



ENERGY
TRANSITION



CLIMATE
ACTION

Corca Dhuibhne 2030/Dingle Peninsula 2030

Dingle Peninsula 2030 was a multi-partner climate action initiative, delivered over five years from 2018-2023, on the Dingle Peninsula, Co. Kerry. Partners included the Dingle Hub, ESB Networks (ESBN), North East West Kerry Development (NEWKD) and MaREI, the SFI Research Centre for Energy, Climate and Marine coordinated by UCC. The initiative was initially funded by Science Foundation Ireland (SFI) and industry partner ESB Networks, and facilitated the partners to attract other competitively won funding from national and international sources.

Impact Statement

The Corca Dhuibhne /Dingle Peninsula 2030 initiative has empowered the community to advance the energy transition to a low carbon society. This novel partnership has increased societal capacity and employment in climate action on the Dingle Peninsula and has resulted in the emergence of many new sustainability initiatives and activities, including the West Kerry Dairy Farmers Sustainable Energy Community (SEC) and the Corca Dhuibhne Tourism and Hospitality SEC. Additional outcomes include the accelerated deployment of low carbon energy technologies, including solar photovoltaics and the inclusion of climate action into local and regional stakeholders' development plans, with a focus on supporting sustainable incomes and enhancing quality of life on the Dingle Peninsula.

MaREI researchers based at University College Cork (UCC) took a collaborative engaged research approach to harness and support the Dingle Peninsula community on their sustainability journey. A key aspect of this engaged research was co-producing, documenting and disseminating the learnings that resulted in broader outcomes nationally and internationally. This is demonstrated through the multiple references to Dingle Peninsula 2030 in Oireachtas policy debates, membership of the EU Network of Living Labs (ENoLL), recognition by the United Nations as a case study for sustainability, and changes in policy and practice of collaborating partners. Accolades include multiple national awards including the SFI award for 'Engaged Research of the Year', SEAI award for 'Inspirational Energy Community' and IPB Pride of Place 'Climate Action Award.'



INSTITUTE

Environmental Research Institute,
University College Cork

RESEARCHERS

Prof Brian Ó Gallachóir, MaREI
Centre Director

Aoife Deane, Communications &
Public Engagement Manager

Dr. Clare Watson, Engaged Research
Support Officer

Connor McGoekin, PhD Student
(now Post Doc Researcher), Energy
Engineering

Evan Boyle, PhD Student (now Post
Doc Researcher), Sociology

Prof Ed Byrne, Dept of Engineering

Dr. Ger Mullally, Dept of Sociology

Dr Maria Power, Community
Consultants, Evaluation Support

COLLABORATORS

Deirdre de Bhailís, **Brendan Tuohy**;
Dingle Creativity and Innovation Hub

Claire McElligott, ESB Networks

Séamus O'Hara, North East West
Kerry Development (NEWKD)

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Networks UCC, Dingle Hub and
NEWKD

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CONTACT

Email: aoife.deane@ucc.ie or
visit www.dinglepeninsula2030.com

Engagement with Energy Transition and Climate Action

Community

During the past five years, approximately 3,600 people (under 13,000 live on the peninsula) took part in over 150 organised events which included festivals, workshops in schools, ESNB technology trials that demonstrated up to 50% reduction in carbon dioxide emissions (solar panels/PVs, battery management systems, air source heat pumps, electric vehicles/EVs), energy training courses, energy clinics and community based planning. 10 EV trial participants went on to purchase EVs.

Farmers

Set up their own Sustainable Energy Community (SEC) which has 120 members. Ten farm families engaged in the very successful Corca Dhuibhne Inbhuanaithe: 'A Creative Imagining' Arts project throughout 2022 to explore climate change, biodiversity and potential diversification opportunities. Sensor technologies were installed on 30 farms as part of the EU Horizon 2020 funded Ploutos Sustainable Innovation Pilot project. These new technologies demonstrated the potential to achieve 50% reduction in chemical fertilizer use, better slurry management and increased milk yields resulting in optimal farm management. In addition, the project has enabled six new businesses to emerge and three existing businesses to further develop.

Transport

New Local Link bus launched in 2021, with equivalent emissions savings to taking roughly 30 cars off the road, while providing a vital local service. Passenger numbers rose from 14,000 in 2021 to 36,000 in 2022 and two new electric buses were provided by the National Transport Authority (NTA) in 2023.

Tourism/Hospitality

A Sustainable Energy Community (SEC) established with 120 businesses signed up since the launch in early 2023. Plans are underway to carry out SEAI energy audits with local businesses funded by Údarás na Gaeltachta and Failte Ireland.

Research Publications & Submissions

- Ten internationally peer-reviewed journal papers (three co-authored with local partners).
- 14 learning briefs co-produced with community partners employing an innovative template to gather reflective learnings.
- Two PhD theses completed with a focus on engaged research methodology.
- MaREI's submission to the Oireachtas Committee on Climate Action on 'Citizen Engagement and Dialogue' in 2020 quoted in a number of publications by state agencies, with reference to Dingle Peninsula 2030.



Knowledge Sharing, Digital & Media Contributions

- Contributed to 22 conferences, workshops and discussion panels (national and international).
- Hosted over 26 visits to the Dingle Peninsula by public representatives / public bodies, Government Ministers and their teams, totalling more than 336 visitors.
- Created six videos and made ten contributions to TV, film and video productions.
- Over 17,000 people have viewed and read contributions created and presented by Dingle Peninsula 2030 and made available on the website. This includes webinars e.g. Dingle Adapts Energy Series, Armchair Chat with SEAI; appearances on TV and Radio including RTE, TV4 and YouTube video clips, print media; blogs; podcasts; and social media posts.



Outcomes

- Dingle Hub accepted as member of ENOLL (EU Network of Living Labs) in Jan 2022.
- Dingle Peninsula selected by Kerry County Council as the County Kerry Decarbonisation Zone.
- Dingle Peninsula 2030 selected as an exemplar case study for the 'Engaged Research for Societal Impact' course (May 2022) run by Irish University Association (IUA) Campus Engage.
- Jobs generated via established local sustainability-eco businesses e.g. Solar Beo and DC6 Technologies (facilitated the creation of 192 positions).
- Informed the development of six local/county plans and Dingle Hub is currently drafting two local Sustainable Development plans in collaboration with Kerry County Council and Údarás na Gaeltachta.
- Invited to participate on the Department of Transport Sustainable Mobility Delivery Team (June – Nov 2022) resulting in the inclusion of Dingle Peninsula Sustainable Mobility project as a national pathfinder project.
- Made ten new funding applications – eight of which were successful.
- Skills and capacity for participatory engaged research methods are being enhanced within MaREI and UCC has established a strong university-wide focus on engaged research.
- Dingle Peninsula 2030 is acting as a test case for other locations to learn from and adapt.
- Corca Dhuibhne Inbhuanaithe is cited as a good practice example in 'Creative Climate Action' new funding call Feb 2023
- A Community Forum has been established to enable consultation, social inclusion and deeper citizen participation in local sustainability initiatives. The forum has over 30 members to date and is facilitated with the support of NEWKD, community development partner.



Empowering
Society



Supporting
Industry



Informing
Policy



Awards and Recognition

- Recognition by the United Nations as a case study for sustainability and as an EU Living Laboratory.
- Winner of 2021 IPB National Pride of Place Award for Climate Action.
- Winner of 2021 UCC Engaged Research of the Year Award.
- Winner of 2022 SEAI Inspirational Energy Community Award.
- Winner of 2022 SFI Engaged Research Award.



Emerging Impacts

Dingle Peninsula 2030 supports a number of targets, in relation to transport, agriculture, residential and service sectors, identified in the **Climate Action Plan (2023)**, in addition to piloting new mechanisms and models for community climate action at local level. This includes collaboration between stakeholders to encourage and support area-based initiatives to create sustainable communities. The initiative also supports key aspects of **Innovation 2020**, in particular; identifying and informing transition pathways to a carbon-neutral and climate resilient Ireland; understanding how individual and collective behaviour can influence this transition; and empowering citizens to take an active role in transitioning their communities.

A wide range of activities and projects have emerged in the area beyond the initial remit of the initiative in what we describe as the 'diffusion of sustainability'. Such processes leave a legacy of embedded projects and sustainable actions which should contribute to Dingle Peninsula's transition journey well into the future. Instilling a collaborative approach can widen participation to a range of stakeholders, enabling the diffusion of sustainability and increasing local capacity to meet decarbonisation targets to mitigate against climate change.

Dingle Hub has developed a concept called 'Scaling Deep', which Dingle Hub defines as '*a process of regional development fusing enterprise, infrastructure and community development where the State (through various public bodies), a breadth of enterprise types (from large multinationals, to large corporates to SMEs) and the communities in which they are embedded, all pursue enduring growth and sustainable transition in an approach that is "rooted-in" the assets of place.*' 'Scaling Deep' underpins the approach of developing the necessary skills in the local community, while also developing the opportunities for companies to work with the community and to scale accordingly. 'We believe that this concept could provide a significant new approach for addressing the future sustainable development of rural Ireland including local agriculture and marine as shown in Dingle.'

Developing participatory impact pathways and embedding on-going robust evaluation methodologies throughout the project, supported reflective learning, timely adjustments and a project that was responsive to changing circumstances and its environment throughout its five year life span. What started as a technology adoption project, evolved into a wider diffusion of sustainability, a process that MaREI researchers were able to track, analyse and document to share experiential learnings, with a view to informing policy and practice on community based climate action.

Feedback from External Stakeholders

Feedback from external stakeholders was sought mid 2022 as part of on-going monitoring and evaluation of the initiative, through the use of surveys and interviews. Interviews were conducted with representatives from: Commission for Regulation of Utilities (CRU), Environmental Protection Agency (EPA), Department of Environment, Climate and Communications (DECC), Gas Networks Ireland (GNI), Department of the Taoiseach (DoT), Electric Power Research Institute (EPRI), Udarás na Gaeltachta, Green Offaly, Sustainable Energy Authority Of Ireland (SEAI), Science Foundation Ireland (SFI), Department Rural and Community Development (DRCD). A series of feedback cards can be accessed on the website.

Highlights identified by external stakeholders in relation to Dingle Peninsula 2030;

— **A MODEL OF GOOD PRACTICE**

— **AN EXEMPLAR FOR RURAL COMMUNITIES**

— **AN EXEMPLAR OF ENGAGED RESEARCH**

— **A STRONG LOCAL COMMUNITY EFFORT WITH FARMERS ENGAGED IN ENERGY TRANSITION AND REDUCED CARBON EMISSIONS ON THE PENINSULA**

Testimonials

'It's a project that really shows the power of local communities, it's an ability to translate abstract ideas from policy and theory into practice.'

'I kept returning to it as the best practice example of local effort, of systems thinking, of cross sectoral work.'

'Dingle Peninsula 2030 encouraged us to think differently. It provides a practical learning example for other locations and organisations.'

From External Stakeholders

'When it comes to farming, I wouldn't be inclined to go intensive anymore. I don't see the point. And I'd be more interested in farming with nature than actually farming for food now. You can do both. I've joined the Organic Trust, so I've reduced the stock I have, and there won't be any chemical inputs.'

From a Farmer

*'The heating, the hot water, the cosiness of the house, the PV panels everything has come good.'
'We would definitely go electric from here on in. It is not an issue, it is just another way to get a car moving. It is like anything in life, people want to tell the negative stories the whole time and people don't talk about the positives. It is very straightforward.'*

From Ambassadors trialling new technology

The initiative has contributed to wider impacts such as:

- Enhanced quality of life, health and environment through;
 - The retrofitting of local homes including increased uptake of renewable energy and home improvements. For example in 2021, the Dingle Peninsula had Solar PV installations of 7.9 W/person compared to a national average of 2.7 W/person.
 - Reduced fossil fuel use and CO2 emissions from increased use of buses and EVs leading to improved air quality from cleaner fuels. For example, a new Local Link bus is the equivalent of removing 30 cars off the roads, and a reduction of about 80t CO2 emissions. Dingle Peninsula will be served by two electric buses.
- The involvement of industry and public bodies in collaborative activities, and consequent learning, is building capacity in relation to community engagement on climate action. For example, stakeholders who worked on and visited the initiative in Dingle, stated clearly that such collaborations enhanced capacity, increased the skillsets and resulted in a greater understanding of the benefits of working with community.
- Lessons learnt through the experience of Dingle Peninsula 2030 are contributing to national policy around supporting and engaging with communities on climate action. For example, Dingle Peninsula 2030 has been cited as 'an exemplar of what rural communities can do' and informed the development and promotion of 'Our Rural Future', the government's five year policy on rural development. Recently, the Department of Agriculture, Food and Marine tendered for slurry tank technology based on the success of the Dingle Farm Ambassador project and the technologies developed by Net Feasa (a company based in the Dingle Hub), and the Joint Oireachtas Committee on Climate Change noted the strategic approach required based on a submission made by MaREI in relation to the research on the Dingle Peninsula.
- Learnings have advanced engaged research practices in UCC and nationally through publications on the engaged research approach, knowledge sharing with SFI and IUA Campus Engage, application of learnings into the research programme, and new projects in MaREI. This is evidenced by an increase in engaged research funding received in recent years, and invitations to share learnings, join new networks, and contribute to new engaged research training activities.



Conclusion

Climate action requires effective community engagement, which must be resourced, to facilitate inclusive dialogue and enable communities to collaborate with other stakeholders to co-create workable solutions. As shown by the Corca Dhuibhne 2030/Dingle Peninsula 2030 initiative, collaboration works best if drawn from across multiple sectors such as industry, government, academia and community. Such investment saves money in the long run by building the societal capacity required for energy transition, supporting the necessary attitudinal and behavioural changes, enhancing quality of life and contributing to Ireland meeting its national and international climate commitments. This approach supports the principles of the European Green Deal and Ireland's Climate Action Plan 2023. It also contributes to enhancing social capital and community resilience, helping people to respond effectively to large-scale socio-environmental challenges. The engaged research approach can help bridge the communication gap between top-down national objectives (such as climate targets) and local bottom-up needs (such as transport, housing, jobs, wellbeing, etc.).

References

Publications including Learning Briefs, Journal Papers and Reports are available on our website: <https://www.marei.ie/project/dingle-peninsula-2030/>

Notes

Engaged Research describes a wide range of rigorous research approaches and methodologies that share a common interest in collaborative engagement with the community. It aims 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 them. 'Community' refers to a range of public research stakeholders, including public or professional service and product users, policy makers, civil and civic society organisations (CSOs) and actors (Engaged Research: Society and Higher Education Working Together to Address Societal Challenges, Campus Engage, 2017).



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