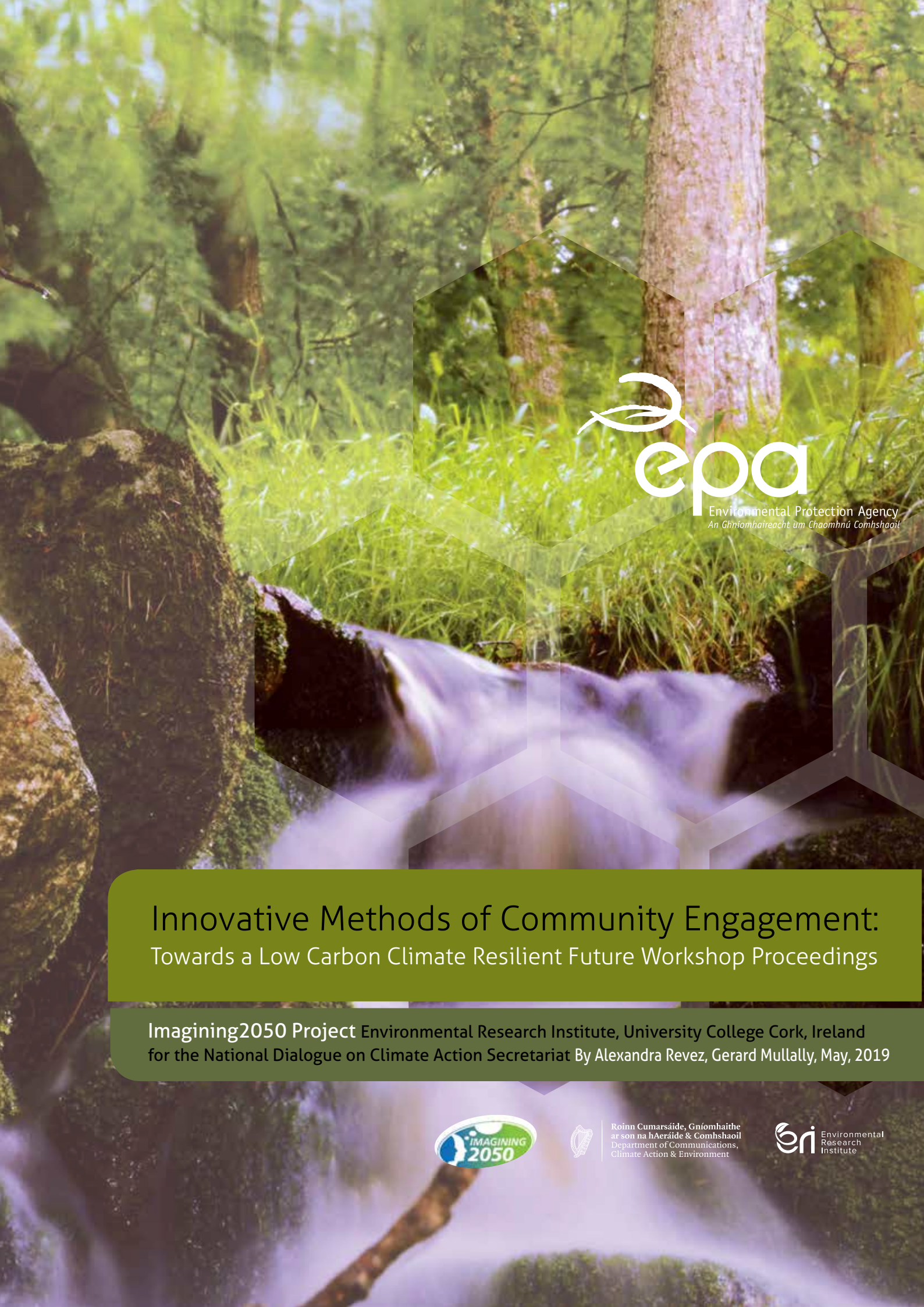
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An Ghníomhaireacht um Chaomhnú Comhshaoil

Innovative Methods of Community Engagement:
Towards a Low Carbon Climate Resilient Future Workshop Proceedings

Imagining2050 Project Environmental Research Institute, University College Cork, Ireland
for the National Dialogue on Climate Action Secretariat By Alexandra Revez, Gerard Mullally, May, 2019

IMAGINING 2050

Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil
Department of Communications, Climate Action & Environment

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Key Messages

These proceedings emphasise the value in understanding community engagement as diverse, evolving and contextually linked to social and institutional settings.

Based on the practical experience of researchers in the field of community engagement in climate action it provides an overview of some existing initiatives and methods employed to engage and mobilise communities.

Rather than drawing attention to a specific approach or rating different techniques as more or less valuable, the key message lies in demonstrating and communicating the value of engaging communities within a greater network of activities, techniques and groups.

Additionally a number of strategies emerged to reach out to more alienated or disengaged groups and these included the value of intermediaries and partnerships, promoting peer-to-peer learning and strengthening strategies through resourcing.

Introduction

*The proceedings of the **Innovative Methods of Community Engagement: Toward a Low Carbon, Climate Resilient Future workshop** have been developed by the Imagining2050 team in UCC and the Secretariat to the National Dialogue on Climate Action (NDCA). The NDCA also funded the workshop running costs.*

The proceedings offer a set of recommendations and insights into leveraging different community engagement approaches and methodologies in the area of climate action. They draw from interdisciplinary knowledge and experiences of researchers for identifying, mobilizing and mediating communities.

*The work presented below derives from a workshop held in the Environmental Research Institute in UCC on the 17th January 2019. These proceedings are complementary to an earlier workshop also funded by the NDCA and run by MaREI in UCC, titled '**How do we Engage Communities in Climate Action? – Practical Learnings from the Coal Face'.** The earlier workshop looked more closely at community development groups and other non-statutory organizations doing work in the area of climate change.*

Workshop Aims

This workshop focused on obtaining a deeper understanding of existing examples of community engagement in the area of climate action, with a view to contributing to the NDCA (see box 1). A number of interactive exercises and plenary discussions were facilitated with a group of twenty-four academics and researchers. Discussions focused on the critical use of different methods with illustrations of what works and what is suitable to particular groups or situations. The key objectives were to:

- Map different approaches to community engagement in Ireland;
- Identify best practice in mobilizing and mediating community engagements;
- Find ways to better account for complexity and emergent communities.

The main motivation to run this workshop was to contribute to the aims of the NDCA. It is clear from the aims of the Dialogue that it understands engagement as a continuum working from creating a general sense of awareness of the topic, to engagement and right up to enabling and empowering citizens and communities to act. This spectrum of engagement would indicate a need to consider varying and alternative methods and approaches depending on which aim is being pursued at any given time. The findings below should aid the further development of thinking in this area. The workshop also considered diverse and inclusive discussion within a research context as a way to better understand the usability and applicability of different community engagement tools and research methods.

Focused on learning from existing or past initiatives we sought to gauge some of the strengths and limitations of different community engagement techniques and to offer practical examples derived from this vast interdisciplinary field of research.The workshop comprised a variety of academics and researchers with direct experience of community engagement working in the field of climate action. Looking to acquire interdisciplinary know-how disciplinary backgrounds were diverse and included: Geography, Sociology, Engineering, Economics, Behavioural Science, Psychology, Environmental Science, International Relations, and Communication.

The role of community engagement in meeting ambitious climate change targets

The most recent report of the Intergovernmental Panel on Climate Change (IPCC, 2018) forewarns policy makers that if tangible climate change action is not achieved by limiting global warming to a 1.5°C target, potentially long-lasting and irreversible impacts such as loss of biodiversity and ecosystems can be expected (1). The report further adds that limiting climate change to 1.5°C requires rapid and ambitious societal action and transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO_2) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050.

To meet this challenge the Irish government has recently published its first statutory National Adaptation Framework (2), and prioritised a number of sectors as well as tasing all 31 local authorities to create climate change adaptation strategies to be revised and renewed on a five-year basis.

However, while there has been some progress achieved, evidence suggests that Ireland is only at the beginning of a challenging process of change to a low carbon and climate resilient future (3). This challenge at present includes the development of structures, processes and knowledge that promotes and enhances societal mitigation and adaptation (3). Furthermore, current indicators such as the latest Climate Change Performance index shows that Ireland is not performing well on many categories, including emissions, energy use, policy and renewables. Only a few positive notes were added in this review and they included acknowledgement and appreciation of the Citizens Assembly process and the Divestment Bill (4). To address some of these challenges the Irish government is advancing with a number of initiatives which include, the National Dialogue on Climate Action NDCA

BOX 1

The National Dialogue on Climate Action

The National Dialogue on Climate Action (NDCA) is a Government initiative led by the Department of Communication, Climate Action and Environment (DCCAE) with Secretariat assistance being provided by the Environmental Protection Agency (EPA). The vision of the Dialogue is to create a long- term process by which the national objective of transitioning to a low carbon, climate resilient society and economy by 2050 is communicated to all of society in a manner that creates awareness and understanding towards enabling climate actions across all of society and the economy.

The central aims of the Dialogue are to:

- Create awareness and engagement by generating a better understanding of the challenges and opportunities posed by the transition objectives
- Inspire and motivate society, businesses and communities to collaboratively unlock opportunities for climate change action
- Enable, co-create and empower the Dialogue process through the engagement and mobilisation of all sectors of society on structures, information flows and events.

The principal beneficiaries of the Dialogue process are citizens and their communities; including 'communities of practice' such as farming, commerce, education, youth, social, and sporting, and of course 'communities of place'. However, the Government, Agencies and Local Authorities also have a key role to play in supporting, facilitating and creating an enabling environment for the level of transformation required. The role therefore for the Dialogue is to act as an intermediary/broker between the top and the bottom levels of activity.

BOX 2

Imagining2050

Engaging, envisioning and co-producing pathways for a low carbon, climate resilient Ireland

Imagining2050 is a transdisciplinary research consortium that seeks to engage with Irish society in all its richness and diversity to explore in a collaborative manner visions and pathways for a sustainable and socially inclusive future.

The Imagining2050 project is a flagship project hosted by the Environmental Research Institute in UCC and the team is composed of highly experienced researchers from diverse backgrounds, with a combination of researchers from University College Cork and Queens University Belfast.

The consortium strives to make use of this expertise to develop of a more unified vision, which links different strands of science with various community and local perspectives.

The key objectives of Imagining2050, which is funded by the EPA, are complementary to those advanced by the National Dialogue on Climate Action. The objectives of Imagining 2050 are:

- To develop and implement innovative approaches for climate dialogues using mini-publics to co-construct visions and pathways for a low-carbon and climate resilient society
- To undertake targeted stakeholder engagement with civil society agencies and state agencies
- To generate a series of scenarios and pathways for climate mitigation and resilience for Ireland
- To evaluate novel communication methods to enhance engagement & stimulate dialogue on climate action.

strategy, with the aim of considerably increasing awareness, engagement and motivation to act (locally, regionally and nationally) in relation to the challenges presented by climate change (5). This is a significant call to action, which seeks to mobilise Irish society to meet these ambitious climate change targets.

Community engagement and participation has gained increased attention in current climate change debates and policy strategies at both national and international levels (6-9). This stems from a growing consensus, among researchers and policy makers, on the value of promoting more inclusive climate change strategies that foster dialogue, promote change and innovation (9). However, as ideas about what participation entails are set into practice in different forms of government interventions, programmes, or research activities, there has been a marked increase in contestation and disagreement on how best to pursue and channel processes of participation (9, 10) .

Diverging notions co-exist in defining and articulating the role that public engagement can serve in new strategies for climate change transitions (11). For instance, the very terminology used can be problematic as for example all-encompassing notions of 'citizenship' or 'civil-society' can be too loose and broad in recognizing the complexity of actors falling outside market and government categories (11). Conversely, critiques have also arisen in terms of channelling public engagement into very specific and narrow roles such as consumers, clients, users or beneficiaries (12).

The range of difference and the potential for limitations in providing more fixed definitions is complex and may be linked to socio-economic background, geographical context, gender, age or culture (13). Many of the polarised views that exist in relation to community engagement can be subsumed by two distinct approaches in defining participation. One, which conceptualises community engagement in different forms as 'real', measurable and externally identifiable, and the other, which understands community engagement as 'socially constructed', fluid and subjective (8, 12). The first approach employs a more fixed view of participation while the later understands participation in a more relational and reflexive manner (14).

In approaching participation for these proceedings, we adopt the later approach that we see as a way of considering these processes as co-produced, evolving, multi-faceted, and often inscribed within social and institutional systems. As suggested by Chilvers and Pallet (8) this relational approach provides a means to understand different community engagements in terms of 'systems of practice' (15) or 'ecologies of participation' (16) which capture a richness in understanding how engagements are mediated, mobilised and situated within particular social, technological and political contexts (17). By doing so we aim to consider the interlinkages between emerging community engagement initiatives in research, their synergies, their differences and their potential connections with the NDCA.

The 'Book of Abstracts', (Appendix 1) offers an overview of research from workshop contributors, and it shows that there is a variety of ways in which community engagement has been conceptualised and mobilised in Ireland from coastal communities, energy citizens, local residents, energy users and consumers. Attempting to account for this diversity, we seek to provide a collaborative view of this diversity and its implications for the NDCA. The findings that we offer below provide some direction and support in the continued involvement of the NDCA in this diverse network of activities and communities.

Mapping community engagement in climate action research in Ireland

As a starting point to these discussions the workshop looked at mapping community engagement in climate action research in Ireland. Participants were asked to name and locate their research activities. For the purpose of this exercise a physical map of Ireland was used (map exercise findings in the following page). While there was effort to locate and identify existing research this exercise was premised by an acknowledgement that the map can be a limited way of identifying and relating to existing research initiatives, which might be located in multiple sites, might not be located spatially, or indeed might be best identified as digital or desk-based activities.

Thus, from this exercise arose a plenary discussion, which looked at usability, merits and drawbacks of maps to represent community engagement in climate action projects that are underway. This conversation is particularly valuable in the context of valorising the idea that 'mapping' community engagement in some form is beneficial, in both efforts to consolidate networks in community action and understanding some of the potential limitations of mapping' techniques. Value was also expressed in terms of offering exposure and learning from other fields of research. The rate of consensus among participants was high in terms of the usability of map representations as a way to capture the diversity of engagements while at the same time acknowledging a broad range of limitations in using this approach. The following Table 1 below offers a brief summary of the ideas raised.

The research map below offers further insights into existing research in community engagement in climate action by looking at projects that were framed locally, nationally and internationally. These maps provide some indication of the context in which different community engagement activities are arising. For instance, while the exercise is not representative of all current research in Ireland there is a marked emphasis on energy projects compared with other dimensions of climate action such as mobility and transport, finance, and natural hazards.

BENEFITS

- Maps are interesting ways to engage with people.
- Maps offer powerful representations of research.
- It's an accessible way to offer information.
- Significant potential as a tool to connect communities and strengthen networks.
- Crowd sourcing and open source maps as valuable and efficient way to connect and gather further insights into community activities in climate action

DRAWBACKS

- Communities are not all geo-spatial and there are online communities that don't recognise maps/spatial identification, communities of interest, etc.
- Only limited and partial representation
- Complexities are often lost
- Language and approach needs to be audience specific
- Classification is a challenge
- Keeping maps up-to-date is an issue
- Ownership and access can be problematic

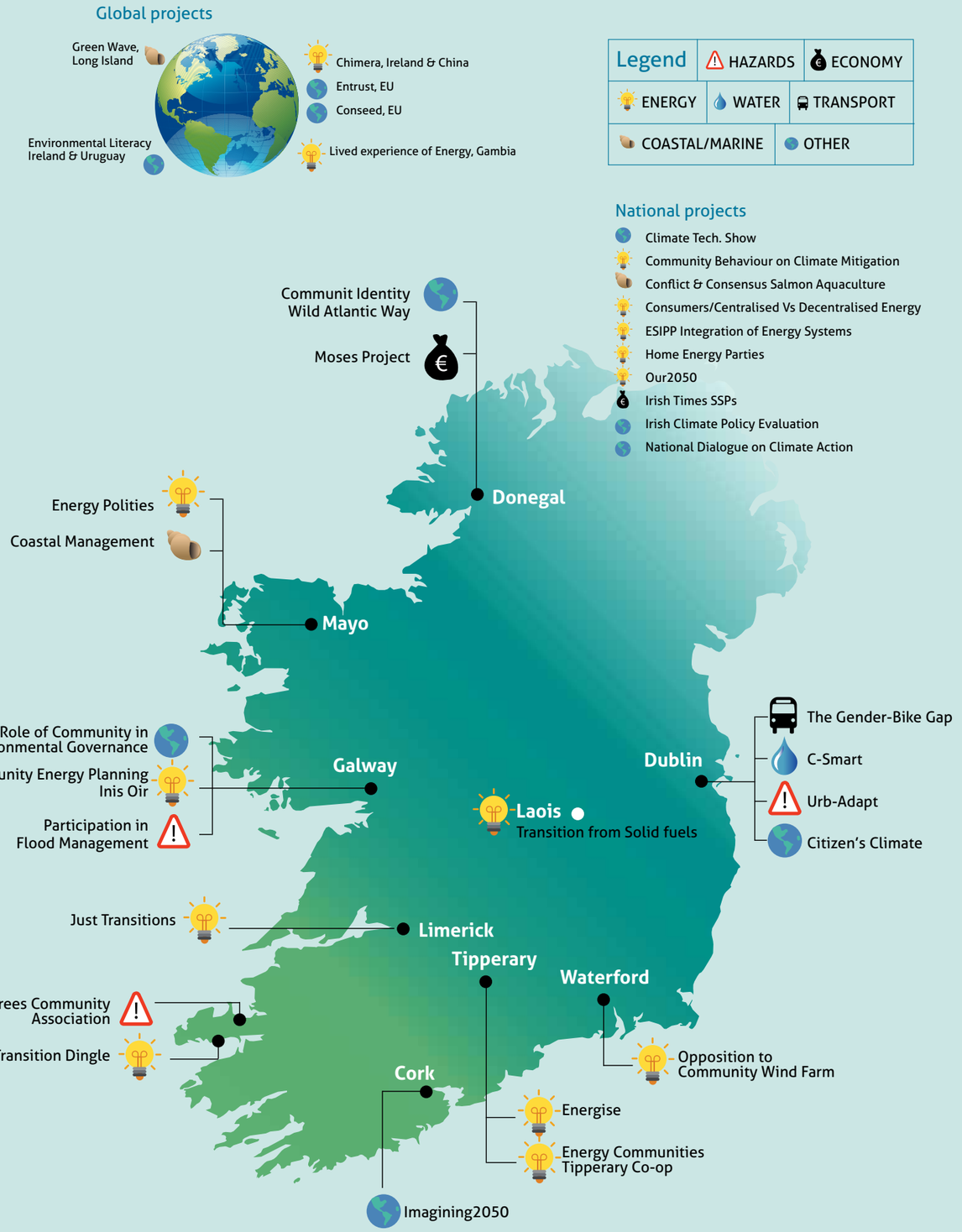


Figure 1.1 Local, national and international research with a focus on community engagement in climate action

Methods of community engagement in climate action research

The workshop findings presented in this section are central in identifying specific practices and methodologies for engaging communities. Some of the research activities identified have worked towards refining community engagement practices, where others have focused on evaluating reach and applicability

As already suggested by the mapping exercise showed above, there is a variety of ways of identifying and engaging with people, which are often tailored for specific contexts and achieve different results. The richness and diversity of these approaches and the manner in which they are adapted to specific purposes makes it challenging to present a roadmap or toolkit on how community engagement is best achieved. Furthermore, it could be argued that it is in grasping this complexity that lessons can be drawn on how best to situate specific strategies for community engagement within a wider system of communities, networks and practices already active in this area as well as determine how some groups remain disengaged.

General key learning points

There were a range of key learning points and shared views common to most of the methods discussed which offer some insights into how different methods work and how they may be applied at community level. For instance, nearly all of the researchers, regardless of technique used conveyed difficulties in engaging communities and especially reaching out to more alienated or disengaged groups, some suggestions were proposed to address these challenges. These suggestions included, valuing the role of intermediaries and partnerships in engaging communities, promoting peer-to-peer networks, and facilitation of dialogue transcending disciplines or specific groups. Another issue that emerged from the identification of different methods was the level of demand that community engagement initiatives place on resources. It was generally acknowledged that community engagement initiatives are usually resource intensive, counter measures include better anticipation of demands on time, cost and expertise. Finally, the issue of continuity and legacy was discussed and highlighted by many of the participants as a significant yet challenging element of community engagement in climate research.

Methods Identified

A range of methods were identified in the workshop (see box 4 below). While participation is a key component within these strategies, there are arguably different driving motivations in the development and implementation of these techniques (18). For instance, some approaches such as the Citizens' Assembly and Citizens' Juries are largely concerned with strengthening social and environmental justice and place emphasis on strengthening the legitimacy of decision-making processes through deliberative and inclusive processes. Other techniques such as Participatory action research are grounded on self-determination principles, which place value on the capacity of different stakeholders to act on their behalf. Methods such as LivingLabs, Fuzzy Cognitive Mapping, Q-Method, Longitudinal Studies and Behaviour Interventions are traditionally more focused on translating knowledge into action. Drivers such as seeking innovation and greater social acceptance of climate change transitions appear common to many of these techniques.

BOX 3

Brief overview of community engagement methodologies

Citizens' Assemblies and Citizens' Juries: closely aligned with a deliberative democracy ethos, it brings together a small representative groups of 'citizens', usually stratified in terms of gender, age and socio-economic status to capture the views and ideas of the group on topics of public and social interest (19-21). Deliberations are encouraged using a mix of information and deliberation: Both methods invite 'experts' to share ideas, which are subsequently debated leading to a set of clear recommendations (e.g. ENTRUST, Imagining2050, Citizens' Climate, DCU).

Participatory Action Research (PAR): PAR techniques encourage active participant engagement in research activities from co-design, implementation and evaluation (22, 23). Seeking to facilitate and empower horizontal and reflexive engagement practices, it promotes more even communication spaces as a way to deepen collective understanding of issues. (e.g. ENTRUST, Role of Communities in Environmental Governance, Galway).

New media and digital databases: Environmental data such as that generated by "smart city" initiatives offer considerable scope for public engagement (e.g. C-SMART): broadly speaking, these data are extensive and generated by novel research or industry-led projects, and thus readily lend themselves to novel visualizations and representations of urban environments. This framing can be of considerable value in provoking and stimulating debate.

Fuzzy Cognitive Mapping: (FCM): FCM is a participatory modelling method which seeks to bridge the gap between qualitative and quantitative approaches and define a problem space according to the preferences and values of individuals and stakeholders groups (24). In doing so, FCM brings together individuals and stakeholders to develop a structured and shared understanding of complex and uncertain environmental issues, and provides a platform for stakeholder deliberation and testing of management solutions.

Participatory Climate Change Modelling and Scenarios: This approach entails the adaptation of traditional scenario development and modelling techniques, commonly carried out in laboratories and research centers to adjusted methods that include participatory procedures. These modified techniques seek to better integrate and translate community inputs and experiential local knowledge in order to promote stronger links between science, policy and local communities. (25)(e.g. imagining2050)

Living Labs: Living Labs are approaches or tools to drive sustainable development by providing spaces for innovative experimentation, by facilitating systematic monitoring and learning, and by involving various actors and users as co-creators of knowledge in real-world settings (26) (e.g. Washlabs in the CONSENSUS project www.consensus.ie or ENERGISE Living Labs (ELL) www.energise-project.eu) and EnergyPolities.

Behaviour Interventions: This is a broad area of research which encompasses a wide number of different approaches seeking to influence or understand behaviour patterns among the population (27, 28) . Approaches include behavioural economics (29), social marketing(30) and social practice (31). Common practical applications include development of a mix of regulatory and non-regulatory mechanisms such as providing information; awareness raising campaigns; financial incentives and behavioural economic interventions (28, 32) (e.g. ENTRUST project).

Longitudinal Studies: Longitudinal surveys employ a cyclical approach to research whereby interviews or surveys are repeated over a period of time with a sample of respondents to 1) determine factors affecting behaviour 2) processes of change 3) evaluate interventions 4) test casual hypotheses (33). In terms of environmental studies, Longitudinal surveys have been used to monitor time use and resource consumption with a focus on life course trajectories and life events (34, 35).

Q-Method: This method has its origins in applied psychology and employs structured and statistical analysis to explore subjectivity within a particular thematic area or domain. The underlying focus is on ordering and finding patterns or categories of themes within larger domains, to better grasp the range of ideas dominating these thematic areas. It has been suggested as a useful tool to employ in grasping the range and diversity of voices in environmental areas where there is considerable debate or contestation (36-38).

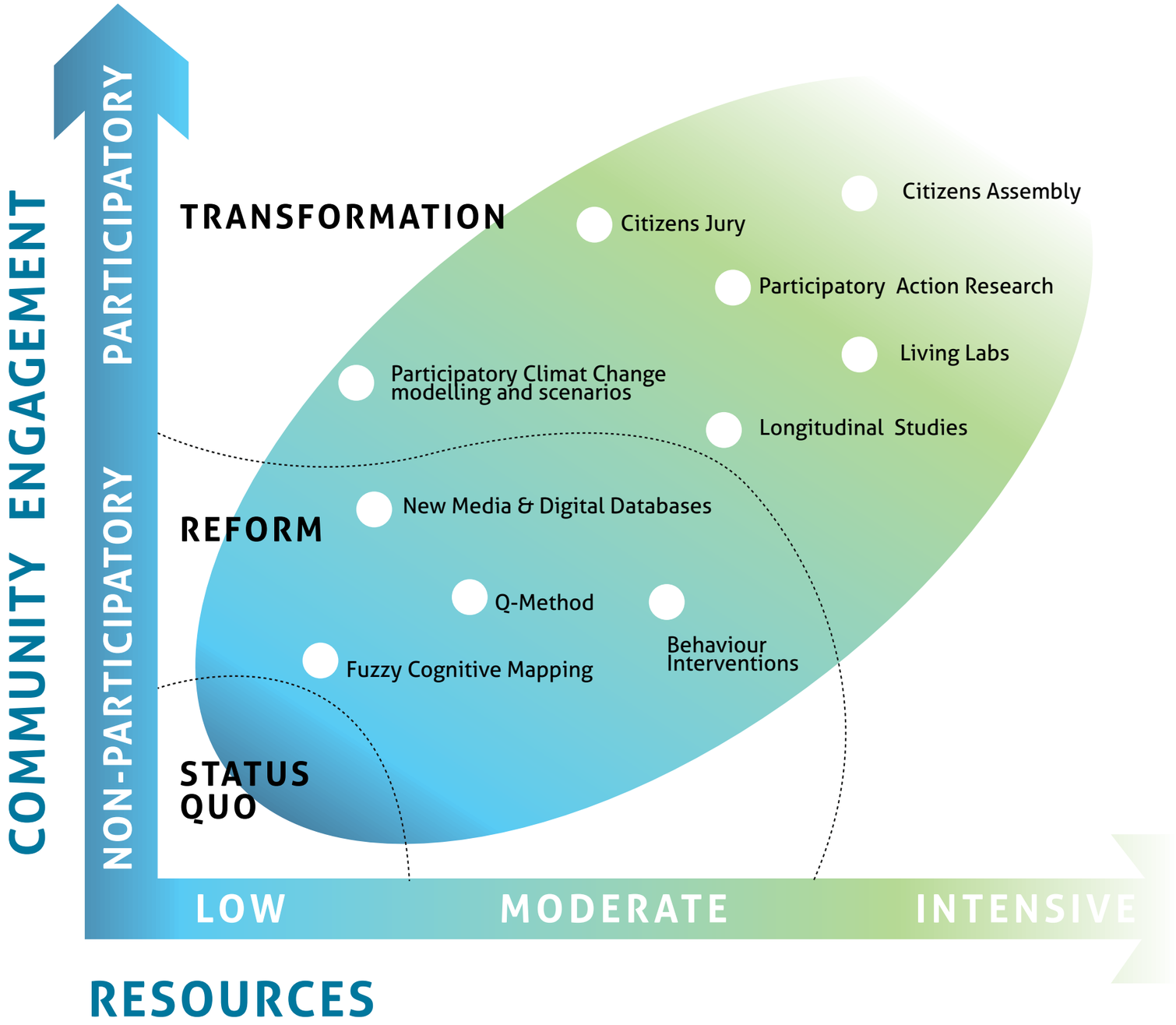


Figure 2. Conceptual map of community engagement techniques in climate action adapted from Hopwood et al (39)

Community engagement and change

Different techniques and versions of community engagement can be complicated and difficult to situate. For this purpose we have adapted a 'conceptual map' previously proposed by Hopwood et al (39) (see figure 2 below) to help situate existing strategies. The community-engagement axis looks at levels of participation within existing community engagement practices. This is in recognition that community engagement is promoted within a wide spectrum of possibilities from more passive, non-participatory relationships to fully engaged and collaborative alliances. The resource axis on the other hand looks at anticipated resource demands in pursuing different community climate action initiatives. The central overlaid category looks at the type of change, typically promoted within these current practices.

The workshop findings provided only partial information to facilitate the development of this conceptual map, thus we note that most of these categorizations are limited and open to further scrutiny. The conceptual mapping also works with the assumption that methods seeking greater levels of participation aim for more drastic levels and transformative change than those who seek more moderate levels of engagement. Thus, while there are limitations to the conceptual map, we argue that this visualization exercise provides a means to explore the relationship between levels of engagement, commitment to resources and desired levels of change. It tentatively shows that most community engagement practices in research in Ireland have moved beyond seeking minor adjustments to societal structures and they aspire to seek out reform or transformation through the development and promotion of community engagement in climate actions knowledge and techniques. It also shows that many of these activities are resource intensive and that there is a link between promotion of participatory strategies and resource intensity. Furthermore, many participants suggested that the biggest challenge in the promotion of participatory strategies was ensuring that these engagements offer clear benefits for communities taking part in the form of a legacy of compensation for time dedicated to activities.

‘Bridging the gap’

Identifying the determinants and conditions
for community engagement in Climate Action

The section that follows presents the main findings from an interactive exercise carried out in the workshop, which explored the ostensible, yet oftentimes illusive, gap between our present-day reality and the aspired goal of gearing society towards a low carbon, climate resilient future.

This exploratory and interactive exercise tried to understand and determine the characteristics of this ‘gap’ or space between our present circumstances and a sustainable future and plot out the vital elements of this ‘journey’ towards sustainability. Premising the exercise with the idea that oftentimes this gap is characterised by a high degree of uncertainty, coercion, instability and confusion participants were asked to think about achieving community engagement in climate action as similar to ‘walking the plank’. As a visually engaging activity, we tried to demonstrate that the positioning of the plank itself can have an effect on how the gap is perceived. For instance, the contrast between having the plank placed on solid ground or walking the plank when placed higher up. The exercise thus asked participants to explore this idea of the ‘gap’ and determine how it can measured, what is needed to overcome the challenges that is poses and ultimately what are the necessary conditions to get across.

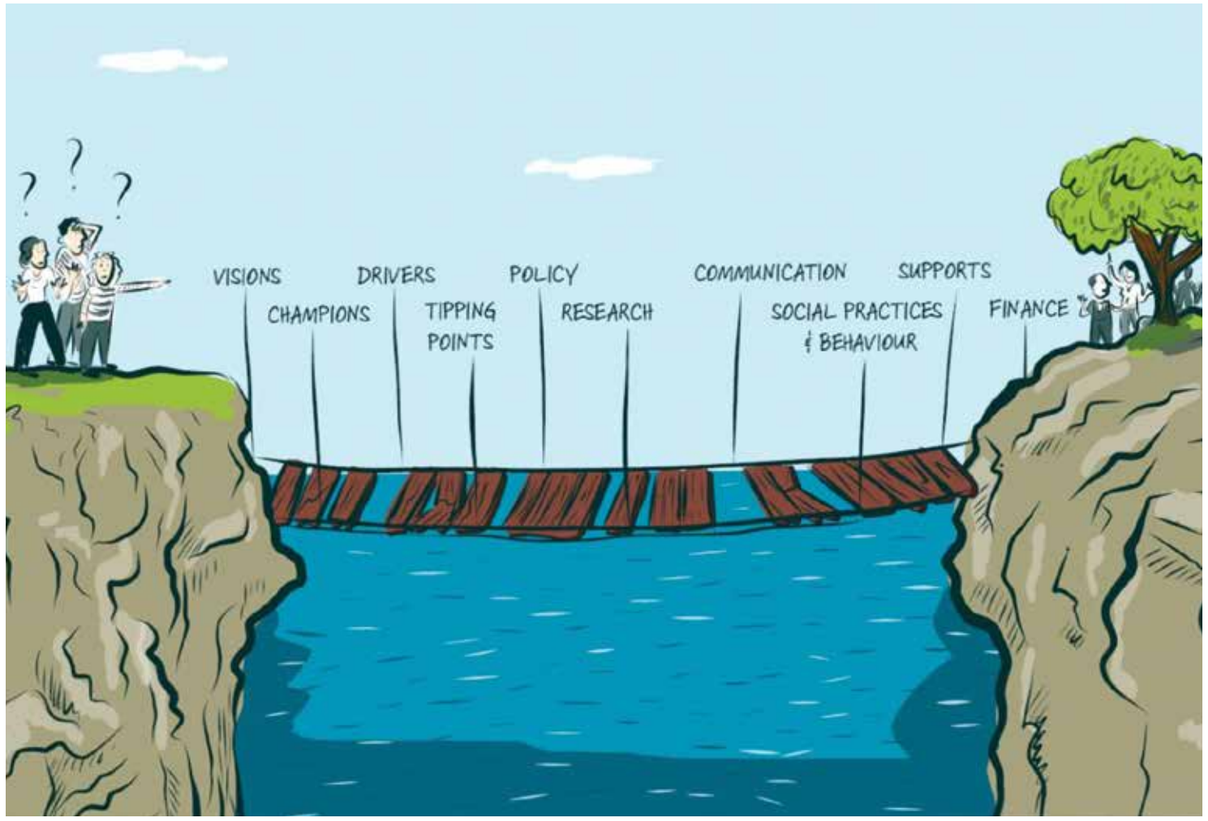


Figure 3 Bridging the gap exercise - illustration of main findings

1. Visions

Many of the participants identified as a determinant for community engagement the use of visions in the sense of having distinct ideals, goals, objectives, foresight which would allow for a clearer understanding of the trajectory and destination in this transition. The need to ‘see the other side’ and ‘knowing where you are going’ as well as ‘how to re-imagine’ this future was highlighted as important. The notion of ‘shared visions’ was also identified.

2.Champions

The role of champions was underlined numerous times as a way of prompting and encouraging community engagement. Different terms such as ‘pioneers’, ‘first movers’, ‘early adopters’ and ‘champions’ were all featured as significant. A number of added ideas were attached to the notion of champions. For instance, the idea that champions oftentimes are the driving force behind making real, imagined alternatives, and that champions are critical for signalling tipping points for change. In this context, it was noted that champions at different levels are needed, for different people (i.e. small businesses, shop owners, local citizens, young people), and that ‘changing the conversation requires a champion-multiple ways across the board’. A number of limitations in terms of the role of champions was also signaled. Cautionary notes highlighted that ‘championing has pitfalls’ and it is often ‘more charismatic than coherent’ and for some champions it can lead to championing fatigue. Finally, it was noted that it is very difficult, yet critical, to find the right champion, particularly in the fluid and emergent context of transition.

3. Drivers

Under the theme of drivers we highlight a number of social factors and processes which were deemed essential in promoting engagement. These include factors such as trust, justice, acceptance, perceptions of change and contingency

planning. In essence determining that the journey is necessarily dependent on people 'wanting to cross', 'being able to cross', and 'battling old thinking'. The community engagement process itself was noted as critical with emphasis on 'invol[ving] people in not just the solutions but also deciding the problem', get[ting] a mix of people who work well together and engaging in 'systemic wide-ranging change'. Other drivers include the development of solutions, which embrace nature-based solutions, climate resilience and indigenous based strategies.

4. Tipping Points

Discussion on tipping-points in this exercise questioned and debated the fact that change is oftentimes reactive and 'driven by urgency'. One participant highlighted the fact that crisis is more imminent for some people or communities and not for others. Thus, imminent crisis and sense of urgency prompts reactive change in an uneven way and has many obvious problematic consequences in delaying engagement and creating fractured responses to change. Within this context smaller incremental change approaches often feed into these reactive patterns. It was highlighted that transformational and systemic change approaches would counter this more reactive engagement with change.

5. Policy

Issues relating to policy appeared as a significant element of this discussion with suggestions doubling compared with other themes. There were a number of dimensions to the ideas that emerged, which included institutional issues, policy approaches and prioritizations. With regard, institutional issues a numbers of concerns were identified which included:

- Institutional memory;
- Overstretched civil service;
- Policy silos;
- Disengaged policy makers;
- Constrained policy implementation powers.

In terms of policy approaches ideas included:

- balancing 'punitive measures . . . with other supportive measures';
- understanding the need for policy acceptance;
- Clear leadership
- starting from 'where people are',
- reducing energy demand;
- strengthening participation and justice elements in developing policies;
- policy integration and the Sustainable Development Goals;
- Having legislative goals;
- National carbon budget.

Finally, prioritisations were identified in two ways:

- Climate action prioritization
- National dialogue and participation

6. Research

A number of factors pertaining to the role of research and academia in determining adequate community engagement was identified. It was suggested that there is a need for researchers and scientists to acknowledge their common goals and act more like a community. Suggestions to achieve this include moving away from individualised researcher focus, which lead to the creation of silos, strengthening research impact, dissemination of work, and having a more engaged approach to research. It was also noted that climate scientists and experts need better media training to handle disruptive media narratives, which feed into erroneous sense of vagueness and ambiguity towards the impacts of climate change in society.

7. Communication

A significant theme in this exercise was the element of communication and how it is delivered and disseminated to communities. A range of suggestions emerged in terms of the content of messages that seek to prompt engagement. It was noted that negative, scary and recriminatory messages are not useful. There was a degree of consensus that messages seeking to blame and scare people as a call for action are often counterproductive. Alternatives such as objective, consistent, supportive and culturally sensitive messaging were advanced as more suitable. Marketing was earmarked a number of times as a 'social lever' whereby peer-to peer networks, community belonging, learning and social responsibility can be advanced.

8. Social Practices and Behaviour

A variety of elements emerged centrally linked to social practices and behaviour. This included a number of suggestions to develop and expand behavioural change strategies such as energy consumption and mobility practices. However, there were also more critical ideas emerging, which questioned the value and desirability of behaviour change, or 'nudge' strategies (40). This critique emphasised the fact that these strategies often overlook the structurally and socially constrained manner in which social behaviour and practices are embedded. In essence leading to a misplaced and harmful burden on individual practices as if they were chiefly a matter of choice and not determined by converging forces stemming from wider societal systems.

9. Supports

A diverse list of various supports emerged from the exercise as valuable determinants in generating community engagement with climate action. These include:

- Awareness
- Knowledge transfer
- Appropriate language
- Technical skills
- Education at early stage
- Needs based/tailored supports
- Experts based supports
- Safety net
- Media support

10. Finance

The final overarching theme we have identified through this exercise related to financial issues. A number of specific elements were highlighted as important determinants for supporting climate change action. These include:

- New business models
- Innovation
- How resources are managed
- Re-skilling and training
- Re-branding
- New opportunities
- Incentives
- Ability to access funds
- Insurance
- Improved efficiencies

BOX 4

How do academic participants see their relationships with the National Dialogue on Climate Action?

- Adequate format for dialogue and discussion is invaluable. Caution noted in pursuing non-inclusive formats.
- Suggestion that interactive workshop designs could be adapted to the dialogue.
- Better structures to promote transdisciplinarity could strengthen ties between NDCA, researchers and communities.
- Hope that further Regional Dialogue meetings will inform future research.
- Dialogue could co-ordinate existing network(s) and this would require a deeper understanding about local/regional networks.
- NDCA would benefit from expanding discussions of community engagement with other fora.
- Value in promoting a wider mix of participation, bringing together different groups including those with very different perspectives.

Concluding remarks

These proceedings have attempted to summarise and generate learning from the practical knowledge of researchers in Ireland in engaging with communities in climate action. The summary highlights a number of techniques and methodologies that can be used to fruitfully engage with communities at various junctures.

Some techniques such as citizens juries are well suited for strengthening social and environmental justice and are appropriate to most communities particularly in areas where there is significant distrust or inequality. Other techniques driven by self-determination motivations such as Participatory Action Research leverage community and grassroots capacities and are well suited to empower communities to change. Finally, the necessity to integrate different knowledges and translate these into more practical and actionable outcomes can be pursued by applying techniques such as Q-method, fuzzy cognitive mapping and behaviour interventions, among others.

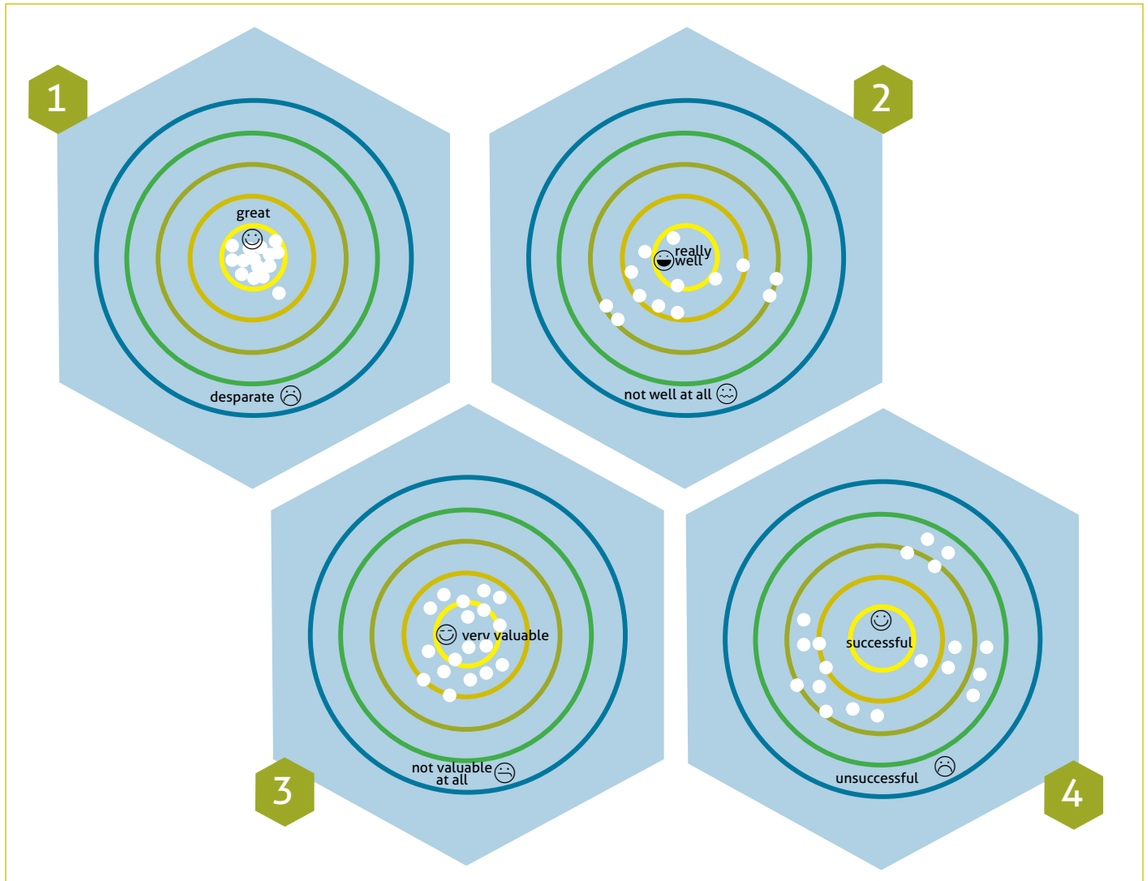
The proceedings have also provided an overview of some of the conditions and determinants that will initiate, mobilise and mediate community engagement through the 'bridging the gap exercise'. The range of different determinants and conditions reinforce the notion that there is a complex range of elements shaping community interactions. Anticipation and development of these will help promote deeper engagements. The book of abstracts offered below in Appendix 1 offers further opportunity for engaging with methods and practice of community engagement as they relate to research they highlight the range of problems and possibilities of accounting for community agency, developing spaces and opportunities for engagement and promoting deeper levels of participation and knowledge creation.

These findings should be particularly useful for the continued roll out of the NDCA as it moves from the more general level regional meetings to the more specific local level meetings. They emphasise the need to know the applicability and degree of interaction enabled through each technique. They also place value on context and diversity and suggest that any action is best placed within a deeper understanding of existing networks and a consideration of strengths and weakness determining ongoing climate action interactions.



Participant evaluation of the workshop

Overall participants were largely positive about the manner in which the workshop was organized and the opportunity for networking with peers researchers. The rating in terms of drawing out knowledge about existing research, identifying innovations, and mapping different approaches to research suggests some limitations in the workshop's scope to fully capture the rich variety of ideas, concepts and innovations.



1. How well organised and run was the workshop?
2. How well did the workshop facilitate a conversation on best practice and innovation in research into community engagement in climate action?
3. How valuable did you find the opportunity provided by the workshop for networking with the others researching in climate engagement in climate action?
4. How successful was the workshop at capturing and mapping different approaches in research in community engagement in climate action

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Appendix 1: Book of abstracts

Name/affiliation Stephan Hugel, Geography, Trinity College Dublin

Abstract: C-SMART (Climate-Smart Adaptable Citizens)

The proposed research programme is based primarily on the concept of "Serious Games" as a mechanism for educating young people about climate change challenges and engaging them in discussions about planning for climate change adaptation.

Using real-time and historical sensor data provided by ENABLE and CONNECT IoT sensor projects in the Smart Docklands area of Dublin, a series of interactive workshops will be run in local community centres and schools, and the AMBER centre in Trinity College Dublin.

It will use an interactive, multi-method approach to engage citizens through the use of community workshops and in-class education initiatives, driven by real-time and historical rainfall and flood data collected by Smart Dublin sensor projects. Key to these activities will be the incorporation of augmented reality (AR) and Virtual Reality (VR) experiences, as well as the use of online interactive game environments such as Minecraft to engage children.

The research programme is highly interdisciplinary; it uses sensor and modelling data from existing ENABLE and CONNECT projects, proposed approaches to effecting and measuring behaviour change from Human-Computer Interaction (HCI), visualisation methods from GIS, and approaches to climate-change adaptation from human geography.

To date, we have run a pilot workshop with transition year students, and are in the process of finding suitable community partners to run a workshop series, as well as integrating additional sensor and flood modelling data into the workshop content

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Name/affiliation
Dr. Diarmuid Torney, DCU School of Law and Government
Prof. Pat Bererton, DCU School of Communications
Dr. Laura Devaney, DCU School of Law and Government

Timeline January–October 2019

Abstract: Citizens' Climate Research Project

The Citizens' Assembly was an exceptional experiment in democratic governance. Comprising ninety-nine citizens drawn from all walks of life, it afforded them the time, space, and structure to consider complex and important questions of public policy in a comprehensive and considered way. The 13 recommendations they agreed on the climate change topic were significantly more radical than many expected.

The Assembly's deliberations on climate change provide an incredibly rich source of data on environmental literacy in Ireland, as well as lessons for deepening public engagement in this area. This is particularly important because, to date, Ireland's climate change policy response has not delivered sufficient progress. Recognition of the need for deeper public engagement is evidenced by the Government's establishment of a National Dialogue on Climate Action (NDCA).

This project, funded by the EPA Research Climate Call 2018, focuses on both the substance and process of the Citizens' Assembly, and is undertaking two principal tasks. First, we are comprehensively analysing written submissions, video footage, and papers prepared by expert presentations at the Citizens' Assembly on climate change. Second, we are using this analysis to develop a toolkit for policymakers to enhance public engagement on climate change. This toolkit will be tested using focus group meetings and will be refined on the basis of feedback received. Relevant stakeholders, including in DCCAE, EPA, and NDCA, will be consulted throughout the project in order to ensure high impact. The project will also contribute to academic research on deliberative democracy, public engagement and climate change by publishing two articles in leading international peer-reviewed journals.

Name/affiliation Dr John Morrissey. Geography, Mary Immaculate College, University of Limerick, South Circular Road, Limerick, Ireland, V94 VN26 +353 61 204371 , john.morrissey@mic.ul.ie
Abstract: Engagement and Empowerment for Community Sustainability: A Just Transitions Perspective

As articulated by Agyeman, Sen and others, sustainability cannot simply be a 'green', or 'environmental' concern. Social and economic dimensions of sustainability are key for societal stability and continuity, increasingly so in the context of the fundamental restructuring which the low-carbon economy necessitates. However, to date attention on the low-carbon economy has focused for the most part on technical dimensions, such as cost, efficiency and reliability questions of renewable energy technologies. The social context for low-carbon transition has been afforded insufficient study. Despite this, there is urgent need to develop deeper knowledge and insight into sustainability concerns from the perspective of the social domain. It is clear for instance, that the challenge of a low-carbon economy is as much an issue of equity and social justice as well as of environmental protection. Citizens at the lower end of the socio-economic spectrum are likely to be worst affected in any low-carbon transition due to higher proportional energy burdens and more constrained capacity to absorb additional costs, for instance. The low-carbon transition therefore poses some fundamental questions: Are there vulnerable groups, exposed by transition and policy instruments of transition, eg. Carbon taxes? How can existing and emerging social needs and welfare requirements be integrally related to real-world environmental limits? What does economic opportunity look like for communities constrained by sustainability imperatives? This paper does not offer definitive answers to such profound questions, but rather suggests that a re-framing of the transitions debate as a social-justice, rather than environmental issue would offer practical, real-world benefits from the point of view of engaging and empowering communities to not only support low-carbon transition policies, but to act as principal drivers of change. Based on the principles of distributive and procedural justice, real community engagement and empowerment potentially delivers the low-carbon transition, while simultaneously averting or mitigating the social unrest which profound societal re-adjustment is inevitably going to produce (evidenced by water charge protects in ROI and more recent 'gilets jaunes' protests in France).

Key words: Sustainability; Community; Low-Carbon Transitions; Social Justice: Just Transition

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Name/affiliation Barry O'Dwyer and Stephen Flood MaREI Centre, UCC

Abstract: Harnessing Local Knowledge to Enhance Understanding of Vulnerability to Climate Change Impacts.

The environmental and associated socio-economic impacts of climate change are already being felt in Ireland, and they are expected to continue and intensify into the future. Adaptation to climate change takes place in response to observed or expected changes in climate and associated impacts through actions that reduce vulnerability and increase resilience. One major challenge in adaptation planning is that although climate change is a global issue, the impacts of these changes are manifest and differentiated at the local scale and according to local environmental, economic and social conditions. As a result, vulnerability has emerged as a key concept in planning for adaptation as it is determined not only by exposure to climate change impacts but also as a result of biophysical and social processes that describe local conditions.

To support local-planning for climate change adaptation under the national adaptation policy, Climate Ireland a DCCAE/EPA funded programme (http://www.climateireland.ie) works with local authorities to understand local scale vulnerability and plan for climate change adaptation. Participatory Vulnerability Mapping (PVM also called community-based mapping) is one method adopted to support this process. PVM is based on the premise that local representatives possess expert knowledge of their environments which can be expressed in a geographical framework that is easily understandable and relevant. This approach integrates scientific knowledge of climate change with qualitative local insights through a process that structures meaningful discussions about where and why vulnerable areas and populations are concentrated.

Through collaborative processes, this approach has been successful in exploring local scale vulnerability to climate change and the development of shared meaning and actionable plans from that information. In addition, vulnerability maps developed through this approach are a useful communication tool in conveying information on the location of vulnerable people and places at a glance.

Name/affiliation
Dr Frances Fahy on behalf of the ENERGISE Research Team
School of Geography and Archaeology, NUI Galway

Abstract: Energy Living Labs as innovative community engagement tools? Reflections from the (energy) field on the benefits and limitations of LL approaches

Living Labs are approaches or tools to drive sustainable development by providing spaces for innovative experimentation, by facilitating systematic monitoring and learning, and by involving various actors and users as co-creators of knowledge in real-world settings. As part of the H2020 ENERGISE project (www.energise-project.eu) the team developed ENERGISE Living Labs (ELLs) which are small-scale targeted interventions that aim to engage households and communities in co-creating and experimenting with new energy practices. The ELLS employ practice-based approaches to reduce energy use in households while co-creating knowledge on why energy-intensive practices are performed and how they depend on the context in which they are performed. The Living Labs were developed after identifying five key approaches for engaging households in change practices: needs-based tailored support, pioneering practices, learning by doing, challenge, competition, game and peer-to-peer-learning (see Heiskanen et al 2018 for a full discussion).

300 households participated in 16 ELLS (8 individual level and 8 community level) across eight European countries in the Autumn and Winter of 2018. Based on this phase of empirical research, this paper will reflect on the benefits and limitations of the ELLS for engaging communities on energy issues.

Reference:

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Name/affiliation
Project Coordinator: Dr Niall Dunphy, University College Cork
Funding programme: Horizon 2020 LCE-20-2014
Timeframe: March 2015 – April 2018
UCC Budget: €1,044,304

Abstract: ENTRUST– Energy System Transition through Stakeholder Activation, Education and Skills Development

ENTRUST explored the human factor in energy systems through an integrated, mixed-methods approach that focused on practice and behavioural aspects. Collaborating with six diverse communities across Europe, the project worked to achieve a deep understanding of the social dimensions of the energy system. Recognising the importance of escaping the 'energy as a commodity' paradigm, ENTRUST developed the concept of energy citizenship as a theoretical lens through which people's relationships with, and day-to-day lived experiences of, the energy system were explored.

The role of gender was illuminated through intersectional analyses of energy-related behaviour and of attitudes towards energy technologies. These analyses assessed how aspects of multiple identity and social position, combine to shape both daily practices and how people see the world. The analyses were integrated within a transitions management framework which took account of the complex meshing of human identities and values with technological systems.

Participatory approaches and deliberative democracy techniques such as citizen juries were used within the communities empowering members to envision possible energy futures and contribute to the shaping of 'their' energy system in the context of transitioning to a low-carbon society. The project forwarded newly developed knowledge and insights on the technical, policy and socio-economic aspects of the energy system. These insights were leveraged to inform an in-depth programme of stakeholder engagement, and to identify opportunities for innovation.

Name/affiliation
Principal Investigator: Dr Niall Dunphy, University College Cork
Funding programme: SEAI Research, Development and Demonstration Funding Programme
Timeframe: November 2018 – November 2021
UCC Budget: €354,721

Abstract: EnergyPOLITIES – Politico-institutional framing of collective engagements with the energy system

Public opposition to energy infrastructure projects is a significant limiting factor to the successful mass deployment of renewable technologies and the transition to a low carbon energy system in Ireland and other countries. On the other hand, inclusive civic participation also offers a route to enhancing the social acceptability of such projects.

EnergyPOLITIES will develop an in-depth understanding of citizen participation in the energy transition, the socio-economic and socio-cultural factors which shape it, and the intersections between these and the governance frameworks within which decisions are made. This will involve an initial mapping of current patterns of citizen engagement with the energy system, from active consumers to social mobilisation, and from political campaigners to members of community energy projects.

This mapping will form the basis of a typology of citizen participation, which will link specific forms of participation to the governance structures which condition them and the socio- demographic characteristics of citizens. This typology will subsequently be applied in an in-depth analysis of three case studies of energy projects (two Irish and one mainland EU) that have stimulated significant citizen participation. Integrating both quantitative and qualitative methods, the case studies will reveal linkages between political, institutional and organisational frameworks and citizen participation in the energy system.

EnergyPOLITIES will explore how governance structures intersect with the socio-economic and key socio-cultural factors such as gender, to influence the social acceptability or otherwise of energy infrastructure projects. The business models deployed in each project will be analysed from the perspective of their impact on inclusiveness, gender, democracy and social acceptability; stakeholders' perceptions of distributional and procedural justice will be explored. Recommendations will be developed for how multi-level governance structures, and business models can support inclusive citizen participation and thereby enhance the social acceptability of the energy transition.

Name/affiliation
Prof Brian O'Gallachoir, School of Engineering and Environmental Research Institute, MaREI Centre, UCC
Dr Ger Mullally, Department of Sociology and Environmental Research Institute, MaREI Centre, UCC
Clare Watson (PhD researcher), Department of Sociology and Environmental Research Institute, MaREI Centre, UCC
Evan Boyle (Research assistant), Department of Sociology and Environmental Research Institute, MaREI Centre, UCC

Timeline: Jan 2015 – March 2018

Abstract: Responding to the Energy Transition in Ireland: The Experience and Capacity of Communities

This was an EPA funded, interdisciplinary and transdisciplinary project straddling the Departments of Sociology and Energy Engineering. The research was guided by the following questions:

- What is the Irish experience of community energy?
- How do we support the development of community capacity to engage in energy transitions?
- What is the role of intermediary groups in supporting a community based response?

The work was influenced by the principles of second order transformational research which see action, learning and the creation of new knowledge as being closely connected, and assume that researchers need to learn from practice and from involving practitioners in the research.

Methods included an initial workshop with policy makers and community energy practitioners, semi structured interviews, attendance at a wide range of relevant events and workshops, interviews with representatives of Tidy Towns' groups, and structured workshops with representatives of 6 community energy groups.

Recommendations arising from the research project include the following:

- Strong, continual and visible national leadership on climate action is critical
- A range of approaches to support and encourage community energy should be developed, in response to the varying capacities of different communities
- Mentoring in community development and community engagement is essential
- Reliable, multi-annual sources of core funding for community energy groups should be made available
- Existing barriers to community energy should be addressed, such as the lack of feed-in tariffs, and difficulties in gaining planning permission, securing investment finance, and obtaining access to the grid
- Practical support and assistance should be provided for intermediary organisations on community energy

Name/affiliation
Project Coordinator: Dr Gerard Mullaly, University College
Evan Boyle, Environmental Research Institute, UCC

Abstract: Multi-stakeholder approach to the socio-technical transition to a low-carbon society on the Dingle peninsula

An MA graduate in Sociology of Development and Globalisation, UCC, with previous experience as a research assistant on the EPA funded project Climate Change, Behaviour and Community Responses, investigating the role of intermediaries in supporting community energy initiatives. Evan is currently in the first year of a PhD entitled Multi-stakeholder approach to the socio-technical transition to a low-carbon society on the Dingle peninsula, using participatory mapping techniques to chart the development of the social network surrounding the Transition Dingle Peninsula 2030 project.

Name/affiliation
Dr Mary Green. School of Geography and Archaeology, NUI Galway

Abstract: Case study of community engagement: Transition Galway

Transition Galway is a community-based organisation focused on engaging the community around environmental change. It is a local-based initiative that forms part of a larger international network, The Transition Town Network. Founded in 2011 by a group of local residents, Transition Galway has been involved in a range of efforts to engage the community around issues of environment, risk, resilience and sustainability. These have included efforts around engaging a wider public through processes of 'mainstreaming' involving organising series of public talks, film nights, community gardening, radio series, fieldtrips, outdoor activities and social media activities to name a few. The group is divided into a series of sub groups that work on various thematic dimensions of community engagement around issues of food, energy, education, outreach and psychological. Community visioning is another engagement tool that is central to the transition approach to community engagement. Transition Galway organised a series of public visioning engagement activities that involved creating a space for members of the local community to articulate their vision for a more sustainable and resilient Galway in 2030. The results of this process were published in a publicly accessible handbook 'A vision for Galway 2030' and accompanying short summary videos available online at galwaytransition.wordpress.com. Material and projects from this process was included in the successful Galway 2020 cultural capital bid application and Galway City Council Development Plan. Since its inception, TG has worked to actively participate as a key player in the environmental governance landscape in Galway and Ireland more broadly. To this end, forging relations with a range of governance actors, including Galway City Council, Galway Chamber, the arts community, schools and other environmental and community development groups in Galway and beyond. Barriers to community engagement experienced by the group have included limited access to funding, maintaining ongoing momentum of voluntary people resources, group dynamics and accessing public space.

Name/affiliation
Prof Brian O'Gallachoir, School of Engineering and Environmental Research Institute, MaREI Centre, UCC
Prof Edmond Byrne, School of Engineering and Environmental Research Institute, MaREI Centre, UCC
Connor McGookin (PhD student), School of Engineering and Environmental Research Institute, MaREI Centre, UCC

Timeline: Oct 2017 – Oct 2021

Abstract: Facilitating Ireland's low carbon transition by developing new societal and energy system frameworks

While it is widely recognised that there is a pressing need for a rapid transition to a low carbon energy system, actual progress made to date has been quite limited. In terms of electricity generation and distribution for example, blockages in the system have manifested between the national operator EirGrid and various local community and interest groups. In this context, it is clear that in the words of Eirgrid's 2014 review report on community engagement, there is a need to 'go beyond informing and consulting to involving and collaborating'. This however presents significant challenges, to experts, planners and policymakers as it requires the difficult task of finding 'a more inclusive problem solving process than optimal, least-cost decision analysis or expert–stakeholder models which tend to blur the important differences between expert judgements and stakeholder values', and thus uncovering one which 'engages stakeholder participation through transparency, transdisciplinary learning, and the explicit use of value sets'. It is the aim of this research to develop and apply an innovative framework to facilitate Ireland's low carbon energy transition. This framework will build on and add to existing research capacity in energy systems modelling on the one hand and societal engagement with the energy transition on the other. The new framework comprises a three-stage process of i) mapping the energy transition topography, ii) engaging with key stakeholder groups; the energy sector, communities (/society), and government (/policy) and iii) energy transition scenario analysis. The scenario analysis will modify existing energy systems modelling tools if appropriate or develop new approaches as necessary. The new framework developed in this project will be tested by applying it to key questions relating to what is the appropriate future level of electrification of heat and transport and to what extent should future energy networks be distributed or centralized.

Name/affiliation
James Carroll and Eleanor Denny, Department of Economics, Trinity College Dublin

Abstract: Knowledge gaps in household energy investments

There are likely multiple layers of information which affect the uptake of more energy efficient products. Energy and climate information reaches the household through social and professional networks, technology (smart meters, for example), labels (the BER, for example) and through the media (IPCC reports, for example). Such information affects different aspects of household energy investments in different ways. For example, a growing body of research from across Europe shows that the willingness-to-pay for energy efficiency upgrades is increased when households are shown long-term energy cost comparisons between alternatives at the point of sale. Such findings highlight a clear knowledge gap, with negative implications for household energy investments.

However, there are likely many other knowledge gaps at play, too. For example, are there certain demographics within society who do not understand all the elements in the consumption-emission-warming-damage chain? And would filling these gaps change investment behaviour today? Knowledge gaps are also evident in policies related to information provision. For example, when investing in energy efficiency, are households motivated by cost savings, asset appreciation, comfort or just "doing the right thing"? The relative importance of these factors, and the manner in which they are communicated, will be important in designing information policies to promote energy efficiency.

Name/affiliation
Project Team - Gerard Mullally, Niall Dunphy, Clodagh Harris, Alexandra Revez, Brian Ó Gallachóir, Edmond Byrne, Barry O' Dwyer, Paul Bolger, Paul Deane, Fionn Rogan, James Glynn, Stephen Flood, John Barry, Geraint Ellis

Timeline: August-2018 to January2021

Abstract: Imagining2050: Engaging, Envisioning, and Co-Producing Pathways for a Low Carbon, Climate Resilient Ireland

The ambitious international efforts to move to a low-carbon and climate-resilient society will require substantial socio-technical transitions in energy, transport, food, land-use and other systems. Imagining 2050 strives to consolidate, existing research capacity in Ireland in terms of societal transitions, climate mitigation, climate adaptation and combine them with innovative communications and engagement methods. Imagining2050 makes use of this knowledge to engage with civic society using innovative approaches, to explore and co-develop future visions of, and pathways to, a low carbon and climate resilient future. A key innovation pertains to the recursive, iterative process of combining citizen-juries together with technical scenario analysis and modelling to envision and co-produce pathways for a low carbon, climate resilient Ireland. This work entails grasping key learnings derived from existing literature on the use of deliberative tools in the development of community-based strategies for action.

Deliberative democracy is a theory of political legitimacy that increasingly dominates discussions about democracy, citizen engagement and governance. It is a subject of intense theoretical scrutiny and deliberative democratic innovations such as citizens' juries have been used to redress some of the deficiencies of the more traditional representative forms of Government. It does not propose to replace representative institutions but to complement them. Deliberative democratic systems can emphasise equal participation, mutual respect and the value of reasoned argument as opposed to a democracy built on an aggregation of individual preferences and opinions. There has been an extensive use of participatory and deliberative tools in transitions and adaptation management with a range of literature emerging both internationally and in the Irish context about the benefits and potential shortfalls in promoting deliberative processes and instruments. Imagining2050 draws from these learnings to develop and test out a framework of community engagement. Results from these endeavours include the identification and critical mapping of existing approaches to community and civic engagement in climate action, the testing out of innovative communication and engagement methods and the co-development of scenarios and pathways for a low carbon future for Ireland.

Keywords: socio-technical transitions, Ireland, Civic engagement, Citizen juries, Deliberative democracy

Name/affiliation Eugene Farrell, NUI Galway, Discipline of Geography

Abstract: The Maharees Community Association CLG: an exemplar of a coastal community group building adaptive capacity in response to changing climate and human activities

The development of coastal management plans in Ireland needs to be considered in the context of a changing ocean climate (rising sea levels and increased storminess), increased usage of coastal zones for social and economic purposes, and one million extra people living on the island by 2040. Human-induced pressures include grazing (including overgrazing and undergrazing), recreation (sports and leisure structures and activities), urbanisation, sand and gravel mining, pollution, invasive species, erosion, and trampling. The lack of basic amenities to facilitate the increased numbers of people accessing the shoreline is leading to widespread coastal ecosystem degradation and conflict between landowners, residents and visitors. Addressing these challenges will only be successful if coastal communities are an integral part of the management process from identifying risks to designing short- and long-term solutions. Recent work by a community group ('Maharees Conservation Association CLG') in County Kerry highlights both enablers and barriers to effective community led responses to building adaptive capacity.

Enablers include: building strategic partnerships and networks with key decision makers within the different management agencies; facilitating their local political representatives (TDs, councillors) to support their actions; collaborating with third level institutes to avail of physical and social science expertise; building key relationships with commonage and individual landowners; good governance arrangements; ability to for residents, visitors, landowners, and managers to see progress; success at obtaining funding; continuous engagement with entire community spectrum; engagement with the local school children and teachers; building a strong presence on print and broadcast media; hosting organisations to conduct fieldtrips to the area; and embracing the rich heritage and identity of the area by broadening their 'protection' strategies to include cultural and heritage awareness and education.

Barriers include: competing values and priorities within the community; controlling access and signage perceived as militant; lack of recognition or support at government level; perceived lack of expertise and under resourcing within local authorities to make site-specific decisions for management strategies; the balance of interests between protecting the SAC as required by EU legislation vs. protecting the local communities; general lack of enforcement of local plans and county beach bye-laws due to limited gardaí resources and ambiguity in the responsibilities of the local authorities; continued illegal sand mining from the foreshore by local farmers; and land ownership as Commonage requiring consent from multiple landowners to carry out management projects.

It was found that there are many benefits to be derived in empowering coastal communities and involving them in decision making (bottom-up) results in actions that is more likely to be acceptable. Likewise, the survival of rural coastal communities depends on empowering people to make change locally and providing them with tools to adapt to climate change impacts.











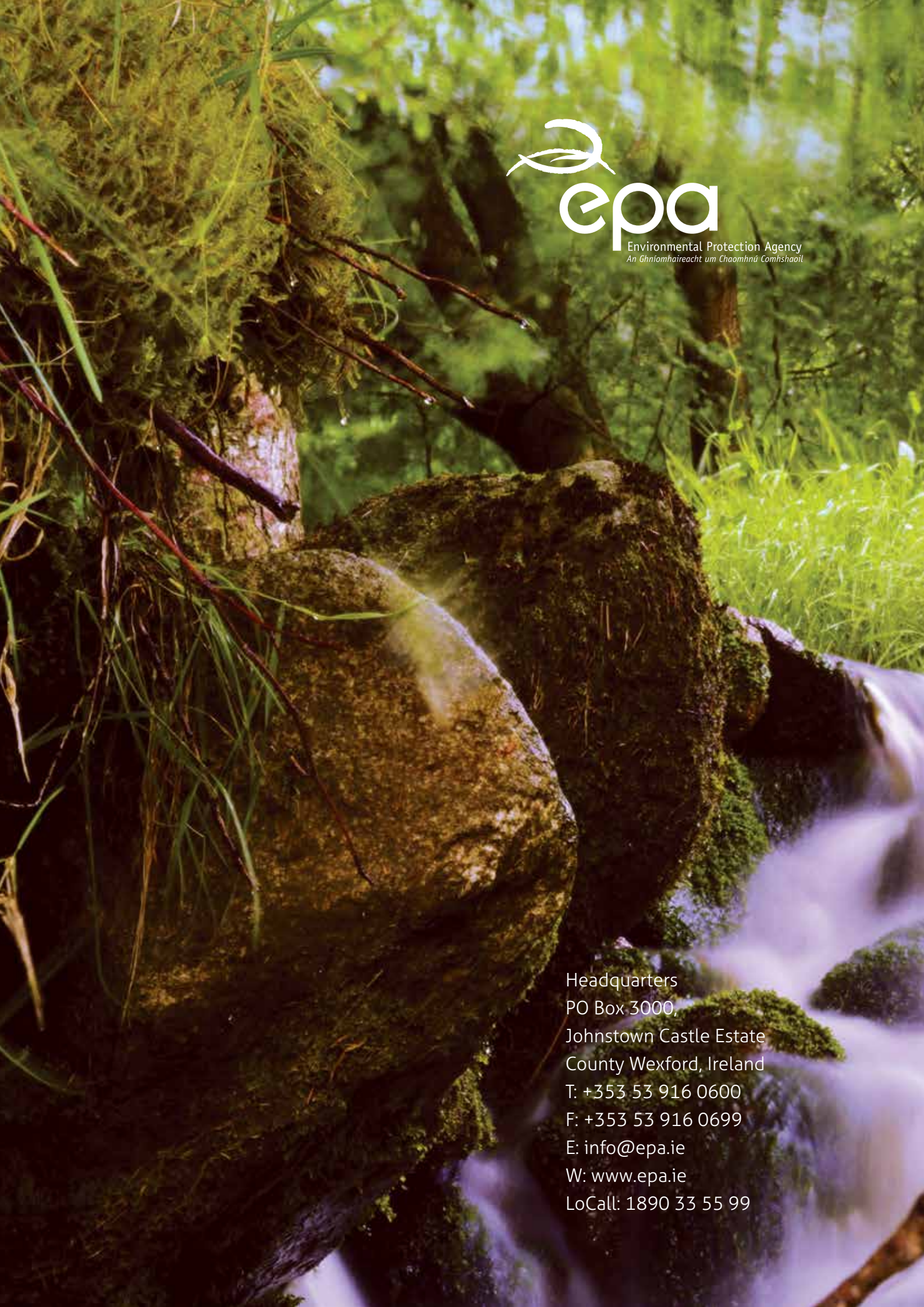







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