

# ENGAGED RESEARCH & INNOVATION FOR SOCIETAL IMPACT





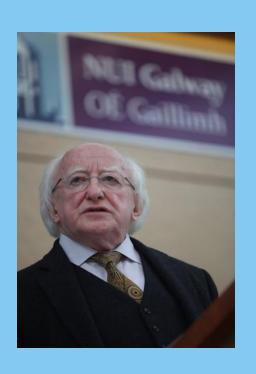






#### **Third Mission**

#### Call to Action!



"... universities are also a part of our societies. What's the point unless the accumulated knowledge, insight and vision are put at the service of the community? With the privilege to pursue knowledge comes the civic responsibility to engage and put that knowledge to work in the service of humanity".

President of Ireland Michael D. Higgins, 2012

### **ENGAGED RESEARCH IN IRELAND**











#### Third Mission – Prioritised in HEI National Policy

### Chapter 5 of the Irish National Strategy for Higher Education to 2030

"Higher education institutions become more firmly embedded in the social and economic contexts of the communities they live in and serve."

### Part of Universities Mission-based Performance Compact Section 5.5

Enhance Engagement with industry and community and embedded Knowledge Exchange

Engagement is part of Key Strategic Objectives (KSO's) 1-3 of the Higher Education System Performance Framework.

**National Strategy** for Higher Education to 2030

### National Priority given to Engaged Research (2014)





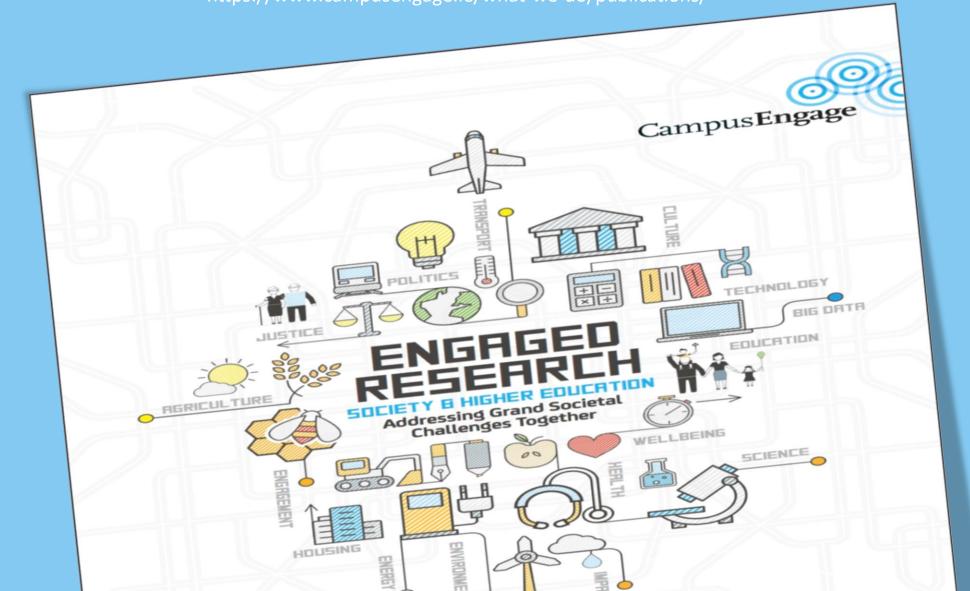
We will promote civic and community engagement through a variety of community-based learning, community-based research, public scholarship and volunteering activities and seek to align these with the overall teaching, research and outreach missions of our institutions;

We will continue to promote the engagement of our institutions with the wider society through two-way knowledge exchanges, and actively communicate the social relevance and impact of our research and teaching activities as broadly as possible;

We will continue to advocate for appropriate resources, both financial and human, to achieve high impact civic and community engagement activities to maintain and build on what we have achieved to date.

## IUA Campus Engage: Engaged Research Report

http://www.research.ie/sites/default/files/er\_report\_2016\_web\_final.pdf https://www.campusengage.ie/what-we-do/publications/

































































### Third Mission: UCC Strategic Plan 2023-2028

UCC's mission is to create and sustain an inclusive environment and culture to enable transformative research and learning for the *enrichment of society* and stewardship of our planet:

"We recognise that the "third mission of universities", engagement, is at the heart of the future vision and policy direction for higher education in Ireland and Europe...We promote this mission of collaboration and co-creation with society, embedding a university-wide culture where staff, students and external partners feel valued and supported to deliver engaged research, community-engaged learning and public engagement".



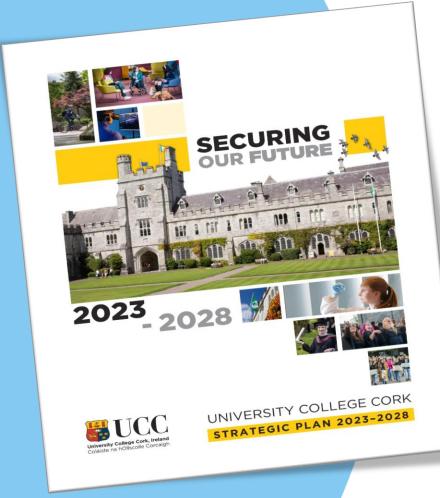
### UCC Strategic Plan 2023-2028

**GOAL 1.4:** Transform UCC's research culture through the implementation of engaged research and open research, underpinned by academic integrity, and ethical and responsible practice.

"Actively support staff and students to embrace a range of rigorous research approaches and methodologies that share a common interest in collaborative engaged research 'with' and 'within' society".

**GOAL 1.1:** Embed impact mapping in our research ecosystem so that all researchers can articulate the links between their research and global grand challenges via the framework of the UN SDGs. Prioritise research where UCC can have maximum impact.

"Ensure maximum societal, cultural and economic impact through active cross-disciplinary collaboration with our communities, across the city and region, nationally and internationally".



### **ENGAGED RESEARCH & INNOVATION FOR**

SOCIETAL IMPACT



**UCC Research Awards** 2022

**Engaged Research of the Year** 

Professor Maggie O'Neill

Departn

Professor M participatory with margin UCC University Colorge Card, India

Research of the Maggie O'Neil

Prof Patricia Leahy-Warren and Dr. Katharina Swirak

# ENGAGED RESEARCH & INNOVATION FOR SOCIETAL IMPACT

Pact for Research and
Innovation in Europe: Value
Creation and Societal and
Economic Impact: Active
Citizen and Societal
Engagement in Research
and Innovation.
European Research Area

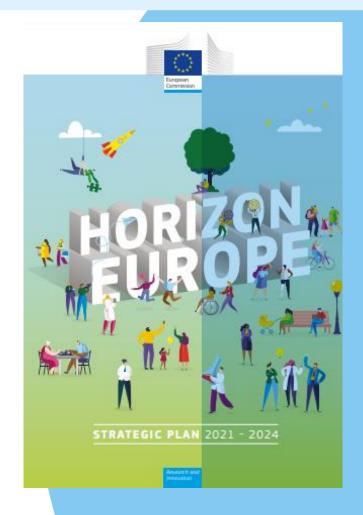
Research assessment by research funders should consider disciplinary, multi-, inter-, and trans-disciplinary research as well as contributions to knowledge generation and scientific, technological, economic, cultural and societal impact.

**Coalition for Advancing Research Assessment** 





#### **HORIZON EUROPE**



SOURCE: HORIZON EUROPE STRATEGIC PLAN

#### **PERSPECTIVE ON ENGAGED RESEARCH:**

- Researchers must provide "clear and succinct information on how citizens, civil society, and end user engagement will be implemented within the project," recognising this may include:
  - Co-design activities; co-creation activities; coassessment activities; and engagement through methodological approaches.
- Researchers must be able to articulate how the project contributes to the outcomes of specific calls, and how it is linked to *wider impacts*.

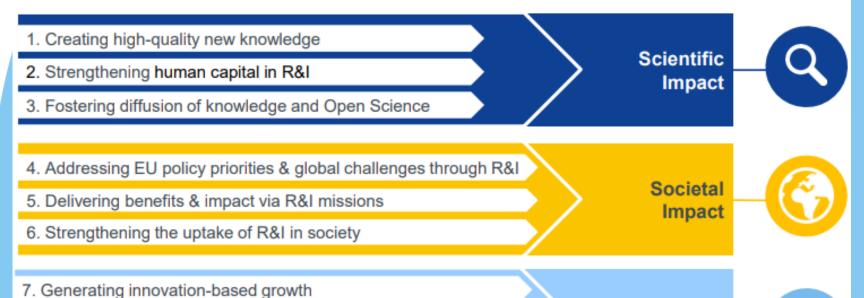


#### A New Horizon for Europe: Framework

8. Creating more and better jobs

9. Leveraging investments in R&I

# Quick Introduction — The 9 KIPs (Key Impact Pathways)



Economic/ Technological Impact











#### **HORIZON EUROPE: MISSION FOCUS**



"EU Missions are a new way to bring concrete solutions to some of our greatest challenges. They have ambitious goals and will deliver concrete results by 2030.

They will deliver impact by putting research and innovation into a new role, combined with new forms of governance and collaboration, as well as by engaging citizens."

**SOURCE: HORIZON EUROPE MISSIONS** 

### Why Engaged Research Matters?



- Higher Education Third Mission
- Democratising science through knowledge co-creation with and within society
- Inclusiveness and equality through recognising different forms of knowledge(s)
- Partnership for the goals (SDG 17)
- Transdisciplinary: Research Boundary Crossing
- Transnational local to global challenges
- Contributes to Local, National, European and International Policy Context
- Impact for Society, Scientific, Economy, etc.



### **Engaged Research & Innovation**



Bringing
beneficiaries into
the research &
innovation process



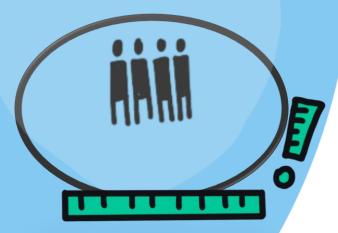


Collective transdisciplinary approach





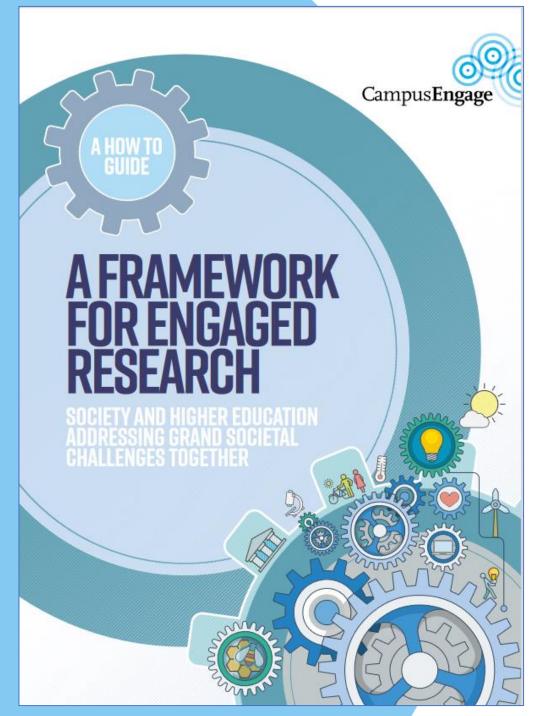
For societal value and impact



### Campus Engage

**Irish Universities Association** 

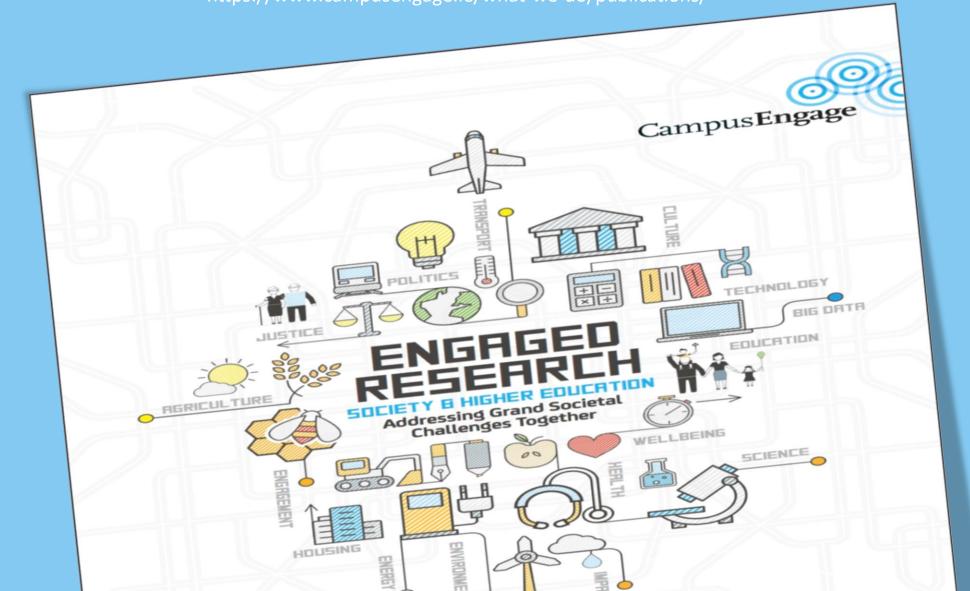
Describes a wide range of rigorous research approaches and methodologies that share a common interest in collaborative engagement with the community and aim to improve, understand or investigate an issue of public interest or concern, including societal challenges. Engaged research is advanced with community partners rather than for or about them.



https://www.campusengage.ie/wp-content/uploads/2018/12/Framework\_for\_Engaged\_Research\_May\_18\_Web.pdf

## IUA Campus Engage: Engaged Research Report

http://www.research.ie/sites/default/files/er\_report\_2016\_web\_final.pdf https://www.campusengage.ie/what-we-do/publications/







#### **UNIC European University of Post-Industrial Cities**

EUROPEAN DECLARATION ON ENGAGED RESEARCH

#### UNIC: Educating Through Teaching, Research and Community Engagement for Inclusive Societies

We are UNIC, a European alliance of universities and post-industrial cities, whose aim is to develop a new model of European inter-institutional teaching, research and engagement infrastructure that promotes 'superdiversity' and interrogates and addresses the challenges facing post-industrial cities. The uniqueness of our alliance resides in our places, our histories and traditions, our individual and collective experience, and the diverse nature of our cities. The vision of our alliance is that our universities, municipalities & civil society partners will collaborate multilaterally to address urban challenges - collectively shaping learning, research and engagement within and

"An overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement 'with' and 'within' society."

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Cork, Ireland, from March 30th to April 1<sup>st</sup> 2022. A signing ceremony, involving university, municipality and civil society delegates, took place in Oulu, Finland on June 15<sup>th</sup> 2022. This

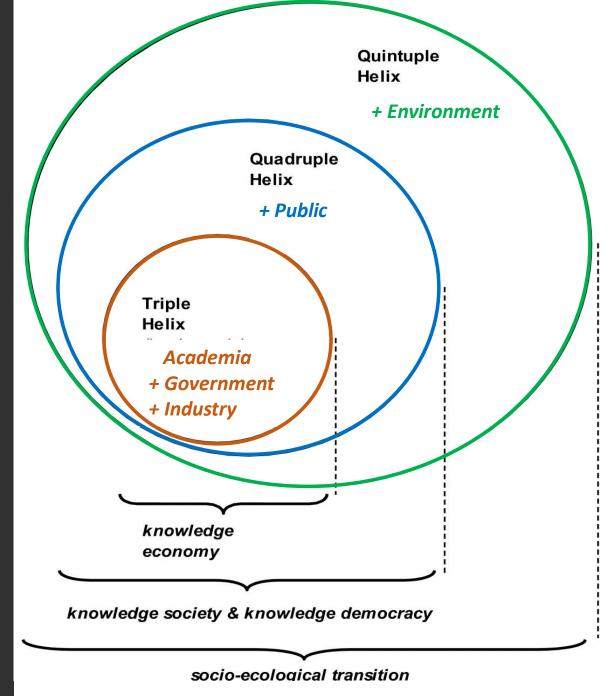
The European Declaration of Engaged Research was signed by University and Municipal Leadership at the UNIC CityLab Festival in Oulu, Finland on the 15<sup>th</sup> of June 2022



# What is Engaged Research?

"An overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement 'with' and 'within' society."

European Engaged Research Declaration (UNIC)



Carayannis and Campbell, 2014

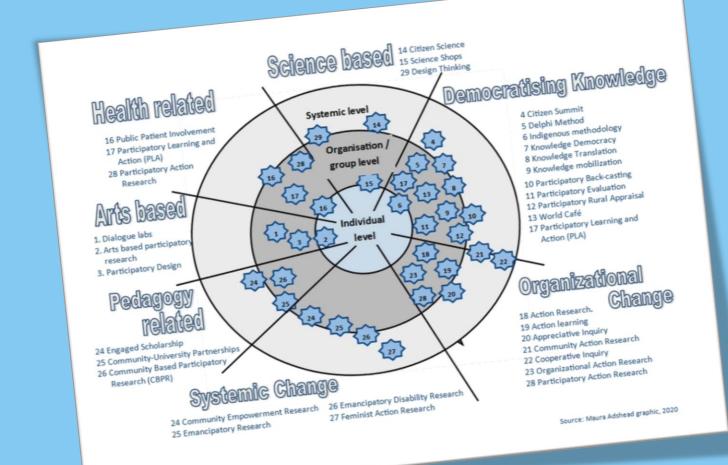
### UNIC European Declaration of Engaged Research (2022)

Engaged Research is an overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement 'with' and 'within' society.

- Committed to academic freedom and the public good.
- Nurtures democratic competencies through participation in research from defining research need, to the co-creation of knowledge and equitable and reciprocal knowledge translation.
- Committed to sustainability, and inherently transdisciplinary, it explicitly builds awareness of the interconnectedness of our social-ecological systems.
- Respects different knowledge traditions (expertise, practice, experience, wisdom).
- Emancipatory and transformative social justice orientation consistently pursuing intersectional understanding towards greater social solidarity, diversity, inclusion and equity.

# Engaged Research Approaches



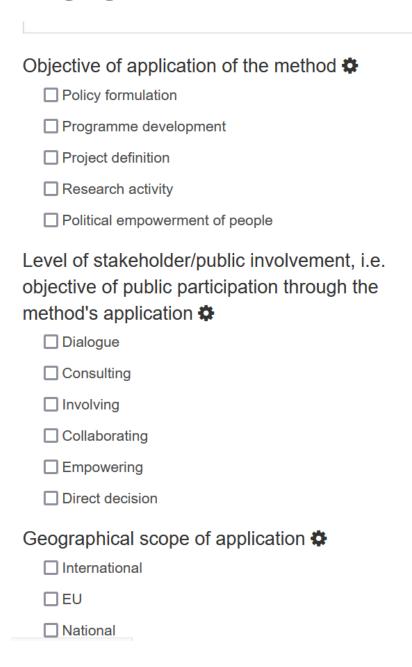




#### **NAVIGATING THE 'ENGAGED RESEARCH' HIVE**

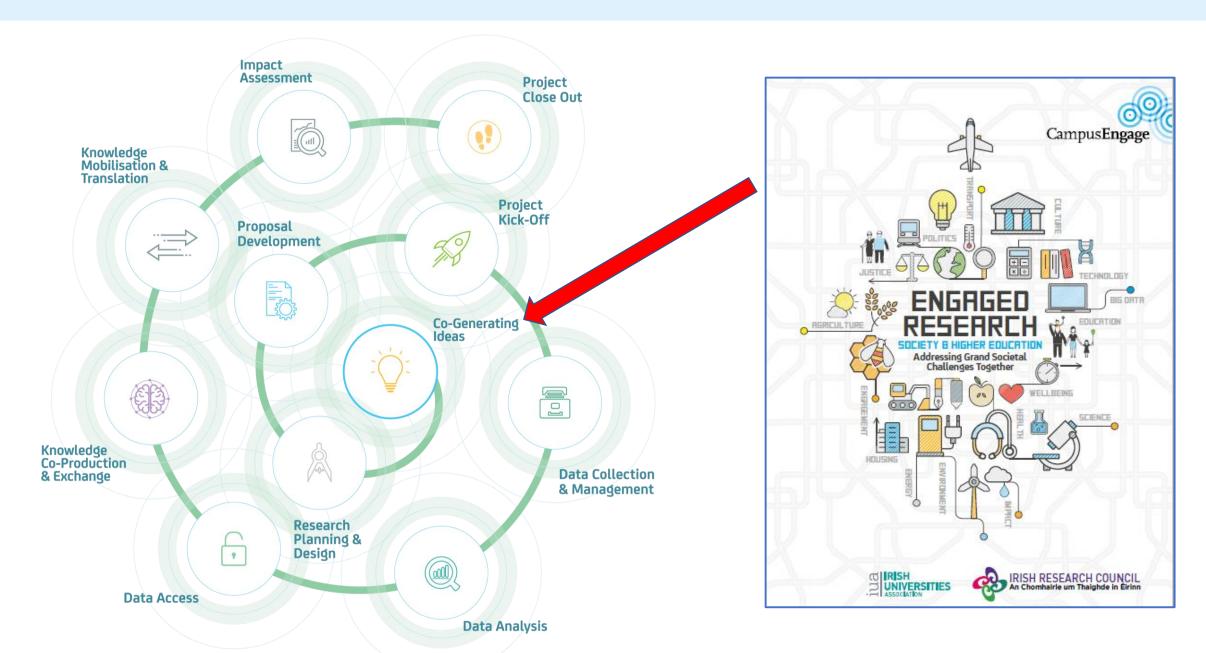


### The Engage 2020 Action Catalogue Approaches and Methodologies





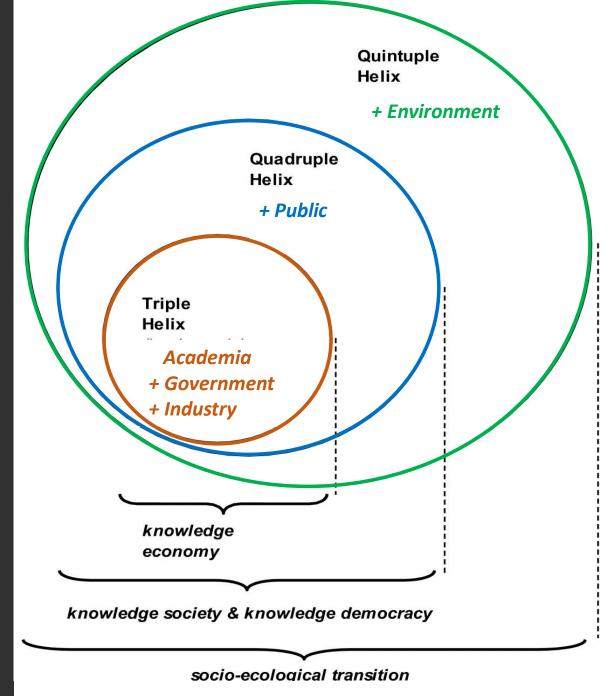
### **ENGAGED RESEARCH FRAMEWORK**



# What is Engaged Research?

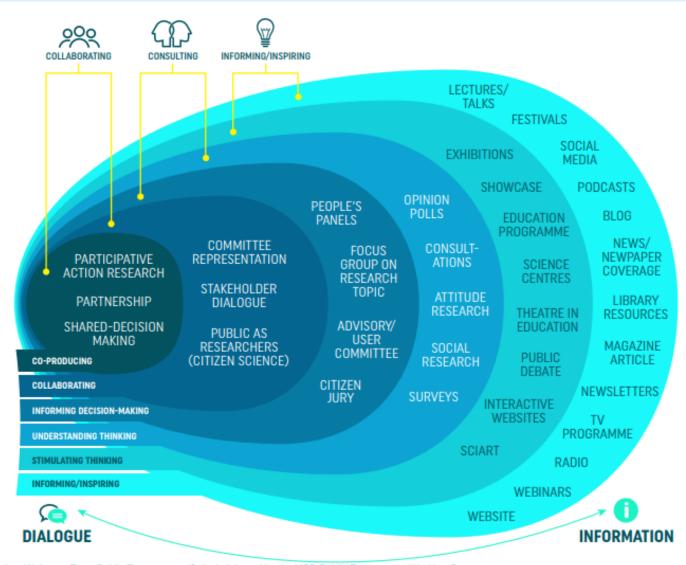
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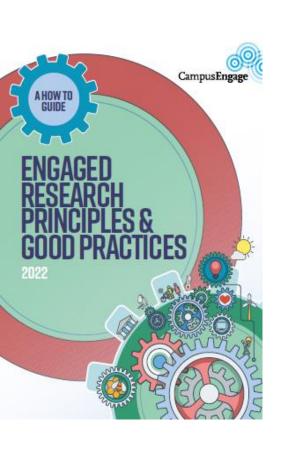


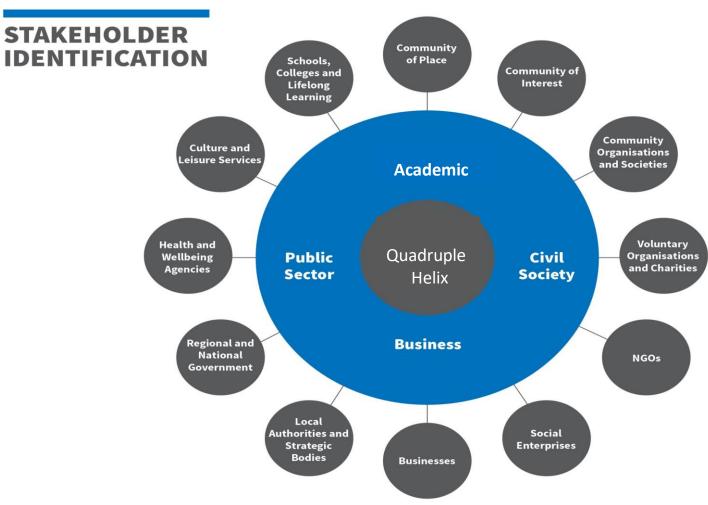
Carayannis and Campbell, 2014

#### **CONSIDER THE SPECTRUM OF ACTIVITIES**



### **CO-GENERATING IDEAS WITH STAKEHOLDERS**





Credit: National Co-ordinating Centre for Public Engagement - UK



### **Examples of Best Practice**

## Corca Dhuibhne 2030 Dingle Peninsula 2030

A multi-stakeholder initiative aimed at transitioning the Peninsula to a low carbon and resilient community by 2030

https://doi.org/10.1080/13549839.2021.1936472







#### Participatory network mapping of an emergent so dal network for a regional transition to a low-carbon and just society on the Dingle Peninsula

Evan Boyle<sup>A,c</sup>, Brian Ó Gallachóir <sup>(1)</sup> and Gerard Mullally <sup>(1)</sup> Acc

\*MaREI Centre, Environmental Research Institute, University College Cork, Cork, Ireland; \*School of Engineering, University College Cork, Cork, Ireland: "Department of Sociology and Criminology, University College Cork, Cork,

The paper develops a methodological approach that acts as a tool for active change agents working in community and just transition contexts to increase their capacity to engage a wider public in planning. An imovative contribution is made to the literature through the development of a participatory action research (PAR) based approach to social network analysis using a participatory mapping method with relation to sustainable transitions. The method comprises a participatory network mapping approach, adapted from the Net-Map todkit, which is applied to a multi-stakeholder approach to realising a regional sustainability transition in the Republic of Ireland. Dirigit Peninsulg 2030 is an initiative aiming to transition a geographic region in the South West of Ireland to a low-carbon society by 2080 across the

ARTICLE HISTORY Received 29 July 2020 Accepted 11 May 2021

#### KEYW ORDS

Participatory network mapping method; so dal network analysis; transitions management; participatory action research









The Dingle Creativity and Innovation Hub **ESB Networks** 

MaREI

North East West Kerry Development (NEWKD)

### **Examples of Best Practice**

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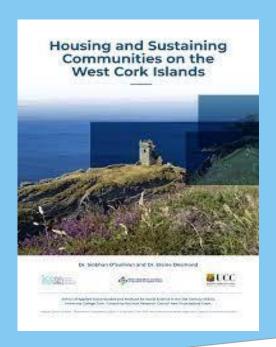


The Dingle Creativity and Innovation Hub **ESB Networks** 

MaREI

North East West Kerry Development (NEWKD)

## West Cork Islands Partnership







A multi-stakeholder partnership aimed at sustaining Island life and communities through engaged research

**EU Grassroots Wavelengths Project** 

# Fairhill Community Partnership

Spaces, Places and Young People: Exploring Youth Valces of Fairhill

Spaces Places and Young People: Exploring the Youth Voices of Fairhill

Student No. 114368271

CARL Research Project

Fairhill Community Association and Fairhill Youth Facility Working Group



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An engaged research partnership to support community identification of needs and community advocacy



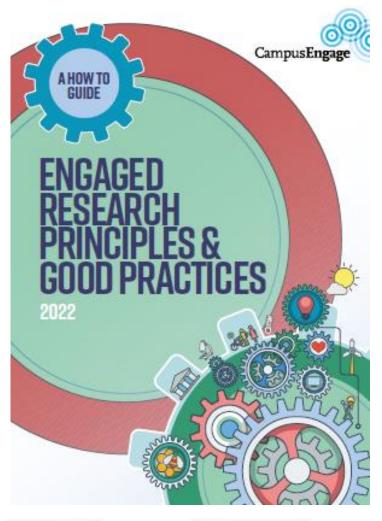


### Cork Migrant Centre



The CIPHER initiative works with the Cork Migrant Centre and Kabin Studio, and a team of global researchers, to co-investigate how Hip Hop, which was once highly-localised, has translated so easily to far-flung communities around the globe.

## **Engaged Research Principles**



- Integrate transdisciplinary and cross-sectoral partnerships
- 2. Clearly identify pathways that maximise research impact
- 3. Advance open science / open scholarship
- 4. Deliver solutions through open innovation
- 5. Promote equality, diversity, inclusion, and belonging
- 6. Lead responsible research and innovation





### 1. INTEGRATE TRANSDISCIPLINARY & CROSS-SECTORAL PARTNERSHIPS

What steps are you taking to build a successful team that encourages collaboration and establishes effective working relationships, acknowledging and actively integrating different sectoral and disciplinary perspectives?

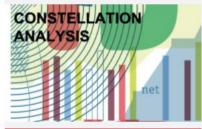
## 1. INTEGRATE TRANSDISCIPLINARY & CROSS-SECTORAL PARTNERSHIPS



#### **Actor constellation**

A role-play for jointly sorting out the relevance of various involved actors for tackling a specific research question.

Image: td-n



#### Constellation analysis (CA)

This method develops constellations of social actors, natural elements, technical elements as well as signs/symbols with regard to an issue. It involves heterogenous groups with the intention to find the...

mage: td-net



### **Emancipatory boundary critique**

A set of questions supporting non-experts in critically challenging an expert's suggested solution to a problem and the solution's social and ecological implications.

Image: td-n



### Functional-dynamic stakeholder involvement

This approach helps to specify the functional (related to the goal of the respective project step) as well as dynamic (related to the type of participation in the respective project...

tmage: p'n'p



### Multi-stakeholder discussion group

An approach that allows for expressing tacit knowledge, values and practices within a group of actors and stakeholders accompanying a (research) project.

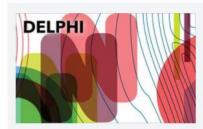
Image: td-net



#### Nomadic concepts

A heuristic tool for exchanging understandings of concepts across disciplinary, professional and cultural boundaries.

Image: td-ni



### Delphi

A poll for consolidating expert views on an issue using ratings and arguments.

mage: td-net



#### Design thinking

An iterative methodology for (re)framing problems and co-creating implementable solutions using visual thinking and prototyping.

terrore teles



#### Give-and-take matrix

A tool for identifying pieces of knowledge to be shared between subparts of inter- and transdisciplinary projects.

Image: td-net



#### Most significant change

A story-based, qualitative method for uncovering most significant project impacts experienced by individuals.

mage: td-net



#### Outcome spaces framework

A framework to plan for preferred outcomes in transdisciplinary projects.

Image: td-net



#### Research marketplace

A tool to initiate bilateral and small group exchange between (sub)projects that need to be

Image: td-ne

SOURCE: HTTPS://NATURALSCIENCES.CH/CO-PRODUCING-KNOWLEDGE-EXPLAINED/METHODS/TD-NET TOOLBOX

### 1. INTEGRATE TRANSDISCIPLINARY & CROSS-SECTORAL PARTNERSHIPS

Top Ten Tips for writing an inter- and transdisciplinary research proposal Top Ten Tips for working in multi-stakeholder collaborations

Top Ten Tips for working with policymakers



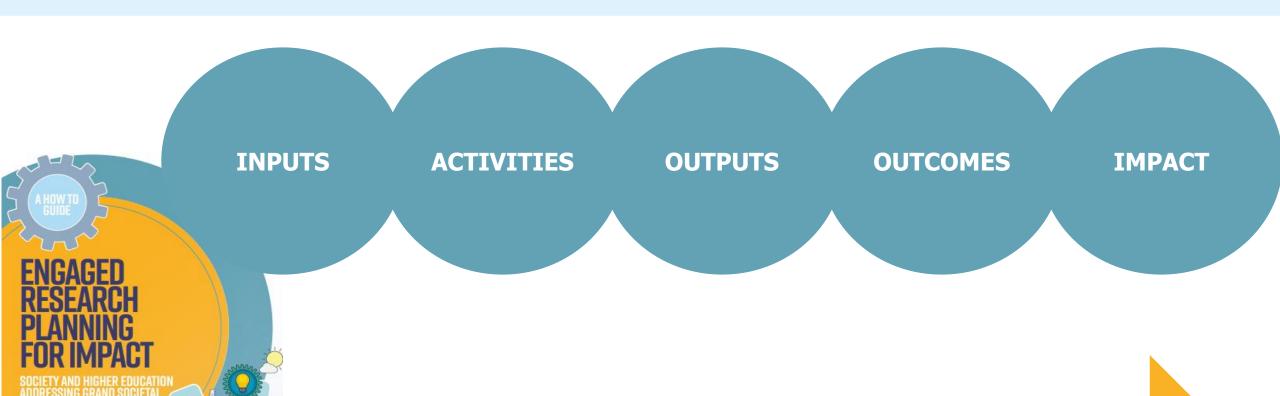
Top Ten Tips for evaluating inter- and transdisciplinary research

Top Ten Tips for developing inter- and transdisciplinary research funding programmes Top Ten Tips for inter- and transdisciplinary academic careers

Top Ten Tips for mentoring academic careers in inter- and transdisciplinary research

SOURCE: HTTPS://WWW.SHAPEIDTOOLKIT.EU/

## 2. CLEARLY IDENTIFY PATHWAYS THAT MAXIMISE RESEARCH IMPACT



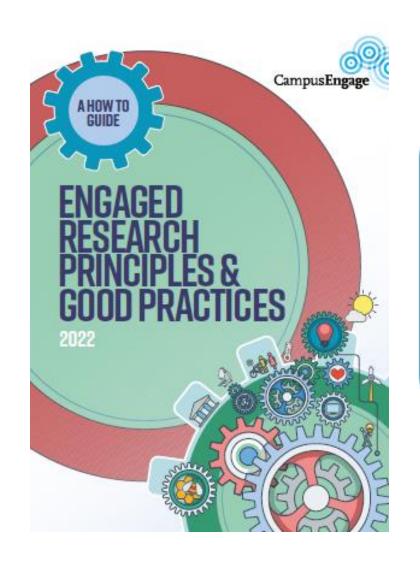
**Pathway to Impact** 

## 2. CLEARLY IDENTIFY PATHWAYS THAT MAXIMISE RESEARCH IMPACT

- "Impact may be broadly defined as a change or a benefit to the economy, society, culture, public policy or services, health, the environment or quality of life. The European Commission's Horizon Europe Intervention Logic distinguishes between three types of expected impacts scientific, innovation/economic and societal.
- .... But successful Horizon Europe proposals need to cover impacts that go even further, such as:
  - Generating or improving awareness
  - Changing attitudes
  - Delivering positive effects on the economy or the environment
  - Improving health and wellbeing
  - Effecting a desired cultural change."

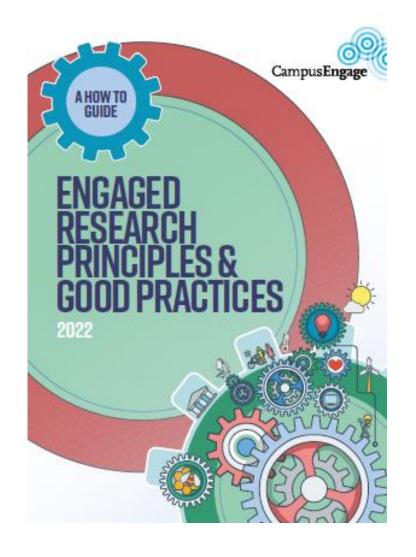
**SOURCE: HORIZON EUROPE GLOSSARY** 

### 3. ADVANCE OPEN SCIENCE / OPEN SCHOLARSHIP



Can the research data, instruments, and/or findings be openly accessed and utilised by researchers and other stakeholders in order to further investigate or address the societal challenge or issue of public concern?

## 3. ADVANCE OPEN SCIENCE / OPEN SCHOLARSHIP

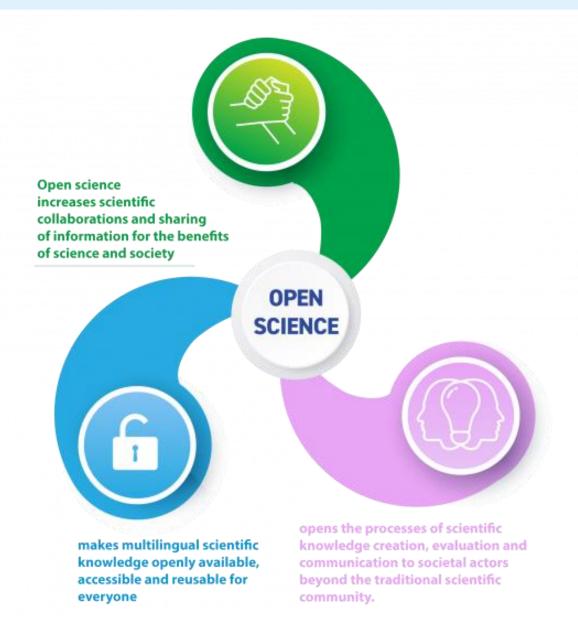


- Improve the excellence, rigor and reproducibility of research.
- Drive local and global scientific discovery and innovation.
- Grow collaborations and research networks.
- Encourage informed dialogue and debate.

"Open Science is a system change allowing for better science through open and collaborative ways of producing and sharing knowledge and data, as early as possible in the research process, and for communicating and sharing results."

**SOURCE: EUROPEAN COMMISSION** 

## 3. ADVANCE OPEN SCIENCE / OPEN SCHOLARSHIP



**SOURCE: UNESCO** 

## 4. DELIVER SOLUTIONS THROUGH OPEN INNOVATION

How does this project engage and empower members of the public; enhance the resilience of communities; increase the relevance, acceptance and uptake of innovation; or help foster lasting changes in social practices, therefore acting as a system changer?

## 4. DELIVER SOLUTIONS THROUGH OPEN INNOVATION

"Innovations defined by their (social) objectives to improve the welfare of individuals or communities."

SOURCE: OSLO MANUAL, 2018

"Social innovation concerns the development of new products, methods, and services for and with society involving citizens, public authorities, business and industry, and academia — **the Quadruple Helix** — in their design, development, and implementation."

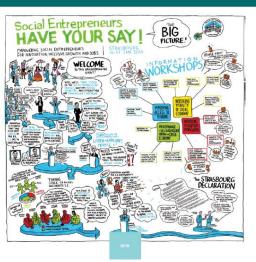
SOURCE: HORIZON EUROPE PROGRAMME GUIDE, 2021-2027

"Most broadly it can refer to the creation of new services, products or processes that engage and mobilise its beneficiaries, and that to some extent transform social relations by improving beneficiaries' access to power and resources."

**SOURCE: INNOVATE COMMUNITIES IRELAND** 

## 4. DELIVER SOLUTIONS THROUGH OPEN INNOVATION











4th Edition





SOURCE: SOCIAL INNOVATION: A DECADE OF CHANGES

**SOURCE: OSLO MANUAL, 2018** 

SOURCE: EUROPEAN INNOVATION SCOREBOARD, 2021

SOURCE: NATIONAL RESEARCH & INNOVATION STRATEGY CONSULTATION PAPER

## 5. PROMOTE EQUALITY, DIVERSITY, INCLUSION & BELONGING: IMPROVE GENDER BALANCE

Have you considered gender bias throughout all stages of the research cycle: from the definition of a research question / hypothesis ... to the selection of research methods ... to the running of research activities ... to the analysis and dissemination of results?

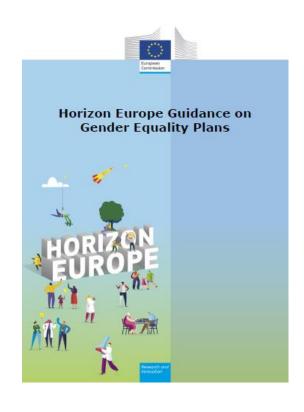
## 5. PROMOTE EQUALITY, DIVERSITY, INCLUSION & BELONGING

- Diverse ideas, opinions, knowledge and people enrich our work and enlarge our knowledge economy.
- We have a responsibility to give everyone the opportunity to participate for mutual benefit.
- We maximise the impact of research and innovation to involve and benefit all parts of society.
- We can identify and reflect diverse interests using an intersectional approach.
- We must treat people equitably to achieve equality in outcomes.

**SOURCE: UK RESEARCH & INNOVATION** 

SOURCE: NIHR: NATIONAL INSTITUTE FOR HEALTH RESEARCH

## 5. PROMOTE EQUALITY, DIVERSITY, INCLUSION & BELONGING: IMPROVE GENDER BALANCE





- Deliver a gender-balanced team.
- Identify procedures, practices and structural barriers.
- Implement innovative strategies to correct any bias.
- Set targets and monitor progress via indicators.

SOURCE: HORIZON EUROPE GUIDANCE ON GENDER EQUALITY PLANS

**SOURCE: ATHENA SWAN IRELAND** 

### 6. LEAD RESPONSIBLE RESEARCH & INNOVATION

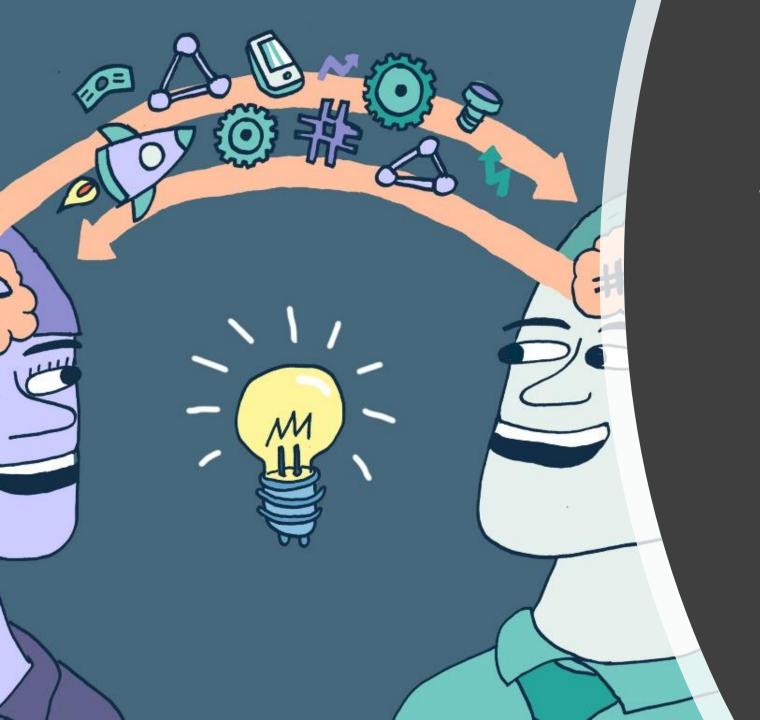
How are you engaging and involving others through inclusive methodologies in all stages of the research and innovation process — and in all levels of project activities and governance — from agenda setting, to design, implementation, dissemination and evaluation?

### 6. LEAD RESPONSIBLE RESEARCH & INNOVATION

### We lead responsible research and innovation (RRI) by:

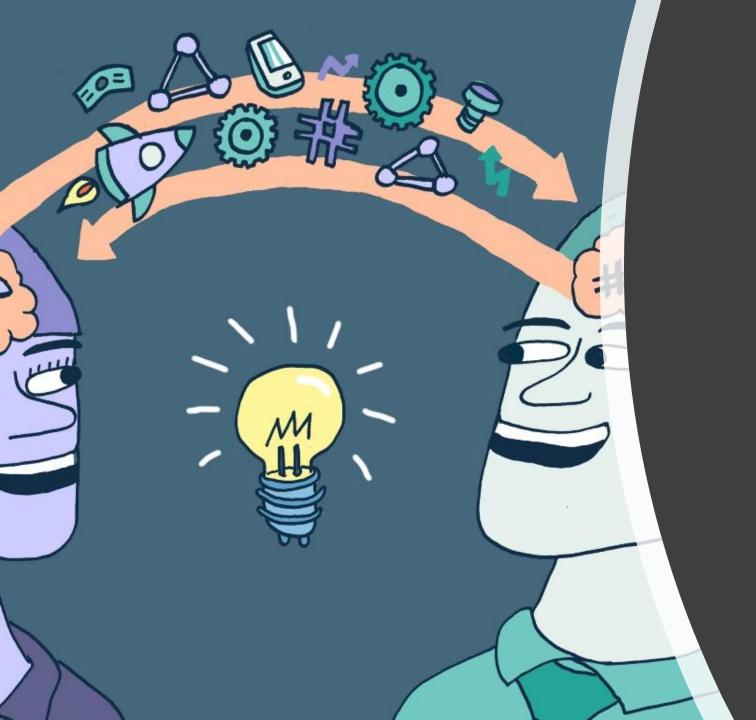
- Building a diverse and inclusive team, appropriate to the research
- Envisioning the potential impacts (positive and negative) from our efforts
- Being intentional in what we hope to achieve and clearly articulating this
- Delivering open, transparent and audience-appropriate communications
- Encouraging public scrutiny and dialogue on our efforts
- Responding to feedback from those we engage with
- Ensuring quality engagement to deliver applications of science and scholarship
- Creating momentum for a responsible research environment by modelling good practice

SOURCE: RESPONSIBLE RESEARCH AND INNOVATION TOOLS



Sharing your experiences with Engaged Research

- Engaged Research Approach or Methodology?
- Discipline?
- At your institution or elsewhere?
- What did you do?



### **Designing Engaged Research**

How would you apply the engaged research cycle to addressing a grand societal challenge?

With QH Partners.
Transdisciplinary.
Impact.

# THANKYOU

Email: martin.galvin@ucc.ie

LinkedIn: www.linkedin.com/in/dr-martin-galvin-a05b564b/

PH: 0867708217