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Connecting People to Climate Change Action: Informing Participatory Frameworks for the National Dialogue on Climate Action (C-CHANGE)

Authors: Marguerite Nyhan, Barry O'Dwyer, Yairen Jerez Columbie



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Rialtas na hÉireann
Government of Ireland

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3. Office of Evidence and Assessment
4. Office of Radiation Protection and Environmental Monitoring
5. Office of Communications and Corporate Services

The EPA is assisted by advisory committees who meet regularly to discuss issues of concern and provide advice to the Board.

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This report is based on research carried out/data from spring 2020 to summer 2021. More recent data may have become available since the research was completed.

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Executive Summary

Ireland has committed to becoming a net-zero and climate-neutral economy by 2050. The Climate Action and Low Carbon Development Act set this ambition in legislation, while the Climate Action Plan defines the pathway to achieve it. For Ireland to make this transition, a society-wide collaborative effort is required by government, business, communities and individuals. Thus, the National Dialogue on Climate Action (NDCA) aims to engage stakeholders and the public with climate action across Ireland by enabling and empowering people. The NDCA is delivered through three main pillars: (i) improving climate literacy, awareness and understanding; (ii) providing funding and support for active public engagement in climate action at local and national levels; and (iii) conducting social and behavioural research connected to the Climate Action Plan and climate policies in Ireland.

The EPA-funded Connecting People to Climate Change Action: Informing Participatory Frameworks for the National Dialogue on Climate Action (C-CHANGE) project aimed to improve our understanding of environmental participation to specifically support the implementation of the NDCA and future environmental and climate dialogues in Ireland. C-CHANGE also aimed to support public participation in climate action across Europe by informing the European Climate Pact. This report presents the results of the C-CHANGE project, which (i) synthesised national and international best practice for facilitating participation in environmental and climate action, and (ii) assessed the NDCA in order to provide guidelines for supporting long-lasting participation in environmental and climate dialogues.

Chapter 1 of this report sets the NDCA in the context of the wider landscape of climate action in Ireland and Europe and details the research objectives and methodology. It also situates both the NDCA and the research outputs within action for climate empowerment (ACE) and the guidelines from UNESCO (United Nations Educational, Scientific and Cultural Organization) for accelerating climate solutions through education, training and public awareness. Chapter 2 discusses existing research and empirical evidence highlighting the need for intersectional and interdisciplinary approaches to participatory climate action and climate justice. It describes the European policy landscape for public participation in climate action, and draws lessons from the Irish Citizens' Assembly, to inform the longitudinal assessment of the NDCA. Chapter 3 presents the longitudinal assessment of the NDCA process and discusses the results of critically analysing, comparing and contrasting the qualitative information collected from focus group sessions, surveys, interviews and documentary research. Lastly, Chapter 4 describes the research findings in relation to impact indicators and guidelines to support future environmental and climate dialogues in Ireland. The process of co-assessing the NDCA with participants and organisers, while considering the literature on best practice in environmental participation, ensured that the impact indicators and guidelines will best support future environmental and climate dialogues. This report's final sections detail how the findings will directly inform the design, implementation and assessment of participatory processes for climate action and climate justice in Ireland.

1 Introduction

1.1 Aligning National Initiatives with Global Responses to Climate Change

The Intergovernmental Panel on Climate Change (IPCC) reports that limiting global warming to 1.5ºC above pre-industrial levels will require rapid and ambitious societal action and transformation in all sectors (IPCC, 2018, 2021). In recent years, public concern over the impacts of climate change has increased, with global and national calls for emission abatement and a need to increase public participation and climate empowerment to co-develop effective and fair policies for climate action. Action for climate empowerment (ACE) is a term adopted by the United Nations Framework Convention on Climate Change (UNFCCC). It refers to Article 6 of the convention's original text, which focuses on six priority areas: education, training, public awareness, public participation, public access to information, and international cooperation on these issues (UNCED, 1992). The implementation of these priority areas has been identified in recent years as the pivotal factor in inclusive public participation in climate action (UNESCO, 2016). The United Nations Educational, Scientific and Cultural Organization (UNESCO) guidelines for accelerating solutions through education, training and public awareness provide a flexible approach to the strategic and systematic implementation of ACE activities at the national level, driven by each country's circumstances. These guidelines are aligned with the calls and efforts of international organisations and agreements including the Rio Declaration (UNCED, 1992), the Aarhus Convention (UNECE, 1998) and the Paris Agreement (UNFCCC, 2015), which have called for states to promote public participation and to foster cooperation at all levels of decision-making and action (local, national, regional and international). Understanding and further developing the National Dialogue on Climate Action (NDCA) and supporting future environmental and climate dialogues in Ireland are key factors that will support long-lasting public participation in climate action and drive societal transformation at national, local and individual levels. This will also serve to support public participation in climate action across Europe by informing the European Climate Pact. There are three key reasons why developing a national strategy is useful for scaling up ACE efforts. Firstly, it presents an opportunity to implement ACE systematically. Secondly, it can improve policy coherence and facilitate cross-sectoral collaboration on ACE. Thirdly, it provides avenues for financing action. A national strategy ensures that ACE activities are duly aligned with national policy, including annual and multi-year budgets and planning (UNESCO, 2016). Furthermore, an improved ACE agenda was adopted at the 26th Conference of the Parties (COP26) in Glasgow in 2021, building on the Doha Work Programme on Action for Climate Empowerment (2012–2020) (UNFCCC, 2012). In this light, it is also timely to reflect on the factors that enable our understanding of participatory processes for climate action at the national level in order to coordinate global efforts to empower citizens in the context of climate change.

Effective public participation is where people who have a stake in an issue but normally have no power to influence it are given the opportunity to have an active role in the decision-making process (Arnstein, 1969). Environmental and climate dialogues are key forums for facilitating inclusive participation, deliberation and climate empowerment (Hanson, 2018; Malone, 2009; UNFCCC, 2012). The benefits of participation in climate dialogues in terms of supporting action for climate mitigation and adaptation have been highlighted in numerous studies (Chess & Purcell, 1999; Prutsch, Steurer & Stickler, 2018; Rotter *et al.*, 2013; Tovey & Bruckmeier, 2009). Because socio-ecological systems are embedded within economic, political, social, cultural and physical contexts, climate change action, adaptation and transformation relate to the strategic shaping of responses from aspects of social life (Pelling, 2010; Watkiss & Cimato, 2020). The benefits of participation in climate dialogues also include raising awareness, preventing conflicts or unanticipated negative outcomes in policymaking processes and improving the quality of policies based on knowledge articulated by stakeholders (Chess & Purcell, 1999; Prutsch, Steurer & Stickler, 2018; Rotter *et al.*, 2013). However, articulating

inclusive and effective participatory processes to support climate action in Ireland and globally remains a major challenge.

In order to transition to a low-carbon and climate-resilient future, Ireland needs to develop structures, processes and knowledge that promote and enhance climate change mitigation and adaptation and societal transformation. In Ireland, through the Climate Action and Low Carbon Development Act (Government of Ireland, 2015, 2021a), the government launched its National Mitigation Plan (DCCAE, 2017), its first statutory National Adaptation Framework (DCCAE, 2018), the National Dialogue on Climate Action (NDCA) (Government of Ireland, 2017, 2021b) and the Climate Action Plan (Government of Ireland, 2019, 2021c). The Climate Action Plan was directly informed by the participants in Ireland's Citizens' Assembly, which enabled 99 citizens to consider five complex public policy questions in a deliberative way between 2016 and 2019. This process covered questions on the constitutional ban on abortion; the challenges and opportunities of an ageing population; the manner in which referenda are held; fixed-term parliaments; and how the state can make Ireland a leader in tackling climate change. The climate recommendations agreed by Ireland's Citizens' Assembly in 2018 played a key role in shaping the EPA's assessment of how the state can make Ireland a leader in tackling climate change (Devaney *et al*., 2020a). In response to each recommendation, a set of solutions and policy actions was established, and this contributed to the formation of the Joint Oireachtas Committee on Climate Action (JOCCA) in July 2018. These Citizens' Assembly results also formed the basis of the all-of-government Climate Action Plan.

The Climate Action Plan 2021 sets out the measures required to put Ireland on a pathway towards halving its emissions by 2030 and reaching net-zero emissions by no later than 2050. Informed by the work of the Citizens' Assembly and the All Party Committee on Climate Action, the plan identifies the nature and scale of the challenge. It outlines the current state of play across key sectors, including electricity, transport, the built environment, enterprise, agriculture, land use and forestry, and the circular economy, and charts a course towards ambitious decarbonisation targets. The Climate Action Plan also includes actions to ensure that citizens become engaged with and mobilised on climate action, while ensuring that the transition we make is both sensible and fair. It also includes actions on climate adaptation. These actions are supported by the NDCA, the EPA Climate Lecture Series, the international environmental education programme An Taisce Green Schools and the Tidy Towns programme.

In spite of this reconfiguration of the policy framework for climate action, Ireland's rating in the international Climate Change Performance Index 2019 for climate policy was "very low" for its national policy performance and "medium" in the international climate policy landscape (Burck *et al*., 2019, p. 15). The Department of Communications, Climate Action and Environment (DCCAE) – now Department of the Environment, Climate and Communications (DECC) – launched the NDCA as a forum for engagement and collaboration between citizens, stakeholders, the Government of Ireland and relevant agencies to address a broad range of climate action-related challenges. This includes a major focus on participatory processes and empowering people to act at local and national levels.

1.2 The National Dialogue on Climate Action

The NDCA was initially set up as a 2-year pilot forum for engagement, capacity building and local action, connected to the Climate Action Plan and the National Adaptation Framework. When it was established, the objectives of the NDCA included:

- creating awareness, engagement and motivation to act (locally, regionally and nationally) in relation to the challenges presented by climate change;
- creating structures and information flows to facilitate people gathering to discuss, deliberate and maximise consensus on appropriate responses to these challenges, and to enable and empower appropriate action;
- establishing, on a long-term basis, appropriate networks for people to meet periodically to consider evidence-based inputs on the economic, social, behavioural, environmental and public aspects of climate and energy policy;
- providing regular input into the prioritisation and implementation of climate and energy policy which can be reported and monitored at local, regional and national levels.

The NDCA has been operating since March 2017 with administrative support from a secretariat within the EPA. Key activities that have taken place under this initiative include:

- two regional climate action gatherings in Athlone and Tralee and a local dialogue in Kildare;
- ongoing engagement with the Climate Action Regional Offices (CAROs), in particular to develop the Local Authority Climate Action Charter, which has been approved by government and signed by all local authorities;
- specific youth engagement workshops involving young people in climate action issues;
- a schools-focused "town hall" event on climate action at Mount Temple School in Dublin attended by students from north Dublin schools;
- EPA support through the NDCA for the *Eco Eye* television series, which focuses on relevant issues, regular climate lectures and the EPA national climate change conference;
- DECC support for the National Climate Change Action and Awareness Programme (operated by Green Schools), which includes the Climate Ambassadors Programme, teacher training and an annual climate action week;
- DECC sponsorship of the Tidy Towns Climate Action and Air Quality Awards.

From these regional gatherings and activities, it emerged that the objectives, strategy and implementation of the NDCA would need to be refined. The NDCA now aims to engage stakeholders and the public with climate action across Ireland, enabling and empowering people to act at local and national levels. The NDCA programme is now delivered through three main pillars:

1. improving climate literacy by creating awareness and promoting understanding of climate change through communications and education;
2. funding, supporting and enabling active engagement in climate action at local and national levels, conducting public consultations, and empowering the public to adopt more sustainable behaviours;
3. capturing insights from engagement activities and conducting social and behavioural research to inform the Climate Action Plan and climate policies.

Many of the aims of the NDCA are in alignment with those of the European Climate Pact. The pact is an EU-wide initiative inviting people, communities and organisations to participate in climate action (European Commission, 2020a). Specifically, it invites people, communities and organisations to:

- connect and share knowledge;
- learn about climate change;
- develop, implement and scale up solutions.

Drawing upon the experience of the NDCA in Ireland and on evidence-based knowledge of best practices for facilitating long-lasting, inclusive and fair participation in environment and climate dialogues across Europe and globally, this report aims to provide clear indicators and guidelines for better understanding and further developing environmental and climate dialogues.

1.3 Multi-level Public Participation as a Prerequisite for Effective Climate Action

The EPA's assessment of Ireland's preparedness to mitigate and adapt to climate change reported that, until 2018, "insufficient effort has been put into engaging with the public in terms of the implementation of adaptation action, raising awareness and building capacity" (Desmond, 2018, p. vii). This remains a challenge in the context of the cross-sectoral implementation of the government's Climate Action Plan, National Adaptation Framework and the NDCA to transition to a low-carbon and climate-resilient society and economy. In this light, the present report draws upon lessons learned from the Citizens' Assembly in Ireland (Devaney *et al*., 2020a,b), previous EPA research on factors that drive the sustainable behaviour and transitions of individuals and communities in Ireland (Carragher & McCormack, 2018), and empirical evidence on interventions for public engagement and sustainable behaviour change in business and communities (Boyden, 2015; O'Rafferty, 2018). To ensure that research outputs translate into policy, the results presented build on research related to the Irish legal framework for participation and environmental democracy (Ewing, Hough & Amajirionwu, 2011), which is aligned with the three pillars of participation outlined in the Rio Declaration (UNCED, 1992) and the Aarhus

Convention (UNECE, 1998). These are (i) access to information; (ii) the ability to participate in decision-making in relation to the environment; and (iii) access to justice. These pillars connect centrally with the United Nations Sustainable Development Goals (SGDs), more specifically with SDG 17 "Partnerships", which aims to ensure responsive, inclusive, participatory and representative decision-making at all levels (UNGA, 2015). The above-mentioned agendas and agreements are also at the centre of the work and guidelines of the International Association for Public Participation, which advances and extends the practice of public participation through capacity building and initiatives with strategic partners globally.

Localism, defined as the focus on local problems and therefore local initiatives, has been proposed as a defining feature of environmentalism in Ireland (Devaney *et al*., 2020b; Garavan, 2004, 2007). In addition, "community" is a unique expression of socio-political localism in Ireland (Tovey & Bruckmeier, 2009). In this light, social and cultural critical approaches to both local knowledge and narratives play a determining role in understanding and promoting the NDCA and environmental and climate dialogues at the national level. A study on environmental participation in Connemara, County Galway, found that differences and similarities in how rural actors interpret participation are linked to discourses about lay knowledge and the primacy of techno-scientific rationality in environmental policymaking (Moran, 2017). The study examined how local understandings of sustainability both help and hinder successful environmental participation in Ireland. The study concluded that many established local understandings draw on sustainability ideals based on local knowledge "to justify the deliberate exclusion of recent settlers to the area from environmental participatory forums" (Moran, 2017, p. 174). It reveals how local cultural conventions, "defensive localism", "insider–outsider distinctions" and "local discrimination" affect participation in rural Ireland and delegitimise the roles of incomers and national and EU policymakers in environmental decision-making. These conventions are highly significant in understanding the barriers to environmental participation at a national level. This case study of Connemara also shows that "more qualitative research is required on how government actors interpret participation in Ireland and the EU, and how these definitions intersect with concepts of participation in local communities" (Moran, 2017, p. 176). This report aims to fill a gap in the qualitative research on how diverse stakeholders understand public participation in Ireland. By doing so, it provides flexible guidelines to address barriers to the implementation of national participatory environmental and climate initiatives and provides adaptive indicators and participatory tools relevant to the diverse actors, governance levels and approaches at play in the Irish context.

1.4 Objectives and Methods

The EPA-funded Connecting People to Climate Change Action: Informing Participatory Frameworks for the National Dialogue on Climate Action (C-CHANGE) project aimed to improve our understanding of environmental participation to specifically support the implementation of the NDCA and future environmental and climate dialogues in Ireland. C-CHANGE also aimed to support public participation in climate action across Europe by informing the European Climate Pact. This report presents the results of the C-CHANGE project, which:

- synthesised and analysed the literature on best practice in participatory processes for environmental challenges and climate action;
- assessed the governance structure and impact of the NDCA process and activities;
- identified participatory approaches, activities, messages, models and tools that have a sustained impact and developed new indicators to measure their impact;
- developed guidelines on participatory models and tools for informing the NDCA and future environmental and climate dialogues in Ireland.

The critical literature review focused on existing studies and reports of impactful environmental and climate dialogues globally. This provided an analysis of transferable models and tools for fostering participation. In line with the research objectives, the selection of case studies included initiatives from the past 10 years with diverse geographical scope. This aligns with the acceleration of climate risks related to global warming during the past decade; a changing policy landscape; and an increase in public actors' involvement in decision-making to support adaptation, mobilisation and societal transformation

in relation to climate change. The impact indicators and recommendations distilled from the critical literature review were adapted to the Irish context in the light of existing research and this project's assessment of the NDCA. This assessment was based on qualitative information collected through two focus group sessions, two online surveys and in-depth interviews with key stakeholders. It also compared and contrasted this information with existing NDCA documentation and research on environmental participation in Ireland.

The first focus group gathered 17 participants who were divided into smaller groups of five or six during the session, according to their role in the NDCA process as organisers, observers and speakers. The segmentation of the audience was done according to their role in the NDCA process as organisers, observers and speakers. The main objective of this session was to collect qualitative information to (i) assess the effectiveness of the NDCA and (ii) provide guidelines for future developments of the NDCA and enduring public participation in climate action in Ireland. A small number of participants and sessions suggested that synchronous focus group were effective. We combined asynchronous and synchronous approaches, with an emphasis on the latter (Abrams & Gaiser, 2017). Conducted synchronously, online focus groups more closely approximate the face-to-face medium because everyone is online at the same time in the chosen communication application, just as they would be physically for a live focus group. This approach is desirable for researchers seeking live interaction among participants, as it may reveal important and unanticipated data on the topic. This approach was combined with an asynchronous approach in which participants were invited to provide responses to semi-structured interviews in an online survey form. A key feature of this technique is that it allows participants and the moderator time to think about answers, to be reflective and introspective, and allows time for views and reactions to evolve (Poynter, 2010). We adopted a theoretical sampling technique, which means that the selection of the participants reflected the composition of the entire study population and was aligned with the intersectional and interdisciplinary perspectives outlined earlier in this report (Kitzinger, 2005; Liamputtong, 2011; Skeat, 2010). The focus group methodology was supported by a GAMPER (Goals, Audience, Message, Platform, Evaluate, Refine) strategic communication approach, which is summarised as follows:

- Goal: the purpose of the NDCA, the desired outcome.
- Audience: the priority audiences identified.
- Message: the key messages identified for communications and to reach the target audiences.
- Platform: the communications channels used to raise awareness of the NDCA and the engagement methods used in the regional gatherings.
- Evaluate: the mechanism for evaluating the impact and effectiveness of the NDCA.
- Refine: the ways in which the NDCA goals, messages and overall communication strategy have been refined to date.

The second focus group session brought together a diverse group of 38 participants including key stakeholders ranging from national and local authorities and non-governmental organisations (NGOs) to academia and youth organisations. This group was divided into smaller groups of seven or eight participants during the session. The composition of the audience was defined using an intersectional and intersectoral approach. Participants included members of the NDCA, the Office of Public Works, the CAROs, the Health Service Executive, the Department of Agriculture, Ireland's environmental education and youth organisation ECO-UNESCO, the National Women's Council of Ireland, Met Éireann, the Marine Institute and University College Cork (UCC) Green Campus, as well as climate ambassadors from the Cool Climate Experience interactive initiative and UCC researchers. Participants' input through the focus groups allowed the research team to collect qualitative information that was compared and contrasted with existing studies (i) to provide guidelines for future developments of the NDCA and more inclusive long-lasting public participation in climate action in Ireland, and (ii) to explore how to connect the NDCA and future climate dialogues to existing environmental initiatives in Ireland. The information collected during the focus group sessions was complemented by in-depth interviews with members of the EPA NDCA Secretariat and the NDCA Advisory Group. These unstructured interviews enabled participants to expand on the

information shared during the second focus group and to provide details of their potential involvement in future environment and climate dialogues.

Investigating existing research on public attitudes to broader societal issues in Ireland contributed to a better segmentation of the participants in the focus groups and to an improved understanding of the direction of both current and future environmental participation initiatives to support climate justice and action (Fahey, Hayes & Sinnott, 2005; Garry, Hardiman & Payne, 2006). The following chapters detail the results of the process, which combined a critical review, critical discourse analysis and ethnographic research through focus groups, surveys and interviews. These were completed with the objective of bringing forth qualitative perspectives, strategies and tools that have emerged from existing environmental participatory processes.

2 Approaches to Participation in Climate Action

This chapter discusses existing research and empirical evidence highlighting the need for intersectional and interdisciplinary approaches to participatory climate action and climate justice. Considering both emerging perspectives and challenges is necessary to understand and implement environmental initiatives that are aligned with local, national and regional policies. In this light, the chapter describes the European policy landscape for public participation in climate action and draws lessons from the Irish Citizens' Assembly, thereby establishing the basis for the longitudinal assessment of the NDCA.

2.1 Intersectional and Interdisciplinary Approaches to Climate Action and Climate Justice

The IPCC reports that climate change is leading to increasing environmental threats globally, with accelerating risks, particularly for those groups considered most disadvantaged: "Ethical considerations, and the principle of equity in particular, are central to this report, recognising that many of the impacts of warming up to and beyond 1.5°C, and some potential impacts of mitigation actions required to limit warming to 1.5°C, fall disproportionately on the poor and vulnerable" (IPCC, 2018, p. 51). That report highlights four specific framing asymmetries associated with global warming. These four framing asymmetries are (i) the differential national contributions to global warming, with industrialised countries having a greater responsibility; (ii) a disparity in impacts that "tend to fall on those least responsible for the problem, within states, between states, and between generations"; (iii) the gap in capacity to shape solutions and response strategies "such that the worst-affected states, groups, and individuals are not always well represented"; and (iv) the future response capacity, as "some states, groups, and places are at risk of being left behind as the world progresses to a low-carbon economy" (IPCC, 2018, p. 55). These asymmetries are key to evaluating and fostering environmental participation in the light of (in)equity and climate (in)justice, both between and within regions, countries, communities and individuals. For this reason, engaging in dialogue about the roles of gender, race and/or ethnicity, and socio-economic status, and the intersection of these, is key for identifying inclusive and effective policy options that will support long-lasting inclusive participation in environmental dialogues, deliberations and fair societal transformation. This is aligned with a vision of climate justice and the just transition that links human rights and sustainable development to achieve a human-centred and culturally sensitive approach through "safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly" (Robinson & Shine, 2018, p. 564).

In terms of our collective understanding of participatory processes in environmental and climate dialogues, many unanswered questions remain. These are mainly related to (i) a lack of common understanding of public participation in climate action across the academic disciplines (sciences, social sciences, arts and humanities); (ii) incomplete articulation of processes involving public participation and citizen engagement; and (iii) insufficient empirical research examining how the use and understanding of influential concepts vary among different disciplines and stakeholders (Hügel & Davies, 2020). These multifaceted challenges for both the theory and the praxis of participatory climate action call for more interdisciplinary research to connect existing knowledge and best practice in environmental and climate dialogues. Our analysis of empirical evidence of best practice in facilitating climate action supports the need for more nuanced methodologies and refined indicators for understanding the interplay between factors that drive changes in beliefs, values, perception, knowledge and behaviour in relation to environmental challenges (Armstrong, Krasny & Schuldt, 2018; Ballew *et al*. 2019; Beiser-McGrath & Huber, 2018; Severson & Coleman, 2015). Similarly, the analysis highlights the need to expand our research views with more international empirical evidence by including knowledge that has emerged from underrepresented communities from the Global South in the climate change literature (Nature Climate Change, 2017). For these reasons, this report

highlights the importance of supporting climate justice not only through inclusive and fair climate action but also by voicing the contributions of underrepresented and marginalised regions, communities and individuals. The following sections and chapters detail effective participatory perspectives and tools to improve the synergies between top-down (government and state) and bottom-up (community) participatory processes for climate action and justice by drawing lessons from the empirical evidence provided by relevant case studies.

The empirical evidence from the case studies analysed indicates that the success of participatory initiatives should be understood in terms of both engagement with and active participation in decision-making processes (see case studies in Table 4.1). Although most of the case studies refer to either national participatory initiatives or projects that cover a vast territory, they all depend on the work of grassroots, local or community-based groups and social actors. This validates the importance of improving synergies between national authorities and community-based initiatives for supporting inclusive participation and effective climate action. Some of the case studies show the high level of influence of relatively small communities and local social movements in shaping policy at national, regional and international levels. This demonstrates the "3.5% rule" for effective public participation, which comes from research reporting that campaigns tend to succeed after they have achieved and sustained participation of even just 3.5% of the population (Chenoweth & Stephan, 2012; Robson, 2019). In Ireland, where localism is a defining feature of environmentalism (Garavan, 2004, 2007; Moran, 2017), improving synergies between top-down and bottom-up initiatives and layered approaches are key for facilitating long-lasting participatory processes for climate action and justice. The integration of local perspectives into national-level environmental initiatives is necessary for co-designing participatory processes that are not only considered acceptable by local social actors but are also inclusive and fair, which is consistent with the requirement of doing no harm. This has implications for environmental and climate justice, for which inclusive participation – across the intersections of gender, race and/or ethnic background, socio-economic background, age and level of access to education and information – is a prerequisite.

2.2 Supporting the European Policy Landscape for Public Participation in Climate Action

Governments are adapting their climate action strategies to new forms of governance at local, regional and global levels (European Environment Agency, 2014). These national efforts are taking place in the context of the European Climate Pact (European Commission, 2020a), as part of the European Green Deal (European Commission, 2020b). The European Commission has acknowledged that people still feel that they have too little influence over crucial decisions, such as how to fight climate change. This has highlighted the importance of processes such as citizen dialogues and assemblies to directly involve people in decision-making: "As the EU raises its climate targets, the Pact will link with all levels of government as well as civil society and Europe's citizens directly, by launching democratic debates that include the perspectives of people in all their diversity" (European Commission, 2020a, p. 7). Participation in the pact is expected to contribute to a climate movement across Europe's communities and regions by building on, supporting and connecting existing participatory initiatives.

Notwithstanding recent progress, implementing and connecting participatory environmental initiatives across Europe remains a challenge. So far, the effectiveness of intergovernmental collaboration has often been questioned, particularly in relation to the lack of enforcement of agreed rules or commitments (European Environment Agency, 2015, 2019). This is related to the multiplication and diversification of governance systems under the growing influence of non-state actors, such as NGOs, multinational firms, digital communities, transnational networks and social media platforms. Although some of these non-state actors could potentially threaten democratic processes, as they are often unelected and unaccountable, and not always transparent (European Environment Agency, 2015), their participation is also key. Another emerging phenomenon, which was corroborated by the case studies, is the increasing "glocalisation" of governance, which sees in particular an increased role for global governance and local governments, with a declining and secondary role for national and provincial levels of government. City networks and associations have an increasing role in agreements, including on climate and sustainability

(Vandecasteele *et al*., 2019). Similarly, "polycentric governance", which consists of multiple governing bodies interacting to make and enforce rules across various scales, is gaining traction in the context of collective actions for fighting climate change (Jordan *et al*., 2018). The literature and case studies analysed provided empirical information on the role of glocalisation in shaping polycentric and hybrid forms of governance that are, in consequence, reconfiguring climate adaptation and participatory action strategies and the role of governments in Europe. Some examples also show how cities and neighbourhoods could become more important in collective environmental decisions and solutions in the region, including in responses to climate change. The impact indicators and guidelines provided in Chapter 4 consider these characteristics and ongoing transformations of the European policy landscape.

2.3 Lessons Learned from the Irish Citizens' Assembly

In 2011, a project entitled We the Citizens was established. This initiative piloted the Citizens' Assembly process and aimed to address the disconnection between Irish citizens and politics and ensure citizen participation in the democratic process (Devaney *et al*., 2020a,b; Farrell, O'Malley & Suiter, 2013; We the Citizens, 2015). This pilot became a template for the Irish Government's Convention on the Constitution, which was initiated in 2012. This forum, which ran for the following 2 years, deliberated on potential future modifications to Ireland's Constitution, which would be decided on through national referenda (Devaney *et al*., 2020a,b; Field, 2018). A very significant outcome from the Convention on the Constitution was a recommendation to permit marriage equality. A majority (62%) subsequently passed the Marriage Equality Act in a national referendum in 2015.

In 2017, the Citizens' Assembly focused on "How the State can make Ireland a leader in tackling climate change", in response to Ireland's reputation as a "climate laggard" in addition to being repeatedly ranked as one of the worst performing EU Member States in the annual Climate Change Performance Index (Burck *et al*., 2019; Devaney *et al*., 2020b). According to Devaney *et al*. (2020b), the independent space provided by the Citizens' Assembly was essential to reduce the impact and influence of market-based lobbies on Irish climate policy. Therefore, there were no presentations from lobby groups, and these groups were allowed only to make public submissions similar to other interested parties and to act as observers in the process. The process was transparent in that there was a dedicated website with expert content, literature and public submissions. In addition, all expert presentations were live broadcast and there was a strong media presence. All of these actions ensured that public awareness of the climate issues raised was maximised, and the Citizens' Assembly process and its recommendations were optimised (Devaney *et al*., 2020b).

As discussed in Chapter 1, the recommendations developed in relation to the climate crisis by the Irish Citizen's Assembly contributed to both the policy and the praxis contexts for climate action in Ireland. The suggestions provided by citizens through this participatory process contributed to the establishment of the JOCCA in July 2018, which published its final report in March 2019, largely endorsing and developing the Assembly's recommendations (Houses of the Oireachtas, 2019). Each chapter of the JOCCA report responded to the Assembly's recommendations and, in most cases, developed and expanded upon the Assembly's work. In turn, the JOCCA report significantly contributed to the development of the Irish Government's Climate Action Plan (Devaney *et al*., 2020a,b). The plan specifically calls for improved public awareness of the need for climate action (Government of Ireland, 2019, 2021c). It proposes a significant step-up in government engagement with citizens through mobilising initiatives connected by the NDCA "to inform, engage, motivate, and empower people to take climate action" (Government of Ireland, 2019, 2021c). These objectives are aligned with the public participation pillars detailed by the International Association for Public Participation.

As part of Ireland's Citizens' Assembly, 99 people deliberated five complex public policy questions. In addition to randomly selected citizens, approximately one-third of the assembly comprised elected politicians. According to Devaney *et al*. (2020a), the questions covered "Ireland's constitutional ban on abortion; the challenges and opportunities of an ageing population; the manner in which referenda are held; fixed-term parliaments; and how the State can make Ireland a leader in tackling climate change". The Citizens' Assembly comprised a number of phases.

The first of these was public submissions that aimed to broaden inclusivity beyond the 99 citizens chosen to take part. In the second phase expert witnesses presented evidence. The third phase included citizen discussion and deliberation guided by trained facilitators. The fourth phase consisted of anonymised voting to ascertain the Assembly's level of support for proposed recommendations. The 99 citizens considered all five public policy questions. Over two weekends, the Assembly took part in 26 hours of listening, discussion and deliberation on the topic of climate change alone. This included presentations from climate change experts and individuals advocating a low-carbon transition (Devaney *et al*., 2020a). These were focused on the transport, energy and agricultural sectors. Over 80% of the Assembly voted in favour of each recommendation proposed.

The participation of citizens in nationwide decision-making through the activities of Ireland's Citizens' Assembly balanced out the localism that characterises the Irish environmental movement. By integrating participants' recommendations into the national Climate Action Plan, the initiative set a positive precedent for citizen involvement in decision-making at the national level. Ireland's Citizens' Assembly facilitated the integration of the local actionable knowledge of its participants into the policy cycle and nationwide responses to climate change. This initiative provided evidence-based guidelines for deliberation and communication that set the basis for assessing and further developing the NDCA and long-lasting participatory processes (e.g. the National Youth Assembly) in Ireland.

3 Longitudinal Analysis of the National Dialogue on Climate Action

This chapter provides a longitudinal assessment of the NDCA process and the NDCA regional gatherings. The findings discussed in the following sections resulted from critical analyses of the qualitative information collected through focus group sessions, surveys, interviews and documentary research. While the first section looks at specific regional gatherings, which resulted in mainly positive lessons, section 3.2 focuses on the evolution of the overall NDCA process. Finally, this chapter provides a summary of lessons learned and informs the recommendations and guidelines provided in Chapter 4.

3.1 The NDCA Gatherings

Regional and local gatherings were a central component of the pilot phase of the NDCA (2017–2019) and explored how best to shape the dialogue process in the future. The trial Athlone regional gathering took place on 23 June 2018 and the Tralee regional gathering on 10 November 2018. In general, people were positive about the NDCA adopting the format of the regional gatherings, and there was an awareness among participants of a need for collaborative action between communities, the public sector and the private sector. Studies carried out by M.CO (2018a,b) showed that there was a sense that it was imperative to act as a nation through collaboration between communities and the public and private sectors. Participants identified behavioural change, developing resilience skills and harnessing what works well in empowering citizens to act as vital components of an effective climate action strategy. Some of the participants' main motivations for taking part in the NDCA gatherings and getting involved in climate action were:

- to improve their personal awareness of climate change, including how it will affect society and how people can adapt and change behaviours;
- to learn how to take action by exchanging information about what is happening on the ground and accessing new knowledge to share with their communities;
- out of personal interest and a sense of responsibility to future generations;
- to represent their groups or communities;
- to ensure that young people's perspective on climate change is heard;
- to offer a farmer's perspective and discuss the important role of sustainable farming and the challenges faced by agriculture;
- to ensure that perspectives on renewable energy ownership and challenges for farmers and rural Ireland are brought to the table;
- to help shape national policy by engaging with policymakers on the urgency of climate action;
- to localise the problem of climate change and to discuss the role of local communities in contributing to national objectives;
- to focus on taking urgent climate action to move the dialogue towards how communities can take immediate steps to empower citizens to be part of the solution, and to ensure that action is taken;
- to contribute to the solutions for climate action in Ireland.

These key motivations and expectations were supported by NDCA participants, organisers, speakers and observers who took part in the focus group session conducted to assess the NDCA.

The main communication channels and tools for engagement used during the NDCA gatherings were direct conversation and interaction, workshop sessions, a drop-in area with interactive stands and conversation hubs, and an online dialogue that remained open before, during and after each regional gathering. The online dialogue was useful for opening discussions through social media and fostering virtual interaction between citizens. Overall, participants showed a strong interest in hearing the government's plans for action and learning how national authorities can support and fund initiatives that are already working in areas of climate action. Participants also identified the need for the NDCA to connect and collaborate with existing networks and initiatives to extend engagement at the local level (M.CO, 2018b).

Participants captured key principles that addressed common concerns and hopes in relation to environmental participation, climate action and justice. Both studies carried out by M.CO (2018a,b) and our research project confirmed that advancing towards a climate-resilient Ireland entails addressing current social justice challenges and linking climate change to other interrelated pressing societal topics, such as the housing crisis and public health. Ideas shared for advancing societal change included:

- taking responsibility at individual, community and national levels, and considering the impact of climate change on future generations;
- strengthening and empowering communities through collaboration, collective ownership and the recognition of local knowledge;
- changing the way we work by implementing remote working to reduce the need to commute and remove pressure on transport systems;
- collectively accepting the need for change and being open minded about new energy systems and new lifestyles;
- building resilience by learning new skills and new ways of living and by readopting sustainable practices from the past;
- improving local connections, which implies returning jobs to the community, producing and consuming local products and buying seasonally;
- strengthening environmental values by spending more time outdoors, respecting the natural environment and connecting with nature;
- shifting away from consumerism and influencing retailers through consumer choices;
- considering the environmental footprint of households by taking into account the size of families and their activities.

In line with these ideas, NDCA participants proposed the following everyday actions to support societal change and climate action from an individual perspective:

- reducing personal waste by reusing, recycling, repairing and upcycling products;
- changing food habits, including growing and sharing food, buying local and organic products, and eating fewer animal products;
- becoming advocates for change, challenging the status quo, engaging in policy processes and influencing others;
- travelling more sustainably: walking, cycling, using public transport, spending holidays at home, considering electric vehicles;
- reducing personal energy use by insulating and improving the efficiency of our homes and making energy-saving behaviour changes.

Additionally, NDCA participants suggested a set of policy interventions that included:

- leading by example by reducing emissions across governmental departments; showing more transparency in decision-making; and listening to and respecting the public's voice;
- having local climate adaptation officers and educating and engaging local authorities in climate action to support policy interventions for climate action;
- creating government-led awareness campaigns using TV, radio and social media, and allocating significant budget to public environmental awareness campaigns;
- supporting local initiatives such as voluntary groups, simplifying access to grants and offering rewards-based funding;
- transforming energy generation by incentivising renewable energy initiatives, investing in sustainable energy research, promoting and supporting housing upgrades, and ceasing fracking;
- proactively managing waste, banning and/or taxing single-use plastic, and supporting rewards-based recycling;
- improving the transport infrastructure, including improving access to public transport in rural Ireland, facilitating cycling and providing charging points for electric vehicles;
- supporting sustainable agriculture by involving small farmers in discussions, incentivising crop-based, organic and sustainable agriculture, and supporting cooperatives;
- encouraging positive changes in business through financial rewards and tax breaks for climate action, and increased support for social enterprises;
- enforcing the "polluter pays principle" by introducing carbon taxes and taxing industries and practices that are ecologically damaging and wasteful and which produce high levels of greenhouse gas emissions (M.CO, 2018b).

The C-CHANGE research that was conducted through focus groups, surveys, interviews and critical analysis confirmed the success of the NDCA regional gatherings and their ability to facilitate networking between existing environmental initiatives. This is vital for long-lasting engagement and inclusive climate action. Nevertheless, the lack of follow-up activities and the absence of resulting policies and agreements were identified as barriers to continued public engagement. As a result of a lack of traceable and tangible outcomes, some stakeholders are now willing to participate in future environmental and climate dialogues only if they can obtain clearer information about the expected outcomes beforehand. The following section examines the evolution of the NDCA and seeks to understand what worked well in the overall NDCA process and what hampered engagement and long-lasting participation. This longitudinal assessment is vital to provide evidence-based guidelines for future development of environmental and climate dialogues in Ireland.

3.2 Assessing the NDCA Process

The NDCA was designed and implemented by the DCCAE (now the DECC), the EPA NDCA Secretariat and M.CO. The DECC designated an NDCA Advisory Group with diverse stakeholders from local authorities, the education and business sectors, and young people. The research process described earlier in this report confirmed that, although the DECC and the EPA NDCA Secretariat agreed on the main objective of creating awareness of and engagement with climate action, there was insufficient planning time. Therefore, the methodology, impact indicators and expected outcomes evolved throughout the process. This allowed the organisers to further develop and adapt the overall process to diverse audiences and to changes in the Irish governmental structure. As the organisers had different perspectives on the characteristics and expected outcomes of the climate dialogue throughout the NDCA process, their roles and responsibilities were defined during the process. Although refining the methodology and expected outcomes during the process allowed the NDCA to be adapted to emerging needs, it also hampered the design and implementation of follow-up activities, which are vital for long-lasting engagement.

The NDCA Advisory Group provided guidance to the DECC, the Secretariat and M.CO on how to reach a varied audience with different levels of preliminary engagement with the topic of climate change. Although diverse stakeholders were invited through the public participation networks (PPNs) and local, community and professional organisations, the tickets to attend the regional gatherings were directly managed by the DECC. Additionally, the organisers set up a drop-in event, which did not require registration, to support inclusion during the regional gatherings. This modality of participation allowed organisers and facilitators to pitch the ideas of the NDCA to citizens who were not as engaged as those who had already registered to participate in the gatherings. For the Athlone regional gathering, an open invitation was circulated through the PPNs and local, community and professional organisations, and to citizens living in nine counties of the Midlands Region. Similarly, for the Tralee regional gathering, an open invitation was circulated through the PPNs and local, community and professional organisations, and to citizens living in four counties of the Atlantic Seaboard South Region. This regional approach was determined according to the geographical spread of the newly established CAROs. In both cases, people registered their interest in attending through an online form and were asked to provide comments and suggestions on themes and topics they would like to see discussed. This helped to shape the design of the workshop sessions, talks and activities on the day. After the events in Athlone and Tralee, a local dialogue took place in Kildare with a focus on what was relevant for local communities. Nevertheless, establishing and implementing official agreements and networks to connect national, regional and local participatory initiatives for climate action is a task still outstanding in Ireland. Although the regional gatherings were successful, as explained in section 3.1, M.CO had more time to segment the audience and refine the message for the local dialogue. This resulted in more engagement and networking between stakeholders.

3.3 Lessons Learned

The NDCA pilot process provided important lessons for the organisers, facilitators, speakers, observers, participants and researchers. These included learning how to refine the objectives, structure, methodology

and expected outcomes of the NDCA and future environment and climate dialogues in Ireland. The following summarises some of the main results of the research carried out by the C-CHANGE team in collaboration with the above-mentioned stakeholders, including the facilitation company M.CO, which collected lessons from participants after the regional gatherings. These points are the result of analysing research findings on the place of climate change in the Irish public agenda today, and they reflect both the diversity and the convergence of stakeholders' experiences, perceptions and expectations after the NDCA pilot process. The collective learnings and common themes for achieving success include the following:

- More planning time and preliminary coordination is required in order to clearly define the NDCA's goals, as well as the roles and responsibilities of the members of its organisational structure.
- A clearer definition of the general characteristics, communication strategy, specific communication tools and expected outcomes of the climate dialogue is necessary for better planning. More clarity is required to ensure that the DECC, the EPA NDCA Secretariat, the designated facilitation company and the NDCA participants understand what a climate dialogue should be.
- More interdisciplinary and intersectional collaboration is required at all levels. This would include more social sciences and humanities (SSH) and behavioural sciences experts in public participation in the DECC and the NDCA organisational structure, working alongside science, technology, engineering and mathematics (STEM) experts.
- Although the drop-in points, including the work of the PPNs and the local, community and professional organisations, facilitated the participation of a wide audience in the regional gatherings, better networking with marginalised communities and citizens unengaged with the topic of climate change is required.
- Better audience segmentation is required in order to design targeted messages for participants with diverse levels of information and different degrees of engagement with the topic of climate change. For instance, although some participants in the gatherings found basic information about climate change useful and engaging, others who already had a long-standing involvement with the topic and environmental activism perceived the information as patronising. In the light of this, it is important to tailor approaches to messaging that reflect individual and community contexts.
- The NDCA message should be clearer and in line with the goals of the process. Stakeholders, including some organisers, facilitators, speakers, participants and researchers, highlighted the need to avoid excessively technical language or hard-to-define terms, such as "net zero", "retrofit", "resource of efficiency" and "decarbonisation".
- Stakeholders highlighted the effectiveness of online engagement to support the inclusion of hard-to-reach audiences. The discussion and the analyses also showed that online recruitment and engagement was effective within the NDCA, because it was combined with other off-line forms of engagement.
- Stakeholders expressed willingness to support partnerships between businesses and communities.
- Local stakeholders expressed interest in accessing more funding and support from local and national authorities and bodies (e.g. EPA and Sustainable Energy Authority of Ireland), in order to further develop and connect local participatory initiatives for public engagement and climate action. This confirmed that there is willingness among local stakeholders to take an active role in a more decentralised NDCA process.
- The regional gatherings were effective in terms of enhancing the visibility and profile of successful initiatives and how to connect them. However, more work is necessary to scale successful initiatives and take advantage of the potential of local gatherings in terms of boosting mobilisation and supporting long-term engagement.
- The success of the local gathering in Kildare confirmed that bottom-up approaches to participatory climate action are really important in Ireland and are vital for the success of the regional gatherings, the overall NDCA process and future environmental and climate dialogues.

4 Facilitating Participatory Climate Action in Ireland

The process of assessing the NDCA with participants and organisers, and contextualising it within existing literature on best practice for environmental participation, ensured that the impact indicators and guidelines produced would best support future environmental and climate dialogues in Ireland. The following sections detail these findings and directly inform the co-design and co-evaluation of participatory processes for climate action and justice. Our findings confirm that it is necessary to incorporate culturally sensitive, human rights-informed and intersectional perspectives in the development of an inclusive framework to design, understand, evaluate and further develop participatory climate action dialogues. This entails working with cross-sections of people which consider gender, race, ethnicity, age, education and socio-economic representation. The way in which people think and participate in environmental and climate dialogues is also mediated by community experiences. Thus, we consider the specific characteristics of different "cognitive traditions" or collective patterns of thinking that differ from one "thought community" to another, as well as the impact they have on attitudes and behaviour (Berger and Luckmann, 1967; DiMaggio, 1997; Eder, 1996; Norgaard, 2011; Strydom, 2002; Zerubavel, 2009). The first of the following sections draws upon existing research on public attitudes to climate change in Ireland to enable understanding of the national context for environmental participation. It is important to note that the indicators and recommendations presented in the remainder of the chapter should be understood with respect to differences in national, regional and local communities and with respect to the role of intersectionality and diverse socio-cultural factors in shaping attitudes in communities.

4.1 Attitudes and Perceptions in Relation to Climate Change in Ireland

A number of Irish and European surveys have been conducted in recent years to study public attitudes and perceptions in relation to climate change in Ireland. These included the Eurobarometer Climate Change surveys (European Commission, 2008, 2009, 2011, 2013, 2015, 2017, 2019a,b), the *Irish Times*/Ipsos voter opinion polls (*Irish Times*, 2019; Leahy, 2019, 2020a,b) and the EPA-commissioned RED C opinion polls (EPA, 2019, 2021). In terms of the overall perception of climate change, its seriousness increased in the Irish mind over the past decade. In the most recent Eurobarometer poll, conducted from 9 to 26 April 2019, a total of 27,655 face-to-face interviews took place across Europe, including 1067 in Ireland (European Commission, 2019b). Three-quarters of respondents from Ireland saw climate change as a "very serious" problem (75%, just below the EU average of 79%), a substantial increase of seven percentage points since the previous survey in 2017. More than one-quarter thought that it is the most serious problem facing the world (26%, above the EU average of 23%), an increase of 13 percentage points since 2017. More than 6 in 10 of those surveyed said that they had personally taken action to fight climate change in the past 6 months (62% vs the EU average of 60%), a substantial increase of 12 percentage points since 2017. When respondents were given specific examples of sustainable behaviour, however, the proportion increased from 62% to 96% (compared with the EU average of 93%). Nearly all participants thought it important that their government sets targets to increase the use of renewable energy by 2030 (95%, just above the EU average of 92%), and should provide support for improving energy efficiency by 2030 (93%, compared with the EU average of 89%). Most importantly, 92% of respondents (equal to the EU average) supported the aim of a climate-neutral EU by 2050.

In a recent *Irish Times*-commissioned survey of 1200 voters, respondents were presented with a series of statements and asked whether they agreed or disagreed (*Irish Times*, 2019; Leahy, 2019). More than half of respondents (55%) agreed that climate change is "the most serious issue facing the world", and 36% disagreed with the statement. A similar percentage of respondents (54%) said that they were prepared to reduce their standard of living to combat climate change. However, when asked specifically if they were willing to pay more for fossil fuels such as petrol and diesel to tackle climate change, almost half

of respondents (48%) said "no". In general, citizens did not want the government to spend money on climate change at the expense of public services, and 56% disagreed with the proposal to spend more money on climate change and less on public services. One-third of respondents said that they were not 'that worried' about climate change. When asked about the statement "I don't think climate change will be as bad as people say so I'm not that worried about it", 57% disagreed, while 33% agreed. A second *Irish Times*-commissioned survey of voters was conducted in January 2020 (Leahy, 2020), with the participation of 1200 voters at 120 sampling points across every voting constituency in Ireland. In this opinion poll, surveyed participants were asked the following question: "Which of the following issues, if any, will have the most influence on which party or independent candidate you vote for in the upcoming election?". Possible answers included the categories health, housing, economy, climate change, management of Brexit, value for money in public spending, none of these/something else, or don't know/no opinion. According to this survey, health and housing were by far the two most important issues to voters in the general election campaign. Asked which issues would have the most influence on their vote, 40% of voters stated that health was the issue most important to them, while 32% stated that the issue most important to them was housing. These two issues exceeded the importance voters attached to the economy, climate change and Brexit. Only 7% responded to say that climate change would be the issue that would decide their vote. In another *Irish Times* opinion poll conducted in June 2020 (Leahy, 2020b), tackling climate change moved down the list of priorities that the public would like the government to address. When asked which of a menu of issues they thought should be the "top priority" for the next government, the number one choice by a significant margin was "rebuilding the economy", which was nominated by 36% of respondents. This was followed by "protecting Ireland from Covid-19" (20%), housing (17%) and health (17%). Just 8% chose "tackling climate change" as the number one priority. These results point directly to the importance of highlighting the connections between climate change and other pressing societal challenges such as health and housing, in all communications about the environment and climate action in Ireland. National and local authorities, the media and schools can actively contribute to communicating more clearly that climate change poses an immediate threat to people around the world and in Ireland, and that their health, livelihoods, general well-being and human rights are at risk (EPA, 2020; Robinson & Shine, 2018).

There were significant regional variations in the importance that voters attached to the issue of climate in their voting decisions in Ireland (*Irish Times*, 2019). For example, climate change was the most important issue to 12% of respondents in Dublin, 7% in the rest of Leinster, but only 3% in Munster and 4% in Connacht and Ulster. The issue of climate change was the most important to 8% of urban respondents, while it was most important to 5% of rural respondents. In terms of age demographics, the importance of climate change decreased with age. Climate change was most important to 16% of those aged 18–24 years and to 10% of those aged 25–34 years. It was most important to 6% of those aged 35–49, to 5% of those aged 50–64 and to 5% of those over 65 years old. This diversity of opinions was also seen in the results of the poll of June 2020. There was regional variation in the proportion of survey participants who thought climate change should be the main priority of the next government: 7% in Dublin, 9% in the rest of Leinster, 5% in Munster and 10% in Connacht/Ulster. Those ranking climate change as the first priority for the next government were as follows: 23% of the youngest group (aged 18–24), 9% of those aged 25–34, 6% of those aged 35–49, 3% of those aged 50–64 and 5% of those over 65 years old. A similar demographic variability was observed in the EPA RED C opinion poll conducted online with a nationally representative sample of 1019 adults aged 18 years or older (EPA, 2021). In terms of the "most pressing environmental issues facing Ireland", 40% of survey participants cited climate change, 16% cited water quality, 15% cited waste, 9% cited transport and 7% cited energy use. Although 44% of respondents aged 18–24 said that climate change was the most pressing concern, this decreased to 36% for the 35–54 age bracket and it was 42% for the 55 years or older age bracket. Climate change was ranked in the top three concerns by 58% of all participants, by 60% of those aged 18–34, by 52% of those aged 35–54 and by 64% of those aged 55 years or older. These data demonstrate that the Irish Government, local authorities and environmental NGOs will find allies and climate ambassadors among the youngest generation to engage and connect diverse population segments.

This regional and demographic variability is evidence of the importance of allocating time and resources to rigorous audience segmentation studies and to designing specific messages and forms of interaction with diverse target audiences, when co-developing future environmental and climate dialogues in Ireland. The following impact indicators and guidelines for understanding, assessing and further developing environmental participation in Ireland consider the place that climate change occupies in Irish public opinion, as well as the global and local challenges of environmental communication and long-lasting engagement. These challenges include the urgency of other risks, such as those posed by the COVID-19 pandemic and economic crises. Thus, we recommend considering the connections between climate change and other pressing societal challenges such as health, housing, food security and other interrelated human rights threatened by environmental degradation.

The EPA recently commissioned Yale University's Program on Climate Change Communication to conduct a survey entitled "Climate Change in the Irish Mind". This includes a nationally representative study of the Irish population's attitudes, behaviours, policy preferences and beliefs around climate change.

4.2 Impact Indicators for Participatory Environmental and Climate Dialogues

The following seven impact indicators were identified through the assessment of the NDCA and the critical analysis of the global literature on environmental and climate dialogues. These aim to contribute to better understand, measure and support the impact of participatory processes in environmental and climate dialogues in Ireland. The weight of each indicator varies in relation to the context, objectives and the stakeholders involved in the initiative. An effective environmental and climate dialogue should provide evidence of at least some of the following indicators:

1. integration of citizens' recommendations, environmental values, knowledge, and cultural and economic practices into policy documents;
2. integration of environmental values, knowledge and sustainable practices into legal documents;
3. evidence of co-design and co-implementation of agreements;
4. flexible degrees of intervention and good synergies between different levels of governance;
5. changes in people's attitudes, perceptions and behaviour;
6. resulting networks;
7. participants' assessment of the participatory process and involvement in follow-up activities.

4.2.1 Integration of citizens' recommendations, environmental values, knowledge, and cultural and economic practices into policy documents

Policy documents that have been informed by participatory processes can provide evidence of participants' active role in decision-making. These documents support participation in deliberation. Evidence shows that the particular format of a deliberative forum should take account of the specific characteristics of the policy cycle, the nature of the topic to be discussed, the amount of time and resources available, and the follow-up processes that are expected to ensure and assess the implementation of co-designed policies. Seven of the case studies reviewed provided evidence of resulting policy documents for assessing the results of environmental participatory processes. Case studies CS1, CS3, CS4, CS10, CS13, CS16 and CS19 delivered co-designed policy documents (Table 4.1). These documents are not only important to support climate action, they are also valuable pieces of evidence of impact that can be presented to all stakeholders to support trust and fuel follow-up activities. These case studies highlight that good-quality policy documents are a relevant impact indicator (Chandrashekeran, *et al*. 2017; Chowdhury, 2016; Coral-Guerrero, Guardiola & García-Quero, 2020; Devaney *et al*., 2020a; Kabiri, 2016; Prutsch, Steurer & Stickler, 2018; Zimmerer, 2015).

This indicator also refers to the quality of the above-mentioned policy documents. A high level of integration of citizens' recommendations in policy documents reveals participants' more active role in decision-making and hence a more successful participatory process. For instance, the case study of the National Climate Change Master Plan in Thailand (CS10) demonstrated the integration of participants' feedback in revised versions of policy documents. Similarly, the Indigenous principle of *sumak kawsay*

Table 4.1. Case studies of national participatory environmental and climate dialogues and the impact indicators they demonstrate

		Indicator demonstrated						
Case study	**Description**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**
CS1	The National Committee on Climate Change (1996) forum for participation and the Long-Term Mitigation Scenarios (2006) in South Africa (1996–2017): the National Committee on Climate Change is a forum for participation that provides advice to government and takes part in legitimacy building and technical knowledge generation by non-state actors (both grassroots and policy-focused NGOs). The Long-Term Mitigation Scenarios is a state-funded research programme for highly inclusive state–society deliberative processes. The analysis of these interrelated initiatives enables an understanding of the role of the South African state in environmental governance.	✓						
CS2	Public Participation in Disaster Management and Climate Change Adaptation Programme in Northern Ghana (2015): this case study refers to the process- and outcome-based factors that ensure effective mainstreamed public participation in the Climate Change Adaptation Programme in northern Ghana. Four adjacent village communities of the Wa-West district evaluated effective public participation in areas that are vulnerable to climate change-induced disaster risks.							✓
CS3	Sumak Kawsay/Buen Vivir (Good Living) in Ecuador (2007–present): Ecuador's state has integrated *sumak kawsay*/*buen vivir* (good living) Indigenous principles into its legal framework for implementing an alternative participatory development model. By being more than just a changed mindset, these concepts have been translated to the social and political realm, both granting direct rights to the environment and declaring the Andean country a plurinational state in Ecuador's 2008 Constitution.	✓	✓					
CS4	Suma Qamaña/Vivir Bien (Living Well) in Bolivia (2009–present): the Bolivian state adopted the Indigenous concepts of living well and Earth mother to incorporate the knowledge, values and sustainable cultural and economic practices of Indigenous people into its legal framework for participatory environmental governance.	✓	✓					
CS5	Alberta Climate Dialogue in Canada (2010–2016): the Alberta Climate Dialogue was a 5-year community–university research project that drew together a network of scholars, facilitation practitioners, citizens, members of civil society organisations, government officials and not-for-profit organisations from Canada and other parts of the English-speaking world. Members of the project participated in four deliberations connected in varying degrees to climate change, thereby engaging citizens from across the Canadian province of Alberta.					✓	✓	
CS6	Kugluktuk Community Readiness Initiative in Nunavut, Canada (2014–2015): McMaster University and Carleton University collaborated with Kugluktuk, an Inuit community in Nunavut to survey community views on resource development and produce a larger community report. This was part of a Community Readiness Initiative piloted by the Canadian Northern Economic Development Agency to assess the socio-economic needs of communities across northern Canada prior to mine development.			✓			✓	✓
CS7	Alberta Narratives Project in Canada (2018): the Alberta Narratives Project is part of the Global Narratives Project, a pioneering initiative to test and develop climate change messaging and narratives. There are marked differences in opinion between different occupation groups and different parts of the province and especially between people holding different political values in the region. The Alberta Narratives Project aimed to address this challenge and identify new and more constructive ways for people in Alberta to talk about climate change.					✓		
CS8	Participatory Environmental Management in Colombia (2018): in Colombia, the Constitution recognises citizens' participatory rights. This legal framework encourages, supports and facilitates the participation of communities in environmental management. This approach, and the regulation and enforcement of people's right to participate in environmental management, is leading to a change of paradigm towards a more inclusive and ecocentric approach to the environment and its challenges.		✓					

Table 4.1. Continued

Case study	Description	Indicator demonstrated						
		I1	I2	I3	I4	I5	I6	I7
CS9	Transnational Municipal Networks and the Participatory Climate Agenda in Brazil (2019): transnational municipal networks have contributed to multilevel climate governance and supported experiments in local climate action in diverse countries. This specific study is based on empirical evidence from a national survey.						✓	
CS10	Participatory Climate Change Governance in Thailand within the National Climate Change Master Plan (CCMP) (2011–2050) in Thailand (2011–2016): the study investigates the unfolding climate change governance regime in Thailand with an emphasis on land use and public participation.	✓						
CS11	Indigenous Engagement in Environmental Management in Australia (2012): this exploration of 21 case studies presents a typology of Indigenous engagement in environmental management, derived through comparative analysis. Indigenous peoples in Australia engage with many decentralised approaches to environmental management that offer opportunities for integrating Indigenous ecological knowledge and western science to promote cultural diversity in managing the sustainability of the social-ecological system.							
CS12	India Narratives Project (2017): the India Narratives Project is part of the Global Narratives Project. This pilot project in India was launched jointly by Climate Outreach and Climate Action Network International. This was the first qualitative research in India to examine and compare specific language around climate change and renewable energy.					✓		
CS13	Participatory Budgeting in Bangladesh (2019): the Government of Bangladesh has incorporated two participatory forums in the work of the Union Parishad (lowest tier of the rural local government system of the country), with the objective of ensuring people's direct involvement in decision-making: the *war shava* (meeting with voters) and the open budget meeting.	✓						
CS14	Constructive Dialogue in Municipalities in Sweden (2004–2009): these dialogue processes, implemented in six Swedish cities, involved various actors and diverse types of initiative. These collaborative activities were carried out under the title Det Goda Samtalet (Constructive Dialogue), which formed part of a national voluntary agreement for a sustainable building sector. Constructive dialogue was proposed as a means of achieving more holistic and smooth planning processes in order to develop sustainable and attractive cities by involving different stakeholders in collaborative dialogues.			✓				
CS15	Community Action 2020 – Together We Can and the Big Society Agenda in the UK (2005–present): this programme aimed to support community-based action to remove barriers to behavioural change, give information, provide facilities and viable alternatives, educate and build capacity for action. It applied a "diamond model" to capture the essence of citizenship "rights and responsibilities" through a broad-based range of interventions. The primary intention for this model, from the UK government's perspective, was to provide a sufficiently far-reaching framework through which to galvanise agency and to direct behaviour towards achieving environmental policy aims and objectives.				✓	✓		
CS16	Participatory processes in the National Adaptation Strategy in Austria (2007–2013): Austria's National Adaptation Strategy aims to enhance resilience to climate change impacts through a national framework that specifies expected impacts, goals and adaptation options. The aims of its processes for participating in decision-making were to raise awareness of and stimulate adaptation activities; facilitate exchange and consensus finding; improve the contents of the adaptation strategy; and increase acceptance of and commitment to implementation.	✓						

Table 4.1. Continued

Case study	Description	Indicator demonstrated						
		I1	I2	I3	I4	I5	I6	I7
CS17	Participatory processes in the Adaptation Strategy in Germany (2012–2013): these initiatives aimed to aid the development of policies and to create support for and acceptance of policies and their implementation. Openness and cooperation is one major principle of the German Adaptation Strategy; the development and implementation of adaptation policies is hence accompanied by broad and diversified stakeholder participation processes.						✓	✓
CS18	Participation Society Agenda in the Netherlands (2014–present): the Participation Society agenda invited citizens to assume more responsibility for their own well-being and that of society in general. This approach was fuelled by the aim of reducing the government's deficit through the transition of the welfare state to a "participation society", in which people are asked to take responsibility for their own lives and the environment.				✓			
CS19	Citizens' Assembly in Ireland (2016–2019): Ireland's Citizens' Assembly afforded 99 citizens the time, space and structure to consider five complex public policy questions in a deliberative way. Its remit included Ireland's constitutional ban on abortion, the challenges and opportunities of an ageing population, the manner in which referenda are held, fixed-term parliaments, and how the state can make Ireland a leader in tackling climate change.	✓						

(good living) in Ecuador (CS3) or *suma qamaña* (living well) in Bolivia (CS4) has positively reshaped environmental policies. The similarities between the concepts and cultural and economic practices of respect and reciprocity in 'living well', and other occidental ecological discourses, could ensure that these models are adapted in other contexts. The similarities between people's respect for their natural resources in diverse territories across the world ensures the integration of ancestral ecological values into international policies, collective action and individual behaviours (Medina, 2001). Similarly, participatory budgeting processes such as those carried out in Bangladesh (C13) empower citizens to use their knowledge and values to decide how and where to invest money in their communities. In Ireland the case of the Citizens' Assembly demonstrates that effective public participation enables individuals with diverse opinions, experiences, priorities and values to negotiate and actively shape policies (Devaney *et al.*, 2020b).

4.2.2 Integration of environmental values, knowledge and sustainable practices into legal documents

The inclusion of sustainable values and practices in law not only supports future developments of participatory processes, it also reveals their impact on the legal framework for participation. In Ecuador and Bolivia, the Indigenous principle of *sumak kawsay* (good living) (CS3) and *suma qamaña* (living well) (CS4), respectively, have positively reshaped the legal framework of those countries (Table 4.1). This has proven vital for the protection of socio-ecological systems in those territories. People's environmental values were integrated into the Constitution in Ecuador to support the implementation of the Plan Nacional Para el Buen Vivir (National Plan for Good Living) (SENPLADES, 2017). Similarly, in Bolivia, specific laws and the Constitution are not only the result of participatory processes but also provide a legal framework for wide participation in environmental dialogues (Morales Ayma, 2010, 2013). These dialogues concern the interrelated topics of climate change and justice, biodiversity, food justice, water resources, protected areas and extractive industries.

Similarly, the Colombian case (CS8) shows that when states recognise the right of communities to prior consultation on the implementation of plans, policies and laws, authorities are supporting public participation and are contributing to the implementation of effective policies. In the Colombian Constitution of 1991, mandatory consultation prior to the implementation of plans, policies and laws was introduced as a means of guaranteeing support for participation in decision-making. In addition, the

Corte Constitucional (Constitutional Court) identified the fundamental right of ethnic communities to prior consultation on proposed legislative or administrative measures that affect them (Tamayo, 2018). This form of legal protection directly supports public participation by enabling communities to have an active role in decision-making processes. This is particularly relevant in the context of increasing levels of environmental conflict (Environmental Justice Atlas, 2020). Since 2016, at least three domestic Colombian tribunals have each issued decisions that indicate the impact of participatory processes and progress towards changing the anthropocentric paradigm of justice. This has been achieved through an ecocentric approach to the protection of natural habitats and the recognition of ecosystems' rights and entitlements (Camargo, 2019). The "Sentence of the Atrato River" in November 2016 recognised a river as a subject of rights (Camargo, 2019). The second key decision in environment justice in Colombia was issued in April 2018 by the Supreme Court of Justice, which acknowledged that the Amazon rainforest has rights (Supreme Court of Justice of Colombia, 2018). The third decision was taken by the Administrative Tribunal of Bocayá in August 2018 in recognition of the Páramo de Pisba natural park's rights (Administrative Tribunal of Bocayá, 2018). These sentences were the result of citizens' formal petitions.

4.2.3 Evidence of co-design and implementation of agreements

Co-designed agreements resulting from participatory processes can provide evidence of participants' active role in decision-making. Both their existence and their quality are relevant impact indicators. The case study on transnational municipal networks in Brazil (CS9) (Table 4.1) succeeded in mobilising local governments and environmental NGOs to participate in projects funded by multilateral and bilateral agencies, to implement the agreements of the 1992 Rio Earth Summit (Valente de Macedo & Jacobi, 2019; Almeida, Silva & Pessoa, 2013). Similarly, the case study on constructive dialogue in Swedish municipalities (CS14) illustrates the effectiveness of co-design agreements. For example, following the participation of citizens in discussions on sustainable and affordable housing, a sustainability agreement was drawn up and applied in the development of a new construction site in the city of Malmö (Smedby & Neij, 2013). It included provisions for apartment rentals to be leased at a fair price. It also included a focus on architectural diversity; reduced energy consumption and energy costs; building accessibility; biodiversity; and improved facilities for waste management (see Malmö City, 2011). The successful implementation of these agreements led to effective follow-up participatory processes, thus ensuring long-lasting participation and mobilisation. The Kugluktuk Community Readiness Initiative in Nunavut, Canada (CS6) demonstrates the importance of co-design processes to support both the quality and the implementation of research outputs to improve the lives of the members of the community and to address vulnerabilities to climate change. Although the initiative already had elements of community consultation embedded in its design, initially the Community Readiness Initiative template was not fully participatory, culturally sensitive or community driven in research design or methodology. A process of facilitation and mediation between the community, an advisory committee and the Canadian Northern Economic Development Agency allowed the participants to reformulate the design of the project. This ensured that the proposal and methodology were both informed by research and refined based on local community knowledge, thus providing evidence of effective public participation (Gabel & Cameron, 2016).

4.2.4 Flexible degrees of intervention and good synergies between different levels of governance

The benefits and drawbacks associated with different levels of intervention should be considered when measuring the impact of a participatory process. Providing an enabling environment for broad public participation is a critical role for government. Although, in some cases, a high level of intervention can denote poor public participation, intervention may be necessary to ensure inclusivity and may be an indicator of synergy between bottom-up and top-down initiatives. While the UK case study (CS15) suggested that a high degree of intervention could be useful to support long-term citizen engagement in the government's Community Action 2020 Together We Can and the Big Society Agenda for sustainable development (Table 4.1), the analysis of the Australian case study (CS11) reveals that a low degree of intervention can also both indicate and foster the empowerment of Indigenous communities (Hill *et al*.,

2012; Nursey-Bray *et al*., 2019). When considering the degree of intervention as an impact indicator, it is important to recognise that top-down approaches to sustainable development and sustainability can hamper inclusivity (Griffin, 2013). An important finding in the Netherlands (CS18) is that the roles of local governments should be flexible so that they can adapt their form and degree of intervention to the specific characteristics of the contexts and the participants involved in the initiative. Authorities and participants can negotiate their roles as coordinators, facilitators and mediators between different groups. Efficient authorities tend to move from one role to the other over time within the same citizens' initiative, depending on its stage of development, as well as take on several roles simultaneously for different participatory initiatives (Mees *et al*., 2019).

4.2.5 Changes in people's attitudes, perceptions and behaviour

Behavioural change, which can be statistically quantified through interviews and surveys, was identified as an impact indicator. The outcomes of the India Narratives Project (CS12) included a clear set of recommendations for refining narratives about climate change and adapting them to diverse target audiences and contexts. Both the initiative and the associated research showed that the impact of climate action narratives and messages can be understood by tracking changes in people's attitudes and views within a mental map or schema of culturally formed associations, metaphors and narratives (Marshall *et al*., 2017). Similarly, the Alberta Climate Dialogue (CS5) and the Alberta Narratives Project (CS7) in Canada demonstrated the importance of openly discussing values and providing a safe and respectful space in which diverse views could emerge. This resulted in a clear set of narratives designed for specific target audiences (Marshall & Bennett, 2018; Prugh & Leighninger, 2018). The UK's government's Community Action 2020 Together We Can and the Big Society Agenda (CS15) showed that changes in people's attitudes, perceptions and behaviour was an indicator of impact. Existing research on the impact of effective environmental communication and participation focuses mainly on this impact indicator (Abrahamse, 2019; Heberlein, 2012; Telesiene & Gross, 2016).

4.2.6 Resulting formal and informal stakeholder networks

Networks and synergies between stakeholders (individuals, groups, communities, authorities and sectors) resulting from participatory processes can provide evidence of the success of environmental and climate dialogue initiatives and can also support the implementation of future participatory processes. In Germany, stakeholder dialogues initiated by the Federal Ministry for the Environment (Bundesumweltministerium, BMU) and the Federal Environment Agency (Umweltbundesamt, UBA) (CS17) led to strong networks that support long-term stakeholder engagement (Rotter *et al*., 2013). Similarly, the case study on transnational municipal networks in Brazil (CS9) created new networks at local, national and international levels for advancing climate action (Valente de Macedo & Jacobi, 2019). Evidence of relationship-building between community members, academic researchers and institutions demonstrates the positive impacts of participatory processes while also enabling follow-up projects. This was observed in the Alberta Climate Dialogue community–university research project (CS5). This successfully brought together a network of scholars, practitioners, citizens, members of civil society organisations, government officials and not-for-profit organisations to facilitate public deliberations (Hanson, 2018). Similarly, the Kugluktuk Community Readiness Initiative (CS6) brought together the community of Kugluktuk, NGOs, land claims organisations, government, industry and academic partners. The Kugluktuk initiative was informed by the Inuit models of wellness and consultation. It introduced extensive consultation through focus group sessions with a range of stakeholders including young people, elders, women, men, mine workers and industry representatives (Gabel & Cameron, 2016).

4.2.7 Participants' assessment of the participatory process and involvement in follow-up activities

A satisfactory assessment of a process or initiative by its participants can be an indicator of its impact. Furthermore, processes of co-assessment can reinforce trust in participatory initiatives and follow-up activities, which are essential for long-lasting engagement and mobilisation. Post-project

community-based research activities, such as those conducted in northern Ghana (CS2), are useful for co-designing follow-up activities and supporting long-lasting participation. The following process-based factors are important to achieve effective public participation: (i) intersectional representation of all groups; (ii) deliberation; and (iii) co-assessment of both the overall process and its outcomes (Samaddar *et al*., 2015). Similarly, stakeholder dialogues in Germany (CS6) emphasised the importance of establishing cooperation with key actors from specific sectors and regions who can take a leading role in follow-up activities for long-lasting participation and effective climate action (Rotter *et al*., 2013).

4.3 Recommendations for Long-lasting Effective Environmental and Climate Dialogues in Ireland

The following evidence-based guidelines are the result of comparing and contrasting information collected through the assessment of the NDCA and the critical analysis of literature and case studies providing empirical evidence of international best practice in environmental and climate dialogues. These guidelines also draw upon existing research on the place that climate change occupies in diverse segments of Irish public opinion.

4.3.1 Planning

Allocating sufficient planning time, human resources and budget to organise preliminary meetings is vital to define the goals of environmental and climate dialogues. It is also necessary for defining the roles and responsibilities of its members and the organisational structure.

4.3.2 Co-defining objectives, methodology and expected outcomes

Defining the characteristics, methodology and expected outcomes of the environmental and climate dialogue should be one of the main objectives of the planning phase. To support the alignment of the characteristics, methodology and expected outcomes of the dialogue with stakeholders' needs and expectations, the negotiations should draw upon existing research on environmental participation and should include the views of both organisers and participants.

4.3.3 Supporting inclusion

Engaging in dialogue about the roles of gender, race and/or ethnicity, socio-economic inequality and the intersection of these is key for identifying inclusive and effective avenues for the inclusion of all of Irish civil society in future environmental and climate dialogues. The participation of SSH experts in equality, diversity and inclusion and people across the above-mentioned intersections is vital, both during the planning process and throughout the dialogue. Inclusive participation can be supported by grants for helping people to attend gatherings, capacity-building and initiatives within communities (see Hill *et al*., 2012; Marshall *et al*., 2017; Marshall & Bennett, 2018; Medina, 2001; Rotter *et al*., 2013; Samaddar *et al*., 2015). Special attention should also be paid to the communities of the Irish islands and other communities that are not from the main urban centres.

4.3.4 Carrying out audience studies

A rigorous audience segmentation considering diverse demographic variables is necessary to design effective messages and to establish different channels for interaction and engagement. Relevant demographic variables include age, gender, level of education and level of access to services and infrastructures.

4.3.5 Communicating climate change effectively

This entails co-designing different messages and narratives for diverse target audiences; combining different channels or forms of communication (written, oral, visual, audio-visual, scientific, artistic); using clear, accessible and persuasive language; and exemplifying the negative impacts of climate change on both international and local communities (see Devaney *et al*., 2020a; Marshal *et al*., 2017; Marshall & Bennett, 2018).

4.3.6 Linking actions to address climate action with actions needed to address other societal challenges

The COVID-19 pandemic and the associated multidimensional global crisis is affecting the way people think and behave in relation to climate change. Considering the urgency of other societal challenges

in both the global and the Irish public agenda, it is vital to establish connections between the actions needed to address climate change and pressing societal challenges such as health, housing, food security and interrelated human rights threatened by environmental degradation.

4.3.7 Enabling public deliberation and active participation in decision-making processes

Deliberation early and throughout the process supports long-lasting engagement. Participants are more likely to engage if their decisions are taken into consideration to inform policies, achieve agreements and implement follow-up activities. An effective and successful example of this is Ireland's Citizens' Assembly (Devaney *et al*., 2020a).

4.3.8 Looking for consensus throughout the entire process

Consensus at an early stage in the planning and throughout the process is key to ensuring that outcomes are in line with intentions (see Smedby & Neij, 2013). This includes consensus on what can be collaborated on and co-created and what can and cannot be compromised on.

4.3.9 Building capacity of local actors to facilitate participation

Relationship-building, knowledge advancement and mobilisation are supported by capacity-building. Training local actors as facilitators of participatory initiatives can ensure the continuity of initiatives. It can also fill a gap in human resources and reduce the costs of long-lasting processes (see Gabel & Cameron, 2016; Hill *et al*., 2012).

4.3.10 Integrating people's knowledge and values into strategic planning

The integration of people's knowledge and values into both policy and legal documents reinforces engagement and the efficient implementation of decisions (see Medina, 2001; Mees *et al*., 2019; Smedby & Neij, 2013).

4.3.11 Improving synergies between diverse forms and levels of governance

It is important to define a diverse typology of approaches to engagement that provides a framework for the coexistence of different forms of governance for power-sharing. The combination of diverse forms of governance, with initiatives led by various social actors, can help to build capacity on how to interact and collaborate across the intersections of gender, race and ethnic background, socio-economic background, age and degree of access to education and information. Similarly, this enables the combination of initiatives with diverse approaches to participation, from inclusive to more narrowly defined (Hill *et al*., 2012). Participatory and coordinated governance mechanisms should not substitute for but rather complement each other at each stage of the policy cycle because they serve different purposes (Prutsch, Steurer & Stickler, 2018).

4.3.12 Applying community-based participatory research and co-design

Involving communities in the co-design of methodologies and outputs is vital for facilitating inclusive participatory processes and climate action. Academic researchers can successfully mediate between communities and funding bodies to improve the outcomes of participatory initiatives. Post-project community-based research is useful for co-designing follow-up activities that support long-lasting participation (see Gabel & Cameron, 2016). It is important to highlight that mediation between communities and funding bodies aimed at improving the outcomes of participatory initiatives can be useful and may require focused efforts. Academic research could play this role where there is no real or perceived bias.

4.3.13 Reformulating initiatives in line with stakeholders' feedback

Redefining, refining or rectifying the strategy and tools of participatory initiatives can contribute to their continuity and success (see Gabel & Cameron, 2016; Kabiri, 2016).

4.3.14 Involving both STEM and SHH experts and researchers

It is important to base participative processes on empirical evidence and also to involve researchers as key stakeholders in participation in decision-making so that they can explain and adjust their input. Co-design processes between citizens, scientists, authorities and policymakers contribute to the development of usable information and policies that are tailored to the needs of people (Prutsch, Steurer & Stickler, 2018).

4.3.15 Combining digital media with other channels and forms of engagement

The emergence of online environmental communities greatly facilitates people's participation in climate action through a "snowball effect" (Zhang, *et al*., 2019, p. 1). However, 80 million people in Europe never use the internet, either because they do not have a computer or because it is too expensive (European Commission, 2019c). According to the Central Statistics Office, 9% of households in Ireland did not have an internet connection in 2019. Therefore, limiting participation to the online sphere could reinforce digital exclusion. Combining online and off-line involvement allows participatory processes to take advantage of the potential of digital platforms and social media for engagement and mobilisation while also supporting inclusive face-to-face dialogues and deliberation (see Gabel & Cameron, 2016).

4.3.16 Connecting existing participatory initiatives

Local stakeholders have expressed interest in accessing more funding, capacity-building and support from local and national authorities and bodies, in order to further develop and connect local participatory initiatives for public engagement and climate action. This demonstrates that local stakeholders are willing to take an active role in more decentralised environmental and climate dialogues. Regional and local gatherings have proved effective in enhancing the visibility and profile of successful participatory initiatives and in connecting them. However, more work is necessary to scale successful initiatives and take advantage of the potential of local gatherings to boost mobilisation and support long-term engagement.

4.3.17 Supporting and learning from bottom-up initiatives

Long-lasting national environmental and climate dialogues require the integration of bottom-up approaches in national initiatives in order to benefit from the actionable knowledge, methodologies and networks created and tested by communities on the ground. The success of the NDCA local gathering in Kildare confirmed that bottom-up approaches to participatory climate action are extremely important in Ireland to support environmental participation at both regional and national levels.

5 Conclusions

In recent decades, international organisations and agreements, including the Rio Declaration (UNCED, 1992), the Aarhus Convention (UNECE, 1998) and the Paris Agreement (UNFCCC, 2015), have called for states to promote public participation in and foster cooperation at all levels of decision-making and action (local, national, regional and international). The redesign and implementation of the NDCA and future environmental and climate dialogues in Ireland takes place in the context of the European Climate Pact (European Commission, 2020a), as part of the European Green Deal (European Commission, 2020b), and the preparation of an improved ACE agenda, which was adopted at COP26 in Glasgow in 2021. Participation in both the pact and the ACE agenda is expected to contribute to a climate movement across communities and regions by building on, supporting and connecting existing participatory initiatives. To effectively address this call, the success of environmental and climate dialogues should be understood in terms of both engagement with and active participation in decision-making processes (Arnstein, 1969). All communities and individuals should be enabled to participate through access to information and the processes of co-design and co-assessment of policies. Our findings support climate justice and place "human factors at the centre of decision-making on climate change, to inform policies that are good for people and good for the planet" (Robinson & Shine, 2018, p. 569). In order to support the development of participatory initiatives for climate action, it is also important to consider the increasingly important role of hybrid, transboundary and community-based forms of governance in addressing borderless climate risks along with transnational and intra-national climate justice challenges (Benzie & Persson, 2019; Kuyper, Linnér & Schroeder, 2018).

Our study underscores the importance of adopting critical and culturally sensitive perspectives to support deliberation and inclusivity. These approaches allow researchers and practitioners to consider the specific characteristics of both collective and individual patterns of thinking in order to focus on those strategies and indicators that could potentially be transferred to other initiatives by adapting them to the specificities of different social actors and contexts. Critical and interpretative approaches are extremely important for examining the contexts and narratives that mediate deliberative and participatory processes in environmental and climate dialogues (Block *et al*., 2015; Hedtke & Zimenkova, 2013). In the context of climate change and environmental challenges, the interaction between scientific information and the lay public is strongly mediated by culture, including values, identities and attitudes (Hulme, 2009, 2016). The importance of culturally sensitive critical methodological approaches is aligned with research on the increasingly central role of the interpretive social sciences and humanities in framing climate change for public deliberation. These perspectives can assist in "opening up" public discussions about climate change, and this is essential because alternative questions, neglected issues and marginalised perspectives can have an important role in shaping effective and fair policies (Blue, 2016; Stirling, 2008). The impact indicators and guidelines discussed in this report are informed by equality, diversity and inclusivity perspectives, and they should be integrated, where possible, into future environmental and climate dialogues in Ireland.

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Abbreviations

ACE	Action for climate empowerment
CARO	Climate Action Regional Office
C-CHANGE	Connecting People to Climate Change Action: Informing Participatory Frameworks for the National Dialogue on Climate Action
DCCAE	Department of Communications, Climate Action and Environment
DECC	Department of the Environment, Climate and Communications
EPA	Environmental Protection Agency
EU	European Union
IPCC	Intergovernmental Panel on Climate Change
JOCCA	Joint Oireachtas Committee on Climate Action
NDCA	National Dialogue on Climate Action
NGO	Non-governmental organisation
PPN	Public participation network
SSH	Social sciences and humanities
STEM	Science, technology, engineering and mathematics
UNESCO	United Nations Educational, Scientific and Cultural Organization

An Ghníomhaireacht Um Chaomhnú Comhshaoil

Tá an GCC freagrach as an gcomhshaol a chosaint agus a fheabhsú, mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ar thionchar díobhálach na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialáil: Rialáil agus córais chomhlíonta comhshaoil éifeachtacha a chur i bhfeidhm, chun dea-thorthaí comhshaoil a bhaint amach agus díriú orthu siúd nach mbíonn ag cloí leo.

Eolas: Sonraí, eolas agus measúnú ardchaighdeáin, spriocdhírithe agus tráthúil a chur ar fáil i leith an chomhshaoil chun bonn eolais a chur faoin gcinnteoireacht.

Abhcóideacht: Ag obair le daoine eile ar son timpeallachta glaine, táirgiúla agus dea-chosanta agus ar son cleachtas inbhuanaithe i dtaobh an chomhshaoil.

I measc ár gcuid freagrachtaí tá:

Ceadúnú

- Gníomhaíochtaí tionscail, dramhaíola agus stórála peitril ar scála mór;
- Sceitheadh fuíolluisce uirbigh;
- Úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe;
- Foinsí radaíochta ianúcháin;
- Astaíochtaí gás ceaptha teasa ó thionscal agus ón eitlíocht trí Scéim an AE um Thrádáil Astaíochtaí.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Iniúchadh agus cigireacht ar shaoráidí a bhfuil ceadúnas acu ón GCC;
- Cur i bhfeidhm an dea-chleachtais a stiúradh i ngníomhaíochtaí agus i saoráidí rialáilte;
- Maoirseacht a dhéanamh ar fhreagrachtaí an údaráis áitiúil as cosaint an chomhshaoil;
- Caighdeán an uisce óil phoiblí a rialáil agus údaruithe um sceitheadh fuíolluisce uirbigh a fhorfheidhmiú
- Caighdeán an uisce óil phoiblí agus phríobháidigh a mheasúnú agus tuairisciú air;
- Comhordú a dhéanamh ar líonra d'eagraíochtaí seirbhíse poiblí chun tacú le gníomhú i gcoinne coireachta comhshaoil;
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaol.

Bainistíocht Dramhaíola agus Ceimiceáin sa Chomhshaol

- Rialacháin dramhaíola a chur i bhfeidhm agus a fhorfheidhmiú lena n-áirítear saincheisteanna forfheidhmithe náisiúnta;
- Staitisticí dramhaíola náisiúnta a ullmhú agus a fhoilsiú chomh maith leis an bPlean Náisiúnta um Bainistíocht Dramhaíola Guaisí;
- An Clár Náisiúnta um Chosc Dramhaíola a fhorbairt agus a chur i bhfeidhm;
- Reachtaíocht ar rialú ceimiceán sa timpeallacht a chur i bhfeidhm agus tuairisciú ar an reachtaíocht sin.

Bainistíocht Uisce

- Plé le struchtúir náisiúnta agus réigiúnacha rialachais agus oibriúcháin chun an Chreat-treoir Uisce a chur i bhfeidhm;
- Monatóireacht, measúnú agus tuairisciú a dhéanamh ar chaighdeán aibhneacha, lochanna, uiscí idirchreasa agus cósta, uiscí snámha agus screamhuisce chomh maith le tomhas ar leibhéil uisce agus sreabhadh abhann.

Eolaíocht Aeráide & Athrú Aeráide

- Fardail agus réamh-mheastacháin a fhoilsiú um astaíochtaí gás ceaptha teasa na hÉireann;
- Rúnaíocht a chur ar fáil don Chomhairle Chomhairleach ar Athrú Aeráide agus tacaíocht a thabhairt don Idirphlé Náisiúnta ar Ghníomhú ar son na hAeráide;
- Tacú le gníomhaíochtaí forbartha Náisiúnta, AE agus NA um Eolaíocht agus Beartas Aeráide.

Monatóireacht & Measúnú ar an gComhshaol

- Córais náisiúnta um monatóireacht an chomhshaoil a cheapadh agus a chur i bhfeidhm: teicneolaíocht, bainistíocht sonraí, anailís agus réamhaisnéisiú;
- Tuairiscí ar Staid Thimpeallacht na hÉireann agus ar Tháscairí a chur ar fáil;
- Monatóireacht a dhéanamh ar chaighdeán an aeir agus Treoir an AE i leith Aeir Ghlain don Eoraip a chur i bhfeidhm chomh maith leis an gCoinbhinsiún ar Aerthruailliú Fadraoin Trasteorann, agus an Treoir i leith na Teorann Náisiúnta Astaíochtaí;
- Maoirseacht a dhéanamh ar chur i bhfeidhm na Treorach i leith Torainn Timpeallachta;
- Measúnú a dhéanamh ar thionchar pleananna agus clár beartaithe ar chomhshaol na hÉireann.

Taighde agus Forbairt Comhshaoil

- Comhordú a dhéanamh ar ghníomhaíochtaí taighde comhshaoil agus iad a mhaoiniú chun brú a aithint, bonn eolais a chur faoin mbeartas agus réitigh a chur ar fáil;
- Comhoibriú le gníomhaíocht náisiúnta agus AE um thaighde comhshaoil.

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta agus nochtadh an phobail do radaíocht ianúcháin agus do réimsí leictreamaighnéadacha a mheas;
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha;
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta;
- Sainseirbhísí um chosaint ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Ardú Feasachta agus Faisnéis Inrochtana

- Tuairisciú, comhairle agus treoir neamhspleách, fianaise-bhunaithe a chur ar fáil don Rialtas, don tionscal agus don phobal ar ábhair maidir le cosaint comhshaoil agus raideolaíoch;
- An nasc idir sláinte agus folláine, an geilleagar agus timpeallacht ghlan a chur chun cinn;
- Feasacht comhshaoil a chur chun cinn lena n-áirítear tacú le hiompraíocht um éifeachtúlacht acmhainní agus aistriú aeráide;
- Tástáil radóin a chur chun cinn i dtithe agus in ionaid oibre agus feabhsúchán a mholadh áit is gá.

Comhpháirtíocht agus Líonrú

- Oibriú le gníomhaireachtaí idirnáisiúnta agus náisiúnta, údaráis réigiúnacha agus áitiúla, eagraíochtaí neamhrialtais, comhlachtaí ionadaíocha agus ranna rialtais chun cosaint chomhshaoil agus raideolaíoch a chur ar fáil, chomh maith le taighde, comhordú agus cinnteoireacht bunaithe ar an eolaíocht.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an GCC á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóir. Déantar an obair ar fud cúig cinn d'Oifigí:

1. An Oifig um Inbhunaitheacht i leith Cúrsaí Comhshaoil
2. An Oifig Forfheidhmithe i leith Cúrsaí Comhshaoil
3. An Oifig um Fhianaise agus Measúnú
4. An Oifig um Chosaint ar Radaíocht agus Monatóireacht Comhshaoil
5. An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tugann coistí comhairleacha cabhair don Ghníomhaireacht agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair imní agus le comhairle a chur ar an mBord.

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Connecting People to Climate Change Action: Informing Participatory Frameworks for the National Dialogue on Climate Action (C-CHANGE)

Authors: Marguerite Nyhan, Barry O'Dwyer, Yairen Jerez Columbie

Identifying Pressures

Ireland has committed to achieving a net-zero and climate-neutral economy by 2050. The Climate Action and Low Carbon Development (Amendment) Act 2021 sets out this ambition in legislation, while the Climate Action Plan defines a pathway to achieve it. A society-wide and collaborative effort is required by government, business, communities and individuals in Ireland to make this transition. To this end, the National Dialogue on Climate Action aims to actively engage stakeholders and the public with climate action across Ireland by empowering people. To be effective, the National Dialogue on Climate Action must identify new and innovative ways of engaging and communicating with the public to foster trust, co-operation and participation. It is also imperative that mechanisms for ensuring that everyone has a voice in national climate dialogues are designed and implemented effectively. The C-CHANGE project responds directly to these challenges.

Informing Policy

The C-CHANGE project informs climate-related environmental policies, legislation, regulations and guidelines.

- Public debate, specifically, the Department of the Environment, Climate and Communications National Dialogue on Climate Action, is directly informed by this project.
- The Government of Ireland's Climate Action Plan proposes a major programme of change across all sectors to reduce Ireland's national emissions. The C-CHANGE outputs maximise stakeholders' and citizens' involvement in developing and implementing this action plan.
- C-CHANGE addresses key objectives set out in the Government of Ireland's Project Ireland 2040 National Planning Framework. C-CHANGE deliverables feed into local authority plans. Under the Climate Action and Low Carbon Development (Amendment) Act 2021, each government sector is required to develop climate change mitigation plans. C-CHANGE directly informs these processes.
- C-CHANGE makes a significant scientific contribution to global challenges, specifically to the United Nations Sustainable Development Goals.

Developing Solutions

The C-CHANGE project is focused on developing solutions and provides guidance on facilitating stakeholders' and citizens' participation in environmental and climate dialogues and thus in climate action in Ireland. By synthesising international best practice and analysing the National Dialogue on Climate Action process, this research contributes to implementing innovative, intersectional strategies for collaboration, communication models and tools for raising awareness and mobilising societal change on environmental and climate issues at local and national levels. The research outputs provide clear and flexible guidelines that can be adapted to different contexts, sectors and audiences by practitioners, researchers and authorities. Outputs include indicators that measure the success of participatory processes and the effectiveness of strategies, communication models and tools within and beyond the National Dialogue on Climate Action. C-CHANGE directly informs stakeholder, citizen and community engagement, which in turn provides the impetus and motivation to act on the environment and climate change, thereby accelerating our transition to a net-zero and sustainable future.