
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
eit Climate-KIC
Co-funded by the European Union

# Housekeeping

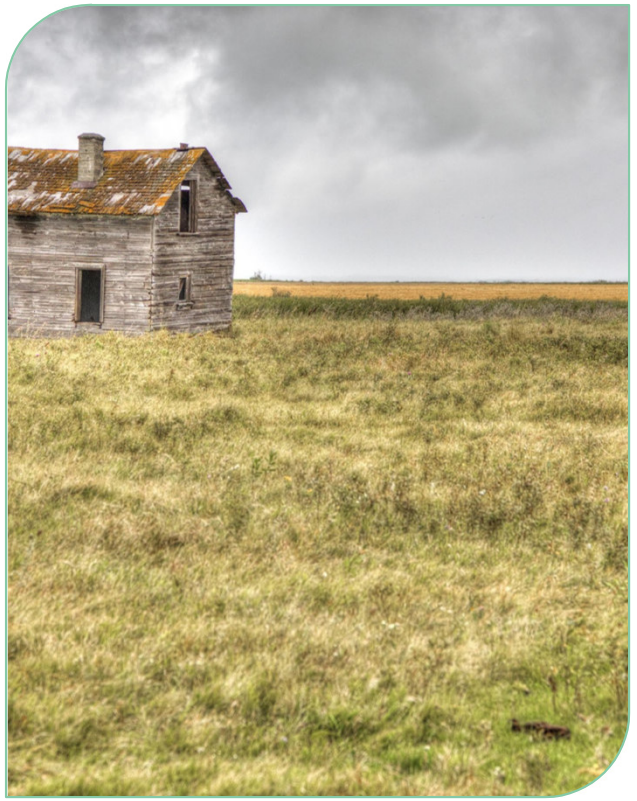
Deep Demonstration

Sustainable food systems in Ireland

Climate-KIC

Co-funded by the European Union

- 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

Deep Demonstration

Sustainable food systems in Ireland

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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?

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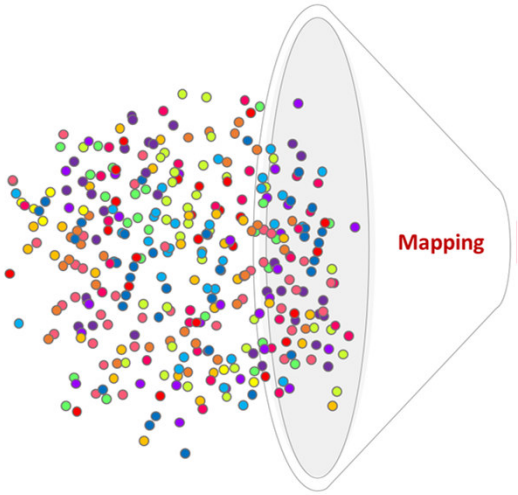



More information: climate-kic.org/SustainableFoodIreland

# The Report

Deep Demonstration

Sustainable food systems in Ireland

Climate-KIC

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## 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!

Deep Demonstration

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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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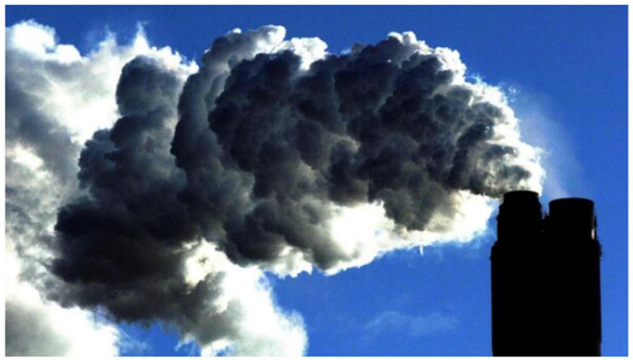
# TODAY'S LINEAR SYSTEM

## Peatland degradation seen as a big problem in west of Ireland

## Ireland had highest increase in greenhouse gases in EU

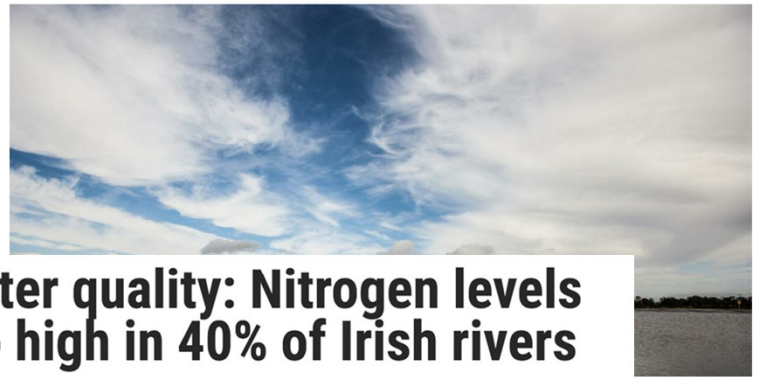


Ireland had the highest increase in greenhouse gas emissions at +17%, followed by Estonia and Malta, both at +8%. Picture: John Giles/PA

on.

## Water pollution is a 'serious problem' – climate report

*Louise Hickey*
May 8, 2023 5:07 pm

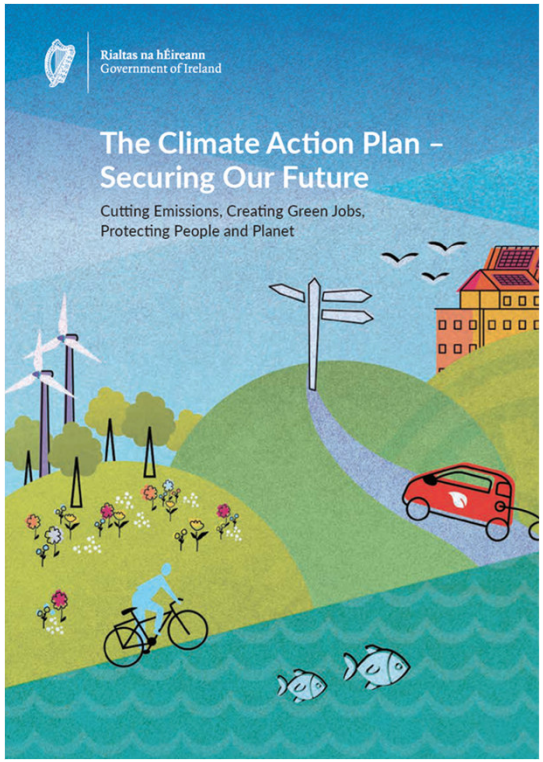


## Water quality: Nitrogen levels too high in 40% of Irish rivers

*Rubina Freiberg*
June 14, 2023 7:00 am

# WHAT NEXT?


Rialtas na hÉireann
Government of Ireland
Food Vision 2030
A World Leader in Sustainable Food Systems


Rialtas na hÉireann
Government of Ireland
The Climate Action Plan – Securing Our Future
Cutting Emissions, Creating Green Jobs, Protecting People and Planet

# 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]

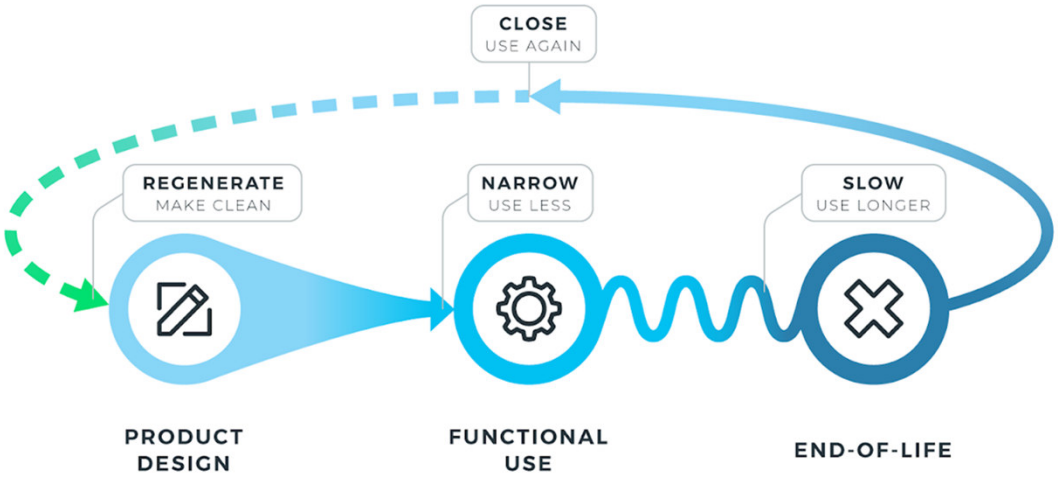



**Figure**: Depicts the four flows to achieve circular objectives: narrow, slow, regenerate and cycle.[2]

[1] Ellen MacArthur Foundation (EMF). (n.d.). What is a circular economy?
[2] Visual by Circle Economy, adapted from Konietzkoa & Bocken (2020)

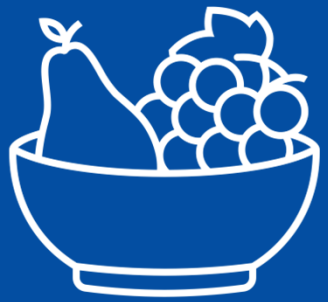
# CIRCULAR AGRI-FOOD SYSTEM

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

**Denyse Julien**

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

**Patrick Barrett**

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

**James Gaffey**

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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.