



BIOECONOMY
IRELAND
WEEK

OCTOBER
13-19 2025



Rialtas na hÉireann
Government of Ireland



CAP Network Ireland National Conference

Launch of Bioeconomy Ireland Week 2025

*Agri-Bioeconomy Value Chains &
Business Models in Ireland*





BIOECONOMY IRELAND

BITHGHEILLEAGAR na hÉIREANN

BIOECONOMY IRELAND

Rialtas na hÉireann
Government of Ireland

CAP
Network
Ireland
SUSTAINABLE
AGRICULTURE
AND RURAL
INNOVATION

Sustainably Growing, Mobilising & Utilising Biomass in Ireland: Current and Future Opportunities for Bioeconomy Business Models

Dr Gillian Barry, Head of Innovation & Enterprise, TUS

Aine O'Donnell, Just Transition Project Manager, TUS

Mount Lucas Circular Bioeconomy Initiative (CIRCULAR_IMTA_Demo), TUS



13th October 2025



- IMPLEMENTATION.
- 2018 - National Policy Statement on the Bioeconomy
 - 2023 - First National Bioeconomy Action Plan (2023–2025) (33 Actions)
 - 2025 - Next Strategy (being finalised) + major demonstration funds
 - National Biomethane Strategy - 5.7 TWh by 2030
 - 2030 - Scaling for impact and exports



IRELAND'S BIOECONOMY JOURNEY: FROM CONCEPT TO ACTION TO IMPLEMENTATION.

- . 2018 - National Policy Statement on the Bioeconomy
- . 2023 - First National Bioeconomy Action Plan (2023–2025) (33 Actions)
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IRELAND'S OPPORTUNITY & VULNERABILITY

Strengths

- Abundant biomass (> 20 Mt / yr)
- Strong R&D & policy support
- Regional pilots & training programmes
- Active Just Transition & Shared Island funding

Vulnerabilities

- 70–80 % fertiliser & protein feed imported
- 75 % energy import dependence
- Fragmented value chains
- Rural transition & infrastructure gaps

THE IMPLEMENTATION PHASE – PROOF OF VALUE

Policy - Funding - Pilots

Education - Skills - Enterprise

RDI - Demonstration - Investment



Ireland's Bioeconomy is no longer about defining it - it's about designing it.

From ideas to investable value.

The bioeconomy includes all sectors and systems that use biological resources to produce food, materials, energy, and services while reducing waste

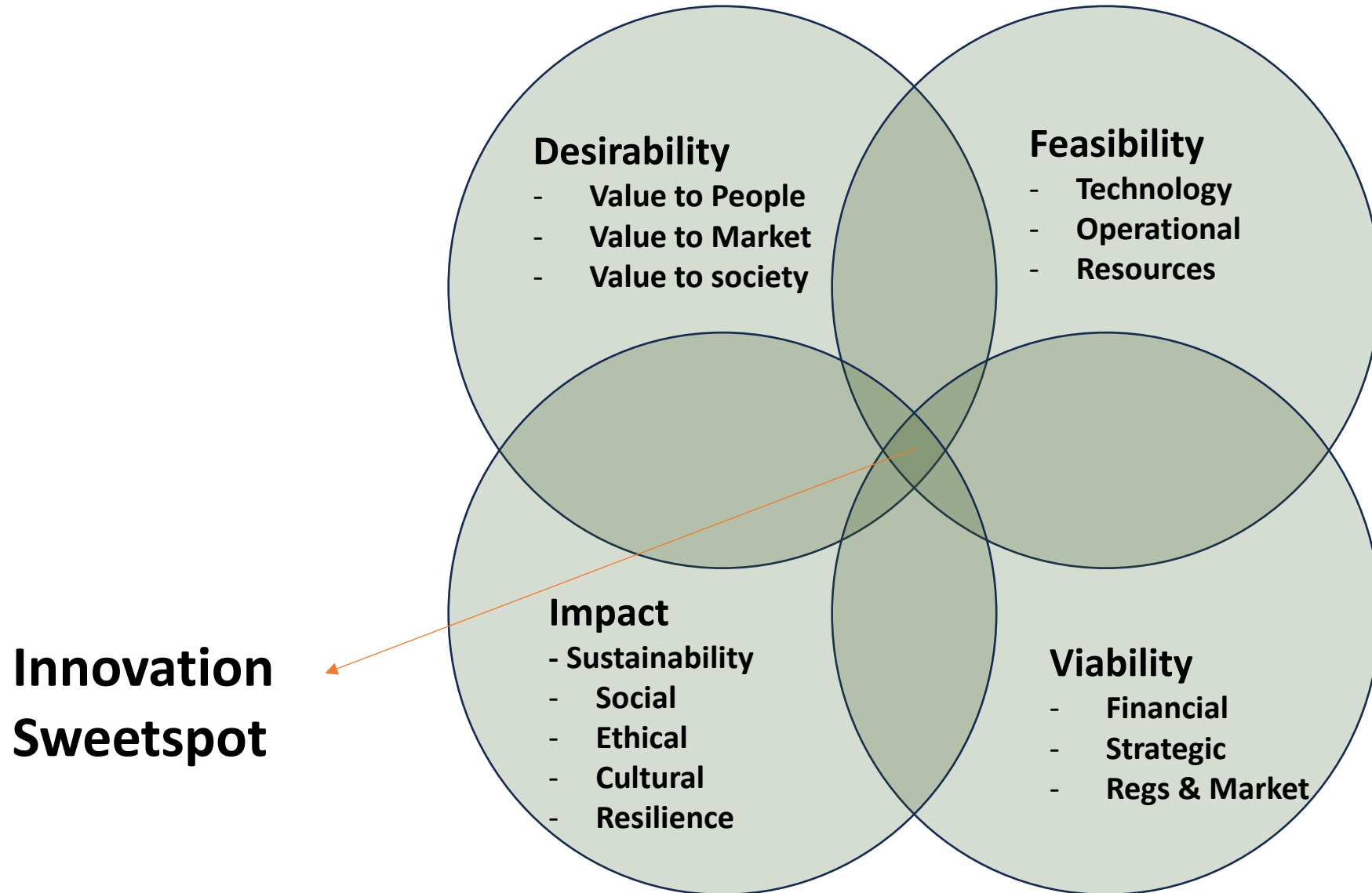


THE BIOECONOMY INNOVATION JOURNEY

- Resources & residues -> What we grow, harvest, waste.
- Science & technology -> what we can make.
- Business models & value chains -> how we can organise ownership and share value.
- Markets & jobs-to-be-done-> who needs it, what problem it solves.
- Scale & impact -> from demo projects to commercial enterprises.

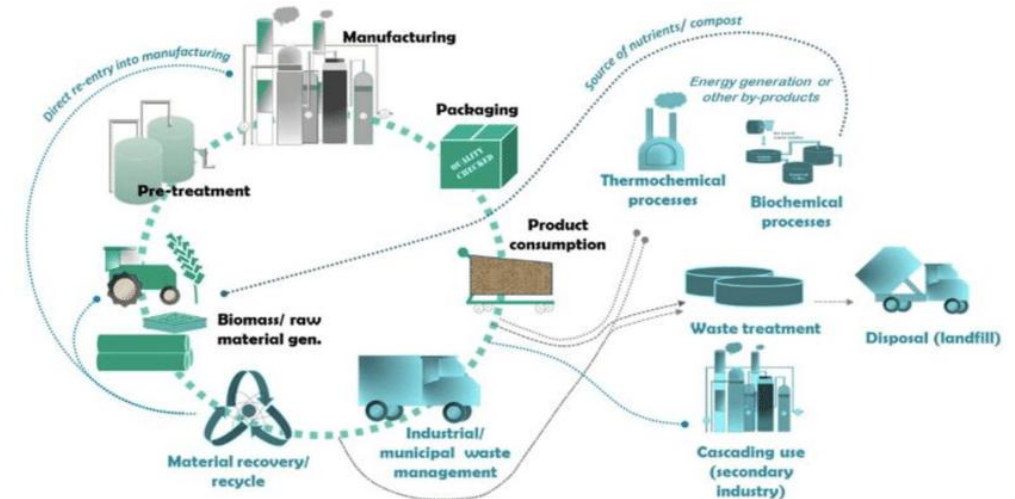


THE INNOVATION SWEET SPOT: FROM IDEA TO PROOF TO INVESTMENT



BUSINESS MODELS & VALUE CHAINS: MAKING THE SWEET SPOT REAL

- Co-ops & Clusters
- Partnerships & Infrastructure
- Investment & Revenue Logic
- Markets & Customers





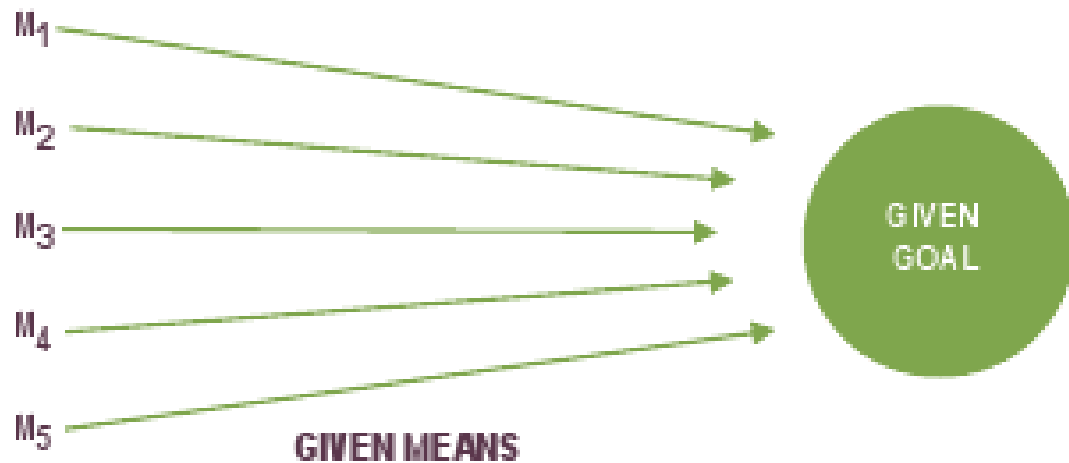
Innovation in the Bioeconomy: Where do the innovation ideas come from?

CAUSAL vs. EFFECTUAL REASONING

Managerial Thinking (Causal)

Distinguishing Characteristic

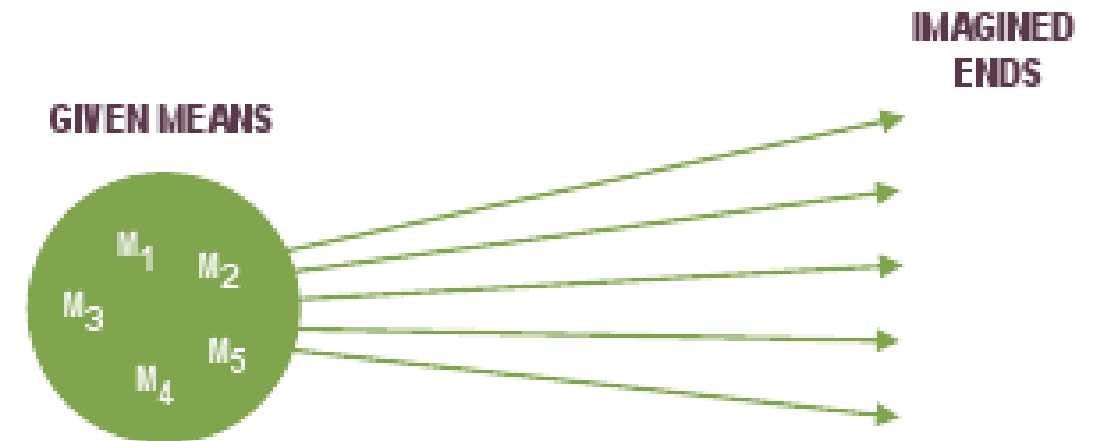
Selecting between given means to achieve a pre-determined goal



Entrepreneurial Thinking (Effectual)

Distinguishing Characteristic

Imagining a possible new end using a given set of means



KEY CONSTRAINTS WE MUST ADDRESS

- High capital costs
- Fragmented supply chains
- Complex regulation
- And competition from cheap imports.

Many promising technologies fail not because the science doesn't work but because the business model isn't right.

Collaboration and partnership is key to getting the right business model fit.

BUSINESS MODELS MATTER

- Tech & funding \neq delivery
- Barriers: costs, logistics, regulation, markets
- Business models = the bridge from policy to enterprise



ROADMAP FOR FARMERS AND SMES

So how does a farmer or SME begin?

Five simple steps:

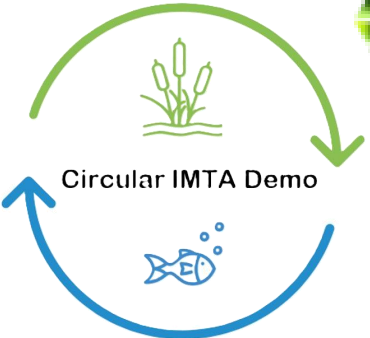
1. Reach out to any of the Bioeconomy Research Centres, Clusters, Co-ops, LEO etc – network.
2. Inventory: look at your by-products and waste streams.
3. Re-imagine: ask what they could be - feed, fertiliser, fibre, fuel.
4. Choose a model: DIY, co-op, cluster, or partnership.
5. Pilot and scale: test small, validate markets, then grow.



Just some TUS Projects



Circular Agriculture & Biotechnology Group



BioScaleUP



AimBio (cross-border Marine)





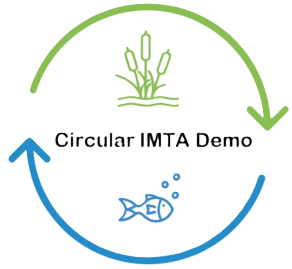
Rialtas na hÉireann
Government of Ireland



Arna chomhchistiú ag
an Aontas Eorpach
Co-funded by the
European Union



Tionól Reigiúnach Oirthir agus Lár-Tíre
Eastern and Midland Regional Assembly



Mount Lucas Circular Bioeconomy Initiative (CIRCULAR_IMTA_Demo)

Aine O'Donnell, Just Transition Project Manager, TUS

The CIRCULAR_IMTA_Demo project is co-funded by the Government of Ireland and the European Union through the EU Just Transition Fund Programme 2021-2027



TUS



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY



UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



INDIGO ROCK
MARINE RESEARCH CENTRE



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY



Derilinx

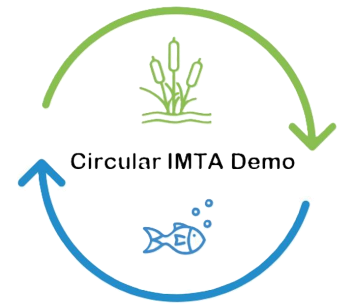
The Mount Lucas Opportunity



TULLAMORE COURT
HOTEL



Mount Lucas Case Study



Project Title	Circular Bioeconomy Aquaculture Initiative (CIRCULAR_IMTA_Demo)
Location	Mount Lucas, Co Offaly (midlands)
Award	€5 million
Duration	5 years, beginning in 2024
Partners	TUS, UoG, UCC, Indigo Rock, Teagasc, Derilinx
Project Coordinator / Principal Investigator	Professor Neil J Rowan
Programme	EU Just Transition Fund



**Technological University of the Shannon
Midlands Midwest**

Ollscoil Teicneolaíochta don Sionainn
Lar na Tíre Lar Thiar



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY



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INDIGO ROCK
MARINE RESEARCH CENTRE

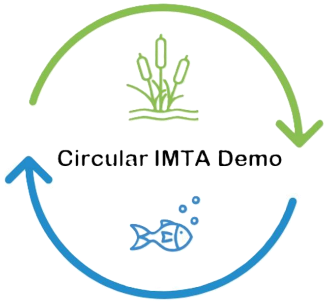


AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

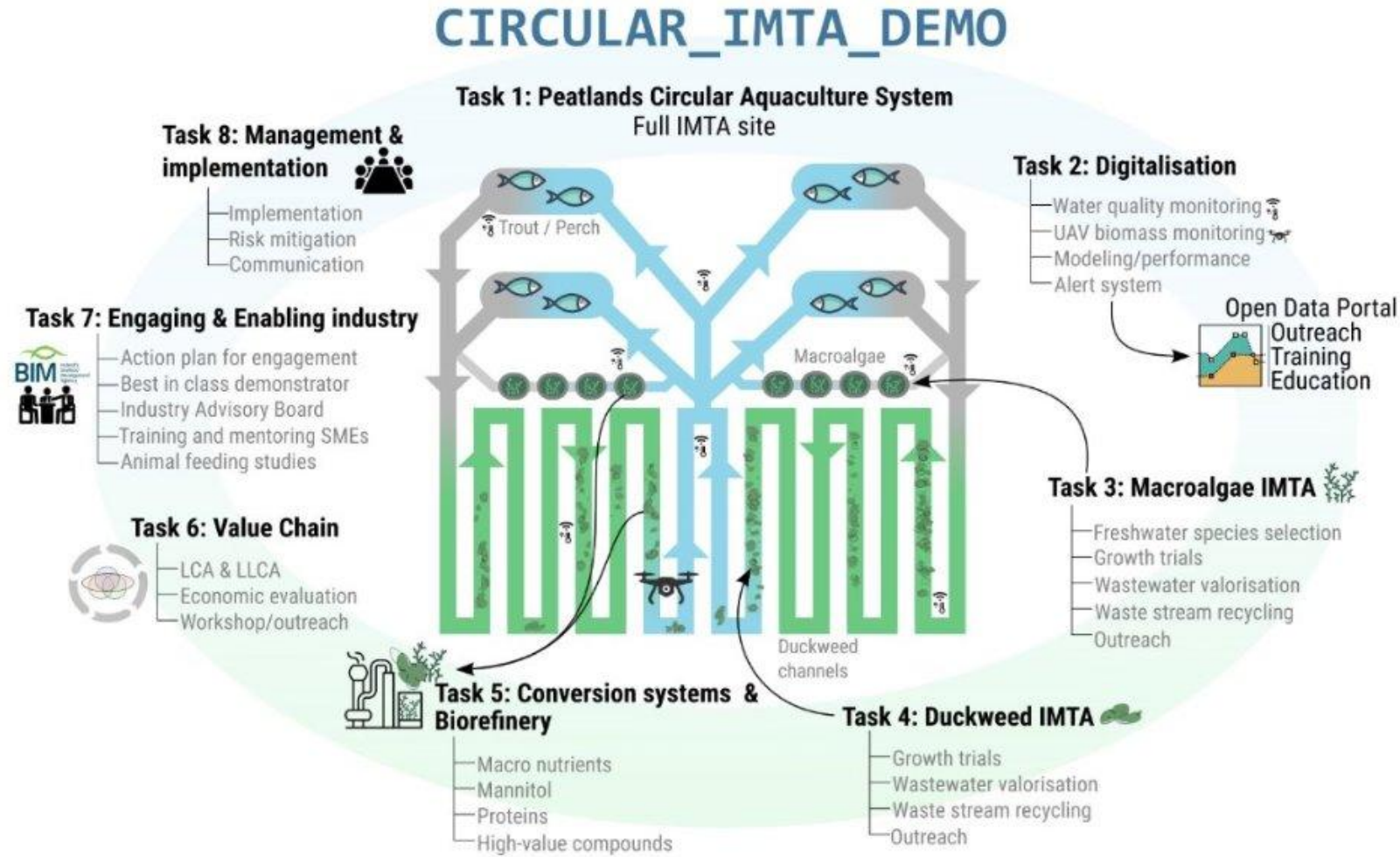
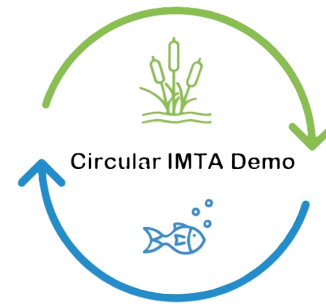


Derilinx

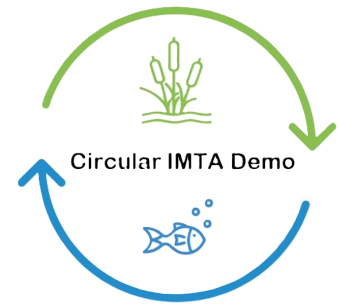
What are we doing?



Activities

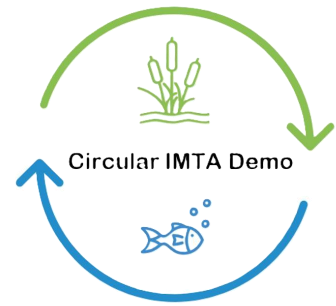


Our Ambition



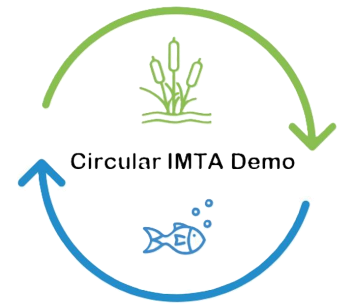
- A **National Success Story**
- A **Centre of Excellence**
- Demonstrate **bioeconomy action**
- Create **jobs & investment**
- Build **capacity**
- Involve **everyone**

Story time

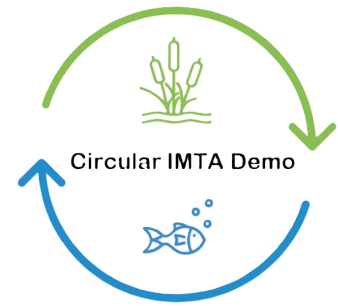


Bord na Móna

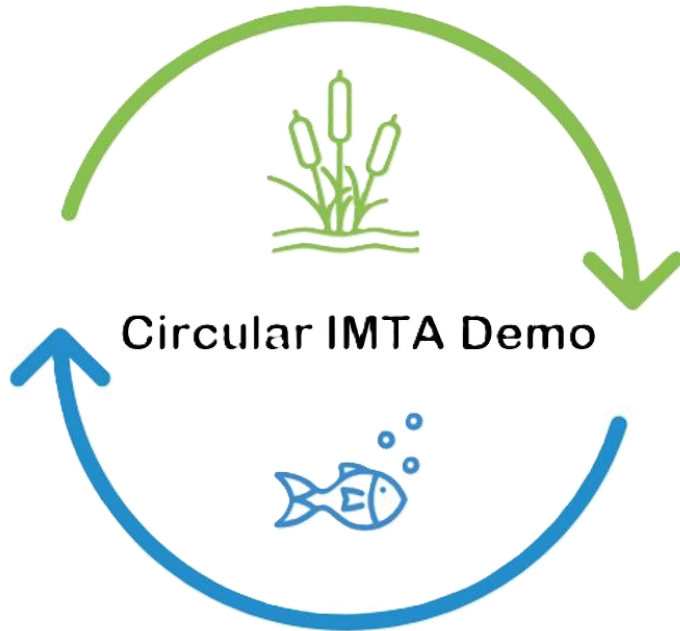
Outcomes



Previous Project

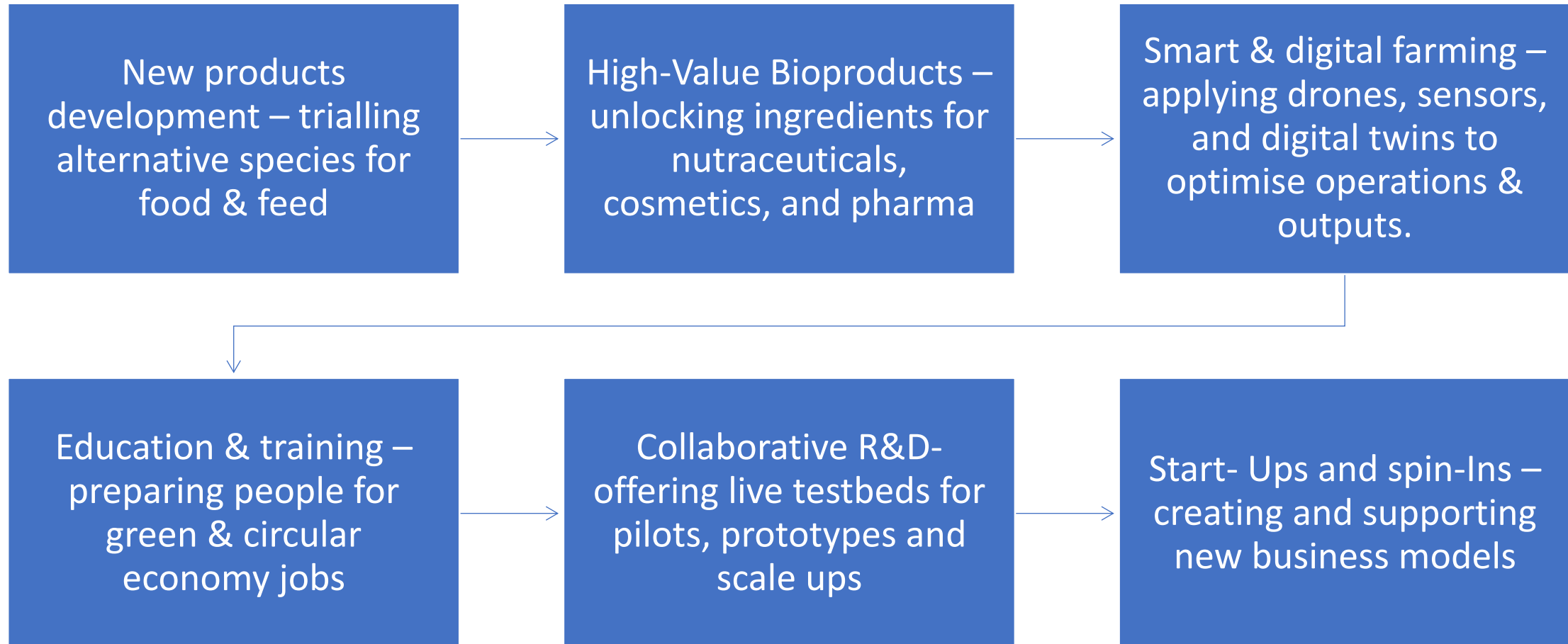
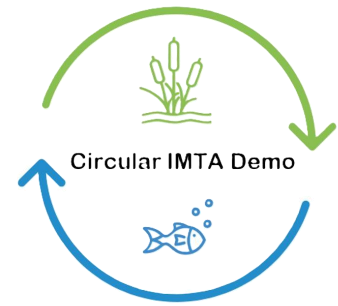


The Mount Lucas Opportunity

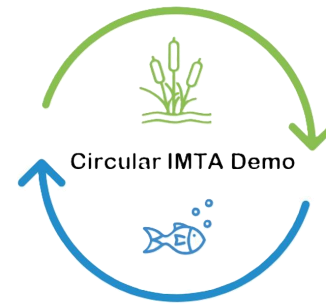


TUS

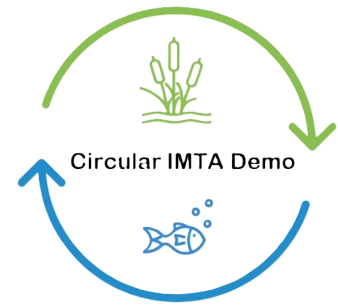
Industry Opportunities



Project Experts

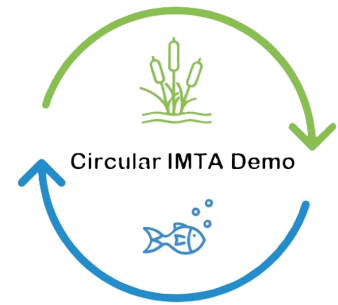


Linked projects



AIMBIO

Key Takeaways



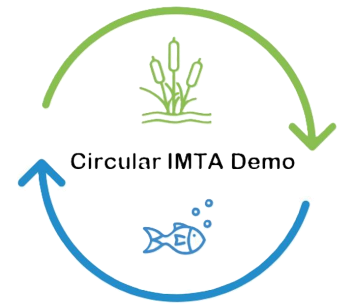
Ireland's peatlands =
untapped potential – Mount
Lucas is just one example of
what's possible

Mount Lucas is your testbed
– open for visits, trials and
collaborations

Beyond trout, duckweed &
algae – there are thousands
of species with potential for
new business models and
application in high-value
markets

We're only getting started –
and we're actively seeking
partnerships and explore
ways to make sure everyone
benefits from this work

Call to Action



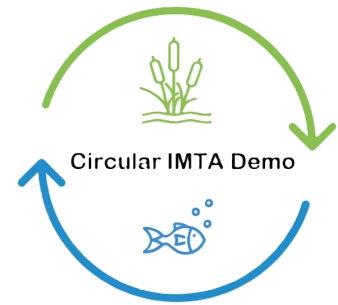
Mount Lucas membership form:
Stay Connected & Get Involved



Dr Gillian Barry: Gillian.Barry@tus.ie

Aine O'Donnell: Aine.ODonnell@tus.ie

More information



Professor Neil J Rowan – Midwest Bioeconomy in Action <https://lnkd.in/eFYx473W>

A poster for the "Midwest Bioeconomy in Action" event. The poster features a central image of a hand holding a small tree, surrounded by circular inset photos of various people and settings. The text on the poster includes the event title, registration information, and a list of speakers and industry panel members.

Midwest Bioeconomy in Action
Bringing together research, industry, and policy to shape Ireland's circular future

REGISTER NOW
14 October, 2025
10:00 am UTC +1

KEY NOTE SPEAKER
Matthew Halpin, DAFM

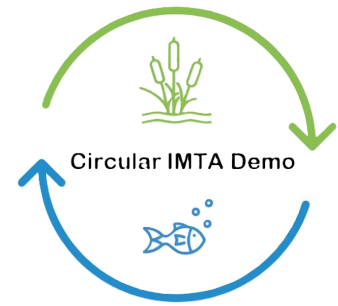
SPEAKERS
Dr. Lena Madden, TUS
Dr. Tim Yeomans, CABR
Stephen Napier, IBE
Prof James Gaffey, CircBio, MTU
Prof Neil Rowan, TUS

INDUSTRY PANEL
Dr. Helena McMahon - Seabody - Marine Industry
Peter Mooney - Dawn Meats - Meat Industry
Michael McEniry - Nephin - Renewable Energy Industry
Margaret Cotter - Loop Head Together - Agriculture
Chris Weinger - Donegal Yarns Ltd. - Textile Industry

MORE INFORMATION
LinkedIn: CircAB - Circular Agriculture and Biotechnology Group

Logos at the bottom include: SEABODY, 500, CircAB, and others.

Working With and Supported by



Financing the Bioeconomy

Grant support available to enable Irish bioeconomy

Marina Donohue
Divisional Manager Research, Innovation & Infrastructure

Sustainability Objectives

- Climate Action
- Quality Employment and Equal Opportunity
- Sustainable Growth

Sustainability Plan

2025 - 2029



Enterprise



TELLAMORE COURT
HOTEL

Sustainability Objectives

- Climate Action
- Quality Employment and Equal Opportunity
- Sustainable Growth

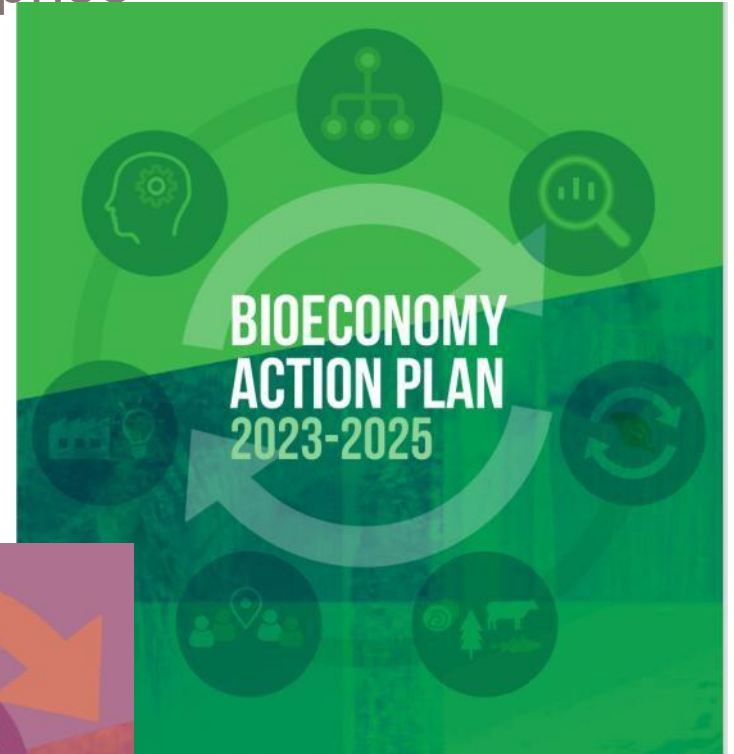
Sustainability Plan

2025 - 2029



Bioeconomy Action Plan 2023 – 2025

- Enterprise Ireland is aligned with Action 6 Industry & Enterprise of the Bioeconomy Action Plan 2023 – 2025.
- Supports Irish bioeconomy, by enabling:
 - Sustainability Supports for Industry
 - Regional Development
 - RD&I Supports for Industry



Sustainability Supports for Business

Climate Action Voucher

€1,800 funding to develop an initial decarbonisation/ sustainability, circular economy / bioeconomy action plan.

GreenStart

Up to €5,000 support to introduce environmental best practice systems, such as life cycle analysis for products, food waste reduction.

GreenPlus

Up to €50,000 support for training e.g. to build environmental management, embed LCA skills and bioeconomy awareness.

Strategic Consultancy

Up to €35,000 support for environmental studies or consultancy services directly linked to decarbonisation investments.

Energy, Monitoring & Tracking

Up to 50,000 available to manufacturers for installation of meters for energy, water, steam

Environmental Aid

Large capital for decarbonisation investments, including biomass boilers, heat recovery etc

Regional Ecosystems

Regional funding mechanisms ranging from REDF, RTCF and most recently Smart Regions support Innovation Centres, Clusters and Feasibility Studies for Pilot facilities.





DTIF

Disruptive Technologies Innovation Fund
(€500m over 10year period)

Company R&D

- RD&I Fund
- Exploring Innovation Grant
- IP Strategy Support
- European Space Agency (ESA)

Commercialisation

- Commercialisation Feasibility Fund Grant & Proof of Concept
- Commercialisation Fund Award

KTI

KTBoost (2024 →)

R&I Internationalisation

- Career-Fit & Career-Fit Plus
- Horizon Europe
- COST (European Cooperation in Science and Technology)
- EUREKA

Technology infrastructure and collaboration

- 17 Technology Gateways
- 8 Technology Centres
- Health Innovation Hub Ireland
- Innovation Vouchers & Partnerships
- 4 Innovators' initiative
- 4 European Digital Innovation Hubs (EDIHs)





Thank-you