



An Chomhairle Náisiúnta Eacnamaíoch agus Shóisialta  
National Economic & Social Council

**NESC Workshop, Thursday, 6th April 2017**

# **Moving Towards the Circular Economy in Ireland**

## **Programme**

**The Clock Tower, Department of Education and Skills, Marlborough Street, Dublin 1**

### **Introduction**

There is increasing recognition of the potential benefits for economies and societies of moving away from a 'take-make-dispose' model towards adopting a circular economy, thereby maximising resource efficiency and environmental protection.<sup>1</sup> At EU level the EU Circular Economy Package is at an advanced stage of development, following the publication of the European Commission's plan, *Closing the Loop: An EU Action Plan for the Circular Economy*.<sup>2</sup> Its aim is to help European businesses and consumers make the transition to a stronger and more circular economy where resources are used in a sustainable way.

NESC has sought to deepen understanding of the circular economy, as part of its sustainability remit.<sup>3</sup> On its behalf, Dr Simon O'Rafferty conducted research exploring circular economy practices in Ireland in 2016. These practices were identified in Irish businesses but also in civil society, community-led initiatives and the work of NGOs, social enterprises and co-operatives. The work draws on interviews with key players in each of the case studies and a small number of key policy stakeholders.

The report documents the opportunities and challenges for these companies and organisations as they strive to bring more circular practices to their business and enterprise models. It reflects on some of the key enablers and barriers to the development and discussion of circular economy practices. A copy of this unpublished draft report is attached, but this is not for wider circulation. NESC aims to publish this report and the main themes emerging from this Roundtable in the coming months

### **Purpose of the Roundtable**

While the EU's package of proposals on the circular economy are being finalised, this event will provide an opportunity for discussion on the key strategic opportunities and challenges of progressing circular economy practices and policies in Ireland. The focus will be on the economic, social and environmental dimensions, grounded in specific examples of the experiences of Irish companies and social enterprises. As well as an Irish focus, the event will include contributions from the Netherlands and Scotland, where the circular economy policy and practices have been advanced.

The research illuminates diverse entrepreneurial activity as 'circular' which may not have been recognised as such before from the reuse of IT equipment, to composting and the bio-economy to repairing furniture. The research brings these activities under the circular umbrella to both ground abstract discussion on the

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<sup>1</sup> The Ellen MacArthur Foundation defines a circular economy as one that is restorative, and one which aims to maintain the utility of products, components and materials and retain their value (EMF, 2015).  
<https://www.ellenmacarthurfoundation.org/circular-economy>

<sup>2</sup> EC (2015) *Closing the Loop: An EU Action Plan for the Circular Economy*. Brussels: European Commission.

<sup>3</sup> NESC receives funds from the Department of Communications, Climate Action and Environment to support this sustainability work.

circular economy but also to act as a frame of reference for many other potential circular activities, not yet labelled as such. These activities have economic but also social and environmental drivers so share commonalities but are also operate in different sectors. Future development of such activities would seem to require greater alignment and orientation towards a more systemic integrative approach. For example, new business and social enterprise development may be hampered without greater understanding of the potential synergies between the materials used and their bi-products.

There is a growing sense that moving from a linear economic model to one that is circular by design will require a transformation with systemic changes in product design, manufacturing, service models and in the ways goods and services are consumed. In this sense, it will require innovation on many levels. As the research notes, while waste prevention and recycling are key aspects, the circular economy predominantly focuses on the technological, organisational, and social innovations across value chains. While pockets of innovation are clearly evident, this will not thrive without the supportive policy and societal supports at local and national levels, aligned across sectors. It is not clear, however, what form and shape such supports should be, and how Ireland's particular economic, social and environmental circumstances can best be adapted and find ways to prosper in a circular economy? How can balance be achieved between fostering new business models and the economic and social potential with the necessary environmental protection of natural resources. Finally, as noted by the OECD, in the context of the transition to a low carbon society, it is worth reflecting on the potential synergies between policies for a circular economy and climate action across key sectors such as agriculture, energy and transport.<sup>4</sup>

## Questions for Discussion

Four central questions will be posed during the Roundtable to help navigate this complex area. These will focus on the themes explored during the day: current practices in Ireland and experience of the circular economy to date; the policy and practice context; examples of international innovation and the future development of the circular economy in Ireland.<sup>5</sup>

### Key Questions to be explored:

- 1. Irish Experience to Date:** *To what extent has Ireland already made progress towards the development of a circular economy?* The case studies illustrate a range of circular practices in business and not-for-profit organisations in Ireland. How can these be further supported and where barriers exist, what can be done to remove them?
- 2. Policy and Practice:** *What are the potential roles for the State, business and civil society in the development of an Irish circular economy?* Given EU developments, what are the potential policy levers for governments? What new business models might achieve better resource efficiency? To what extent do social enterprises have a distinct and significant role to play?
- 3. Enabling Innovation:** *How can innovation in the circular economy be supported in Irish business, social enterprise and public policy?* What can we learn from experiments and developments in other jurisdictions? Is there a particular role for intermediary organisations to help connect and increase collaboration? What are the risks as well as potential benefits in the journey to a more circular economy?
- 4. Future Development:** *What would be an ambitious approach to the development of the circular economy in Ireland?* Could distinctive aspects of Ireland's economy, environment and society provide an advantage in an increasingly competitive economic climate? What are the next steps for policy development?

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<sup>4</sup> OECD 2015 *Aligning Policies for a Low-Carbon Economy*

<sup>5</sup> OECD (2016) Meeting of the Environment Policy Committee (EPOC) at Ministerial Level, ENV 2016, *Draft Agenda and Issues*. Paris: OECD.

<b>08.45</b>	<b>Registration</b>
<b>09.10</b>	<b>Welcome and Introduction</b> —Dr Rory O’Donnell, NESC
<b>09.20</b>	<b>Session 1: Circular Economy Practices: Case Study Research</b>
	<b>Presentation of Case Studies:</b> Dr Simon O’Rafferty—Short Overview of Research Cecil Conaty, Wellman/Indorama Dr Sarah Miller, Rediscovery Centre Kevin McCabe, Enrich Soils Dr Simon O’Rafferty—Reflections Key Observations Brief Q&A
<b>10.20</b>	<b>Panel Discussion—The Experience of Moving Towards the Circular Economy in Ireland</b>
	Dr Simon O’Rafferty (Chair); Gerry Brady (CSO); Jack O’Sullivan (Zero Waste Alliance); Mindy O’Brien (VOICE); Dr Tom Healy (NERI); Prof Shane Ward (UCD); and Anne Murphy (IBEC) <b>Open Discussion</b>
<b>11.15</b>	<b>Morning Coffee Break</b>
<b>11.30</b>	<b>Session 2: The Irish and EU Context of the Circular Economy</b>
	Paola Migliorini, Directorate in charge of Circular Economy, European Commission— <i>Circular Economy: Actions from the European Commission</i> Prof Mike Norton, European Academies Science Advisory Council (EASAC)— <i>Circular Economy: Issues from the European Academies’ Perspective</i> Matthew Collins, Department Communications, Climate Action and Environment— <i>Irish Policy Context for Circular Economy</i> Dara Lynott, Environmental Protection Agency— <i>Living better, Using Less</i> Maeve Thornberry, Community Reuse Network— <i>Reuse, Recycling and their Role in the Circular Economy</i> <b>Open Discussion</b>
<b>13.10</b>	<b>Lunch</b>
<b>14.00</b>	<b>Session 3: Examples of Innovation in Policy and Practice</b>
	Prof Jacqueline Cramer, Utrecht University, Amsterdam— <i>The Transition Towards a Circular Economy: A Multi-actor and Multi-level Challenge</i> Ramon Arratia, Ball Corporation (Previously at Interface)— <i>Circular Economy</i> Iain Gulland, Zero Waste Scotland— <i>Making Things Happen: Driving Scotland’s Circular Economy Ambition</i> Emma Shaw, The Library of Things— <i>Library of Things: The Community Sharing Business</i> <b>Open Discussion</b>
<b>15.30</b>	<b>Afternoon Coffee Break</b>
<b>15.45</b>	<b>Session 4: Closing Panel Discussion—Reflections on the Future Development of an Irish Circular Economy</b>
	Dr Rory O’Donnell (NESC); Paola Migliorini (EC); Iain Gulland (Zero Waste Scotland); George Burke (Department of the Taoiseach); Dara Lynott (EPA); Matthew Collins (DCCA); Prof Jacqueline Cramer (Utrecht University). <b>Open Discussion</b>
<b>16.30</b>	<b>Close</b>

## Biographies

**Dr Simon O'Rafferty:** Simon is a Research Fellow with the Irish Environmental Protection Agency. His research explores the intersections of public service innovation, co-design for policy and behaviour change. He is an expert evaluator for the European Commission on topics related to the circular economy and social innovation. In 2016, Simon completed the current project on the circular economy for NESC.

**Cecil Conaty:** Cecil is the Quality Development Manager at Wellman International, Europe's leading producer of high quality polyester staple fibres from post-consumer recycled materials. Cecil, having initially qualified as a polymer engineer, has been responsible for the health, safety, environmental and quality management of the Wellman manufacturing plant over the past 18 years.

**Dr Sarah Miller:** Sarah is an environmental scientist and experienced business development manager with over 20 year professional experience, in the environmental services sector. In her current role as the CEO of the Rediscovery Centre, Sarah manages a creative education, research and social enterprise centre in Ballymun. She has recently project managed the development of a national demonstration centre promoting reuse and the circular economy and with a keen interest in research; Sarah is involved in several European and national programmes.

**Kevin McCabe:** Kevin is Facility Operations Manager of Enrich Environmental Limited. Enrich is an award-winning compost and soil company. It is now Ireland's largest producer of peat free compost and a leading provider of soil consultancy services. Enrich has pioneered the development of a range of high quality horticultural products from organic waste.

**Gerry Brady:** Gerry is the senior statistician in Environment Statistics and Accounts Division in the CSO. The area is mainly engaged in compiling environmental economic accounts for Eurostat. CSO Environment conducts an annual business energy use and an enterprises biennial waste generation survey.

**Jack O'Sullivan:** Jack is a Director of Zero Waste Alliance Ireland; he has practised as an independent environmental consultant since 1977, and in 1981, he established Environmental Management Services (EMS) as one of the first environmental consultancies to begin operating in Ireland, and has built up a wealth of experience in a wide range of fields.

**Dr Tom Healy:** Tom is Director of the Nevin Economic Research Institute (NERI). Tom has previously worked in the Economic and Social Research Institute, the Northern Ireland Economic Research Centre, the Organisation for Economic Cooperation and Development, the National Economic and Social Forum and the Department of Education and Skills.

**Prof Shane Ward:** Shane is Professor of Biosystems Engineering at University College Dublin. He is leader of the €8 million Horizon 2020 AgroCycle project addressing the application of the 'Circular Economy' across the agri-food industry. He is also Scientific Director of the €17.6 million SFI-Origin Enterprises Plc funded CONSUS project addressing the use of 'Big Data' in agriculture. Professor Ward's team is currently involved in developing a global policy on combining 'Big Data' with 'Circular Economy' principles and systems to deliver a step change in the performance of the agri-food sector over the next decade.

**Anne Murphy:** Anne is Ibec's Green Business Executive, a role which she has held since 2012. As Green Business Executive, Anne encourages Ibec member companies to be more resource efficient in their operations. Anne sits on the EPA's national waste prevention committee and the Industrial Symbiosis steering committee and also serves as the national coordinator for the biennial Ibec Environmental Awards.

**Paola Migliorini:** Paola has been working on eco-innovation and circular economy policies since 2012. She is presently focusing on the implementation of the Circular Economy Action Plan adopted by the European Commission in December 2015. Her main area of interest is best practices on sustainable consumption and production from innovative businesses and public authorities. She has both the experience of the European institutions, which includes funding opportunities for environmental protection, and of the private sector, namely the multinational health industry. Her motto: "explain, listen and make it happen".

**Matthew Collins:** Matthew is the Assistant Secretary leading the Natural Resources and Waste Policy function in the Department. He has responsibility for mineral exploration and mining, petroleum exploration and extraction, the Geological Survey, inland fisheries, and waste and resource efficiency.

**Dara Lynott:** Dara was appointed as a Director of the Environmental Protection Agency in 2004. He has responsibility for EPA licensing, Greenhouse Gas and Waste Inventories, Carbon Emission Trading, Circular Economy and Sustainable Communities and the Chemicals and Market Surveillance functions of the EPA's Office of Environmental Sustainability.

**Maeve Thornberry:** Maeve is Network Coordinator, Community Reuse Network Ireland, the all-island representative body for community-based re-use, recycling and waste prevention organisations. In her capacity as Coordinator (Maternity Leave cover), Maeve works with key stakeholders such as the EPA, government departments, regional waste authorities and network members to promote and support the reuse and recycling sectors and advocate on behalf of members.

**Prof Michael Norton:** Mike obtained his BSc and PhD degrees in chemistry at Bristol University. He has worked in industry, government and academia in UK, USA and Japan. His CV includes Director of the UK Parliamentary Office of Science and Technology (1989-1998), Counsellor Science and Innovation at the British Embassy in Tokyo (1998-2004), and professor at Tokyo Institute of Technology, Shinshu University and Tohoku University. Since 2013 he has also discharged the role of EASAC Environment Programme Director.

**Ramon Arratia:** Ramon is a sustainability director with 17 years of practical experience in corporate sustainability positions at multinational companies such as Interface, Vodafone, Ericsson and now at Ball Corporation. Ramon is a strong advocate of product sustainability and the circular economy. His focus is on creating ambitious sustainability strategies that deliver core business advantages through reducing carbon footprint, designing out chemicals, accelerating innovations, creating better marketing, redesigning supply chains, and building higher ground cultures.

**Prof Jacqueline Cramer:** Jacqueline is Professor of Sustainable Innovation at Utrecht University and a Member of the Amsterdam Economic Board with a focus on circular economy implementation. Previously, Dr Cramer was Minister of Housing, Spatial Planning and the Environment for the Dutch Labour Party from February 2007–February 2010. She was member of the committee to draft the report Circular Economy: From Wish to Practice, published by Council for the Environment and Infrastructure in June 2015.

**Iain Gulland:** Iain is Chief Executive Officer of Zero Waste Scotland works to deliver the Scottish Government's Circular Economy strategy; Making Things Last, and other low carbon policy priorities, and is at the forefront of efforts to create a resource efficient, circular economy in Scotland. Iain previously worked with initiating recycling systems in the public and third sectors and leading the Community Recycling Network Scotland. He was named the 'most influential person in the UK waste and resource efficiency sector' by Resource Magazine (2014) and was granted fellowship of the Chartered Institution of Waste Management in 2016.

**Emma Shaw:** Emma is co-founder of Library of Things, a community sharing business lending out useful items at incredibly low prices. She's interested in turning under-used spaces like libraries and post offices into places that bring people together through learning, making and trading. She used to work as Senior Analyst at the UK Government's urban innovation centre, Future Cities Catapult.

**George Burke:** is a Principal Officer in the Economic Policy Division of the Department of the Taoiseach. He has specific responsibilities for infrastructure, economic regulation and climate action. He is also driving the work of the Interdepartmental Group charged with determining opportunities in the bio-economy across the various sectors in Ireland and developing a high-level policy statement.

## Directions to Venue:

Pedestrians should use the main entrance to Department of Education and Skills. The Clock Tower Building, with its distinctive clock, is 50m straight ahead.

The venue is serviced by public transport links to, and around, O'Connell Street (multiple Dublin Bus routes and the Luas red line—Abbey Street stop).

Dublin Bikes—nearest station is on O'Connell Street <http://www.dublinbikes.ie/index.php/All-Stations/Station-map>.

There is a multi-storey Q park on Marlborough Street <http://www.q-park.ie/parking-with-q-park/our-parking-facilities/dublin/q-park-clerys>.

### *Walking From O'Connell Street:*

At the Spire in the middle of O'Connell Street, turn onto North Earl Street (Kylemore Café is on this corner). From here walk down and take the first left onto Marlborough Street. The Department of Education is about 100ft up on the right.