Appendix A.1 Overview of stakeholder groups and engagements

Table A.1.1 – Local and national partners collaborated with as part of 'Dingle Peninsula 2030'

Stakeholder Groups	Description	Role in the project	Input into energy scenarios
North East West Kerry Development (NEWKD)	Non-profit community development organisation in the region	Providing link to existing community networks	Co-organising the community meetings held and ongoing discussion of energy system modelling scenarios/results
Dingle Creativity & Innovation Hub (Mol Téic)	Non-profit primarily focused on enterprise development in the region	Establishing the Sustainable Energy Community group and a number of other sustainability initiatives including Anaerobic Digestion feasibility study, farm ambassador programme and energy mentor course	Co-organising the re-imagine Dingle Peninsula workshop, and ongoing discussion of energy system modelling scenarios/results
ESB Networks	National distribution system operator	Running a trial on the electrification of heat/transport in part of the region	High-level ambition for the electrification of heating and transport
Dingle Peninsula Sustainable Energy Community	Voluntary group formed out of Mol Téic to access grant support for energy planning and building energy improvements	Developed an energy masterplan, providing an estimate of energy related CO_2 emissions in the region	Collaboratively prepared a previous estimate of energy related CO_2 emission in the region [1]

Appendix A.2 Materials & Outputs

Student workshop

Questions posed

- What do you like about being from Dingle?
- Anything you would like to change about Dingle in the short/long term?
- Please write a paragraph describing the Dingle you would like to see in the future. Think about questions like; How has the community developed? What jobs are people doing? How do people get around? What are the houses like? How has the landscape changed?
- Do you have any further comments / suggestions on the initiatives developing on the Peninsula? Is there anything you think the Hub or ESB Networks should be doing or could be doing better? Or any other stakeholders you think should be involved?
- Do you have any further comments / suggestions on the proposed research? Is there anything you think we should be doing or could be doing better?

Summary of findings

Table A.2.1. Summary of student workshop findings.

Theme 1: Dingle is a small, tightly knit community	**Key questions arising**
Small town culture • Everybody knows each other • It's a very safe place to live • It's a very diverse community, plenty of well-integrated blow-ins • There is a good sense of community • People of Dingle are hardworking, proud of the area and committed to promoting / preserving it • It thrives because of; *"The hardworking nature and innate want of people who live in Dingle to make Dingle a better place"* **Vibrant area** • Great tourist destination • Plenty of summer job opportunities *"For a town of its size it has many opportunities other towns don't have due to the tourism industry"* • Many festivals; film, food, arts music – always something happening *"As a young adult, there is loads of reasons to come home every weekend, e.g. food festival, Other Voices, etc"*	How can Dingle protect this strong sense of community into the future? ➢ Handling the integration of more people *"Increasing number of blow-ins may change the character of the community"* ➢ Planning infrastructure / development appropriately
Theme 2: The Dingle peninsula is a beautiful landscape	**Key questions arising**
Place of natural beauty • Great scenery • Very natural place	How can Dingle ensure that increasing number of tourist and demand for infrastructure / development doesn't impact on the landscape?

"Dingle is still more in touch with a traditional way of living" **Protecting the landscape** • Increasing tourism shouldn't threaten landscape *"I'd like the landscape to stay the same, as natural as possible"* *"Landscape untouched. Beaches, wildlife being protected."* • Increase in littering if tourism keeps expanding	
Theme 3: Lack of Opportunities for Youth	**Key questions arising**
The "brain drain" • Limited opportunity outside of hospitality and agriculture • Need for higher scale job opportunities *"steer our reliability away from tourism"* *"I would like to see Dingle as a place that people who grew up in Dingle could come back to and use their qualification."* • Continued unsustainable growth in the tourism sector makes the area increasing less attractive to native people seeking to work outside of hospitality **Lack of access to Wi-Fi** • There needs to be a reliable internet connection • More modern facilities like the Hub available *"love to see more work spaces like the Dingle Hub from which people can pursue international careers"* **Lack of long-term rentals** • Limited amount of long-term rentals available • Young people choosing to stay in Dingle can't find anywhere to live *"There are far too many short-term houses being let, we need long term letting."*	How can the Dingle Creativity and Innovation Hub (expand it's services to offer D young people the chance to work remotely? ➢ Promoting the notion of working from home ➢ Drawing in interested companies ➢ Expanding on Wi-Fi access
Theme 4: Planning / Infrastructure	**Key questions arising**
Remoteness ➢ Small isolated towns scattered around the peninsula at risk ➢ Lack of facilities for young people. *"not a lot of things for young people (secondary school students) to do outside of school"* **Essentially no public transport, heavy reliance on car** ➢ Need for better planned infrastructure ➢ Traffic during tourism season a problem *"like to see Dingle as a place that is free of traffic congestion"* *"No more widening of roads"* ➢ With more transport options	Could the future developments be better planned, considering the concerns of locals?

"The infrastructure is as good as it should be, the only addition I could see is bicycle lanes" *"a smart system of transport for the elderly"* **Room for improvement** ➢ Small farmers, eager to explore new sources of income ➢ Very dispersed housing/buildings, leaving plenty of room for the development of new industry ➢ However, some also highlighted a fear of developers; *"who solely see Dingle as an opportunity to make money"* ➢ Moreover, noted the need to protect less developed areas in the interest of protecting the nature beauty. *"Not allowing planning permission outside of towns, ruining the landscape"*	

Community meetings

Agendas

Table A.2.2 - First round of meetings, November 2019

Time	Activity
00:00	Welcome / Purpose of the Meeting and the Overall Project
00:05	Presentation of Demographic and Socio-Economic Profile
00:20	Feedback with Q&A (on profile)
00:30	Presentation of Key Environmental Facts about the Dingle Peninsula
00:40	Feedback with Q&A (on environment and energy)
00:50	Break
01:00	Community Planning
	Participants will work in buzz groups dealing with the following themes: i Economic Development ii Community iii Wellbeing iv Environment and Energy They will discuss and assess – <u>with specific reference to their chosen theme</u>: i In this community, what are we doing well? ii What are the main issues locally (in respect of this theme)? iii What needs to be done? / What actions need to be taken? (be as specific as possible) iv Who needs to take those actions? When? How best?
01:30	Feedback from the groups
01:50	Next Steps
02:00	Close of meeting

Table A.2.3 - Second round of meetings, February 2020

Time	Activity
0:00	Welcome
0:05	Recap on the Demographic and Socio-Economic Profile - to conclude with a one-slide overview on 'the main features of this community'
00:10	Recap on the energy presentation – bespoke for each community
00:15	Presentation of the Vibrancy Survey Results – to conclude with a one-slide overview on 'the main implications for this community'
0:25	Feedback on the roundtable discussions (that took place at the November / December meetings) – the **development priorities** for each community

0:35	Q & A
0:45	Break
0:55	A Vision for the Community and the Peninsula – **visioning exercise**
	Buzz Groups – tables by theme: 1. An Ghaeilge (Irish) – language and culture 2. Housing 3. Environment and Energy 4. Economic Development, Agriculture, Fisheries and Tourism 5. Children, Youth and Families 6. Infrastructure, Amenities and Connectivity 7. Health, Wellbeing and Social Services Discussion Questions: a. Where is there potential? / What are the opportunities? b. List five (approx.) projects (under this theme) that would benefit this community. c. What would be main benefits / outcomes be? d. What can we, as a community, do to deliver these projects?
1:40	Feedback from each table
2:00	Open Forum – discussion on the next steps
2:15	Close of meeting

Summary of findings

As noted in the text, the notes recorded during the community meetings have been published online.

- First round of meetings, November 2019 [2]
- Second round of meetings, February 2020 [3]

Along with a detailed report of the findings from the demographic and socio-economic profile [4], and a learning brief reflecting on the evidence-based community planning process [5].

Renewable energy perspectives

Table A.2.4. Local perceptions of renewable energy options.

On-shore wind	• The potential for large-scale onshore wind was ruled out due to concerns that such an installation even if comprising only 1 to 3 large wind turbines would damage the region's reputation for a beautiful natural landscape and may subsequently impact vital tourism revenue • There was a lot of interest in micro wind turbines, although these show limited viability in urban settings, an isolated area such as the case study region has sites suitable for pole-mounted horizontal axis turbines [6]
Solar PV	Keen interest in rooftop solar PV on households, public buildings, farm sheds, etc.
Hydro	Small-scale hydro energy was also seen as having great potential with a number of identified sites around the area. However, these developments have been stalled due to difficulty in securing connection to the electricity grid and a refusal from the local planning authority to allow such installations to impact arable agricultural land
Bioenergy	There is ongoing investigation into the potential for anaerobic digestion in the region, with an initial feasibility study suggesting a potential available resource (grass, food waste and animal by-products) of 305 GWh [7], which would be equivalent to the total energy demand. However, there are significant difficulties in matching the biogas produced with suitable energy demands. Furthermore, due to concerns raised over the plant size and associated traffic, the group have opted to develop a significantly smaller unit producing around 10 GWh per annum

Ocean energy	Offshore renewables such as tidal or ocean energy were widely seen as a solution as these would be 'hidden' from view. However, these technologies were not considered to be at mature enough stages of development to be considered for the period 2020-2030, which is the focus of this analysis.

References

[1] C. McGookin, D. de Bhailís, B. Tuohy, B.Ó. Gallachóir, E. Byrne, Dingle Peninsula Energy Master Plan, 2020. https://dinglepeninsula2030.com/projects/energy/energy-master-plan/.
[2] B. Ó Caoimh, C. McGookin, Dingle Peninsula Community Meetings November 2019, 2021. https://www.marei.ie/wp-content/uploads/2021/07/Notes-from-Community-Meetings-Nov-2019.pdf.
[3] B. Ó Caoimh, C. McGookin, Dingle Peninsula Community Meetings February 2020, 2021. https://www.marei.ie/wp-content/uploads/2021/07/Notes-from-Community-Meetings-Feb-2020.pdf.
[4] B. Ó Caoimh, C. McGookin, Leathinis Corca Dhuibhne – Próifíl Dhéimeagrafach agus Socheacnamaíocha / Dingle Peninsula - Demographic and Socio-Economic Profile, Tralee: North, East and West Kerry Development, 2021.
[5] C. McGookin, B. Ó Caoimh, S. O'Hara, B. Ó Gallachóir, E. Byrne, Corca Dhuibhne / Dingle Peninsula 2030 learning briefs: Evidence-based Community Planning on Corca Dhuibhne, 2021. https://www.marei.ie/wp-content/uploads/2021/07/Evidence-based-planning-Corca-Dhuibhne_V2.pdf.
[6] A. Tummala, R.K. Velamati, D.K. Sinha, V. Indraja, V.H. Krishna, A review on small scale wind turbines, Renewable and Sustainable Energy Reviews 56 (2016) 1351-1371.
[7] XD Consulting, Feasibility Study on Anaerobic Digestion for the Dingle Peninsula, 2020. https://dinglepeninsula2030.com/wp-content/uploads/2020/07/XDC_Dingle-AD-Feasibility-Study_final-report.pdf.