



Climate Smart Innovation Sprints

ICA Education Workshops 2023 - Dr MaryAnne Hurley
Warsaw University of Life Sciences from 26th to 28th April 2023



About IKC3

IKC3 - Ireland's Knowledge Centre for Carbon, Climate and Community Action, is a collaboration between three of Ireland's leading Universities; Munster Technological University, Trinity College Dublin and University College Dublin.

The consortium involves an extensive national and EU wide network of partners, including EIT Climate-KIC, Sustainable Innovations Spain, European HEIs, companies, enterprise clusters, local government, civic and social innovators.



DELIVERY TEAM

The programme is delivered by a team from Munster Technological University and Trinity College Dublin



Dr Helena McMahon



Professor Nick Holden



Dr Quentin Crowley



Dr MaryAnne Hurley



Eve Savage

Providing education for the transition to a low carbon economy

Industry, Clusters, Agencies & Research Centres



International Collaborators



National Collaborators





Pillar 1: Lifelong Learning

Enterprise skills & talent
for the transition to the
low carbon economy



Pillar 2: Turas Learning Programme

Graduate formation
& the workplace
of the future



Pillar 3: Deep Learning Demonstrations

Regional experiential
learning
environments

Climate Smart Innovation Sprint

- Industry members encouraged to provide challenges for strategizing
- Design thinking methodologies used to work through challenges
- Opportunities to collaborate and approach challenges by learning transversal problem-solving methodologies
- Positive, peer to peer learning environment rewarding results based and design thinking approaches



What is Design Thinking?

- Design thinking is a process of problem solving that begins with understanding and empathising with the customer/users/society's needs
- A sequential process to understand the user, redefine problems and challenge assumptions in an attempt to identify innovative solutions to prototype and test.
- The design thinking approach can be applied to ANY problem or challenge..... empathy is at the cornerstone of the process.



10 Step Team process



Identify the problem



Defining the challenge



Designer Dozen
and the 9 R's



The Big Tree

The Bigger picture



Expanding on
your chosen
ideas



Action Plan



IKC3 Climathon Canvas

IKC3 Build Team Canvas



Impact Pitch Presentation

What Will I Learn?



- Work actively and collaboratively by creating practical, meaningful solutions with coherence to holistic thinking such as including - ecological, social, economic, and societal contexts.
- Transferable skills, personal development, and leadership promoting action orientated solutions.
- Achieve personal development, strengthening your communication, skills towards solving complex societal challenges related to climate change.

THE CHALLENGE

How do we halve emissions
by 2030 and get to Net Zero
by 2050?



CLIMATE SMART KERRY PROPOSAL: THE CIRCULAR ECONOMY HUB SOUTHWEST



CLIMATE SMART KERRY PROPOSAL: SOUTHWEST SUSTAINABLE FOOD SYSTEMS

AT A GLANCE

CHALLENGES

- Transition from linear to circular
- Carbon neutrality by 2050
- Create regional solutions towards meeting national climate goals
- Lack of infrastructure and facilities supporting circular economy aims
- Dearth of inclusive education & outreach across societal sectors

OUTCOMES

- Accurate real time data of the built environment in Kerry
- Model of community engagement
- Fast track towards carbon emission reduction targets 2030 & 2050



KEY PARTNERSHIPS

- Munster Technological University
- Kerry County Council
- Chamber Alliance
- IKC3 Project
- NEWKD & SKDP
- IBEC & LEO
- Enterprise Ireland
- LDC & KERRY PPN

OBJECTIVE

The circular economy is a systems solution framework that tackles global challenges like climate change, biodiversity loss, waste, and pollution. Key to activating such an approach requires the design of a circular initiative that can activate multiple fundamental levers of change on a regional and national level in the just transition towards a zero carbon society. The Circular Economy Hub Southwest provides a unified and cohesive platform to deliver climate and community action for the region to eliminate waste and pollution, recirculate products and materials and regenerate the natural environment.

SOLUTION

- State of art circular economy hub facility designed to support and enhance CE education, outreach and skills development
- One stop shop for business, environment, community and society stakeholders to collaborate and deliver actionable 'Climate Smart Kerry' solutions to reach 2030 & 2050 EU targets
- Matchmaking & brokerage service for circular economy products, services and solutions
- Circular Economy Academy to develop regional skills & talent

BENEFITS

Benefits One

Centralised circular and bioeconomy information, education & outreach provider for communities in the Southwest region

Benefits Two

Coordinating services across the 9 R's: refuse, rethink, reduce, repair, refurbish, remanufacture, repurpose, recycle, recover

Benefits Three

Facilitating and coordinating networking to attract and/or source funding, resources and financial inputs from industry

Benefits Four

Key partnerships between local authorities, community groups, research and academia & government departments

AT A GLANCE

CHALLENGES

- Supporting small scale growers
- Creating shorter supply chains
- Connecting consumers to food
- Commercially sustainable farming practices and revenues

OUTCOMES

- Food security and food quality
- Employment security
- Just and fair income streams
- Climate resilience
- Community health & wellbeing



KEY PARTNERSHIPS

- Munster Technological University
- Kerry County Council
- Chamber Alliance
- TEAGASC
- Kerry Group
- Bord Iascaigh Mhara
- Bord Bia
- Department of Agriculture, Food & Marine

OBJECTIVE

Kerry has a significant opportunity to position itself as a 'Climate Smart' region through the development of strategic and coordinated flagship circular and sustainable food system initiatives. Circular food systems prioritize regenerative production, favour reuse and sharing practices, reduce resource inputs and pollution and ensure resource recovery for future uses.

SOLUTION

- Create and sustain key partnerships between food producers, distributors
- To create a detailed map of food systems using a traffic light system for carbon accounting
- Creation of multiple demonstration farms and sites showcasing creative land use and implementation of short supply chain solutions for retail, hospitality & tourism
- Developing strong consumer awareness of and engagement with local food producers and marketplaces
- Regenerative food production with positive outcomes for nature such as healthy and stable soils, improved local biodiversity, improved air and water quality.

BENEFITS

Benefits One

Kerry marked as a key supporter of circular food systems, develop brand as a carbon neutral county

Benefits Two

Diversification of land use creating a vibrant community of food producers and consumers

Benefits Three

Resilient, diversified and sustainable employment opportunities for food producers across the region

Benefits Four

Key partnerships between horticulture, agriculture, land owners, local authorities, community groups, research and academia and government departments





Feedback

Defining

Interactive

Live

Impactful

Collaborative

Sustainable

Action based

Insightful

Innovative

Questions?



For more information or
queries contact:
maryanne.hurley@mtu.ie