Pathways to the Circular Economy Webinar Series

The Future of Food and Bio-based systems?

January 27th 2021













MODERATORS | Future of Food and Bio-Based Systems



MARY CRONIN Founder

UpThink Innovation Agency



DR CERA SLEVIN Founder

Climate Matters Ltd



DR JOANNE ROURKE

Resource Efficiency Officer

Dublin City Council Eastern Midlands Waste region













Agenda

- Welcome
- Clíodhna Dowling Nutramara
- Teresa Patton Green Generation
- Deirdre de Bhailís Dingle Creativity and Innovation Hub
- Questions and Answers



#Pathways2CE #MODOS #CircularEconomy #Irishbioeconomy @EMWR_IE @Nutramara @GreenGenIreland @DingleHub @UpthinkWorks

PRESENTERS | The Future of Food and Bio-based systems



CLIODHNA DOWLING

Marketing Manager
NutraMara Ltd.



TERESA PATTON

National Programme Manager

Green Generation



DEIRDRE DE BHAILIS

Business Development Exec

Dingle Creativity and Innovation Hub









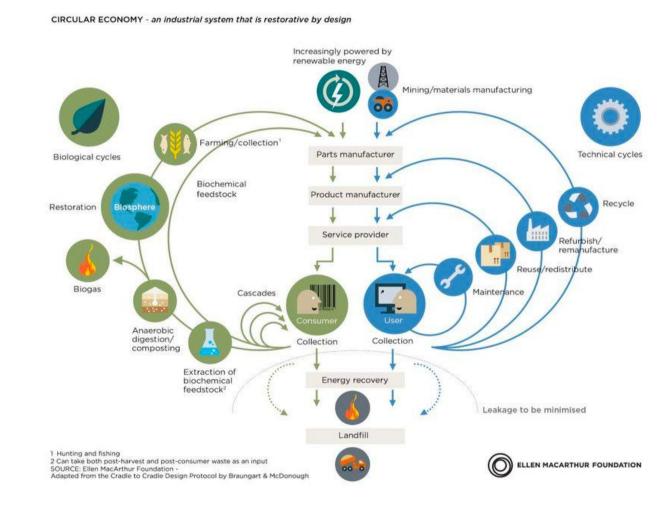




What is the Circular Economy

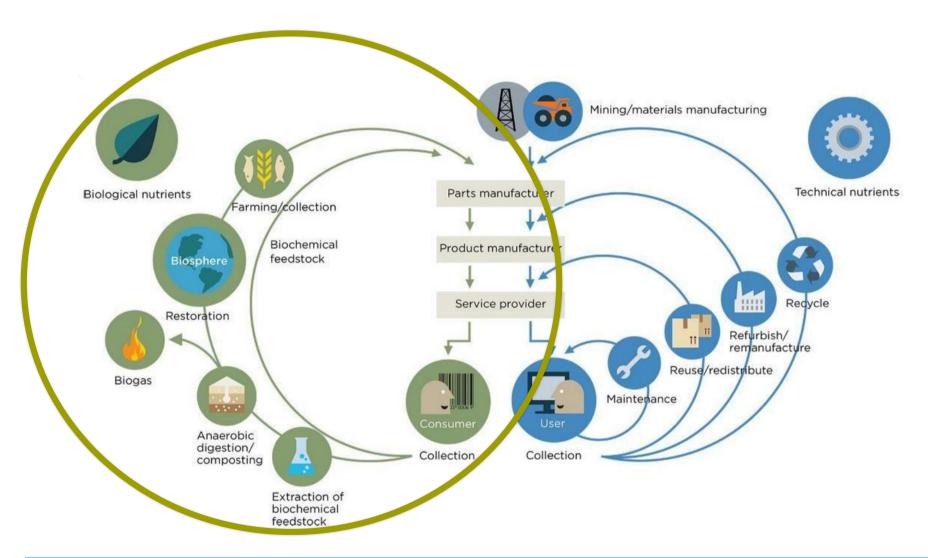
A circular economy is one that is **restorative** by design. It is based on three principles:

- Design out waste and pollution
- Keep products and materials in use
- 3. Regenerate natural systems





Circular Economy and Circular Bioeconomy



The Bioeconomy – the renewable biological resources from land, sea – crops

Source : Ellen MacArthur Foundation





NutraMara



HARNESSING THE POWER OF THE OCEAN

The isolated bioactives have evolved over millennia to have a range of functions which ensure the survival of the algae in the wild, synthesis of these molecules is not currently feasible, they can only be accessed via isolation from algae. This is Nutramara's suite of harnessed bioactives and associated claims.













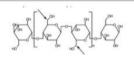




- · Anti-oxidant
- · Immuno-modulatory
- Prebiotic
- · Anti-microbial



- Gut health
- Weight management
- Anti-Cholesterol



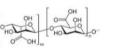
- Anti-inflammatory
- · Prebiotic
- · Anti-microbial
- Skin health



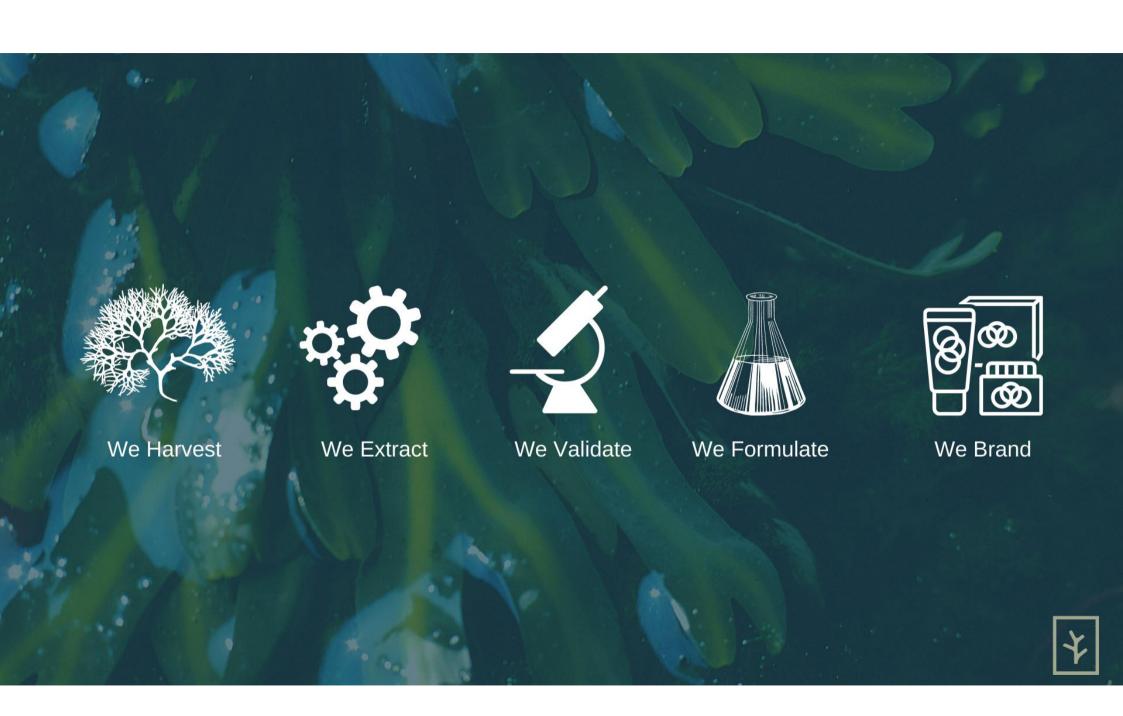
- · Anti-oxidant
- Anti-allergy
- Anti-tyrosinase



- · Wound healing
- · Tissue regeneration
- Anti-bacterial
- Detoxifier
- Cosmetic textures









Contact Us

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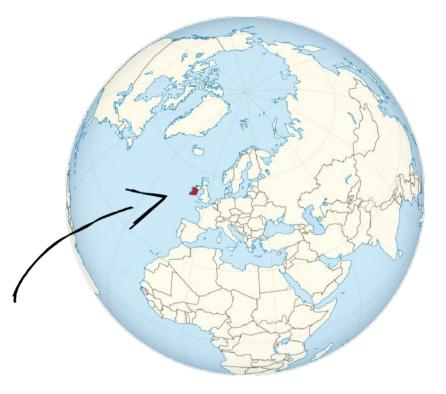




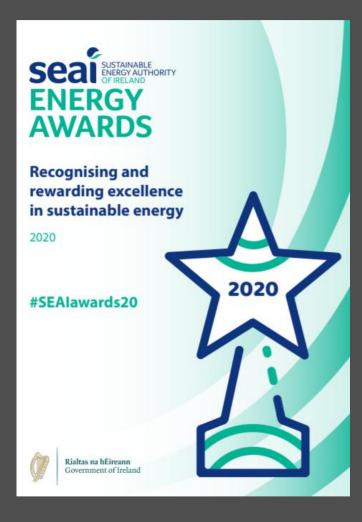




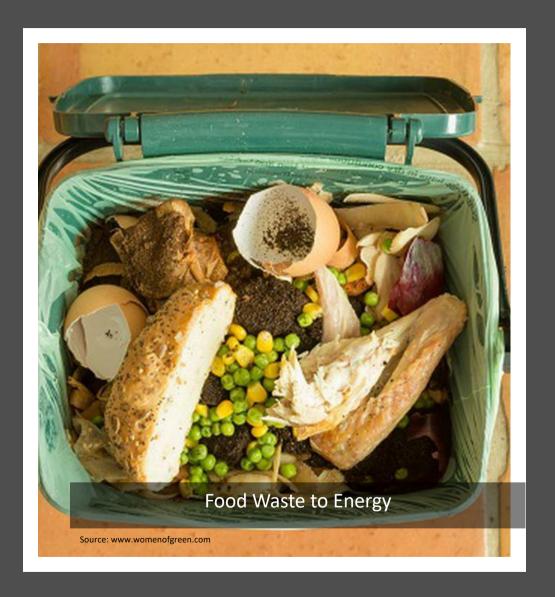




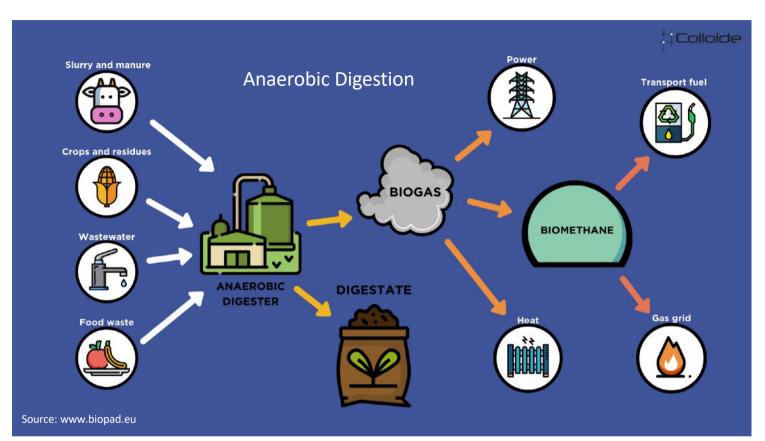


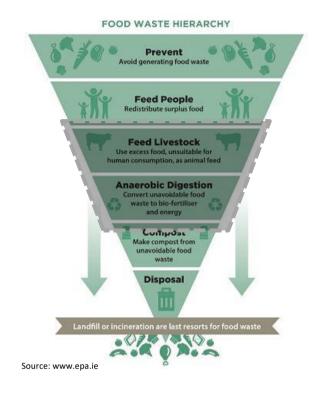


















610 biomethane plants in Europe.

7% using food waste as feed stock.

Source: Gas Infrastructure Europe/ European Biogas Assoc

Green Generation AD Plant, Nurney, Co. Kildare.

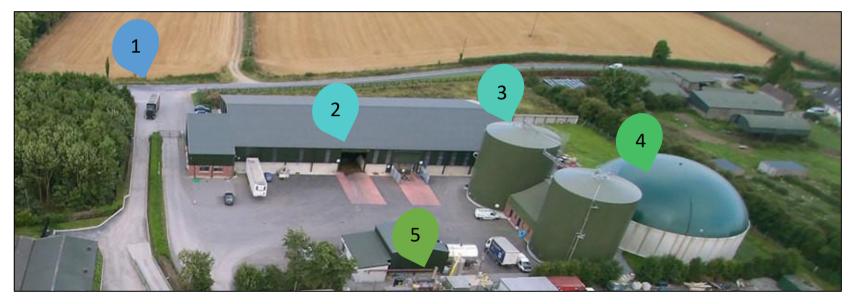
Food Waste In

Intake + Sorting

AD Process

Bio-Gas









Source: Gas Networks Ireland

INJECTION POINT AT CUSH

Cush is Ireland's first dedicated renewable gas entry point and became fully operational in May 2020.















INNOVATION

Thermo Plastic Recycling



Developed and patented by our partners Paltech.

• A versatile system that can process all types of polymers into high value products.

Potential Products



Telegraph Poles



Cladding



Motorway Bollards



Thank You.



Questions

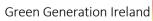
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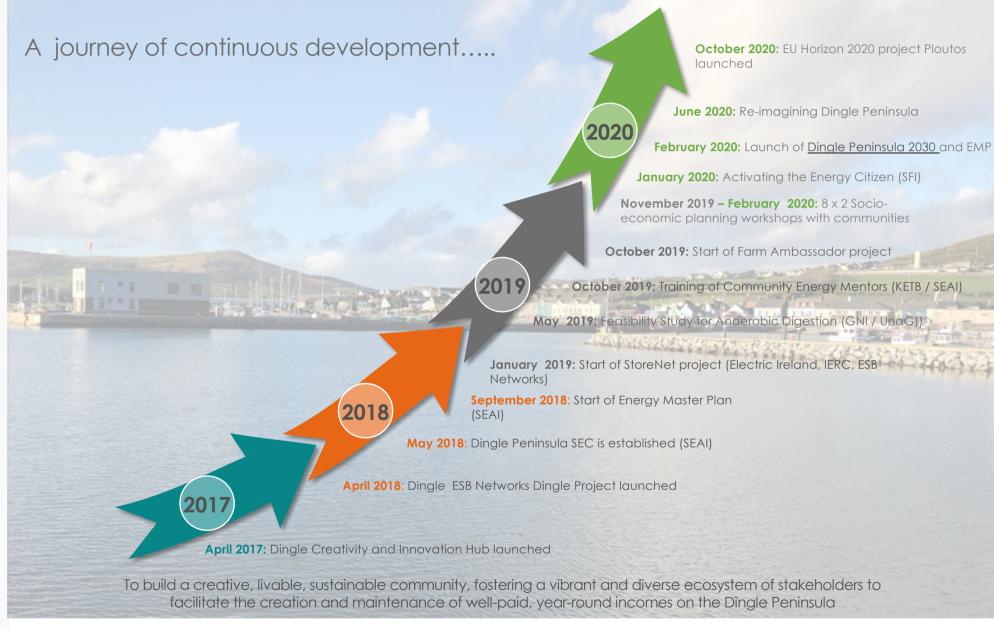














A long-term focus on community-engaged economic and social development

Our mission

to build a creative, livable, sustainable community, fostering a vibrant and diverse ecosystem of stakeholders to facilitate the creation and maintenance of well-paid, year-round incomes on the Dingle Peninsula





How we do it

a flexible multi-layered approach building on the local (at home and our diaspora) & attracting the new, building networks of resources and capabilities aspiring to, primed for and delivering entrepreneurial growth of sustainable enterprise (private & social)



Our operating principles for social & economic impact

- Joining the dots, making connection
- Creating aspirations
- · Lending visibility
- Operating peninsula wide

- Springing from whole of place
- Approaching evidence-based
- Evolving with participation and adaptation
- Co-creating solutions

- Leveraging into the wisdom of the crowd
- Layering international, national, regional, country area all the way up and down to local community



What we aim to achieve





















Vibrant, strongly networked, transition—engaged community with robust co-created vision of the future for the community



Employment impact of 200+ jobs

Sustainable strategies bringing that co-created vision into reality

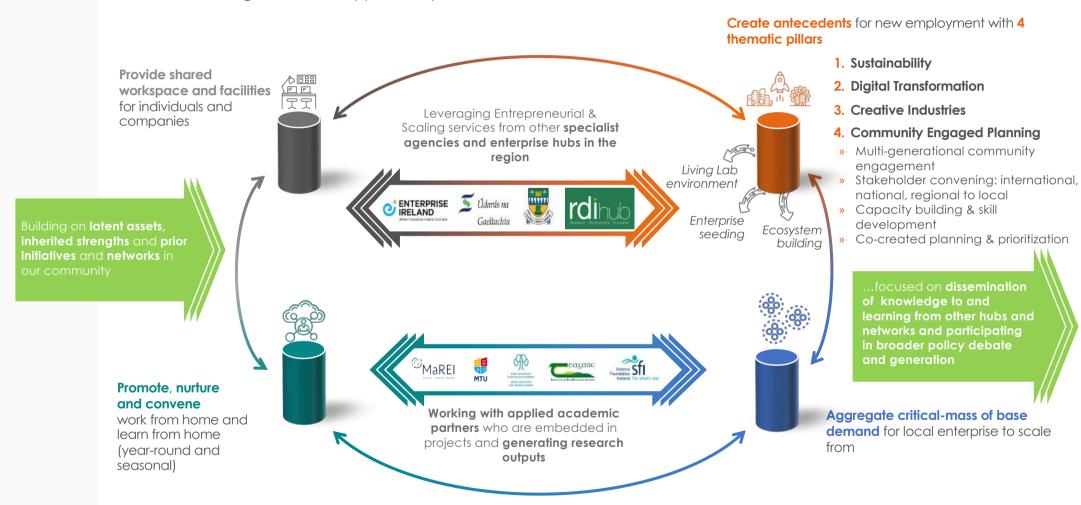
Enabling conditions for 200+ new Connected (Home) Working incomes to be sustained on the Peninsula





How we are doing it

Our model is anchored in a range of strategic platforms relevant to our needs on the Dingle Peninsula, mobilising networks of key partnerships within which the work of the Hub is embedded.



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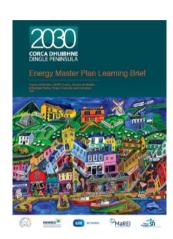


External recognition and dissemination of learnings by our applied research partner MaREI



Certified member of the EU Network of Living Labs







Dingle Peninsula Case Study:
Regional Information Centre for
Western Europe









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Sustainability pillar in action



Energy – established projects

- ESB Networks Dingle Project
- GNI / LECo Anaerobic Digestor Feasibility Study
- IERC / Electric Ireland / ESB Networks StoreNet Project
- SFI Activating the Energy Citizen
- KETB / SEAI Community Energy Mentor Training



















• Teagasc / Kerry Agribusiness / Net Feasa: IoT Farm Ambassador Pilot Project

Agriculture - established projects

- West Kerry Dairy Farmer SEC
- EU SKIN Project
- EU Ploutos Project
- GNI / LECo AD Feasibility Study



Údarás na Gaeltachta













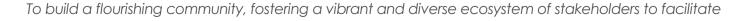








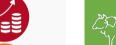






Digital Transformation Pillar in Action















IoT Farm Ambassador Project

- Digital Technologies introduced to 6 local farms
- Relationships established between farming community, technology providers and data analysts
- Toolkit of validated sensors identified to support decision making criteria to reduce GHG emissions and improve cost / labour efficiency on farms.



EU Ploutos Project

- Roll-out sensor technologies to an additional 30 farms on the Peninsula
- Encourage new collaborations and enterprises across the value chain between farmers, technology designers, data analysts, food/service entrepreneurs and consumers
- Greater carbon efficiencies on farms
- Increased profitability on farms as well as new income streams from higher value products
- Work with 33 consortium partners through the Ploutos Innovation Academy













PLOUTOS has received funding from EU's programme H2020 under GA 101000594













Community Engaged Planning Pillar in Action

Engaging the community in future co-creation and prioritisation

Sustainability visioning

Socio-economic and energy planning Workshops

- Information sharing workshops held in 8 electoral districts in Nov 2019
- Follow-up planning workshops held in 8 electoral districts in Feb 2020
- 200+ participants





Future visioning

Online Weekend Workshop & follow-up idea sharing program

- 30 workshop participants (entry capped at facilitator capacity)
- 7 concepts & associated working groups
- 60 participants in idea sharing readout session
 - Sustainable Transport Hub
 - Energy Academy
 - Sensory Gardens
 - I am of Dingle

- Playground of Discoveries
- Social Living Concept
- Educate from Dingle















What's possible next?

What's Possible?

- Multiple community-owned energy projects supporting employment and generating revenue streams
- 10% Energy reduction 30GWh
- 15% CO2 emissions reduction 25ktonnes
- At least 16 new enterprises in the areas of software development for energy efficiency, renewable energy, agri-food, agri-tourism and digital content production
- Cross-sectoral, transition-engaged community authored plans in all 8 electoral districts feeding into one Peninsula-wide

What's the role of the hub to deliver this?

Engage, convene, support and participate in networks at local, regional, national and international level

 Maintain existing and develop new networks through collaborative partnerships, workshop and event delivery and participation, meeting facilitation and training provision

Identify skills needs and mechanisms to address them

 Co-develop and/or facilitate courses, workshops and events that build knowledge and capacity within the four pillars Identify opportunities across the networks and facilitate collaboration and cross-pollination of ideas

- Facilitate meetings and events to provide opportunities for collaboration
- Ensure cross-network communication using social media tools, websites, email and print media where appropriate.

Initiate projects under thematic pillars that contribute to strengthening the innovation ecosystem and deepening local community participation

 Identify and obtain funding mechanisms to resource projects

To build a creative, livable, sustainable community, fostering a vibrant and diverse ecosystem of stakeholders to facilitate the creation and maintenance of well-paid, year-round incomes on the Dingle Peninsula



Questions and next steps

Next Webinar

Financing the Transition

February 3rd 2021 16:00 – 17:00 pm (GMT)

<u>Useful Resources link</u>

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@UpthinkWorks











