagement in a new Circular Economy dialogue. Support and drive further and better implementation of CE principles across Government and at EU level;
- Consultation for the development of an All-Sector Circular Economy Strategy for Ireland providing long term policy direction;
- Maximise supports Ireland can draw down from EU funds for CE projects.

## **Potential actions to shift focus higher up product life-cycle:**

- Develop national-level End of Waste / By-product decisions for certain materials;
- Develop sectoral Circular Economy charters (e.g. in relation to textiles, materials consumption, energy / water usage), building on the Food Waste Charter.

# Circular Innovation in Waste Management Practices/Policy

- Industry requirements to enable circularity of production waste:
  - NEED: Purer secondary raw materials or material substitutes at sufficient volume
  - Enabling infrastructure and markets to aggregate waste by-products
  - Digital passports – material information enabling recovery for reuse and recycling
  - Products – increased preparation for reuse activities / reverse logistics / take back schemes
- Encouraging Industrial Symbiosis
  - European standardisation regarding EoW criteria – learning from other EU countries where by-products are already being utilised safely.
  - Explore opportunities to embed industrial symbiosis in existing, and by design, new/planned industrial parks



# Scaling Circularity in Ireland

## 6 Sectors with significant resource productivity opportunities: [\(McCarthy et al., 2019\)](#)

- Food and beverages, pharmaceuticals and chemicals and non-metallic mineral products (manufacturing)
- Construction, retail and accommodation and food services (services)

## Circularity & COVID-19 economic recovery

- Diversify and create new revenue streams through new product and service creation
- Creating economic growth while retaining and creating new jobs
- Incentivise diversification into green / circular products and services
- Incentivise development of circular upskilling and capacity building for key trades



# Thank you!

Any questions?



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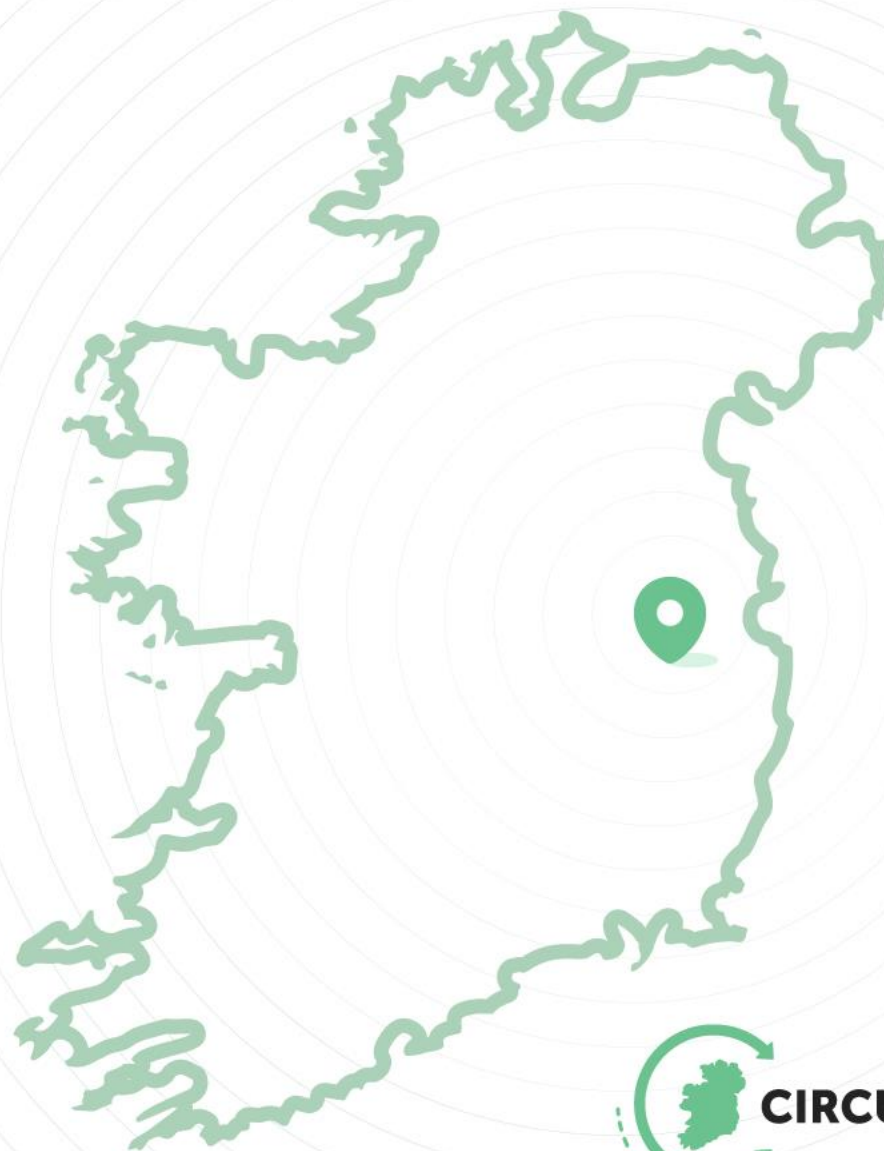


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