

WEBINAR SERIES

Circular economy and agri-food

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

REGISTER AT
www.climate-kic.org/SustainableFoodWebinar

Deep Demonstration

Sustainable food systems in Ireland



Co-funded by the
European Union



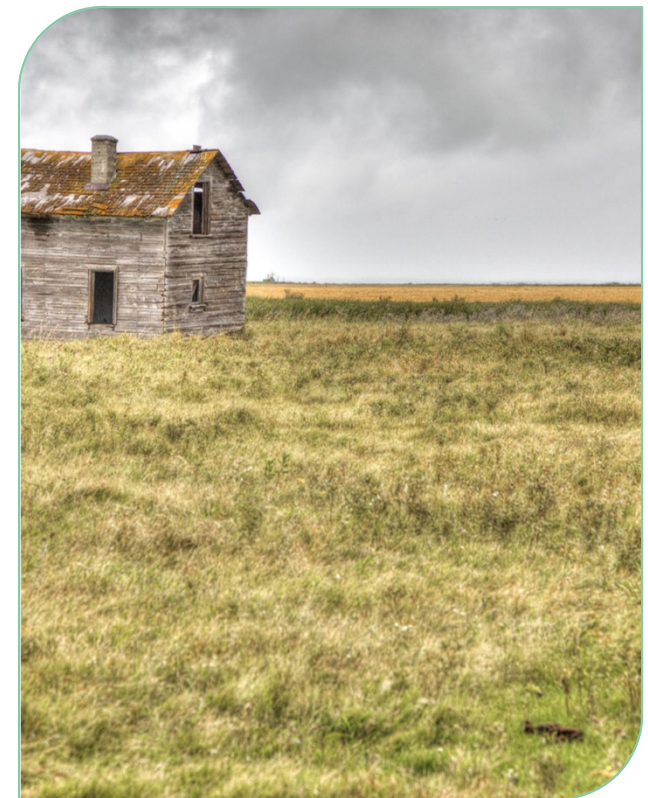
Housekeeping

Deep Demonstration

Sustainable food systems in Ireland



- 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](https://climate-kic.org/SustainableFoodIreland)

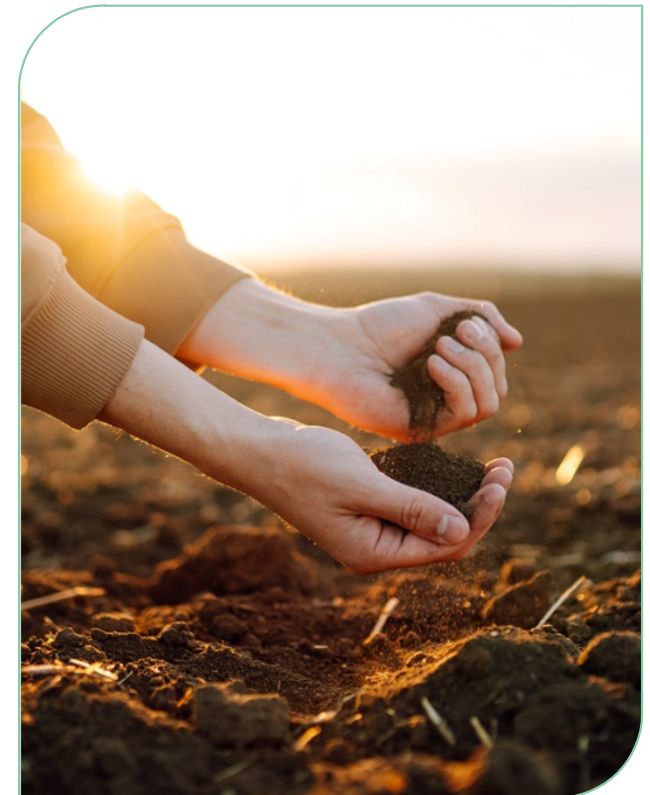
Agenda

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

[More information: climate-kic.org/SustainableFoodIreland](https://climate-kic.org/SustainableFoodIreland)

Deep Demonstration

Sustainable food systems in Ireland



Joining us today



Denyse Julien

Deep Demonstration
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Andrew Keys

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Patrick Barrett

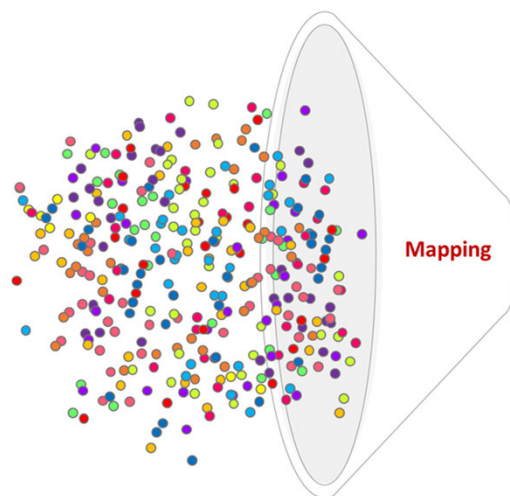
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James Gaffey

Principal Investigator
in Bioeconomy,
Munster Technical
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Why these sessions?



Deep Demonstration

Sustainable food systems in Ireland



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](https://climate-kic.org/SustainableFoodIreland)

The Report

Deep Demonstration

Sustainable food systems in Ireland



Dealing with Climate Change and Sustainability Targets

The innovation potential for the Irish Agri-Food Sector

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More information: climate-kic.org/SustainableFoodIreland

Join us!

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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

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TODAY'S LINEAR SYSTEM

Peatland degradation seen as a big problem in west of Ireland



Ireland had highest increase in greenhouse gases in EU

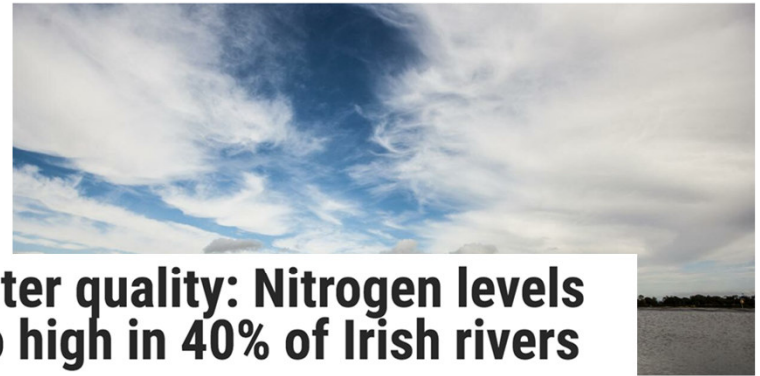


Ireland had the highest increase in greenhouse gas emissions at +17%, followed by Estonia and Malta, both at +8%. Picture: John Giles/PA

Water pollution is a 'serious problem' – climate report



Louise Hickey
May 8, 2023 5:07 pm



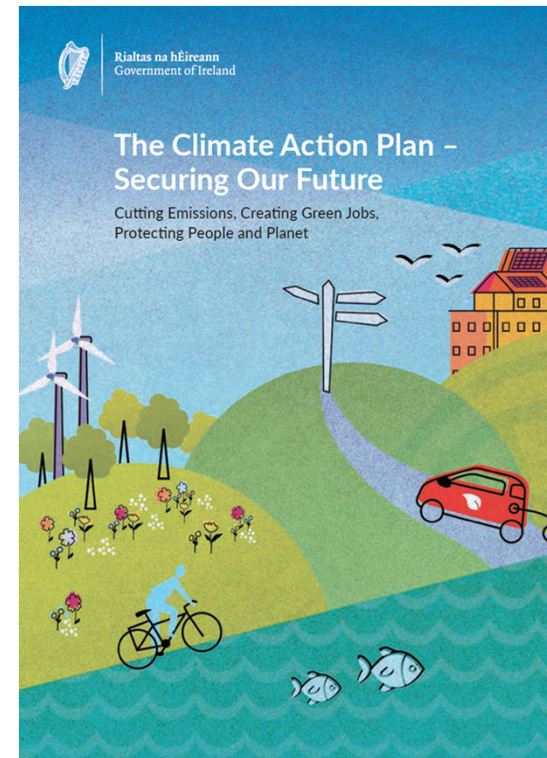
Water quality: Nitrogen levels too high in 40% of Irish rivers



Rubina Freiberg
June 14, 2023 7:00 am



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

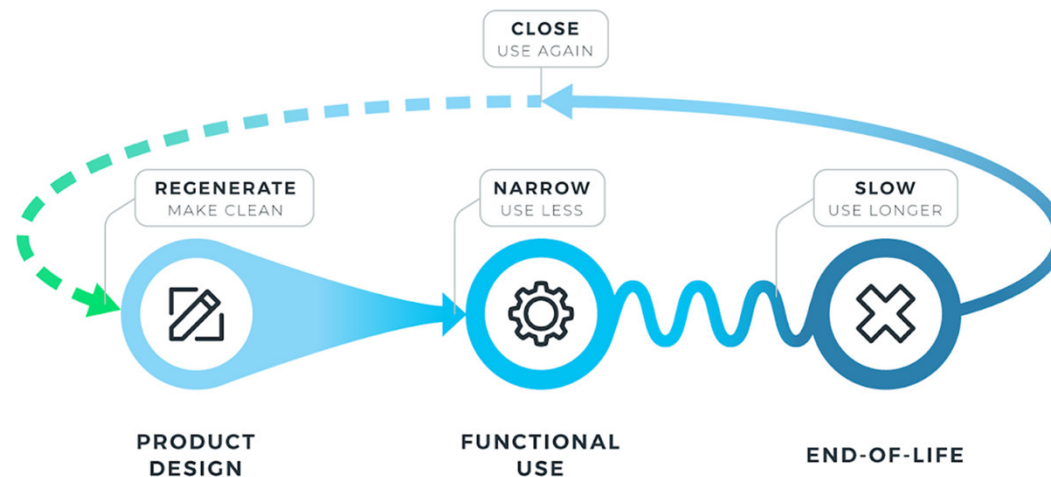


Figure: Depicts the four flows to achieve circular objectives: narrow, slow, regenerate and cycle.²

¹ Ellen MacArthur Foundation (EMF). (n.d.). What is a circular economy?

² Visual by Circle Economy, adapted from Konietzkoa & Bocken (2020)

CIRCULAR AGRI-FOOD SYSTEM

1

Regenerative agriculture and locally sourced where appropriate



2

Low-impact diets and packaging designed for circularity



3

Eliminating food loss and waste and creating value from byproducts



CIRCULAR AGRIFOOD SYSTEM



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.

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.

CIRCULAR AGRIFOOD SYSTEM



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.

CIRCULAR AGRIFOOD SYSTEM



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 half 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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Principal Investigator
in Bioeconomy,
Munster Technical
University, IE



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Circle Economy, NL

A person wearing a plaid shirt and a dark cap is seen from behind, carrying a wooden crate filled with fresh produce (including leafy greens and purple vegetables) on their shoulder. They are standing in a field of green plants, possibly a vegetable field, with a bright sunset in the background. The sun is low on the horizon, creating a warm, golden glow and lens flare effects. The sky is a mix of orange, yellow, and light blue. In the distance, some utility poles and trees are visible against the horizon.

Close and thank you
go raibh maith agat

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