

# Shaping the Future of Marine and Maritime Communities: A multistakeholder workshop

1 June 2021

Summary Report – Draft

Jointly organised by:



Civic and Community Engagement  
Comhpháirteachas Cathartha agus Pobail



## List of acronyms

CAP	Common Agricultural Policy
CFP	Common Fisheries Policy
EU	European Union
GRRIP	Grounding Responsible Research and Innovation Practices
IFA	Irish Farmers Association
IMDO	Irish Maritime Development Office
MaREI	The Science Foundation Ireland's Centre for Climate, Energy and Marine Research and Innovation
ORE	Offshore Renewable Energy
PPN	Public Participation Network
PPP	Public Private Partnership
QH	Quadruple Helix
RESS	Renewable Energy Support Scheme
R&I	Research and Innovation
RRI	Responsible Research and Innovation
SEAI	Sustainable Energy Authority of Ireland
SMEs	Small and Medium-sized Enterprises
UCC	University College Cork
SDGs	Sustainable Development Goals
SFI	Science Foundation Ireland

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GRRIP and CityLabs projects have received funding from the EU's Horizon 2020 Research and Innovation programme and ERASMUS+ under grant agreements 820283 and 101004042 respectively.

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## Overview

A virtual workshop “Shaping the Future of Marine and Maritime Communities” was organised on June 1, 2021. Representatives from government, industry / business, academia, and civil society and citizens were invited to jointly determine the challenges that marine communities face and to identify the potential research and innovation activities that can help address these challenges. The premise of this Workshop was that diversity of agents, sectors, and organisations, and at multiple levels, co-create knowledge and innovation systems.

The Grounding Responsible Research and Innovation Practices, GRRIP Project, is focussed on embedding responsible research and innovation dimensions in research organisations in the marine and maritime sector.

CityLabs are a European Universities initiative involving eight universities across Europe in the UNIC alliance, who are engaging with city and regional partners to address post-industrial societal challenges.

The discussions were based on five wide-ranging topics affecting the marine and maritime sector and associated communities: 1) Marine Environment, 2) Marine Energy, 3) Food Security, 4) Climate Action, and 5) Blue Economy, Skills, and Jobs.

The workshop was supported by an EU H2020 research and innovation project ([GRRIP](#)) and an ERASMUS+ funded project ([CityLabs](#)).

## Workshop approach

The workshop idea and broad topics to be discussed in the workshop was presented and discussed in a meeting on 24 March 2021 with a representative group of members from the Quadruple Helix (QH, i.e., government, civil society/citizens, industry/business, and academia). At the suggestion of this group, the themes of food security and marine environment were added to originally proposed themes (these themes were aligned with the United Nations Sustainable Development Goals [SDGs] *vis-à-vis* the marine and maritime sector and also with the science education and communication dimensions of Responsible Research and Innovation).

Potential invitees for the workshop were identified from government, policy makers and implementors, industry/business, academia, and representatives of communities and civil society organisations. Subsequently, Jeremy Gault (MaREI, UCC) and Martin Galvin and Ciara O’ Halloran (UCC’s Civic and Community Engagement Office) and sent out invitations. In addition, a background note detailing the purpose of the workshop, agenda, and workshop logistics were circulated to the participants in advance.

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In preparation for the workshop, invitees were distributed into five groups (as per the topics identified) keeping in mind that each group had gender balance and that each group had representatives from the four main sectors of the Quadruple Helix. Initially, there were 9 to 11 participants per group. Five moderators from MaREI and UCC's Civic and Community Engagement team were provided with background notes to facilitate the breakout groups and manage the Zoom session. Based on these, facilitators initially asked the participants to note initial areas of concern which are of relevance to them and aligned with the topic of the breakout group. The facilitator then assisted the group to identify three priority challenges. The same structure was adopted for the second breakout session, where participants were asked to think on how they see research and innovation to be part the solution and then to identify ideas which can be actioned upon in the next 2 to 3 years.

Forty-five participants joined the virtual workshop. Number of participants per stakeholder group (other than the organisers) who attended the workshop is presented in Table 1. List of participants (name and affiliation) is provided in Appendix 7)

Table 1: Number of invited QH attendees in the workshop

Main stakeholder category	Number of participants
Government and policy implementors	11
Civil Society and / or citizen	13
Higher Educational Institutes	12
Industry/Business	9

## Agenda

The workshop agenda is in Table 2 with Graham Lynch (MaREI, UCC) responsible for managing the technical aspects of breakout groups.

Table 2: Agenda of the workshop

Time	Workshop Session	Detail
10:00 to 10:30	Welcome and introduction: MaREI marine research in context	Presentation by Jeremy Gault
10:30 to 11:15	Breakout Session 1: Identifying challenges faced by marine communities in Cork and region	Facilitators: Cathal O' Mahony, Ciara O' Halloran, Martin Galvin, Martin Le Tissier, Ruth Hally
11:15 to 11:30	Group feedback: Sharing challenges with wider group	Facilitator feedback from group discussion
11:30 to 11:40	Coffee Break	
11:40 to 11:45	Welcome Back: Looking Ahead	Jeremy Gault

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Time	Workshop Session	Detail
11:45 to 12:35	Breakout Session 2: Rising to the challenge - shaping future research and innovation responses	Facilitators: Cathal O' Mahony, Ciara O' Halloran, Martin Galvin, Martin Le Tissier, Ruth Hally
12:25 to 12:50	Group feedback: Towards a roadmap for future actions	Facilitator feedback from group discussion
12:50 to 1:00	Where to from here? Closing remarks	Jeremy Gault

In the plenary, Jeremy Gault (MaREI, UCC) welcomed the participants and provided an overview of evolution and the governance of MaREI, the research themes of the Centre which were directly linked with the workshop objectives and its research activities in the marine and maritime sector. He also elaborated on the current conceptualisation of Responsible Research and Innovation (RRI) and about the GRRIP and CityLabs projects. Furthermore, he explained the breakout group structure, topics to focus on (identifying challenges and potential research and innovation solutions), and the duration of the breakout groups. The slides from this opening plenary session are in Appendix 1.

After each breakout group session, the groups reconvened in plenary and the facilitators shared the key points from the group discussions with Jeremy Gault chairing the plenary facilitator feedback session. After the second breakout session and ensuing feedback, Jeremy Gault outlined the next steps which including producing a draft report for review and comment by participants prior to final publication. In addition he outlined, the need for further consultation with the QH with respect to developing a roadmap to consider all the challenges and solutions raised and in closing thanked all the participants for giving up their time for their enthusiastic participation.

## Discussion

In this section a summary of the feedback from each session based on the facilitator's notes is presented (further details are in the Appendices). A more in-depth report following transcription of the recorded session will follow this brief report and will be shared with the workshop attendees.

### Breakout Group 1: Marine Environment

#### Challenges faced by marine communities in Cork and region

A number of challenges were put forward by participants including: flooding and sea level rise; marine litter and plastic pollution; loss of biodiversity and ecosystem health; community engagement and empowerment; water quality; impact of

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tourism and recreation; sustainable transport; development pressure; and, competition for use and space. The challenges were grouped based on the linkages between them, e.g. marine litter is likely exacerbated by increased tourism and recreation pressure which may result from poor spatial planning and transport systems.

Biodiversity and the valuation (in monetary and non-monetary terms) was discussed, and it was mentioned that understanding the goods and services provided by ecosystems is a current challenge.

Localised tourism and recreational pressures within Cork Harbour was considered to be an emerging pressure and the potential conflicts were discussed which underlined the importance of marine spatial planning.

For both marine litter and biodiversity a common theme to emerge was the importance of education – and engagement with communities. Education is important but research has shown that there is little correlation between education and behavioural change – there are barriers additional to education to bringing about change. Greater understanding of the social context in which environmental issues occur will assist in identification of effective solutions – empowerment to lead is not promoted in the current cultural context. Mechanisms are needed to be identified / developed which can be used to instil (and recognise) leadership within communities that fully empowers citizens to deliver positive changes.

The discussion closed with agreement on the following priority challenges:

1. Leadership to Deliver Healthy Ecosystems and Environment
2. Education Challenges and Barriers to Behavioural Change (Empower, Enable, Enforce)
3. Long term Planning to Proactively Identify Environmental Pressures

## **Solutions**

Innovative solutions and action suggested by participants included: educational outreach with action-oriented approaches; spatial planning; citizen science; modes of enforcement; destination certification labels and programmes (e.g. Tidy Coasts); greater interaction between research centres and communities (and other actors); and, developing deeper and sustained links with communities.

Spatial planning was the first solution to be discussed as it very much influences activities and resource use within the harbour; particularly when trying to balance development needs with ecological health – plan for space for each use and respect these limitations. A local based plan that incorporates the marine element would be welcome – the emergence of marine spatial planning provides an

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opportunity for better coherence between terrestrial and coastal plans, and the beginning of a new way of thinking of how we plan for marine and coastal environments. Spatial planning also offers all stakeholders an opportunity to influence through the consultation and engagement processes but imbalances should be recognised, i.e. the loss of the community voice.

In terms of good practice models, it was raised whether destination labels such as a Tidy Town model be a vehicle for fostering leadership? The development of resources such as Climate Ireland demonstrate the value of long-term interaction with specific audiences to develop bespoke solutions was shared as another good example.

Mechanisms focused on means to increase the visibility of research centres such as MaREI within the local community would be welcomed; in certain cases, the awareness is not at the level it should be to support further collaboration. There are a number of reasons behind this – community-based work is seen as additional to core activities; a tradition of not communicating value to wider society; work is not valued by peers and funders – but this trend is changing. An associated challenge is building this activity into sustained long-term engagement rather than stop-start interaction that is typical of time bound research projects. Long-term engagement will also lead to trust which can be a vital element in meaningful collaboration with communities and other stakeholders. Focus should be on strategic goals shared by all QH representatives and collaboration with a view to achieving mutual goals and objectives.

The discussion closed with agreement on the following priority challenges:

1. Spatial Planning – terrestrial planning, and potential offered by marine spatial planning.
2. Long-term planning – building long-term sustained partnerships, involving all actors – looking at strategic shared goals that are align with funding shift of putting citizens front and centre.
3. Greater Visibility – roll out of Citizen Science – good practice models such as Climate Ireland.

## **Breakout Group 2: Marine Energy**

### **Challenges faced by marine communities in Cork and region**

The challenges noted by individual participants have been grouped based on interlinkages and commonalities and are covered below:

Creating a local supply chain for renewable energy projects (building and assembling renewable energy associated infrastructures locally and operation and maintenance of the same) was felt to be important by participants. Moreover, GRRIP and CityLabs projects have received funding from the EU's Horizon 2020 Research and Innovation programme and ERASMUS+ under grant agreements 820283 and 101004042 respectively.



anything that creates jobs for current and future generations is seen as a positive for the community and can be used to get local buy-in.

Another challenge mentioned and supported by other participants was ensuring a route to market for large quantities of offshore generated renewable electricity (export, storage, etc.) and identifying who is going to use the energy, understanding whether the grid is ready for it, and what other uses can be found.

Lack of independent information in the renewable energy sector was seen as a main challenge. It was mentioned that “there is a lot of noise in the system on planned projects – clear, concise, and correct messaging from an independent and trusted source is required”.

Other key challenges for marine energy mentioned in the chat function were: 1. Technical (proving that the technology works at scale); 2. Financial (make the cost of generation competitive with other power sources); 3. Societal (fostering social acceptance and sharing benefits); 4) Resources need to be allocated to support the consenting mechanisms to fasten the permitting process; 5) Conservatism in the marine sector to adapting new technology; 6) Lack of project financing for early stage technologies; 7) Lack of clarity around consenting requirements

Speaking in a language that communities can understand, engagement with different demographics differently was highlighted for successful community engagement, it was emphasised that building trust and being open and transparent, and proper explanation of what is to be benefitted and who benefits are important.

At a national level, clarity of messages going out to the public and how various public consultations interact with each other were highlighted to be important. It was shared that at project level data was being gathered, however, “data needs to be collected at national level, in order to fill gaps around cumulative impacts of projects”.

One participant stressed that the biggest challenge in the marine energy space is public acceptance. The participant added that how marine communities get defined is key as the definition will differ from onshore renewable energy communities.

The three main challenges identified in this session were:

1. Support to create local supply chain and establishing PPP
2. Lack of clarity in processes and how all actors are treated equally (i.e., how might commercial interests be reconciled with local interests)
3. Need of political support to construct just governance processes

### **Ideas for Research and Innovation (R&I)**

Ireland could benefit from learning from other countries (e.g., learning from Danish approaches to onshore wind [when it was evolving] and how community engagement was undertaken, and benefits were defined, and from the UK on how not to do stuff).

Data sharing is important. One of the ways to shape future research and innovation is involving local communities in research projects. Developing best practices document on community engagement by people who are working on the ground. Co-developing various roadmap documents.

How to use the energy that is being generated? Identifying increase in demand – at the right place and right amount. A participant elaborated Eirgrid's recent consultation on future energy networks, which showed that one of the models proposed is the need to move demand closer to supply in terms of renewable generation, example, data centres is movable demand.

Important for activities to be seen as part of a process and not a 'one-off' event, and how will process be extended and continued beyond individual events/projects.

Participants were of the opinion that it is important to understand how much appetite the local coastal communities in Ireland have for ownership in offshore renewable energy projects.

It was agreed that there is a need to identify who actually benefits from these offshore renewable energy projects.

The three solutions identified were:

1. Community participation at all stages is desirable
2. Scalability – ownership and appetite for participation to be reflected at all stages and levels of planning
3. Requirement for joined-up thinking between and across sectors and administrative units/levels

### **Breakout Group 3: Food Security**

#### **Challenges faced by marine communities in Cork and region**

The session started with the facilitator requesting that participants write using the chat function two to three main challenges and concerns that they have about food security. The first point discussed was about the challenges in the fishing and farming sectors and how they have got impacted by the Common Fisheries Policy (CFP) and Common Agricultural Policy (CAP).

It was shared that island communities have four main economic options: agriculture, fishing, tourism, and other sorts of small jobs. Many men involved in

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agriculture and fishing are older and are single and have no families, and agriculture and fishing as livelihoods are dying in these communities. Young people are not interested in these activities as it is not seen as a viable industry. Changing cultural context in rural communities (e.g. using boats for offshore renewable energy rather than for fishing which necessitates being in the sea over weeks, shift to intensive dairy and other farming practices) was mentioned which has further hampered the traditional fishing and farming sector.

Hidden work of women in the fisheries industry was highlighted. Women doing the accounts, the book-keeping, supply change communications, and this work is not recognised.

The challenges of engaging with the fishermen and farmers were mentioned. It was shared that fishing communities are not homogenous, they are diverse and each competing for the same resource and conflict exists within various communities.

As the case is with island communities, it was shared that a lot of farmers in west Cork are elderly farmers who do not have family members to take on their farms and to whom they can pass on their traditional farming practices. Without succession, there is a fear that farming land will be bought up by large industrial farmers which will outprice local farming who would be willing to continue traditional approaches or evolve to non-intensive organic farming.

It was emphasised that the fishing and agriculture sector is tied to the CFP and CAP of the EU. It was acknowledged that they are not perfect, and that there are major flaws in the CFP. Any research and innovation plans, however, need to be aligned with these policies. A participant added that CAP and CFP were oriented towards sustainability of businesses and hence there was push for more large, intensive farming, in which local communities lost out and made them unsustainable. Therefore, it was shared that changing policies is very important which takes into consideration small scale operators. The upcoming review of the CAP policy should look at these operators.

The three priority challenges identified were:

1. Traditional method of knowledge sharing (i.e., lived knowledge shared with older fishermen with their heirs) amongst farmers and fishermen who are operating at small scales has got lost. The existing knowledge needs to be tapped into for the future.
2. Succession issues in marine and agriculture sector; achieving community buy-in (through communicating all the benefits) and generating pride in fishing industry (pride in agriculture exists). Education and awareness of the local and wider communities (and especially younger generation) on the

role of fishing sector in the history and culture of Ireland; informing, training and educating younger generations and those connected to agriculture/fishing industries on the technological advancements and opportunities.

3. Developing sustainable policies which include the small-scale operators.

### **Ideas for Research and Innovation (R&I)**

The first point made was that consideration of impacts of R&I is needed. The focus has to be on building a long-term sustainable and viable industry. Research institutes do not have significant stakes in such type of research, therefore, people tasked with running the industry or the key actors in the sector should take the lead or be at the core of the research or driving the research. In other words, research proposals should be evaluated in a manner where one of the criteria is whether the research is being driven by those who have an actual stake in it.

For research to have impacts, it was emphasised that involving communities alone would not help. It is important to bring the government on board, industry will follow. For example, Department of Agriculture, Food and Marine needs to be on board in case of food security related research and innovations. Without government on board, private entities would only innovate to comply with EU regulations and policies, etc. If one wants success in research and real innovation, it needs to be tied into the EU context (government's policies are tied to EU policies) and needs to fit in the KPIs and strategy for the year of the government.

Three ideas for future research and innovation:

1. Youth engagement - awareness building among young people and the general public about the marine and maritime sector. Instil a sense of pride and historical culture in Ireland's link to fishing and agriculture and take advantage of technological advances to encourage young people to get involved in these industries.
2. To have success and real innovation, it has to be tied into the EU context. Get buy-in from government and it is easier if they see the fisheries and other industries are innovating which are aligned to EU context.
3. Support and resources to commercialise Research and Development (R&D). Need to demystify the process of commercialisation of R&D. Exploitation driven R&D and not figure out the use of the R&D at the end.

## Breakout Group 4: Climate Action

### Challenges faced by marine communities in Cork and region

In a quick-fire round, participants were asked to note using single words or phrases, areas of concern and of particular relevance to them in relation to climate action.

Key words / ideas from quick fire round:

- Reducing emissions
- Circular economy
- Zero waste
- Behavioural change
- Manage Language
- Awareness and Education
- Innovation
- Mitigation
- Collaboration and Communication
- Accessibility
- Farmers

#### PRIORITY CHALLENGES

1. How can farmers diversify and be *creatively* supported to do this?
2. Enabling *communities* to participate in climate action effectively.
3. Nurturing societal cohesion.

### Ideas for Research and Innovation (R&I)

Towards the end of discussions in session 2, the group summarised some key ideas for research and innovation. Three of them are as follows:

1. An important area for R&I is researching *area-based approaches* that support communities with climate action and ways to become a renewable energy community. R&I is needed to create behavioural change in communities, not in the future, the need is now. Engaged research is central to this. Creativity and the arts are a means of engaging people and sectors (e.g. farming). This should be explored more as a focus of R&I. Research is needed to synthesise international, national, and regional plans and policies for communities, to make it understandable and engaging.
2. The Green and Blue Economy needs to become more inclusive of disadvantaged and diverse communities. R&I is needed to understand and proposed how people and communities can be helped to effectively transition into the green economy.

3. R&I is needed with regard to finding models of communication and engagement with people and communities in Renewable Energy Systems and help them understand how energy systems work.

### **Breakout Group 5: Blue Economy, Skills, and Jobs**

#### **Challenges faced by marine communities in Cork and region**

These issues raised in the first instance reflect the range of issues explored in the sessions. They referred to:

- infrastructure, including digitisation, enabling technologies and supply chain for offshore energy roll out;
- skills - shortages, future skills, upskilling and remote working in coastal areas;
- power of local authority in Ireland vs EU re power to procure;
- environmental and sustainability concerns - including marine protection, transition and protection against climate change threats like flooding and the need for environmentally friendly solutions;
- Small and Medium-sized Enterprise (SME) supports including navigating marine spatial planning and financial instruments for aquaculture;
- Engaging citizens, coastal communities, smaller towns/rural areas and all stakeholders, with reference to a coastal inclusion strategy.

#### **PRIORITY CHALLENGES**

The facilitator captured three priority challenges/opportunities:

1. Unlocking opportunity for Cork – consolidating expertise/strengths in the region;
2. Creating and supporting industry;
3. Building local buy-in / support.

#### **Ideas for Research and Innovation (R&I)**

Towards the end of discussions, the facilitator shared a slide on screen and the group fed in to summarising the key ideas for research and innovation that had been discussed. Drawing from this summary and the discussion and zoom chat function overall, key points arising in the dialogue around ideas for research and innovation is summarised as follows:

1. The role of research in bringing stakeholders together – attracting and mobilising people to come together around issues;
2. The opportunity for universities and research institutes to act as promoters and brokers, in partnership with others; creating new and building on existing initiatives that 'join the dots';

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3. Opportunities for research informing and shaping policy and the role of the state/state bodies in the blue economy;
4. Opportunities for research to support industry development considering economic, market, skills and upskilling and contract issues including for example – joint ventures, local content in supply chains, creating domestic industries and services, local training offers, PPP and determining what are good solutions for a long term sustainable Irish market / economy;
5. The opportunities for research institutes and projects to support stakeholders – engaging, enabling and navigating through complexity of planning stages – particularly SMEs and local communities. This included the importance of early engagement, to be starting out on the right foot;
6. Opportunity for research to inform the planning process – e.g. mandates through planning for local content; engaging communities;
7. Opportunity for research institutes to support industries and sectors; SME supports and collective research for industry-wide issues; learning from experience, lessons learnt, examining common issues and building an evidence base, including supporting perceptions, social acceptance in society/communities of the impacts and opportunities of projects;
8. This type of collective research could build in ongoing evaluation and reflection by all stakeholders in projects - assist with quick learning and adaption of new projects;
9. The opportunity for inputs from social sciences, applied psychology to inform solutions for engagement and behavioural change;
10. The opportunity for research to help build and disseminate the knowledge base of local and global experience / good practice recognising regional or sector differences;
11. The different sectoral opportunities including: offshore energy; aquaculture; digitisation of ports; and green hydrogen as a future opportunity. It was noted that aquaculture, fisheries and tourism overlap in terms of usage, infrastructure and legislation;
12. Benefit to and engagement with citizens at grassroots level; demonstrating and ensuring projects and mechanisms that benefit local communities and citizens.

## Conclusions

The composition of the group in terms of their “position” within the quadruple helix did not seem to cause any issues regarding discussion or exchange of views. The discussion in the sessions were often directly amongst the participants (rather than through the facilitator) which demonstrated a respect and openness to talk

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regardless of background or who they were representing. Discussion flowed, and people were responding to / picking up the points made by fellow participants ensuring that multiple perspectives were being offered on specific issues/solutions. The conversations quickly focussed onto some key areas mentioned.

It was recognised that only by engagement across all actors would things move forward. There was strong willingness to explore collaboration with the MaREI Centre, UCC Civic and Community Engagement Team and with other stakeholders. Participants exchanged email ids in the chat to be connected beyond the workshop. It was strongly felt that people protect, take robust actions, when they understand the problem and context properly.

There was some commonality of challenges which emerged from the five breakout groups and research and innovation gaps also cuts across the themes. Some are summarised below:

**Proper communication across sectors and stakeholders** came up frequently in the sessions. People largely do not know what type of support is available for bringing a technology to market and the types of knowledge available and where to access this knowledge from.

**Identification of benefits** (who and what – financial and others) came up to be very important. Communities can participate if they are aware of the ambitions of the various projects. **Openness and transparency in community engagement** was highlighted. The need to have **long-term community engagement (beyond project duration)** was mentioned in few sessions. Participants felt that engagement with various demographics and groups is needed and that learnings from these engagements with the wider community be shared. **Using a language when communicating research results that is understandable by all** and not only by researchers was emphasised.

**Strengthening the local supply chain** was seen as paramount for the blue economy and for retaining jobs in Ireland.

Importance of **linking between and across sectors and administrative units/levels** (county to national) and being aware of the EU policy contexts. It was felt that there are disconnected and plethora of public consultations for various projects, and it is important that all such activities are linked up.

Synthesising international, national, and regional plans and policies for communities and sharing them was highlighted to enable learning, co-developing, scaling up from best practices, etc.



Research can help to find models of communication and engagement with people and communities, especially with respect to marine energy and climate action. Volunteerism at community level is not sustainable. Coordination support is needed at the community level. **Connecting with the community networks and groups to understand what research they need** and using their knowledge to understand what skillsets and expertise exist within the region to design new, and optimise, the existing qualifications regime and harness the existing skills and knowledge to add to the Irish edge.

It was highlighted that **independent information and impartial public engagement in the case of renewable energy** is needed and the importance of third-level organisations was mentioned.

**Conducting impactful research** with the communities or stakeholders who are responsible for, and sustaining, the change or are significantly impacted by any change are at the heart of the research.

Lastly, it was strongly felt that there is a need **to contextualise the Irish funding in the overall EU funding landscape** to support informing and influencing funding policies.

## APPENDIX 1 OPENING PLENARY SESSION PRESENTATION

1)

**Agenda (10:00 - 13:00)**

- Welcome and introduction: MaREI marine research in context
- Breakout Session 1: Identifying challenges faced by marine communities in Cork and region
- Group feedback: Sharing challenges with wider group
- Coffee Break
- Welcome back: Looking ahead
- Breakout Session 2: Rising to the challenge - shaping future research and innovation responses
- Group feedback: Towards a roadmap for future actions
- Where to from here?

**Shaping the future of Marine and Maritime Communities**  
June 1st, 2021

5)

**MaREI Phase 2 (2019-25):**  
Science Foundation Ireland National Centre  
Working Across 13 Academic Institutions

**Cork:**

- University College Cork
- Cork Institute of Technology
- Tyndall National Institute

**Dublin:**

- University College Dublin
- Trinity College Dublin
- TU Dublin
- The Economic and Social Research Institute
- Dublin Institute for Advanced Studies
- Dublin City University

**Limerick:**

- University of Limerick

**Galway:**

- National University of Ireland Galway

**Dundalk:**

- Dundalk Institute of Technology

**Kildare:**

- National University of Ireland Maynooth

Workshop | June 1st, 2021

2)

**MaREI**  
Energy - Climate - Marine

**Shaping the future of Marine and Maritime Communities**  
MaREI (Marine) Research in Context  
Jeremy Gault

6)

**MaREI Evolution**

2011: Marine Renewable Energy  
2016: MaREI Centre for Marine and Renewable Energy  
2018: Decarbonising the Energy System, Sustainable Living  
Jun 2019: MaREI Energy - Climate - Marine

**Structure:**

- Platform / Spokes
- MRE Value Chain
- 6 Partners
- Industry / SFI

**Phase 2 Structure:**

- Energy, Climate Marine
- 7 Research Areas
- 13 Partners
- EU / Industry / SFI / Other

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3)

**MaREI - UCC Context**

- Four Colleges:
  - Celtic Studies and Social Sciences, College of Arts
  - Business and Law
  - Medicine and Health
  - Science, Engineering and Food Science

**Six Priority Research Areas delivered by four colleges, supported by five research institutes:**

- BioSciences Institute
- Tyndall National Institute
- ISS-21
- Food Institute
- Environmental Research Institute

UCC QUICK FACTS	
21,000	2,800
15,000	4,400
2,800	3,300
€96.4m	€330m
31,000	€600m
TOP 2%	€10.6m

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7)

**MaREI Phase 2 (2019-25): Research Areas**

- Marine Renewable Energy Technologies
- Materials & Structures
- Observation & Operations
- Coastal & Marine Systems
- Bioenergy
- Energy Policy & Modelling
- Energy Management

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4)

**MaREI - ERI Context**

- > 300 researchers drawn from 17 UCC Schools and Departments and affiliated research centres
- The ERI Buildings have over 7000 m<sup>2</sup> of offices, laboratories, workshops and incubation suites
- Headquarters of the MaREI Centre

**Environmental Research Institute**

Energy, Materials, Marine, Environment

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**MaREI Phase 2 (2019-25): Societal Challenges**

- Energy Transition
- Climate Action
- Blue economy

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### MaREI Phase 2 (2019-25): Strategic Impacts

**Strategic Impacts**

- Policy influence:** Inform policy on the energy transition, climate action, and the blue economy by increasing, improving and communicating the scientific evidence
- Industry support:** Enhance the capacity of enterprises across the energy and marine sectors to enable sustainable economic development
- Societal support:** Support societal engagement on grand challenges to facilitate participatory action in the energy transition, climate action and blue economy

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### MaREI – Workshop Context (Example Projects)

- ECOSTRUCTURES – Climate Change Adaptation through ecologically sensitive coastal infrastructure
- FISHKOSM - Fisheries Knowledge for Optimal Sustainable Management
- FloTEC - Floating Tidal Energy Commercialisation
- Learnwind - Logistic Efficiencies And Naval architecture for Wind Installations with Novel Developments
- MARPAMM - Marine Protected Area Management and Monitoring
- MARINERGI - Marine Renewable Energy Research Infrastructure
- MARINET2 - Marine Renewables Infrastructure Network for Enhancing Energy Technologies, Part 2
- Minatura: Developing a concept for a European minerals deposit framework;
- MUSICA: Multiple Use of Space for Island Clean Autonomy
- NAVIGATE - Ocean Law and Marine Governance
- Oceanwise - Wise reduction of marine litter in the North-East Atlantic Ocean

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### MaREI – Workshop Context

**Marine Renewable Energy Technologies**

- DEVICE DESIGN, TESTING AND EVALUATION
- POWER TAKE OFF
- CONTROL SYSTEMS
- MODELLING AND SIMULATION

**Coastal & Marine Systems**

- MARINE ECOLOGY
- MARINE GOVERNANCE
- COASTAL DYNAMICS AND MARINE SYSTEMS MODELLING
- CLIMATE CHANGE AND ADAPTATION

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### MaREI – Workshop Context (Example Projects)

- SAFEWAVE - Streamlining the Assessment of environmental eFfects of WAVE energy
- SCORE - Smart Control of the Climate Resilience in European Coastal Cities
- SIMAtlantic - Developing a Maritime Spatial Planning Vision for the Atlantic
- RRING - Responsible Research and Innovation Networked Globally
- SDG4i - Identifying Interactions for SDG Implementation
- SELKIE - Development of a streamlined commercialisation pathway for the Marine Renewable Energy (MRE) industry
- STEP4WIND - Novel design, production and operation approaches for floating WIND turbine farms
- SDG4i - Identifying Interactions for SDG Implementation in Ireland
- TAOIDE - Technology Advancement of Ocean energy devices through Innovative Development of Electrical
- WAM - Wild Atlantic Mussels

Marine Environment Marine Energy Food security Blue Economy, Skills and Jobs Climate action

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### MaREI – Workshop Context

**Marine Renewable Energy Technologies**

- 100-135 Cross-disciplinary Researchers
- 60+ Associated Academic Researchers in ERI - UCC

**ERI Beaufort Building**

**Coastal & Marine Systems**

- 4,700m<sup>2</sup> Dedicated Labs, test facilities and offices
- €15.2m Support from HEA, DETE, Bord Glas, DECC, DAFM, SEAI, SFI, IDA, Port of Cork

LIR NOTI – National Ocean Test Facility

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**Climate Action Plan 2019**

- 2011 ICP Phase 1 System Design
- 2013 ICP Phase 2 Local Authorities
- 2015 ICP Phase 3 Sectoral
- 2017 onwards Operational Rollout
- 2018 Operational Climate Ireland

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### MaREI – Workshop Context (Example Projects)

- ANDROMEDA - analysis techniques for quantifying nanoplastics + microplastics
- AquaSpace - using the Ecosystem Approach to make space for Aquaculture
- AQUACROSS - protect aquatic biodiversity and ensure the provision of aquatic ecosystem services
- BCOMAR - Building Coastal and Marine Resilience
- Climate Ireland - Ireland's Climate Change Information Platform
- Clim2power - Translating climate data into power plants operational guidance
- CCAT - Coastal Communities Adapting Together
- C-Risk - National Climate Risk Assessment
- Delta-Lady - Management of River - Delta Systems
- DOORS - Developing Optimal and Open Research Support for the Black Sea
- EATFISH - European Aquaculture Training for improving Seafood Husbandry

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# Responsible Research and Innovation

GRRIP and CityLabs projects have received funding from the EU's Horizon 2020 Research and Innovation programme and ERASMUS+ under grant agreements 820283 and 101004042 respectively.

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“ *Your scientists were so preoccupied with whether or not they could, they didn't stop to think if they should.* ”  
*Ian Malcolm, Jurassic Park*




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### UNIC European Universities








- CityLabs are an initiative of UCC's European University (UNIC) alliance
- UNIC consists of eight universities and their cities, situated in different countries throughout Europe, all representing post-industrial port cities
- University College Cork; Erasmus University - Rotterdam; Koc University - Istanbul; University of Deusto - Bilbao; University of Liège; Ruhr University - Bochum; University of Oulu; University of Zagreb



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<b>Anticipation</b> Think through various likely, plausible and possible implications of research & innovation	 Open Access
<b>Reflection</b> Reflect on underlying purposes, motivations, what is uncertain, assumptions and ethical dilemmas	 Science Education
<b>Inclusion</b> Involve diverse stakeholders (e.g., users of technology, policy influencing NGOs) in the RRI process	 Ethics
<b>Responsiveness</b> Flexibility and capacity to change RRI processes in response to societal values and concerns	 Gender Equality
	 Public Engagement

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### UNIC European University

- CityLabs connect university curriculum and research, with external partners
- They are physical and virtual meeting places where universities and their stakeholders come together to work on identifying and solving societal challenges
- This involves academia collaborating with Local Government & Public Sector; Industry, CSOs / NGO's/ Citizens & communities (Quadruple Helix)
- The focus is on co-creating solutions at the local and European level



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### RRI tensions and trade-offs



- ◆ **MULTI-STAKEHOLDER DELIBERATION**  
Competing objectives of different stakeholders
- ◆ **OPENNESS AND TRANSPARENCY**  
Intellectual Property Rights
- ◆ **RESPONSIBILITY VARIES**  
For-profit – economic; Government – legal; Not-for-profit – moral


Who is responsible for what and to whom

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### Six themes of CityLABS

- Climate, Sustainability and Environment
- Social Inclusion
- Socio-Economic Resilience of City and Region
- City and Urban Revitalisation
- Communities of Care and Wellbeing
- Digital Cities and Regions



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### GRRIP



Grounding Responsible Research and Innovation Practices in five Research Performing/Funding organisations

- MaREI (Marine / Maritime), UCC
- Sea and Littoral Research Institute (France)
- Swansea University (Wales)
- The Oceanic Platform for the Canary Islands (Spain)
- Wave Energy Centre Offshore Renewables (Portugal)

Project Partners:

- National Research Council, Italy
- De Montfort University
- Dublic City University
- Erasmus University Rotterdam
- ICORSA
- UNESCO
- Rhine Waal University




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### Expected Workshop Outcomes

- Mutual understanding of the challenges faced by stakeholders from Marine and Maritime communities
- Increased awareness of ongoing research and innovation in MaREI / UCC
- Identification of potential future research topics that address these challenges
- To form, and inform, potential future collaborations
- To establish a dialogue with stakeholders from multiple backgrounds
- Inform funding policy



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**5 breakout groups**  
Representatives from the Quadruple Helix (QH)

- Government and policy implementors
- Civil society
- Industry and businesses
- Academia

divided across the breakout groups and where possible in line with your expertise.

**Breakout Groups**

1. Marine Environment
2. Marine Energy
3. Climate Action
4. Food security
5. Blue Economy, Skills, and Jobs

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**Credits**

- Presentation template by [SlidesCarnival](#)
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**Workshop Structure**

Breakout Session 1: Identifying challenges

Breakout Session 2: Research and Innovation as part of overcoming challenges

Next steps: Where to from here?

Group Feedback by facilitators

Group Feedback by facilitators

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**Thanks!**

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## APPENDIX 2 DISCUSSIONS IN THE MARINE ENVIRONMENT BREAKOUT SESSIONS

### Further summary and discussion details

A quick run through of the challenges was provided and participants were asked to consider a priority issue to initially focus discussion. Option was also provided to consider grouping

Considering coastal and marine communities are very often the “first responder” when it comes to marine litter it was decided to initially focus discussion on that topic; communities play a significant role in attempts to mitigate the issue of marine litter and plastic pollution.

Discussion progressed to sharing of views on whether or not communities were sufficiently empowered to deal with a societal challenge such as marine litter and what supports would be most effective to their role. Communities feel the brunt of marine litter as an environmental impact but there are manufacturing, economic and social aspects that are largely outside their control – but they can be an enabler for change with sufficient support whatever form that may take (research question).

Localised tourism and recreational pressures within Cork Harbour is an emerging pressure to consider; previous work undertaken in the harbour examined recreationally capacity and potential conflict, however, the tourism profile of the Harbour has since changed, particularly with the growth of cruise liner traffic and associated visitor levels. The profile of other sectors within the Harbour has also changed and will change dramatically into the future (e.g., port operations; increase in offshore renewables, etc.) and spatial planning processes will be important to how the harbour evolves in a sustainable manner.

It was highlighted that biodiversity can be a difficult concept to communicate, and the use of specific examples, which demonstrate the importance of connections between our natural environment and the benefits we accrue, will help to make the concept more tangible. However, a positive development is that local scale projects are beginning to frame ecosystem health and benefits in economic terms and this will support efforts to maintain and protect biodiversity.

### Solutions

It was suggested that to create deep links with the community could come from providing a space in the MaREI building for community/ volunteer groups, who often lack space for meetings and events. With regard to knowledge sharing, it was mentioned that educational outreach with action-oriented approaches that

include the relevant knowledge (the what), the key dispositions and skills (the how) and the values (the why) that will motivate and empower participants.

## APPENDIX 3 DISCUSSIONS IN THE MARINE ENERGY BREAKOUT SESSIONS

### Further summary and discussion details

#### Challenges and Solutions

It was mentioned that renewable energy technologies like on-shore wind and off-shore wind are going to feature in Ireland's future as Ireland has committed to 25 GW energy from renewable sources by 2050, currently it has only 4.5 GW. Participants shared their concern that the supply chain is largely abroad and does not bring much back to Ireland and that a lot of work is done to bring in investment companies in the offshore projects/ space but supporting the supply chain is indeed important.

It was suggested that it was important to develop the Irish Maritime Qualifications regime to optimise homegrown maritime talent. This was further elaborated Huge community of fishing expertise, people who have experience in fishing vessels, huge capability the types of vehicles, etc. however, the qualifications and licensing of the fishing industry is not immediately transferrable to other industries. Ireland could gain an advantage if it is able to come up with a flexible and adaptable qualifications regime.

Limited experience of Irish companies in offshore renewable energy sector is a barrier to entry.

The importance of incentivising the supply chain to use renewable and clean technology was highlighted and supported by other participants. An example was given as how commissioning of offshore wind turbines need diesel generators. Designing hybrid energy systems for marine infrastructure associated with larger offshore projects. Opportunities exist for renewable energy in small scale aquacultures, small island communities, so focus can be on these communities too, in addition to large scale offshore wind energy. Need was felt to reinvigorate past investments in renewable energy supply chain and decarbonising of the supply chain.

SEAI was looking at renewable energy projects in three distinct dimensions : 1) build capacity of the national grid capacity to accommodate energy from renewable sources without putting constraints on the generators 2) Clarity in consenting procedures – when will these projects happen and why? 3) The Renewable Energy Support Scheme (RESS) and tariff - how the communities (and who – need to define communities) will benefit from the projects and how the money will be spent in communities), e.g., a query was raised whether there are opportunities for the fishing industry to access these funds. All three pillars needed public engagement to be done in an impartial and independent manner within

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the pillars as well as across the pillars at both national and community levels to understand how communities can benefit. It was emphasised that Ireland cannot focus only on offshore wind. The large amount of investment in emerging technologies that was done in previous years and the test infrastructure created needs to be revitalised and revisited.

Need for innovation in public-partnership was highlighted. Big scale imagination translated to on-the ground activities. Attention was called towards the fact that energy transition in communities is dependent on volunteers and this needs to change. Innovative ways of working together is needed, large amount of work done on decarbonising communities, however, the community plan needs to be linked to county development plans and national framework.

Important to capture the imagination of Irish people and exploring PPP to make in-roads into renewable energy and get support from communities. A participant shared their idea on how to grab the Irish imagination (where Ireland is in a great period of transition) is the idea that Ireland can be electric/ energy independent, and marine renewable is a large component of it. However, on the other hand, it was raised what does independence mean in case of Ireland, if local suppliers and local communities are not involved.

Need for collaboration between academia, industry, and government in defining how aerial surveys in the marine sector can be undertaken, licensing of it, etc.

'Community Benefit Fund' scheme flowing from the Renewable Energy Support Scheme (RESS) Auctions is something that Communities could organise around in terms of maximising the benefit.

It was mentioned that who benefits is largely a political question and that lot of analysis is top-down, how the targets are being met and linking them at community level can be done by third level organisations.

The importance of a third level organisation in developing Ireland's first community-led energy plan (which was an output of the local community planning process) was highlighted. It was mentioned this plan happened because of informal networks (establishing contacts with third level organisations in a meaningful way is difficult at community level), more formalised collaboration with third level organisations in community development plans and for engaging with communities is needed as these organisations have the expertise in information collection, processing, and presenting. These thoughts were supported by another participant who shared the details of the Dingle project and MaREI's role in it. It was mentioned that there was an institutional gap in these community centred renewable energy projects, where, the Government and policy makers drive down

the targets, and people on ground try to operationalise those targets. This gap in case of the Dingle Project was being filled by MaREI.

It was suggested that MaREI asks coastal communities and residents directly what research projects they would like in marine energy and how best they can be served which also fulfils the objectives of Engaged Research. Communities know how they want to be helped, a specific process of asking them needs to be developed. MaREI can link in with Comyhdháil na noilean, with Public Participation Networks (PPN), The Wheel and directly with communities groups through a survey and follow up. This could then look at topics including how to incorporate community acceptance into planning involvement of local authorities community ownership, community investment opportunities in offshore, local specific behaviour and attitudes surveys, what involvement coastal communities want their local authorities to have in the new energy infrastructure.

Including people in the design and planning stage and using a language that is understandable to all was emphasised. Having open conversations about technology and managing misinformation early-on was shared.

The importance of engaging with the Industry was shared. It was mentioned that “Ireland remains 'seablind' and therefore in danger of not recognising the value of the sea to local communities beyond the traditional”. Optimisation of “community benefits from the sea in the context of the greater energy transition and climate action” was suggested as a potential research topic.

Local communities should have inputs into the funding council's strategies.

R&I on whether the excess renewable energy can be converted to green hydrogen, can they electricity be used as fuel for the future ships and airplanes

## APPENDIX 4 DISCUSSIONS IN THE FOOD SECURITY BREAKOUT SESSIONS

### Further summary and discussion details

#### Challenges

The protest by fishermen held on the 26<sup>th</sup> May 2021 at Cork Harbour was discussed. It was felt that the soundbites from the fishermen and industries affected by the fishing industry was heart rendering. With the protest, there were many issues that led to that. If you want to engage with the fisheries sector, it is a difficult thing to do and needs to be done at local level (buy-in of local inshore fleet could be possible, but then large ones get left out).

On the decline that is happening in Ireland's fishing and farming sector, it was mentioned that in Kinsale, many communities are not connected to the fishing industry and a very small fraction of people know about the mechanics of boats, or what the fishermen do. The sea is seen for its recreational qualities only and there are many opportunities to package and pitch it as a form of livelihood. It needs to be socialised and demystified. A participant said, "When you understand it, you care about it more". There is a need is to create community connection to these industries.

Aquaculture is one of the options for coastal communities in terms of sustainability. People don't really understand the supports and skills available, and needed, to sustainably develop businesses around the marine industries. Lack of or limited knowledge sharing was identified to be an issue.

It was mentioned that the fisheries is a critical industry for local, indigenous regions and that the technology developments that have happened (e.g., aquaculture) bode well for the future. There was is a high chance that a lot of people will be coming back into the industry via this route to build sustainable businesses. To add granularity to this thought, a participant added that the large fishermen are at the top of the game (in shore fishermen/ fleet don't have the same devices), they use state of the art innovations and equipment and need higher qualifications and highly skilled people to use these gadgets and devices. Hence, the focus needs to be on the small-scale fishing community.

Marine and maritime sector has national as well as global regulatory issues to be considered, which makes any change slow and there is considerable time lag. It is further exacerbated by the fact that changes are slower in Ireland. These create challenges for bringing innovative ways of working in the fishing and agriculture industries.

The difficulty to meet and talk with farmers was highlighted. To overcome this challenge, a community group member shared that a series of tours to farmers GRRIP and CityLabs projects have received funding from the EU's Horizon 2020 Research and Innovation programme and ERASMUS+ under grant agreements 820283 and 101004042 respectively.

who are doing something different was being organised so that people can learn from successful sustainable farming models. This community group was bringing together farmers (other models of farming except beef and dairy) from different areas to visit their farms. The main idea is to provide a platform where farmers open up and share their issues.

Another participant mentioned that sustainability in the fishing sector has two dimensions: 1) sustainability of the fisheries sector in Ireland, and 2) environmental sustainability issues. There is a need to bridge the gaps between the technology advancements and applications, important to connect these innovations with the fishing communities.

There is a gap between research done by researchers in academia/ higher education institutes and research done by the government and this bridge needs to be crossed.

## **Solutions**

Much stronger leadership from the government over a sustained period of time and a critical role played by them in bringing the main actors together. Government know about EU compliance and without strong leadership from them, private and other actors will be limited to align with EU policies.

It was shared that the way driving tractors and milking cows in agriculture and dairy farming were seen as a matter of pride, such pride needs to be developed in the fishing industry too. There is a plan to set up a ship right course in the Bere Island to bring back a love and culture of fishing.

Discussion on how technology can help to bring the youth to these traditional industries revolved around use of tagging of animals, creation of virtual fences, etc.

Real need to shift the measures of success in academia – the publish or perish culture is widely prevalent, there has been a shift to innovations, i.e., patenting and commercialisation of research, however, measuring environmental and societal impacts of research and incentivising those types of research are important with respect to sustainability.

Further discussion on research impacts highlighted that in R&I projects, the key end users of innovations are not considered. There is a need to define the ultimate success what R&I hopes to achieve and how it can help to achieve tangible impacts. Science communication should be done keeping in mind different stakeholder groups and not only researchers.

Support to individuals to commercialise their I.P. was discussed and the push to be commercially focused from the outset. People need to be informed of the various support available so that they can actualise and commercialise their ideas.

Important to clarify the role of each of the QH right at the beginning, why each of the sectors should participate as each of the sectors have different goals and want different things out of a project, for example, researchers want papers and conferences, communities need concrete actions.

## APPENDIX 5 DISCUSSIONS IN THE CLIMATE ACTION BREAKOUT SESSIONS

### Further summary and discussion details

#### Challenges

- Society has become more diverse and community cohesion is an important precondition for climate action. There is a need to think and act more communally in Ireland. Working patterns and lifestyles need to become more sustainable, affordable, secure, and less stressful, which in turn builds social cohesion.
- Community is an important locus of activity. We need community buy-in around sustainable energy and electric vehicles especially. Communities and citizen level action cannot be done alone, they need help from government. Coordination support is needed at the community level as volunteers alone is not sustainable - volunteers reach burn out after a while.
- Inertia is a big issue. There is so much consultation, it goes over people's heads. A local level one stop shop is needed for all things related to climate action. There is a knowledge gap that needs to be addressed, give people the information and they will take action. Demonstrate some of the solutions to people.
- Communication, collaboration and conversations are key. Intergenerational conversations and positive conversations are important. The power governments have to influence is important, as are education systems in engendering behaviour change. Give accessible, relevant information at primary school level especially. However, participation is important than simple information sharing.
- Creative ways of engaging with the farming community are needed. For example, 50% of emissions on the Dingle Peninsula are agriculture related. Exploring avenues for farming diversification is important. Cork has a lot of high value dairy land. It has the largest IFA in the country.
- There are lessons for Climate Action from COVID. It has sustained a sense of crisis which has enable dramatic systemic change, particularly impacting our ways of working. We need to learn systems change lessons from this that can be applied to the climate crisis.

#### Solutions

Key words / ideas from quick fire round:

- Just Transition
- Sustainable energy systems, we need to know how it works
- How to ensure Zero Waste and Carbon: How do we fund recycling infrastructure properly.

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- Flood mitigation
- Become a nation of Blue Flag Beaches
- Put the citizen at the heart of innovation
- How do all forms of transport energy become renewal – and zero carbon transport
- Enable diverse groups of people to become engaged in climate action
- Citizen assembly model at a local level is needed to create local level adaptive environments.

#### Details:

- An important area for R&I is researching *area-based approaches* that support communities to become renewable. How can governments more effectively nurture community trust and empower communities. What is the role of local level coordinators that enable and empower climate action? How can 'community engaged researchers', become embedded in communities? This form of research helps to understand community context, bring the expertise locally and support evidence informed local action. Engaging whole communities is essential, community education is essential. Listening to community is essential.
- How can we bring different perspectives into dialogue with community? How do we creatively engage communities? Feeling and belonging are important sensibilities, but climate action is often about reports. A different ethic is needed. Let us bring in different language via culture.
- How do we engage the marginalised? Disadvantaged communities see climate action as a privileged thing. Rural areas are often disadvantaged in economic terms. How do we engage them? UCC Civic and Community Engagement Committee in particular should look at as a priority in terms of UCC's external engagement work.
- Ireland is good at community development, how do we mainstream this for climate action? Villages are full of underutilised experience and capacity, how do we link this to technical expertise?
- How do we support communities to articulate a vision of what they want to look like? Local needs and priorities need to show up at the national level.
- How can we take a holistic approach across the economy and society? E.g. transport, energy, food.
- How do we engage policy makers with research? Research needs buy-in from the Policy community, both Irish and EU.
- How can we utilise citizen science to increase MaREI's visibility within local communities?

## APPENDIX 6 DISCUSSIONS IN THE BLUE ECONOMY, SKILLS, AND JOBS SESSIONS

### Further summary and discussion details

#### Challenges

Discussions began with the Irish Maritime Development Office (IMDO) sharing more on their perspective in relation to infrastructural development, providing a national context including demands and opportunities for ports and planned infrastructural developments with Port of Cork being a Tier 1 Port. To capitalise on that in local economies, there is a lot of thinking on how one can develop the infrastructure to meet the new demands, whilst also managing the role of ports in importing and exporting goods. Reference was made also to Ringaskiddy and there was an overall thinking on how to maximise the return to the local economy from these infrastructure planning and developments. This was mentioned to be a key opportunity for the region, including developing the local supply chains.

Regarding the supply chains, it was highlighted that trying to establish the supply chain organically is going to be difficult, particularly in relation to offshore renewable energy. Ireland has the skillsets, the expertise, the facilities, the people, the motivation, just not the projects – “we have everything, but right now we don’t have the projects”. There is a need for projects and direction from policy makers to set up a central hub and develop that supply chain. The lack of power and autonomy of the local authority to procure and finance projects was considered as a problem in Ireland.

Considering the power of Local Authority, it was noted that the only way Cork City Council can achieve that type of strategic and local visibility across projects, with communities and to access funding opportunities is through intensive collaboration across all the right stakeholders; harnessing also the creativity and innovation that comes with that.

It was suggested that Cork has the skills base, both practical and academic, with foundational and transferrable skills that could be easily adapted to and developed, for example, within the context of offshore renewable energy opportunity. Technical and commercial skills needs to be considered.

Other participants brought the lens of SME skills and access to finance, in particular, for aquaculture where output from the EU compared to rest of world flatlined in recent years, for lots of reasons including social acceptance, reputational damage. Issues like banks not financing, or difficulty to navigate marine spatial planning are the priority concerns for SMEs in this space – who need different type of skills/support e.g. for navigating complex marine spatial planning

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and promotion or engagement with local communities; considering, for example single bay management. There is a different set of concerns for SME and aquaculture which is not about transferrable skills. Aquaculture has amongst the biggest footprint in EU, but with lowest infrastructure. Infrastructure needed in this space is different to the large-scale development and larger commercial enterprise.

Reflecting on the community or bottom-up perspectives, the decentralisation of funding was also considered relevant, with suitable local policy to link and demonstrate where funds were going. Communities can engage when it's clear where future ambitions / projects are going. Often communities don't know (and often nor do other stakeholders) so there is a need for clear strategy, that is communicated, that then any community can get involved in.

With respect to the 'future' lens - of Cork, Cork harbour, coastal communities – participants highlighted the importance of digitalisation and the digital economy – including robotics, data etc. They mentioned that the skills needed for these new areas of work are already in high demand in lots of other sectors and thus presents a key challenge and there is a need to consider the whole supply chain of talent.

IMDO provided clarity re Port Development in Ireland – i.e. that there is no exchequer funding for any port development projects, ports are semi-state companies. Port development is funded through financing of port itself. Tier 1 ports tasked with leading that development, with other smaller regional ports being moved into local authority. Therefore, they have to be commercially viable projects that meet a return is a practical consideration based on current National Port Policy.

A number of existing initiatives e.g. Leading Atlantic Ports Pillar, working closely with MaREI, demonstrate the potential of collaboration which is critical for going forward. Mapping already done, shows huge opportunity of strengths and clusters in Cork – and a big opportunity with baseline skillsets, expertise to be harnessed.

Participants were asked to note a Top Priority re: Challenge / Opportunity and add it to the Chat

- Digitalisation and decarbonisation
- Smart port/harbour ambition
- Collaboration and digitalisation
- Port financing is key issue in Cork. €100m+ needed now for Offshore Renewable Energy (ORE) terminal.
- Smart environment/Smart Economy of ports and coastal communities
- Sustainable development of western seaboard
- Upskilling for blue economy opportunities

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- Get it right from the start ... get the policy in place to benefit the regions and citizens

Participants availed of the virtual coffee break space to network and continue to discuss issues for Ports. IMDO shared insights from a national policy and strategy perspective and highlighted the balance to facilitate and coordinate for diversity between ports across Ireland, the efficiencies that can be achieved by shared national approaches e.g. regulatory process as well as providing the autonomy and ability for ports, at different levels of development to innovate themselves. This big picture national port perspective was reflected by the local participant noting their perspective looking at how to locally mobilise offshore renewable energy and the construction side. Participants noted looking at global experience and expertise as well as European expertise with specific cases cited. An issue for Ireland compared to other countries was highlighted, in that Ireland is not building upon an historic oil and gas infrastructure. It was acknowledged that there is a huge resource offshore, that it is a priority at Government level and speed is of the essence. Three key enablers are – legislation coming through, RESS auction and access to grid. The complexity of it was noted.

## **Solutions**

'Ireland coined as the new Green Gulf' was expressed –how is Ireland and its citizens going to benefit from these opportunities, and in particular how can in benefit communities in the Munster region? There are benefits from reduction in greenhouse gases, but is there an opportunity to benefit financially, for our infrastructure, education and next generations. How can benefits to citizens be realised; who is putting that plan in place?

The group considered the need to look at, learn from and replicate what works well elsewhere, drawing from other international projects.

There was discussion where it was noted that there is currently little or no domestic industry in Ireland i.e. no Irish companies to compete in this space, so financial investment in infrastructure will leave the local economy and go to international companies. There is a need/opportunity to build this industry in Ireland, supporting companies who can also compete in the international marketplace.

A solution proposed for this problem (and was based on a proven model) is to include at planning stage a mandate for a percentage of local content, which can lead to joint ventures being developed between international and local companies, developing supply chains organically.

Considering the supply chain – it was noted that in Ireland, IMDO together with Enterprise Ireland (EI) and other stakeholders have developed the Marine Ireland

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Industry Network (<https://marine-ireland.ie>) and as part of that there is a national offshore wind cluster that EI has developed. They are looking for opportunities in the UK, grow the expertise of Irish companies and establishing their skillset in the UK market so that going forward Irish companies will be able to deliver services.

Initiatives like that could be further solidified for example through community engagement, for local buy-in, there needs to be understanding on what the benefit is for the local community, for example how it creates local jobs. So at a local level it would be interesting to look at how to further consolidate expertise that exists in the region, including expertise that could be easily transferred to offshore wind sector. It would be useful to research on this, bearing in mind the national offshore wind cluster, and understand how the local region can come together around that.

It was noted that it would be important and useful to connect with the community networks and groups who know, at town and village level, what companies are there, what skillset exist, to bring that together. Bringing in academics, linking with research and building skillsets, as well as connecting with funding mechanisms, for example through incubation centres – bringing together the different pieces on the doorstep to strengthen the offering that's available.

One thing learned locally and in the Dingle project, is that community engagement takes time. Different stakeholders have different perspectives and it takes a while to build that shared understanding. Trust is also key. It takes time to build shared understanding in projects to move forward, especially because that hasn't historically been established.

Need to research and consider the role of the state in developing these industries. Ireland has moved a long way from state owned utilities, and there is a key question in terms of free market economics and what role does / will the state play in these developing industries? The state will have to be involved, so how will that be done was suggested as a key area for research – with there being a central issue around how much should be state-led or private-led, with cases to be made for both. This includes issues of scale to be able to compete in an international marketplace if other players are state agencies.

At the other end of the scale - looking at it in all-Ireland way, needs to consider SMEs and enabling local communities. From a planning point of view, making stakeholders part of the planning process is important. There are examples where this hasn't been done well – e.g. Gas pipeline into Blacksod Bay. There are myriad of state agencies with diverse and competing competencies and industries are left very much marginalised in different sectors, shipping, energy (except Aquaculture) – for these sectors upskilling is the reality.

There is a need for an enabling state body and a promoter – Universities and MaREI can be very much at the centre of that. Not necessarily alone, together with other bodies that are very active in the industry, but Universities and research institutes along the western coast of Ireland can engage with communities facing similar and shared challenges and needs. This area is somewhat addressed in new Marine Strategy just published, there is a long way to go in terms of supporting SMEs, supporting them through planning and development processes rather than the current situation where they are faced with an iron wall of legislation and policing.

Cork Smart Gateway is an existing initiative and example of working with Universities, research centres and connecting with local stakeholders. The link with UNIC CityLabs with focus around digital inclusion and the opportunities for digitalisation of ports is an opportunity. A port digitalisation project led by MaREI with other SFI research centres such as Insight (Data Analytics) and Lero (Software) would be really worthwhile exploring.

MaREI's Selkie Project (Marine Renewable Energy Ireland & Wales) was also noted as an excellent premise that could be applied across sectors using GRRIP / CityLabs network.

## APPENDIX 7 LIST OF PARTICIPANTS

Name	Organisation
Alicia Joy O'Sullivan	National Youth Council of Ireland: Climate Justice Committee
Andy Fox	Coillte
Aoife Deane	UCC
Annette Wilson	AquaTT/ ERINN Innovation
Anthony A Geraghty	Naval Service
Brian Fitzgerald	Simply Blue Energy
Catherine Sheridan	Arvia
Clíodhna Ní Ghríofa	UDARAS
Claire Davis	Cork City Council
Claire McEligott	ESB Networks
Cormac Gebruers	National Maritime College of Ireland
Darragh O'Suilleabhain	Cork County Council
David Keniry	Keniry Advisory Services
Deirdre De Bhailís	Dingle Creativity and Innovation Hub
Dermot Kelly	Pfizer
Edel O' Connor	IMDO
Elizabeth Creed	Transition Town Kinsale
Fiona Kearney	Glucksman Gallery
Gearoid Fitzgibbon	Energy Community Tipperary
Gillian Baker	Sustainable Energy Authority of Ireland
Gordon Dalton	UCC
John Barimo	UCC
John Walsh	Bere Islands Project Group
Joseph Barry	Cork Institute of Technology
Karen McCarthy	UCC Teagasc Research Alliance
Kieran Lettice	Energy Cork
Launa Borde	Cork Nature Network
Madeleine Murray	Change by Degrees
Marcia D' Alton	Cork County Council
Marcus Ó Conaire	UDARAS
Maria Young	Green Spaces for Health and SHEP Earth Aware
Maria Power	Community Consultants
Mark Falvey	Environmental Society
Patricia Commiskey	Sustainable Energy Authority of Ireland
Patrick Grehan	Dare Technology Limited
Paul Bonar	Gavin & Doherty Geosolutions Ltd
Robert Lynch	National Maritime College of Ireland
Ruth Callaway	Swansea University
Sarah Twomey	Sea-Fisheries Protection Authority

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Sarah Kandrot	Green Rebel Marine
Sophie Ryan	Cork County Council
Stephen Thornhill	UCC & Cobh Zero Waste
Sue Walsh	One Green Village
Suzanne Kearney	South East Cork Area Development (SECAD)
Vanessa Pulgarin	Coordinator Cork Smart Gateway