Circular economy and agri-food

Online webinar
7th September 2023, 12:30 GMT / 13:30 CET

REGISTER AT
www.climate-kic.org/SustainableFoodWebinar
Housekeeping

- This session is being recorded
- Recording & slides will be available on our website
- Questions in the chat please, we address some (if not all) in panel discussion
- Please share your feedback with us at the end!

More information: climate-kic.org/SustainableFoodIreland
Agenda

5’ Welcome
5’ Why these sessions
10’ Presentation
50’ Discussion/ panel incl. Q&A
5’ Poll & close

More information: climate-kic.org/SustainableFoodIreland
Joining us today

Denyse Julien
Deep Demonstration Senior Programme Manager, EIT Climate-KIC, IE

Andrew Keys
Research Analyst, Circle Economy, NL

Patrick Barrett
Agricultural Inspector, Department of Agriculture, Food and the Marine, Irish Government, IE

James Gaffey
Principal Investigator in Bioeconomy, Munster Technical University, IE
Why these sessions?

More information: climate-kic.org/SustainableFoodIreland
Dealing with Climate Change and Sustainability Targets
The innovation potential for the Irish Agri-Food Sector

Editor | Saskia Visser
Amsterdam | March 2023

More information: climate-kic.org/SustainableFoodIreland
Join us!

EVENT

From farm to fork: Shaping sustainable food systems

LOCATION
Dublin, Ireland & online

DATE
28 September 2023, 9:00 - 17:00 IST

REGISTER FOR THIS EVENT
Circular economy and agri-food

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Peatland degradation seen as a big problem in west of Ireland

Ireland had highest increase in greenhouse gases in EU

Water pollution is a ‘serious problem’ – climate report

Water quality: Nitrogen levels too high in 40% of Irish rivers
WHAT NEXT?
CIRCULAR ECONOMY

“The circular economy is an economic system where waste is designed out, everything is used at its highest possible value for as long as possible and natural systems are regenerated.”¹

Figure: Depicts the four flows to achieve circular objectives: narrow, slow, regenerate and cycle.²

¹ Ellen MacArthur Foundation (EMF). (n.d.). What is a circular economy?
² Visual by Circle Economy, adapted from Konietzko & Bocken (2020)
Eliminating food loss and waste and creating value from byproducts

Low-impact diets and packaging designed for circularity

Regenerative agriculture and locally sourced where appropriate

Eliminating food loss and waste and creating value from byproducts
1. Regenerative agriculture and locally sourced where appropriate

**Best practices** include:
- (Multi-species) cover crops
- Minimising tillage (no- or low-tillage)
- Agroforestry and silvopasture
- Rotational or holistic grazing

**Barriers and enabling policies** include:
- **Barrier**: farmers lack the financial resources required to invest in the transition and need support to minimise risks to their profitability
  - **Enabler**: prioritising regenerative, local food in public procurement strategies.
- **Barrier**: lack of knowledge and experience in regenerative practices and difficulties accessing retailing and selling infrastructure.
  - **Enabler**: creating innovation incubators to test regenerative agriculture concepts and business models; creating, facilitating and supporting initiatives such as farmers’ markets and local food festivals with emphasis on regenerative farms.

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**Case study**: Improved nutrient management for 250 dairy farmers in the Netherlands

Tailored livestock diets to provide the exact quantity of nutrients they need and increased the yields of feed crops as a means to absorb more nutrients in the soil and hence reduce the overall surplus of minerals.
2. Low-impact diets and packaging designed for circularity

**Best practices** include:
- Producers can shift away from intensive farming practices and resource- and land-intensive biological products, towards smaller-scale production and other activities.
- Food production and processing companies should invest in prioritising food with lower impacts.
- Retailers can use consumer design to shift consumer choices towards lower-impact, healthier diets.

**Barriers and enabling policies** include:
- **Barrier**: reluctance to change diets and low consumer knowledge of food impacts
  - **Enabler**: run consumer awareness campaigns to help consumers understand the impact of their food choices.
- **Barrier**: Price competitiveness of low-impact food
  - **Enabler**: price regulation measures: for example, tax breaks and/or subsidised prices for low-impact foods.

**Case study**: Foundation Earth Ecolabelling

By developing a single, straightforward and systematised environmental label, Foundation Earth hopes to empower customers to compare products and make educated decisions that are better for the environment.
3. Eliminating food loss and waste and creating value from byproducts

**Best practices** include:
- Implement industrial symbiosis in food processing facilities.
- Facilitate the donation of unsold goods.
- In-store price promotions for perishable goods.

**Barriers and enabling policies** include:
- **Barrier**: Lack of data on food loss and waste reduction  
  - **Enabler**: Investments in collecting and monitoring food waste data to quantify the economic value lying in this field.
- **Barrier**: Lack of infrastructure and markets for surplus food  
  - **Enabler**: Investments in food waste processing infrastructure, such as composting and anaerobic digestion.

**Case study**: Albert Heijn’s Food Waste Mission 2021

Dutch supermarket chain, Albert Heijn, aims to halve food waste by 2030 through strategies such as smart ordering systems, price promotions of perishable goods and donating the remaining food to food banks.
CONCLUSIONS AND RECOMMENDATIONS

- Regenerative agriculture needs a significant push
- New opportunities for farmer income diversification and rural economic development are needed to make attaining environmental goals easier
- Dietary advice needs to go beyond health impacts and also include environmental impacts
- Food loss and waste has a lot of attention through the food waste prevention roadmap
- Food packaging sustainability needs to go beyond recycling ambitions and focus on absolute waste reduction
Into the discussion

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Patrick Barrett
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James Gaffey
Principal Investigator in Bioeconomy, Munster Technical University, IE

Andrew Keys
Research Analyst, Circle Economy, NL
Close and thank you

go raibh maith agat

More information: climate-kic.org/SustainableFoodIreland; Email us at: learning@climate-kic.org.