RESHAPING CITIZENS' DELIBERATION FOR THE EUROPEAN GREEN DEAL

RESHAPING EUROPEAN ADVANCES TOWARDS GREEN LEADERSHIP THROUGH DELIBERATIVE APPROACHES AND LEARNING

D1.2 An assessment of participatory and deliberative techniques and processes relevant to the EGD

WP1 – State-of-the-art assessment of deliberative and participatory approaches relevant to the EGD

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Project Summary

REAL DEAL will stimulate a pan-European debate to reshape citizens' and stakeholders' active participation through deliberative processes around the European Green Deal (EGD). It brings together researchers and practitioners of deliberative democracy from a wide range of disciplines including environmental rights and the law of public participation, ethics and responsible innovation, gender studies and ecofeminism, psychology, geography, urban planning, and sustainability studies. It includes the EU's largest civil society networks advocating on the environment, climate, sustainable development, local democracy, and the European movement. It teams up with youth climate, social justice and women's organisations, SMEs, universities and research institutes, mobilising networks with thousands of CSOs, uniting millions of citizens and activating contacts to thousands of policymakers. In a large co-creation exercise, REAL DEAL will develop, test, and validate innovative tools and formats to propel deliberative democracy to the next level. It will test its innovations at citizens assemblies for the transition in at least 13 countries. We will scrutinise pan-European formats ranging from digital deliberation through our online platform www.realdeal.eu to in-person processes such as an Assembly for a Gender-Just Green Deal and a pan- European Youth Climate Assembly. REAL DEAL will co-create a comprehensive protocol for meaningful citizens' participation and deliberation to work towards the objectives of the EGD. It will validate recommendations on how to design such processes and how they can be applied by European institutions, Member States, and civil society alike. Gender equality will be embedded into the project's DNA. It pays specific attention to the leave-no-one-behind principle, fostering the engagement of disenfranchised groups that are disproportionally burdened by environmental damage. REAL DEAL will develop a new model of environmental citizenship across Europe.

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	ASSOCIATION DES AGENCES DE LA DEMOCRATIE LOCALE	AADL/ALDA	France
	CENTRAL EUROPEAN UNIVERSITY	CEU	Hungary
	CLIMATE ACTION NETWORK EUROPE	CAN EUROPE	Belgium
	DIALOGIK	DIA	Germany
	EUROPEAN MOVEMENT INTERNATIONAL	EMI	Belgium
	GLOBAL CLIMATE FORUM	GCF	Germany
	FORENINGEN NYT EUROPA	NYT EUROPA	Denmark
	SOLIDAR	SOLIDAR	Belgium
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Executive summary

A range of European Union (EU) policies, programmes, and initiatives have been engaging citizens in their design and implementation, ranging from Citizens' Dialogues to Horizon Europe Missions, from cohesion policy to green urban infrastructure. The European Commission (EC) has also held a few citizens assemblies. However, the formats currently used should be enhanced based on the lessons learnt from a wide array of successful deliberative processes rolled out at local and national levels across the EU and beyond. Moreover, European institutions do not yet apply citizens participation and deliberation in a systematic, evidence-based way. Hence, the REAL DEAL project aims to produce a comprehensive protocol of how the EU could and should design and deploy deliberative and participatory concepts, formats, and tools, to turn the objectives of the European Green Deal (EGD) into political actions and social practice. The main feature of this protocol is to ensure joint ownership over this crucial transformation by a wide range of stakeholders and citizens. The former includes representatives of the political, economic, scientific, and civil society sectors. The latter includes a cross-section of the European citizenship in all its diversity and cultures. Moreover, the end product, the protocol, is envisioned to provide guidance on how to give a voice to citizens and those individuals and groups who are often neglected and disenfranchised from the political process while being most affected by the necessary transformation. The protocol will also be sensitive to the diversity within Europe concerning social and political histories, cultures, institutional arrangements, and the way in which they give rise to different aspirations and challenges associated with the realisation of a green and just transformation.

This deliverable contributes to the protocol by assessing of participatory and deliberative techniques and processes relevant to the EGD.

Key take aways:

- ***On deliberative democracy and deliberative participation:***
  - The implementation of the EGD requires more than the deliberative decision-making process in elected or delegated bodies associated with the respective political system. It also requires the substantive engagement of stakeholders and citizens in designing, evaluating, and selecting public policies.
  - This engagement by all sectors of society in governance is called participatory. Today, the challenges to representative democracy bring attention to other democratic qualities such as participatory, strong, discursive, communicative and welfare democracy. Two main pillars of representative democracy (delegation and majoritarian voting) have been in tension with other democratic qualities (such as creating multiple opportunities for participation beyond elections). The main critique of majoritarian decision making is that it may jeopardise the rights of minorities, while not providing any logical base for assuming that majority-held preferences may be any wiser (della Porta, 2019).
  - If, in addition to being democratic, deliberative, and participatory, the process of decision making also provides genuine opportunities for meaningful participation from the full spectrum of social demographics affected by the issue being deliberated (e.g., marginalised, disadvantaged, and historically discriminated members of society), then it can be considered inclusive and representative, as well (Chwalisz, 2021; Fishkin, 2018).
  - On environmental governance: There have been and remain severe conflicts between market-driven interests and environmental concerns ranging from local to large scale cross-boundary issues which weigh heavily on the difficulties in setting effective policies for environmental governance within Europe and beyond. Meaningful compliance with policy entails changes in patterns of behaviour in

societies, which in democratic contexts grows from citizen and stakeholder engagement in policy making. Evidence in this review indicates that participatory deliberative processes engaging citizens and stakeholders and conducted under conditions of transparency, legitimacy, inclusion, and effective moderation can help address these highly conflicted environmental governance challenges.

- ***Boundary conditions: fairness, representativeness, inclusion, closure, ownership***
  - The literature review shows that if the conditions of fairness, representativeness, inclusion and closure, and ownership are met, along with developing faith in their own competence, participants start to place trust in each other and have confidence in the engagement process, and by extension, more broadly in governance. This is particularly true for the local level where the participants are familiar with each other and have more immediate access to the issue.

- ***Methodological challenges***
  - One of the main challenges of citizen engagement is to involve, throughout the process, participants with a great diversity of backgrounds, with a specific focus on hard-to-reach fringes of the population. Beyond the traditional method of stratified random sampling, which is helpful – but not enough - for selecting participants with a diversity of backgrounds, there is still a need for further experimentations and solutions. It is therefore necessary to rely on further methods or to use dedicated formats in order to secure the participation of these groups throughout the process.
  - Moreover, the use of digital tools has proven to be useful to involve some fringe of the population (above all younger generations), while a combination of both, online and offline formats, would ideally enable a more inclusive process.

- ***Learning from case studies and experiences***
  - The review of different citizen engagement processes that have taken place at the national and pan-European levels have revealed that there is not one format to conduct citizen participation that is suitable for every type of issue, nor is any method suitable for any context. Nevertheless, some key take-aways can be drawn from this review:
  - First, all processes described need to be seen in their own social, political, and cultural context. For instance, the potential of minipublics formats differs considerably when conducted in different political systems. In states in which the political system, in general, is more open towards civil society organisations and movements, minipublics are more widely accepted and influential compared to states in which there is little political involvement on the part of civil society. Besides the political context, the social and cultural context in which a deliberative or participative process is organised influences what kind of format, method, tool, or communication style would be most useful. When organising transnational processes, it is therefore important to consider the variety of contexts in which participants live and the effect this may have on the process of the deliberation and eventually on the results. This variety of contexts needs to be considered in the design of the deliberation process.
  - Second, what is needed in a deliberative or participative process also depends on the desired outcomes, or the intended goals of the intervention. Deliberative or participative interventions should a) help to legitimize the government that genuinely functions on a democratic basis, b) have an effect on political or technical decision making, (c) lead to public support for decision making, d) lead to agreement (or consensus) between citizens about policy decisions, (e) lead to more understanding between people with different opinions, (f) lead to informed and deliberative citizenry, (g) empower citizens and (h) have an effect on sustainability outcomes.

- ***Multi-level governance (MLG)***
  - Citizen engagement must be integrated into the structure of MLG. In addition to vertical and horizontal cooperation, MLG can be further enhanced by also involving non-governmental actors, including citizens, especially on topics that directly affect them. The most advanced option to do that is to co-develop, meaning to invite stakeholders to jointly develop a policy, programme or project, starting with the collective analysis of an issue.

- ***The question of meta-consensus***
  - The more actors, viewpoints, interests, and values are included and, thus, represented in an arena, especially on high-level complex issues such as climate change, the more difficult it is to reach a consensus/agreement. However, even with very heterogenous compositions of participatory bodies, mutually respected and legitimate agreements can sometimes be reached.
  - Although consensus need not to be the ultimate aim of deliberation in which participants are expected to pursue their interests, an overarching interest in the legitimacy of outcomes (justification to all affected) should ideally characterise deliberation (Chambers, 2003).
  - Deliberation should be plural more than consensual. Deliberation should recognise pluralism and strive for meta-consensus, involving mutual recognition of the legitimacy of different values, judgements and discourses held by other participants.

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List of acronyms/abbreviations

Abbreviation	Explanation
EGD	European Green Deal
EU	European Union
MLG	Multi-level governance
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
SDGs	Sustainable Development Goals
TEU	Treaty on European Union

Table 1 List of acronyms/abbreviations

Glossary of terms

Term	Explanation
Deliberation	The term deliberation refers to the style and procedure of decision-making without specifying the participants who are invited to deliberate. For a discussion to be called deliberative, it must rely on a mutual exchange of arguments and reflections rather than on decision-making based on the status of the participants, sublime strategies of persuasion or socio-political pressure. Deliberative processes should include a debate about the relative weight of each argument and a transparent procedure for balancing pros and cons.
Participation	The term participation refers to different mechanisms and processed for the public to express opinions and exert influence in policymaking.

Table 2 Glossary of terms

1 Introduction

Three questions constitute the backbone of the envisioned protocol of the REAL DEAL project. These questions focus on three fundamental challenges of deliberative and democratic policymaking in Europe:

a) What are the most suitable formats, methods and tools that promise to elicit and respect citizens and stakeholder preferences while at the same time ensuring that the implemented actions remain within the planetary boundaries that have been identified and accepted as credible by science and politically codified in the EGD?
b) What are appropriate institutional and organisational means to ensure the integration of civil society input obtained from organised interest and value groups and/or the input of non-organised citizens?
c) Which processes link the various vertical governance levels in the policy arenas of the EGD and how can they be sustained? How can local, regional, national, and European governance levels be addressed by innovative forms of deliberative democracy in an integrative and mutually productive manner?

There is no recipe book that can deliver such a protocol and there is no single format, such as minipublics or citizen assemblies, capable of addressing all three challenges outlined above. The protocol that this consortium is going to produce rests on a thorough analysis of the existing literature, including practical reports and personal accounts of participants and process facilitators. While there is no single, universally agreed definition of "deliberative democracy", the "notion of a deliberative democracy is rooted in the intuitive ideal of a democratic association in which the justification of the terms and conditions of association proceeds through public argument and reasoning among equal citizens." (Cohen, 1989, p. 21). As stated in the proposal, our point of departure for the discussion on the theory and concepts of deliberative and participatory approaches is rooted in approaches towards deliberative democracy (Dryzek et al., 2019; Dryzek & Niemeyer, 2010; Habermas, 1968, 1992; Rawls, 1999). Furthermore, we draw on insights from advocacy coalition frameworks (Sabatier, 1998; Sabatier & Weible, 2007) and discourse coalition concepts (M. A. Hajer, 1993b, 1995) enriched and further inspired by environmental democracy and rights (Christoff, 1996; Schuijff & Dijkstra, 2020), ecofeminism (Dietz, 1998; Lister, 1997), transdisciplinarity (Lang et al., 2012; Mattor et al., 2014), as well as responsible innovation (Schuijff & Dijkstra, 2020). This initial selection promises to provide an analytical and normative point of departure for developing a theoretically sound and practically feasible protocol for public deliberation in the context of the EGD.

By providing an assessment of participatory and deliberative techniques and processes relevant to the EGD, this deliverable contributes towards Work Package 1 "State-of-the-art assessment of deliberative and participatory approaches relevant to the EGD". The aim of T1.2 is to provide a review of scientific and grey literature and to assess existing policy frameworks, tools, formats, and processes for engaging citizens in the transition to a carbon-neutral and sustainable future through participatory and deliberative instruments. The fundamentally relevant approaches sketched out above have already been identified in the proposal as our point of departure. An initial set of relevant literatures had thus been identified already. In addition, our corpus of literature was substantially enhanced by a literature search based on keywords relevant to the EGD. We performed a search with two search engines: Scopus and Web of Science. In this search we focussed on finding scientific

literature about participative and deliberative actions in combination with one of the eight policy areas of the EGD. The search terms that we used can be seen in Table 3.

Search engine	Searched in	Search query
Scopus	TITLE-ABS-KEY	Democra* AND (particip* OR deliberat*) AND (citizen* OR stakeholder*) AND (environment* OR green OR sustain* OR ecology* OR climate OR energy OR "circular econo*" OR "resource efficient building and renovat*" OR "zero-pollution" OR "toxic free environment" OR "ecosystem* and biodiversity" OR "food system" OR "sustain* and smart mobility") AND (inclusive* or direct)
WEB of Science	Title, Abstract, Keyword Plus	Democra* AND (particip* OR deliberat*) AND (citizen* OR stakeholder*) AND (environment* OR green OR sustain* OR ecology* OR climate OR energy OR "circular econo*" OR "resource efficient building and renovat*" OR "zero-pollution" OR "toxic free environment" OR "ecosystem* and biodiversity" OR "food system" OR "sustain* and smart mobility") AND (inclusive* or direct)

Table 3 Search Queries for Scopus and Web of Science

After the searches were performed, outcomes of both of the searches were combined, and duplicates were removed. This resulted in 311 articles. These articles were added to Zotero, a reference management software. This allowed the team members to work collectively in one bibliographic database. Besides the articles that were found with the above-mentioned search criteria, additional scientific and grey literature was added to our bibliographic database as well. Snowball sampling was used, meaning that team members added articles or reports they already knew, or which was referenced in other articles or reports they read. By the 10th of August 2022, a total of 732 items had been added to the group library. In this group library, multiple subfolders were created to which articles could be added. Three team members divided all articles amongst themselves, read the titles and abstracts and added them to relevant subfolders.
In a second step, the group library and subfolders were continuously supplemented by additional academic and grey literature by means of a snowballing approach. This combination of systematic literature search and snowballing facilitates a thorough review of relevant scientific and grey literature.
In a third step, the major task contributors were assigned specific Zotero subfolders for review. The subfolders were arranged according to major topics relevant to task 1.2. These topics are:

- Conceptual foundations of deliberative and participatory processes
- Methodological approaches towards facilitating deliberative and participatory processes
- The status quo concerning the institutionalisation of deliberative democracy in the EU
- An overview of actual deliberative and participatory processes
- Lessons learnt from empirical applications of deliberative and participatory processes
- Deliberative and participatory processes in the context of selected policy fields relevant to the EGD

- Gender aspects

The results of this review constitute Chapter 2 of this deliverable. Chapter 3 then opens the discussion for contextual factors such as multi-level governance arrangements and the challenges of aligning vertical and horizontal governance structure, as well as a critical reflection of experiences with deliberative and participatory processes at the EU and national levels. Chapter 3 also reflects on how the criteria developed in REAL DEAL Task 1.1 can be brought to bear in D1.2. The deliverable concludes with key takeaways for a protocol leading to an effective, efficient, competent, fair, and ethical implementation of participatory and deliberative approaches in Chapter 4.

2 Deliberation and participation in the context of the EGD – A literature review

2.1 Deliberative Democracy: Concepts and definitions

The term deliberation refers to the style and procedure of decision-making without specifying the participants who are invited to deliberate (Chambers, 2003; Renn, 2008; Stern & Fineberg, 1996). For a discussion to be called deliberative, it must rely on a mutual exchange of arguments and reflections rather than on decision-making based on the status of the participants, sublime strategies of persuasion or socio-political pressure. Deliberative processes should include a debate about the relative weight of each argument and a transparent procedure for balancing pros and cons (Bächtiger & Beste, 2017; Dryzek et al., 2019; Habermas, 1989; S. Tuler & Webler, 1999; Webler, 1995). Deliberation is first and foremost a style of exchanging arguments and coming to an agreement on the validity of statements and inferences. Using a deliberative format does not necessarily include the demand for stakeholder or public involvement. Deliberation can be organised in closed circles (such as the political systems in ancient Athens), as well as in public forums. Such deliberative processes practiced within highly restricted subsets of societies (e.g., only men or only landed gentry or representatives of certain ethnic, political, or religious factions) have been the norm for centuries and continue to be prevalent in many places around the world (Niemeyer, 2014).

The combination of deliberation and democracy requires that the bodies in which deliberation takes place are legitimised by democratic principles and due process.

Democratic deliberative forms of exchange can be organised in parliaments, ministries, parties, committees as long as they have a clear democratic mandate in the locally recognised forms of democracy. The 1990s saw a strong deliberative turn in democracy and democratic theory (Dryzek, 2000) in which democratic legitimacy is based on the ability to participate in effective deliberation. Deliberative democracy should be pluralistic, embracing the necessity to communicate across differences without erasing differences. Deliberation should also be pluralistic and not only consensual, involve a mutual recognition of the legitimacy of different values, judgements and discourses held by other participants, and strive for meta-consensus (Curato et al., 2017).

Following our arguments that the implementation of the EGD requires more than the deliberative decision-making process in elected or delegated bodies associated with the respective political system, we advocate for the engagement of stakeholders and citizens in designing, evaluating, and selecting public policies.

The opportunity for engagement by all sectors of society in governance is called participatory. Democracy should not be reduced to electoral accountability of those in government. Today, the challenges to representative democracy bring attention to other democratic qualities such as participatory, strong, discursive, communicative and welfare democracy (della Porta, 2019) . Two main pillars of representative democracy (delegation and majoritarian voting) have been in tension with other democratic qualities (such as creating multiple opportunities for participation beyond elections). The main critique of majoritarian decision making is that it may jeopardise the rights of minorities and provides no logical base for assuming that majority-held preferences may also be wiser (della Porta, 2019).

If, in addition to being democratic, deliberative, and participatory, the process of decision making also provides genuine opportunities for meaningful participation from the full spectrum of social demographics affected by the issue being deliberated (e.g., marginalised, disadvantaged, and historically discriminated members of society), then it can be considered inclusive and representative, as well (Chwalisz, 2021; Fishkin, 2018).

The OECD Work on Open Government provides an interesting distinction between deliberative and participatory democracy:

“Deliberative democracy is the wider political theory that claims that political decisions should be a result of fair and reasonable discussion among citizens. Gastil and Levine’s Deliberative Democracy Handbook (Gastil & Levine, 2005) argues that “deliberative democracy strengthens citizen voices in governance by including people of all races, classes, ages and geographies in deliberations that directly affect public decisions”. The theory gained traction in academic literature in the 1980s (Mansbridge, 1980; OECD, 2020, p. 4)

“Participatory democracy has a slightly longer history, gaining ground with the activist movements of the 1960s that demanded greater participation in government decision making (e.g., civil rights, women’s liberation movements, see (Pateman, 2012). A central tenet of later work on participatory democracy is that it must increase the capacities of citizens to participate, which necessitates reform of democratic institutions to make participation more meaningful (Pateman, 2012).” (OECD, 2020, p. 4)

Vitale attempts to reconcile deliberative and participatory democracy (Vitale, 2006). By acknowledging the citizens as the main actors in the political process, political deliberation entails a strong ideal of participation. In modernity, deliberative and participatory democracy are compatible and can, either separately or together, enhance democratic practices.

Political participation and sustainability are closely intertwined. With the Rio conference in 1992, the Local Agenda 21 strategies strengthened new trends towards more deliberative political participation, focusing on sustainability. It was also a trigger for social innovations and a wave of more civic engagement (Kersting, 2021).

A broader participatory space with democratic innovations emerged and a “deliberative turn” around the late 1990s could be identified in several new participatory instruments in the invited and invented space. In the invented space, new participatory instruments are initiated by civil society (bottom up) often in the form of demonstrations. In the invited space, the state offers new channels to extend the participatory space often to include new interest groups and to put new issues on the agenda. Nevertheless, criticism of participatory democracy and demands for more elite-centered, epistocratic governance and a stealth democracy also became louder (Kersting, 2021).

We suggest using the term deliberative participation within democracy when one refers to the combination of deliberation and public involvement (Atlee et al., 2009; Bohman, 1997; Chambers, 2003; Cohen, 1997; National Research Council, 2008; Renn, 2004, 2008; Renn & Schweizer, 2020; Warren, 2002). Although research on this topic is still in its infancy and empirical evidence is scarce, we posit that deliberative participation is required for four major tasks:

1. Deliberative processes are needed to define the role and relevance of the different forms of knowledge (Lavazza & Farina, 2021) for making informed choices on how to reach the major objectives of the EGD (such as decarbonisation, biodiversity or climate protection).

2. Deliberation is needed to elicit informed preferences about policy options and priorities based on a discourse on expected consequences, underlying values, interests, and visions of the future.

3. Deliberation is needed to explore the most appropriate way of dealing with uncertainty and to set efficient and fair trade-offs between too much or too little regulation (i.e., agreement on handling uncertainty).

4. Deliberation needs to address the wider concerns of the affected groups and the public at large, particularly if the means to reach the goals of the EGD are highly contested.

Addressing the concerns of those who are systemically excluded is a complex task, and how to do so is not agreed upon in the literature. Nevertheless, following discussion among the partners on REAL DEAL, there are some key concepts which must be clarified before we continue with the literature review and assessment.

As an ecofeminist organisation, Women Engage for a Common Future, and one of the REAL DEAL partners, we have utilised our expertise to conduct gender analysis where possible and to include an explicit gender section. It should be noted that this analysis aims to be intersectional, so does not solely focus on gender but rather aims to incorporate the lived experiences of women[1] and gender non-conforming people in all their diversity.

Deliberation is often primarily concerned with consensus building and ensuring decisions are made which represent a variety of actors. Although such aims of inclusion are related to the goals of feminism, how this is done to ensure equality can be difficult to conceptualise. The focus on consensus leaves little room for enacting the cultural politics of difference, a form of expression that some feminist movements rely on to achieve their aims by highlighting the diversity of experiences under current structures such as patriarchy and colonialism (Squires, 2008). Additionally, despite Habermas' critique of liberalism and carving out of an alternate political space for deliberation, such spaces will not be free of structural bias, as they are built by people who are inherently biased, and can therefore reproduce inequalities, even with the best intentions of including everyone equally (Young, 2001).

We posit that rationality is not a neutral term, and historically has been associated with masculinity (including abstract thought, objective judgement) and placed in a hierarchy above its 'feminine opposite', emotionality (including subjectivity) (Ross-Smith & Kornberger, 2004). This normative conceptualisation has existed since the time of ancient Greece, and as such has become the socially accepted and reinforced norm. This is reflected in the literature around democratisation and participation, especially considering such areas of

[1] Whenever terminology such as the term "woman" or "women" is used, we refer to this term in all its diversity and inclusiveness.

study have been largely developed since the enlightenment by heterosexual, white European men. This colonial Eurocentric centre of epistemological production has led to the valuing of "objective" scientific knowledge. In our understanding, however, knowledge is socially situated and influenced by unequal epistemological structures which prioritise those who have traditionally held power, who can often present arguments in male coded "rational" ways (Ahmed, 2017). This can also be seen in the environmental sphere, where "rational" techno-scientific arguments have taken precedence over the lived experiences of those most affected by climate change (usually structurally disadvantaged groups) (Bäckstrand, 2004).

2.1.1 The need for deliberative participation in modern and post-modern societies

Modern societies are confronted with new challenges that pose threats to both their political and economic performance and their legitimacy, especially the acceptance of controversial and collectively binding decisions (Kaltwasser & Taggart, 2016; Mair, 2013). Many traditional institutions that served the function of building and maintaining social cohesion and coherence have been in decline over the last years. Public support for political processes of producing, justifying, and implementing policies has been gradually replaced by indifference, criticism or even cynicism and opposition towards elected actors and established representational institutions (Crouch, 2004; Flinders, 2012; Nanz et al., 2019). Many analysts have diagnosed a crisis of governance due to a growing pluralism of values and lifestyles among the population, fading loyalties towards social or political reference groups, lack of social and cultural cohesion, and a growing disenchantment with the main institutions of democratic rule making (Norris, 2011). Expressions of the discontent include increased protest against infrastructure projects and collectively binding decisions, expanding distrust in political elites and a growing number of individuals who raise general doubts about the capability of the political system to meet its expectations (Crouch, 2004; Mair, 2013; Norris, 2011). The rise of populist parties and positions in Europe and the US is a vivid manifestation of this dissatisfaction with the political system and its performance (Grimm, 2015; Kaltwasser & Taggart, 2016). These trends have elements of disenchantment with the governance institutions and processes on one hand and disengagement from participation in governance on the other. The effort in this REAL DEAL project can be seen as an effort to address the former by enhancing the degree and effectiveness of the latter.

The quest for new deliberative elements for political governance is embedded in meta-discourse about democracy and post-factual policy styles: the debate on the crisis of democracy (Blühdorn, 2013; Crouch, 2004; J. S. Fishkin, 2018), of the economic system (postgrowth/degrowth society debate; (D'Alisa et al., 2015; Mason, 2015) and of the state (i.e., discussion about the denationalisation and/or return of a stronger state; (Schiller, 2016; Voßkuhle et al., 2013). There are some who suspect that a new relationship between the state and citizens may arise, triggered by new forms of participation and cultures (Elstub & Escobar, 2019; Fung, 2015; Poguntke et al., 2015).

The idea of deliberative citizen participation has been mainly inspired by Habermasian discourse theory (Habermas, 1984; Jaeger, 2001; Webler, 1995; Webler & Renn, 1998) and John Rawls' Theory of Justice (Rawls, 2006). Discourse theory and discourse ethics advocate more inclusiveness for legitimate and sustainable political decision-making. Modern societies are characterised by a plurality of values and world views. According to Habermas (Habermas, 1996, p. 20), conventional politics and political decision-making cannot adequately deal with this heterogeneity. Modern societies lack moral cohesion that could guide political decision-making. Although mutually binding norms and values are non-existent at the surface, people can allude to their shared reason and experience as human beings. Here, the joined heritage of Habermasian deliberation and 'communitarianism' (common good versus individualism) becomes obvious (Benhabib, 1992). Consequently,

political decision-making must find mechanisms that could serve as guidance instruments by enabling citizens to engage in joint evidence-informed decision-making.

Habermasian discourse ethics offers a solution to the dilemma between heterogeneous worldviews and the need for collective decisions. In discourse ethics, political and judicial decisions may claim to be legitimate if and only if they find the consent of all affected parties once these have engaged in an open and disciplined exchange of arguments. Consent does not merely mean agreement but is a product of a rule-based discursive opinion formation and decision-making process (Habermas, 1992, p. 169). From a liberal perspective, this process can best be described as a competition of arguments whereas, from a Habermasian perspective, there is no such "competition" because the more rational argument prevails according to the Principles of Discourse and rational consensus (Abat & Monserrat, 2009). As a result, the procedure of decision-making provides legitimacy by enabling a fair context of arguments. As noted before, Habermas claims that in communication, people always make one or more factual, normative or subjective knowledge claims (in his words: speech acts). These claims allude to the objective world of factual evidence, the normative world of values, moral orientations and worldviews, and the subjective world of individual experience. The basic premise of the theory of communicative action is that people are capable of coming to a rationally motivated agreement (i.e., agreements free of coercion of any kind) if they are provided with the optimal discourse setting.

Thus, factual, normative, and expressive knowledge claims are settled by alluding to the common rationality of communicative action provided by an appropriate organisational discourse structure. Of course, no real-world discourse can reach the prerequisites of the ideal speech situation (Webler, 1995); yet practical discourse can aspire to this goal. Discursive decision-making is therefore oriented towards the common good and seeks the rational competition of arguments. It looks for diversity in participants and perspectives in the sense that all potentially affected parties should be able to agree with its outcome. All relevant arguments need to be included in the deliberation regardless of the extent of their representation within the population. The objective here is to find the best possible consensus among moral agents (not just utility maximisers) about shared meanings of actions based on the knowledge about consequences and on an agreement about basic human values and moral standards (Webler, 1995, 1999a). The results of discursive decision-making then draw their legitimisation from the procedural arrangements of the discourse. Participation methods aim at facilitating mutual understanding and transparent decision-making, thus adding legitimacy to the whole process of policymaking. The best-suited instruments refer to citizen forums, multiple stakeholder conferences and consensus-oriented meetings (Dienel, 1989; Glucker et al., 2013; Rowe & Frewer, 2000). The main contribution of deliberative models to society is to reflect social and cultural values in collective decision-making. Such a value-based reflection is a prerequisite for legitimising transformations towards more sustainable and climate-neutral futures.

Deliberative democracy has been paired with environmental action and the idea of environmental citizenship (Dobson, 2003, 2007; European Network for Environmental Citizenship - ENEC, 2018), with some proposing that the public-sphere approach of deliberative democracy allows us to understand our dependency on the environment and establish ways in which “citizens consciously create a common life and a common future together” (Eckersley, 2000a, p. 120; Westra, 1995). Furthermore, this idea includes citizens as agents of change in the private as well as the public sphere, who could give shape to a more sustainable human (societal) life (Jagers & Matti, 2010). A benefit of deliberative democracy is the contribution from citizen engagement and a shift in perspective towards valuing the future, which sometimes becomes lost in the short-term cycles of vote-centric governance approaches (Eckersley, 2000b). Future generations thereby are not overlooked for the economic gains of present political systems or individuals. Decisions about our

ecological future should be made by a wide variety of stakeholders through deliberative processes, and not be solely the decision of politicians and multinationals (Westra, 1995).

Some propose that deliberative democracy needs to be grounded on a type of 'post-normal science', whereby, the values of individuals are incorporated into the decision-making process, rather than solely confined to scientific recommendations (Funtowicz & Ravetz, 1993). In that sense, post-normal science refers to the reversal of reductionist hierarchical approaches towards frameworks that are more focused on the importance of value within our decisions. It is also grounded on the understanding that science does not always provide hard "facts", but more of an approximation of what will happen in certain situations and circumstances. Without post-normal science, policy and action will revert back to what scientists say and will be guided by policymakers instead of including public participation (Wyborn et al., 2019).

Deliberative democracy is implicitly underpinned by a post-normal scientific outlook, one that values public input and participation to provide moral reasoning behind the actions of scientific recommendations. We already have the scientific extrapolations and recommendations about climate change, but we need citizen engagement and moral will to implement and design a climate-neutral and ecologically safe future.

Given these potential advantages and prospects of deliberative participation, the crucial question to raise is whether and to what extent methods, formats and tools of deliberative participation can be regarded as powerful instruments for enhancing the transformation towards a sustainable, climate-neutral society and how should they be designed to be effective, efficient, resilient, fair, and legitimate?

Among many potential conceptual frameworks, the following three seem to be particularly relevant for deliberative participation in the context of the EGD because they explicitly link stakeholder and public engagement with decision-making.

- The first concept relates to the advocacy coalition framework (Sabatier, 1998; Sabatier & Jenkins-Smith, 1993) that explains how coalitions of civic society organisations become powerful change agents for initiating, promoting or facilitating transformations. This framework has been augmented by Maarten Hajer who added a discursive element to the idea of coalitions stressing that through the interactions with other actors, conflicting positions are re-negotiated and adapted (M. A. Hajer, 1993a, 1995). This discursive turn in the advocacy framework opens up a bridge to the various concepts of deliberative democracy and citizen participation (M. Hajer & Versteeg, 2005; Weymouth & Hartz-Karp, 2015). This concept particularly addresses our second main orientation question of how to reconcile stakeholder positions and public preferences.
- The second concept refers to the idea of deliberative democracy and inclusion of stakeholders and the general public when making collectively binding decisions (Chambers, 2003; Dryzek et al., 2019; Elstub, 2010; Mansbridge et al., 2012; Pateman, 2012). The claim is that, once the decision-making process reflects the plural knowledge, interest and value structure of society, basic functions of society could be better served and, at the same time, positive effects with respect to the legitimisation of political decision making could be accomplished (Beauvais & Baechtiger, 2016; Dryzek & Niemeyer, 2010; OECD, 2020; Pellizzoni, 2015). Such a transformation towards a broader inclusion of social actors is also envisioned as a change of political style – from an instrumental and strategic perspective to a more deliberative and collaborative perspective of policymaking (Habermas, 1984; Webler, 1999a). The promise here is that with the opening of multi-stakeholder, multi-actor governance structures, politics would be able to produce better solutions for complex tasks promoting effective, efficient, resilient

and just solutions to “wicked” problems, i.e., problems that are difficult to solve because of their complex and interconnected nature (Head & Alford, 2015) that precludes a singular accepted solution. At the same time, the acceptance for such decisions would be improved due to the inclusion of many different perspectives from the population so that an additional legitimisation effect is accomplished. This concept addresses mainly the first question of how to match planetary boundaries with open participatory processes.

- The third concept refers to the many variants of multi-level governance (Maggetti & Trein, 2019; Trein et al., 2019). This concept is crucial for addressing the third question relating to the link between various governance levels (Sager, 2019). Trying to be effective in climate and environmental regulation requires a close cooperation between the local, regional, national and European level. Particularly with the priority of the subsidiarity principle, it is crucial to design policy mixes that clearly specify what needs to be done on each governance level in order to produce an integrated and coherent policy result (Rietig, 2021). On the formal institutional side of governance, the interactions between the different governance levels are at least defined and often enhanced through mutual learning. However, on the informal side, for example when using citizens assemblies, it is not at all clear at which level that type of participatory instrument should be used and, even more so, how these different types should be integrated and structured so that they interact with each other.

In addition to three concepts that need to be combined to address the crucial orientation questions from the introduction, the task of structuring deliberative innovations into the political system needs to be guided by the legal frameworks in which these activities take place (and they vary within the European Union). The task must also be adjusted to the normative goals of environmental ethics, gender equality, respect for diversity and inclusion of the needs and rights of non-European populations and future generations (Christoff, 1996; Davies et al., 2017). This is easily said but difficult to accomplish.

Our approach of combining the strategies described and analysed in the advocacy coalition framework with its emphasis on reaching specific targets (such as the objectives of the EGD) and the open processes of citizen deliberation provide the key to this challenge. The targets and the main strategies are pre-formed by legal treaties (such as the Paris accord) and stakeholder negotiations; however, deciding how to implement in which form, with what priority, and with what accompanying measures to compensate deficits or value violations should be seen as an open-ended process in which the affected citizens should be consulted (Bächtiger & Parkinson, 2019; Christoff, 1996). A third player in this process is the science sector, which in a post-normal understanding of science provides the necessary analytical evidence for designing or co-designing strategies and implementation plans (SAPEA, 2019; Mattor et al., 2014).

2.1.2 The crucial criteria for deliberative participation: inclusion and closure

Participatory and deliberative processes are shaped by two major components: inclusion and closure. Inclusion refers to the composition of the group of participants and stakeholders, the selection of themes and issues as well as the time frame of the engagement activity or process (Renn & Schweizer, 2009). Closure refers to the applied methods that help to reach a decision or conclusion at the end of the deliberative process. Also, the climate of the discourse, the management of disagreement and the opportunity to raise and test arguments can be subsumed under closure. Furthermore, any citizen deliberation endeavour starts on the basis of certain criteria that form the background of its design.

Inclusion and closure can both be used to characterize different concepts and formats of any type of collective decision making but are particularly important in participatory approaches (independent of whether they are deliberative or any other type). The crucial questions here refer to the selection rule and process with respect to participants, topics, and issues. Furthermore, discourse boundaries specifying time limitations, spatial extension (local, regional, global) and domains are subsumed under the term inclusion. It basically determines who is legitimised to deliberate about what.

There is a first specific set of requirements for a participatory process to be deliberative and inclusive (Webler, 1999; Renn, 2008, p. 274). These conditions are met if the process

- involves representatives of all relevant actor groups (if appropriate) regardless of their formal power or mandate in the political arenas;
- empowers all actors structurally to participate actively and constructively in the discourse;
- allows co-design of the framing of the issue in a dialogue with these different groups;
- generates a common understanding about the framing of the problem, potential solutions and their likely consequences (based on the expertise of all participants);
- provides a forum for deliberation that provides equal and fair opportunities for all parties to voice their opinion and to express their preferences; and
- establishes a connection between the participatory bodies of decision-making and the political implementation level.

The literature shows that if these conditions are met, along with developing faith in their own competence, participants start to place trust in each other and have confidence in the process of risk management (Kasperson, 1986; Beierle & Cayford, 2002, p. 30f.; Viklund, 2003) and by extension, more broadly in governance. This is particularly true for the local level where the participants are familiar with each other and have more immediate access to the issue (Petts, 1997). Reaching consensus and building-up trust on highly complex and transgressional subjects such as the topics of the EGD (for example, global climate change) is, however, much more difficult. Being inclusive and open to social groups does not, therefore, guarantee constructive cooperation by those who are invited to participate. It is up to empirical evaluation to decide whether the goals of inclusion for deliberative processes have been met. This is one task of the tests planned for the later stages of the REAL DEAL process.

The second term is closure. All participatory processes should set up rules of how the deliberation is conducted and how a final product is reached, i.e., reaching closure on a set of options that are selected for further consideration, while others are rejected (Renn & Schweizer, 2009). Closure does not mean to have the final word on a development, a green law, or a new regulation. Rather, it represents the product of deliberation (i.e., the agreement that the participants reached). The problem is that the more actors, viewpoints, interests, and values are included and, thus, represented in an arena, the more difficult it is to reach either a consensus or some other kind of joint agreement. However, the empirical analysis of Beierle and Cayford (2002) as well as the evidence presented by several recent reviews (National Research Council, 2008; OECD, 2020; Parkinson & Mansbridge, 2012) demonstrate that even with very heterogenous compositions of participatory bodies, mutually respected agreements could be reached that go beyond the commonplace. Furthermore,

Beierle and Cayford (2001) were able to show that involvement activities that were directed towards reaching consensus or a mediated resolution of a conflict were more successful in terms of output and process than those directed towards collecting opinions or a variety of options. At the same time, the study made clear that consensus-seeking projects demanded many more resources and a better structure than other types of involvement activities. In particular, it was important to establish common rules for generating and evaluating evidence and to deal with conflicting values.

For this purpose, a second set of requirements is needed to evaluate the process by which closure of debates (whether they are final or temporary) is brought forth, as well as the quality of the decision or recommendation that is generated through the closure procedure. The first aspect, the quality of the closure process itself, can be subdivided into the following dimensions (Renn & Schweizer, 2009; Webler, 1995):

- Have all arguments been properly treated? Have all knowledge claims been fairly and accurately tested against commonly agreed standards of validation?
- Has all the relevant evidence, in accordance with the actual state-of-the-art knowledge, been collected and processed?
- Was systematic, experiential, and practical knowledge and expertise adequately included and processed?
- Were all interests and values considered, and was there a major effort to come up with fair and balanced solutions?
- Were all normative judgements made explicit and thoroughly explained? Were normative statements derived from accepted ethical principles or legally prescribed norms?
- Was every effort made to preserve plurality of lifestyles and individual freedom and to restrict the realm of collectively binding decisions to those areas in which binding rules and norms are essential and necessary to produce the wanted outcome?

Turning to the issues of outcome, criteria in additional to inclusion and closure are needed. They have been discussed in the political science and governance literature extensively (Dryzek, 1994; European Commission, 2001; Rhodes, 1997). Crucial questions in connection with criteria include (Renn, 2005):

- *Effectiveness:* Does the chosen policy option achieve the desired effect?
- *Efficiency:* Does the option achieve the desired effect with the least resource consumption?
- *Minimisation of external side effects:* Does the option infringe on other valuable goods, benefits or services such as competitiveness, public health, environmental quality, social cohesion, etc.? Does it impair the efficiency and acceptance of the governance system itself?
- *Sustainability:* Does the option contribute to the overall goal of sustainability? Does it assist in sustaining vital ecological functions, economic prosperity and social cohesion? Is it in line with the objectives of the EGD?

- *Fairness:* Does the option burden the subjects of regulation in a fair and equitable manner?
- *Transparency:* Are all rules, methods and procedure transparent to all persons involved in the process?
- *Legitimacy:* Does the design of the participatory process involve commitment from policymakers to consider all recommendations and provide justification if recommendations have not been taken onboard?
- *Political and legal implementability:* Is the option compatible with legal requirements and political programmes?
- *Ethical acceptability:* Is the option morally acceptable?
- *Public acceptance:* Will the option be accepted by those individuals who are affected by it? Are there cultural preferences or symbolic connotations that have a strong influence on how the risks are perceived?

In order to assess and evaluate different deliberative participation designs, the distinction in inclusion (who is participating and why) and closure (how is the deliberation process organised and how are recommendations accomplished) facilitates comparative reviews. The following table 4 is an example for this approach: it distinguishes between four modes of inclusion (citizens, experts, stakeholders and hybrid) and three modes of closure (consensus, documenting diversity and voting). However, two cells are empty because there is no convincing concept for a combination of voting with experts and stakeholders.

closure type / inclusion category	consensus	documenting diversity	voting
citizen	panel, jury, assembly	study groups	American townhall, study groups
expert	group Delphi	expert hearing	
stakeholders	round table	participatory modeling, mapping	
hybrid	analytic-deliberative discourse		

Table 4 Exemplary illustration for using inclusion and closure for classifying different formats

A considerably more detailed and comprehensive table of formats and inclusion categories is available in the D3.2 Public Engagement Methods and Tools document of the Engage 2020 project of the European Horizon 2020 program, the Engage 2020 Action Catalogue (http://actioncatalogue.eu/).

The distinction between inclusion and closure will be the guiding principle for the introduction of methods, formats, and tools. It helps us to classify and characterise each option and to conduct a comparative review. It is also relatively easy to communicate and helps decision-makers to evaluate the suitability of each method, format, or tool for the problem that they want to address.

2.1.3 Classification of participatory processes: Six conceptual approaches

The perspectives on deliberation and participation are influenced by philosophical traditions or "schools of thought". Discerning the origins of these perspectives on deliberative participatory processes can serve as a heuristic for making informed decisions about selecting methods, formats, and tools for implementation. Our literature review revealed that one can distinguish six distinct types of how participatory processes can be framed and purposefully deployed to foster and sustain deliberative and participatory democracy (see reviews in Renn & Schweizer, 2009, 2020; Bidwell & Schweizer, 2021). The prototypes can be labelled as: functionalist, neo-liberal, deliberative, anthropological, emancipatory, and post-modern (see reviews in Renn & Schweizer, 2009; National Research Council, 2008; Renn, 2008; Renn & Schweizer, 2020; Bidwell & Schweizer, 2021). They have to be considered as abstractions from real-world interaction in so far as no actual participation process would attribute itself exclusively to one of these categories. They are rather ideal-types in the Weberian sense (Weber, 1972; see the review of Renn & Schweizer, 2009).

2.1.3.1 Functionalist concept

This approach to citizen participation draws on the functional school of social sciences and evolutionary concepts of social change. Functionalism is originally based on the works of Bronislaw Malinowski and Alfred R. Radcliffe-Brown, the founding fathers of British and US-functionalism (Radcliffe-Brown, 1935; reviews in: Coser, 1977, p. 140ff.; Nassehi, 1999; Lenski, 2005; A. Parsons, 2019; Malinowski, 1945). Functionalism conceptualises society as a complex structure realising different essential functions for social survival either from an individual actor's perspective (Malinowski) or from a society's perspective (Radcliffe-Brown, 1935). Each social action is assumed to be functional in assisting the survival of society (Hillmann & Hartfiel, 1994, p. 252).

Structural functionalism then as a later development, mainly associated with Talcott Parsons and Robert K. Merton, presumes that a system must meet functional imperatives (adaptation, goal attainment, integration and latent patterns maintenance). These functions are performed by certain structures (Jaeger, 2001, p. 20 ff.; Merton, 1951; Parsons & Shils, 1951). Therefore, society is a stratified system of structures securing functional needs (Ritzer, 1996). Social differentiation produces structures which are specialised on the fulfilment of specific functions (Münch, 1996, p. 21).

In this sense, participatory exercises are necessary to meet complex functions of society that need input (knowledge and values) from different constituencies. Nevertheless, even well-ordered societies change over time. Structural functionalism conceptualizes social change as social evolution. As societies evolve, their subsystems become ever more differentiated. Neo-evolutionary theorists such as Neil J. Smelser and the later Parsons assume that these new subsystems are not only more differentiated but also more adaptive towards changed social prerequisites than their predecessors. They therefore differ in terms of structure and functional significance (Ritzer, 1996, p. 247).

Integration is the major challenge of functionally differentiated societies. The telos of social change is therefore the emergence of differentiated, integrated and adaptive systems. Differentiation, integration, and adaptation are consequently also the key features of the functional perspective of participatory decision making. Ongoing social differentiation leads to heterogeneity which makes integration a vital social imperative. Adaptation is therefore the outcome of functional differentiation and simultaneous integration.

Turning towards participation, the main objective is to avoid missing important aspects, information, perspectives, etc. for the decision and to ensure that all knowledge camps are

represented. Participation is therefore seen as a process of getting all the problem-relevant knowledge and values incorporated into the decision-making process.

In terms of inclusion, the functionalist concept requires that all individuals with special knowledge about the problem to be solved are to be convened. There is less or even no demand for representational proportionality or a broad inclusion of different value positions. All individuals who can contribute to designing problem solutions are welcomed regardless of where they are coming from. In terms of closure, a consensus is the preferred option, but a majority and minority position are also tolerated if the reasons for the dissent are well documented.

The goal of "functionalist" participation is the improvement of political decision making in general and of political policies, in particular. Functionalist decision making is clearly oriented towards goal achievement and synthesising knowledge and values towards achieving a pre-defined goal. In terms of the basic functions of society as outlined above, the model is designed to improve and enhance the effectiveness of decision making, it assumes that representation and inclusion of diversity will result in the improvement of environmental policy making with respect to the quality of the decisions made. Methods of participation suitable to this approach are expert Delphi, negotiated rule making, hearings and citizen advisory committees (Coglianese, 1997; Checkoway, 1981; Gregory et al., 2001; Hadden, 1995; Webler et al., 1991; Gregory et al., 2001). These methods of participation are especially suited for the functional perspective because they emphasise the inclusion of various kinds of information for strategic planning.

2.1.3.2 Neo-liberal concept

This approach to citizen participation draws on the philosophical heritage of liberalism and Scottish moral philosophy (Jaeger, 2001, p. 20ff). Neo-liberalism conceptualises social interaction as an exchange of resources. In this concept, deliberation is framed as a process of finding one or more decision option(s) that optimizes the payoffs to each participating stakeholder. The objective is to convert positions into statements of underlying interests (basics in Fisher & Ury, 1981; Bacow & Wheeler, 1984; Raiffa, 1982; Susskind et al., 1996; Knight, 1998; critical review in Nicholson, 1991; review of pros and cons in Friedman, 1996; Jaeger, 2001, p. 243ff). The rational actor paradigm understands humans as resourceful, restricted, expecting, evaluating and maximising individuals (Lindenberg, 1985).

Neo-liberal decision making consequently focuses on the individual interests and preferences. It is assumed that people pursue their individual goals according to their available resources. However, the role of society is not to provide integration, but to grant security for property and personal well-being (Rawls, 1999). Public preferences are seen as miscellaneous and unstable. Stakeholder and citizen participation therefore consist primarily in the collection and representation of (well-informed) public preferences.

The market is the place where these preferences can be converted into the appropriate actions under the condition that choices between different options are open to all individuals and that the selection of options by each individual does not lead to negative impacts on the utilities of another individual (absence of external effects). If all individuals have the resources to select options and all suppliers have the opportunity to offer options, the market guarantees optimal allocation and distribution of goods.

If, however, the aspired good requires collective action by many individuals or if an individual good leads to external costs and benefits, the market mechanism will fail and public policies including collectively binding norms and rules are needed. These policies should reflect the preferences of all the individuals who are affected by the decision (Fisher et al., 2011). Since not all preferences are likely to represent identical goals and means to reach them, a

negotiation process needs to be initiated which aims at reconciling conflicts between actors with divergent preferences. Within neo-liberal theory, individual preferences are given and stable so that conflicts can only be reconciled if, first, all the preferences are known in the proportional distribution among all affected parties and, second, compensation strategies are available to compensate those who might risk utility losses when the most preferred option is taken (O'Hare, 1990). The two ideal outcomes of negotiation are hence to find a new win-win option that is in the interest of all or at least does not violate anybody's interest (Pareto optimal solution) or to find a compensation that the winner pays to the losers to the effect that both sides are at least indifferent between the situation without the risk and no compensation and the risk plus the compensation (Kaldor-Hicks solution) (Martin, 2019; see O'Hare, 1990). Deliberation helps to find either one of the two solutions and provides acceptable trade-offs between over- and underprotection for all participants. Under these conditions, participation is required to generate a most truthful representation of public preferences within the affected population (Amy, 1983). The measurement of preferences is, however, linked to the idea that the individuals should have the opportunity to get the best knowledge about the likely consequences of each decision option (concept of informed consent). Therefore, public opinion polls are not sufficient to represent the public view on a specific public good or norm. Appropriate methods for revealing informed public preferences are referenda, focus groups, (internet) forums, Round Tables, and multiple discussion circles (Dürrenberger et al., 1999; Ethridge, 1987). For the second objective to generate win-win solutions or acceptable compensation packages, negotiation, arbitration and especially mediation are being seen as the best instrumental choices (Amy, 1983; Bacow & Wheeler, 1984; Baughman, 1995; Bingham, 1986). With respect to non-organised citizens formats such as "America Speaks" have gained much popularity, particularly in the US (Fishkin, 2018). These methods correspond with the neo-liberal emphasis on bargaining power and balancing individual interests. The main contribution of neoliberal participation models is to be more *efficient* and, to a lesser degree, to be more *reflective of social values and concerns.*

In terms of inclusion, the neoliberal concept requires that either all conflict partners are at the negotiation table or that a representative sample of all affected groups are to be convened. The ideal is the informed consent by a group of participants whose composition is proportional to the body that they represent. In terms of closure, consensus is certainly welcomed, but a majority vote is sufficient under the condition that all parties are represented according to the proportion in the general population.

2.1.3.3 The concept of rational, deliberative discourse

This concept is mainly influenced by Habermasian discourse theory (Apel, 1992; Benhabib, 1992; Brulle, 1992; Cohen, 1997; Habermas, 1984, 1987; Webler, 1995; Webler & Renn, 1998, pp. 48–57). Discourse theory and discourse ethics advocate more inclusiveness for legitimate and sustainable political decision making. Modern societies are characterised by a plurality of values and world views. According to Habermas, conventional politics and political decision making cannot deal with this heterogeneity adequately. Modern societies lack moral cohesion which could guide political decision making (Habermas, 1996, p. 20). Although mutually binding norms and values are non-existent on the surface, people can allude to their shared reason and experience as human beings. Here, the joined heritage of Habermasian deliberation and communitarianism becomes obvious (Benhabib, 1992; Bohman, 1997). Consequently, political decision making has to find mechanisms which could serve as guidance instruments by enabling citizens for joint rational decision making.

Habermasian discourse ethics offers a solution to this dilemma. In discourse ethics, only those political and judicial decisions may claim to be legitimate which find the consent of all affected parties in discursive opinion formation and decision-making processes (Corrigan &

Joyce, 1997; Habermas, 1992, p. 169). Accordingly, legitimate political opinion formation is conceptualised as a process of the competition of arguments. As a result, the procedure of decision making determines its legitimacy. Habermas claims that in communication, people always make one or more of factual, normative, or subjective knowledge claims. These claims allude to the objective world of factual evidence, the normative world of values, moral orientations and world views and the subjective world of individual experience respectively (Habermas, 1999). Each world has its own rationality and limitations. The objective world is subject to teleological or strategic action. Action alluding to the normative world is obviously governed by norms and values, whereas the subjective world is governed by the dramaturgic action of self-presentation. Only communicative action allows alluding to each of the worlds simultaneously because it aims for true understanding. Yet understanding and consequently communicative action can only be reached under the ideal conditions of non-coercive discourse. The basic premise of the Theory of Communicative Action is that people are capable of coming to a rationally motivated agreement (that is, agreements free of coercion of any kind) if they are provided with the optimal discourse setting. Communicative acts are inherently social since they engage two or more speakers and listeners in a social relationship, and are, when conducted in the proper discourse setting, fully dialogical. This setting, where actors can openly and critically reflect, was originally described by Habermas as the "ideal speech situation," but is now referred to as "communicative competence" (Habermas, 1970) and "unconstrained discourse conditions" (Bächtiger et al., 2014; Crosby, 1995; Dienel, 1989; Habermas, 1990, p. 113; Setälä, 2017b; see also the critical remarks in Warren, 1993).

Thus factual, normative and expressive knowledge claims are settled by alluding to the common rationality of communicative action provided by an appropriate organisational discourse structure. Of course, no real-world discourse can reach the prerequisites of the ideal speech situation (Gripp-Hagelstange, 1984; Webler, 1995), yet practical discourse can aspire to this goal. Discursive decision-making is therefore oriented towards the common good and seeks the rational competition of arguments. It looks for diversity in participants and perspectives in the sense that all potentially affected parties should be able to agree with its outcome. All relevant arguments need to be included in the deliberation regardless in which proportion they are represented in the population. The objective here is to find the best possible consensus among moral agents (not just utility maximisers) about shared meaning of actions based on the knowledge about consequences and an agreement on basic human values and moral standards (Brulle, 1992; Kemp, 1985; Webler, 1995, 1999b). The results of discursive decision-making then draw their legitimisation from the procedural arrangements of the discourse. The methods for participation aim at facilitating mutual understanding and transparent decision making, thus adding legitimacy to the whole process of policy making. The most suited instruments refer to citizen forums, citizen assemblies, minipublics, consensus-oriented meetings (Bächtiger et al., 2014; Breckon et al., 2019; Crosby, 1995; Dienel, 1989; Kathlene & Martin, 1991; Setälä, 2017b; Stewart et al., 1994). The main contribution of deliberative models to society is to enhance *legitimacy* and to reflect *social and cultural values in collective decision making*.

On the practical complexities that the implementation of the deliberative theoretical frame imposes, we are taking into consideration other, more experimental theories that have been applied to practical and concrete political and legal cases (Ackerman & Fishkin, 2004a; Fishkin, 2009; Fishkin et al., 2015).

Of particular interest for the REAL DEAL project are citizen assemblies (minipublics) which can be located in this concept (but sometimes also inspired by neoliberal thoughts). All over Europe, the idea of citizens assemblies has gained traction, recent examples including the Irish Citizens' Assembly and the French Citizens Convention on Climate (Bächtiger et al., 2014; Breckon et al., 2019; Kuyper & Wolkenstein, 2019). In the OECD's recent study on participatory mechanisms, citizen assemblies were rated most highly.

In terms of inclusion, the rational discourse concept requires that all arguments about the problem to be solved are represented at the table. There is no need for proportional representation, one advocate for each position is sufficient. There is less or even no demand for representational proportionality or a broad inclusion of different value positions. All individuals who can contribute to designing problem solutions are welcomed regardless of where they are coming from. In terms of closure, a consensus is the preferred option but also a tolerated consensus is acceptable. The main drive, however, is to exchange arguments until a strong consensus emerges.

2.1.3.4 Anthropological concept

Anthropological citizen participation is mainly influenced by pragmatic Anglo-Saxon philosophy. It is based on the belief that common sense is the best judge for reconciling competing knowledge and value claims. Pragmatism was mainly influence by the works of Charles S. Peirce and John Dewey (Peirce, 1867; Dewey, 1940; review in Hamner, 2003). Pragmatism postulates that ideas are to be judged against their consequences in the social world. Peirce states that ideas, theories and hypotheses can be experimentally tested and intersubjectively evaluated according to their consequences (Riemer, 1999). According to Dewey, the thinking process develops over a series of stages from “defining objects in the social world, outlining possible modes of conduct, imaging the consequences of alternative courses of action, eliminating unlikely possibilities, and finally selecting the optimal mode of action” (Ritzer, 1996, p. 328; Stryker, 1980). This way, science can reach truth by constantly testing and modifying its assumptions. This assumption is equally valid for politics and generally for each individual.

For participatory decision making, this approach has far-reaching consequences. The moral value of policy options can be judged according to their consequences. Furthermore, each citizen is capable of moral judgement without relying on more than their mind and experience. When organising discourses of this kind however, there is a need for independence of the judgment situation, meaning that the jury (participants sitting in judgement on the issue at hand) has to be non-interested in the topic (or at a minimum not vested in the outcome) (Crosby, 1995). The main focus of the anthropological model is to reflect *social values and concerns* in the public policy making.

In terms of inclusion, the group of selected persons can be small. Most methods do not require more than 12 to 25 participants to accomplish valid results (Stewart et al., 1994). Within that small number a quota representation of the population is strived for, thus ensuring the inclusion of the general attitude of all citizens. In terms of closure, consensus is the preferred option, but majority and minority votes are also tolerated.

2.1.3.5 Emancipatory concept

The basic ideas of emancipatory participation are derived from a Marxist or neomarxist perspective of society (Ethridge, 1987; Jaeger, 2001, p. 232ff.). The goal of inclusion is to ensure that the systemically excluded groups of society have an opportunity to have their voices heard and that participation provides the means to ensure they become agents of change. In the long run participation is seen as a catalyst for an evolutionary or even revolutionary change of power structures in capitalist societies (Forester & Stitzel, 1989).

The main motive for participation is the revelation of hidden power structures in society and the enabling of structural change through engagement and action of the previously disempowered and disenfranchised groups. This motive is shared by the post-modern school that is described later. Yet the main emphasis in the emancipatory school is the transition from the oppressed classes firstly acknowledging their objective situation, then becoming aware of their own ability to change this situation, and lastly be prepared to continue this fight even after the participatory exercise is completed. The main thrust is the

awakening of individuals and groups to make them more politically active and empowered (Skillington, 1997).

The emancipatory perspective has partially been derived from classic Marxist positions, but was also highly influenced by the early works of Critical Theory (in his later works Habermas distanced himself from these Marxist roots and developed the deliberative school which deviates in main parts from the original critical theory), which has then been strongly adopted by all variations of liberation theories in the context of development and anti-capitalist movements (Freire, 2000; Pretty, 1995). The goal of empowerment, however, has spread out to more liberal participation contexts, in particular in the pursuit for environmental justice, community development, access to basic services for people living in poverty and enhancing rural development (Eklund, 1999; Hardina, 2004). Several analysts have linked empowerment and the mobilisation of resources to the theory of social capital (Portney & Berry, 1997; Bolland & McCallum, 2002; Larsen et al., 2004).

The methods within the emancipatory concept include activist driven public meetings, tribunals, science workshops, community solidarity committees, and others (Koopmans, 1996; McCormick, 2007; Wachelder, 2003). The main emphasis is on making sure that the powerless are addressed and then empowered to fight for their own interests and values. Although the focus of this concept is on transformation of society, it does add to a more balanced *reflection of social and cultural values* in the policy making process.

In terms of inclusion, the group of selected persons should be explicitly selected from the groups that are systematically underrepresented in the respective political arena. Proportional representation is not the goal but a clear selection bias in favour of less privileged groups. In terms of closure, consensus is the preferred option, but majority and minority votes are also tolerated.

2.1.3.6 Post-modern concept

This approach to citizen participation is based on Michel Foucault's theory of discourse analysis. Discourse analysis rests on the three basic concepts of knowledge, power, and ethics. Foucault is interested in the constitution of knowledge. He assumes that knowledge formation is a result of social interaction and cultural settings. Truth then depends on historically and socially contingent conditions (Foucault, 2003).

The archaeology of knowledge shows the underlying sets of rules which determine the formation of knowledge. The conditions of discourse are therefore not determined once and for all but open to (social) change. The relativity of truth and knowledge leads Foucault to the next question. What influenced knowledge and truth to develop in the specific way is has developed so far? The answer to this question and the second assumption of discourse analysis is that knowledge is constituted and legitimised through power (Foucault, 1979, p. 39). Power is ubiquitous and permeates society. Power and knowledge are interlinked insofar as power supports the creation of knowledge, whereas knowledge legitimates power structures and their social manifestations.

By means of genealogy, Foucault provides an examination of dynamic power structures which permeate society. Individuals are therefore faced with complex social structures of interlinked knowledge and power formation. Ethics and the self-constitution of the individual are Foucault's third topic of interest. It is the task of each person to reflect on the knowledge and power structures surrounding and conditioning them. The insight into the restraints and possibilities of knowledge and power and how they relate to him or her transforms a person into an individual (Foucault, 1986). However, individuals do not need to accept the conditions of society once and for all. Rather, they have the power to shape the social structures surrounding them.

Thus, ethics and individual "self-constitution" form the backbone of discourse analysis. In this respect, discourse analysis informs citizen participation with an analytical focus on social

power and knowledge formation. In this sense, post-modern decision-making aims at revealing the hidden power and knowledge structures of society, thus demonstrating the relativity of knowledge and values. Reaching a consensual conclusion is neither necessary nor desirable. In its deconstructivist version, deliberation serves as an empty but important ritual to give all actors the illusion of taking part in the decision process. In its constructive version deliberation leads to the enlightenment of decision makers and participants (Jaeger, 2001, p. 221ff.). Far from resolving or even reconciling conflicts, deliberation in this viewpoint has the potential to decrease the pressure of conflict, provide a platform for making and challenging claims, and assist policy makers (Luhmann, 1989). Deliberations help to reframe the decision context, to make policy makers aware of public demands, and to enhance legitimacy of collective decisions through reliance on formal procedures (Freudenburg, 1983; Luhmann, 1983; Skillington, 1997). The process of talking to each other, exchanging arguments, and widening one's horizon is all what deliberation is able to accomplish. It is an experience of mutual learning without a substantive message[2].

Especially, participatory decision making seeks to include dissenting views and social minorities, thus illustrating the relativity of knowledge and power. Appropriate participatory methods are framing workshops, discussion groups, internet chatrooms and open forums, because they do not set rigid frames for decision making (Stirling, 2005). Rather, they provide insight into stakeholder interests, knowledge base and power structure. Accordingly, the main function of post-modern discourse is to enlighten the policy process by illustrating the *diversity of factual claims, opinions, and values.*

In terms of inclusion, the group of selected persons should be as diverse as possible. Beyond having representation of each argument, different value groups that may have another view on the topic should also be invited to participate. Diversity is the guideline for inclusion. The more the better! In terms of closure, post-modern concepts do not favour any binding agreement at the end of a participation process. Rather they hope for an enlightenment about diversity and mutual respect for dissenting viewpoints. The main outcome may be joint arrangements that facilitate diversity but not a substantive agreement on the topic itself.

2.1.4 Implication of these concepts for deliberative processes in the context of the EGD

This review of different background concepts for public participation is more than an academic exercise. Organisers, participants, observers, and the addressees of public participation are implicitly or explicitly guided by one or a combination of several of these concepts. Often conflicts about the best structure of a participatory process arise from overt or latent adherence to one or another concept. Advocates of neoliberal concepts stress the need for representativeness of participatory bodies, while advocates of deliberative concepts are satisfied with a diversity of viewpoints. For advocates of the anthropological model, representativeness plays hardly any role if common sense is assured. Models driven by emancipatory concepts will judge the quality of participation by the degree to which underprivileged groups have accomplished gaining more access to power, whereas

[2] The social systems school of sociology pursues a similar approach to deliberation (Luhmann, 1989; 1990; 1993; Markowitz, 1990; Eder, 1992; Japp, 1996). It is based on the assumption that each stakeholder group has a separate reservoir of knowledge claims, values, and interpretative frames. Each group-specific reservoir is incompatible with the reservoir of the other groups. Therefore, there is no realistic possibility to reach consensus, the best one can strive for is a mutually acceptable agreement. This line of argument is also shared by the so-called cultural theory group which claims that the main four prototypical cultures (cf. the chapter on risk perception) in society cannot overcome their communication barriers (Rayner, 1990; Thompson at al. 1990; Dake, 1991; Adam, 1995)

functionalist models will judge the quality of the process by the competence of the participants with respect to the problem that needs to be resolved. While neoliberal concepts will take public preferences as a given prerogative to participatory decision making, deliberative models are meant to influence preferences and change them through the process.

The diversity of concepts and background philosophies is one of the reasons why participatory processes are so difficult to evaluate in terms of overarching evaluative criteria (Rowe & Frewer, 2000; Tuler & Webler, 1999; Rowe et al., 2004)

Although some of these models can be combined and integrated, there are at least differences in priorities. It is obvious that within the functionalist school the main evaluation criterion is the quality of the output, whereas the models inspired by postmodernism and emancipatory schools are not interested in output but rather in the changes that were induced in the minds of the participating people (raising awareness and emancipation).

In the US and partly Europe, there has been a strong preference for the functionalist and neoliberal view of participation. Many policymakers have been and still are primarily interested in the input from the relevant stakeholders to improve the quality of the decisions and to make sure that conflicting values could be resolved in proportion to the representativeness of the people affected by the decision (Fiorino, 1990). More lately, there has been a shift towards deliberative and emancipatory forms of participation (Bächtiger et al., 2014; OECD, 2020). The discussion on climate protection policies as well as climate and environmental justice has served as a catalyst for these more intense forms of argument-based participation (Dryzek et al., 2019). In parallel, the anthropological concept has inspired many organizers of participation to model participation in accordance with the well-established jury format of the US judicial system (Armour, 1995; Crosby et al., 1986).

Given this mix of models driven by different concepts many participation analysts and practitioners have advocated hybrid models that combine elements of different models. One of these models is the “analytic-deliberative” approach that has been advocated by the US (Stern & Fineberg, 1996; National Research Council, 2008). But there are many other attempts of combining different concepts to new models. Attempts to combine the neoliberal with the deliberative concept include the deliberative polling method that has been widely used in several areas of environmental policy making (Dryzek & Tucker, 2008; Ackerman & Fishkin, 2004b). More complex hybrid models try to include even more than two concepts such as the cooperative discourse model (Renn, 2008; Renn et al., 1993).

It is not possible to evaluate these models in abstract terms. First, it often depends on the context which of the six or a combination of them seems to be most appropriate; secondly, it depends on the political preferences or values of those involved in the process to determine on their own what concept they would like to pursue, and thirdly, one needs to acknowledge the diversity of underlying concepts and make sure that within a given context adequate justice is given to all of them if they are represented within the constituency for which the process is designed (Krueger et al., 2001). Without any doubt there will be conflicts as the concepts themselves are often contradictory. The knowledge, however, about these concepts and an explicit inclusion of these concepts into the designing and executing phases of participation are essential for matching purpose and design and for bringing the aspirations of all parties affected into line with the possibilities that each design can deliver. In this case, theory can enlighten the process of practical implementation. Table 5 provides an overview of the six models, their main rationale and some of the formats that can be associated with them.

Concept	Main objective	Rationale	Formats and tools
Functionalist	Improvement of quality of decision output	Representation of all knowledge carriers, integration of systematic, experiential and local knowledge	Delphi, workshops, hearing, inquiry, citizen advisory committees
Neo-liberal	Representation of all values and preferences in proportion to their share in the affected population	Informed consent of the affected population; Pareto-rationality plus Kaldor-Hicks (win-win solutions)	Referendum, focus groups, negotiated rule-making, mediation
Deliberative-Rational Discourse	Competition of arguments with respect to criteria of truth, normative validity and truthfulness	Inclusion of relevant arguments, reaching consensus through argumentation	Discourse oriented models, citizen forum, deliberative jury
Anthropological	Common sense as ultimate arbiter in disputes (jury model)	Inclusion of non-invested laypersons representing basic social categories such as gender, income, and locality	Consensus conference, citizen jury, planning cell
Emancipatory	Empowerment of less privileged groups and individuals	Fostering agency of those who suffer most from environmental degradation and systemic inequalities	Action group initiatives, town meetings, community development groups, science shops
Post-modern	Demonstration of variability, plurality and legitimacy of dissent	Acknowledgment of plural rationalities, no closure necessary, mutually acceptable arrangements are sufficient	Open forums, open space conferences

Table 5 The six concepts of stakeholder and public involvement and their salient features

The taxonomy of six basic concepts is not the only attempt to classify and characterize main approaches to understand and classify participatory processes. Some of them have been inspired by the six prototypes and provided a subset of the six (Alcántara et al., 2015; Wesselink et al., 2011). Other approaches are guided by empirical clustering methods of participatory processes (Tuler & Webler, 2020).

In our view, the six prototypes provide a valid, practical and resourceful classification for purpose of the REAL DEAL project to assess, review and evaluate existing approaches and, based on this review, develop a protocol for a viable and meaningful deliberative participation process for the implementation of the EGD. The following part will be devoted to the various formats that are associated with the six prototypes. These formats are characterised according to their structures and processes with respect to inclusion and closure.

Moreover, the criteria developed in D.1.1 of the REAL DEAL Project are intended to define the boundaries in implementing those concepts. They will become relevant in applying the methods and tools discussed below in chapters 2.2. and 2.5. (see also chapter 3, section 3).

2.2 Methodological approaches towards facilitating deliberative democracy

This subchapter aims to give a brief overview on various methods, formats and tools used in the practice of deliberative and participatory democracy. It is based on the 150 entries in the project's Zotero library as of September 30, 2022 and on additional desk research in the databases available online. Among them is a considerable amount of grey literature including articles from websites (such as involve.co.uk, participedia.net), the OECD database of Representative Deliberative Processes and Institutions, from practitioner webpages, and from online project reports (such as ISEED and Imagining2050).

Both in the theoretical and grey literature, many different terms and typologies are being used around the implementation of participatory and deliberative democracy processes, leading sometimes to some confusion. Hence, in describing methodologies, some authors refer to *formats* (T. Dietz & Stern, 2008; Radtke et al., 2018; Setälä, 2017b). The OECD sources speak of *models* (OECD, 2020). Many use also the term *processes* (Abels et al., 2022; Claudia, 2021; Hassenforder et al., 2015; Jäske, 2019) or *participatory processes* (Allegretti, 2021). Others use the terms *practices* (Renn & Schweizer, 2020; Gherghina et al., 2021; Dahlberg, 2011) or *methods* (Salter et al., 2010) and *tools* (Bellatoni et al., 2020; Parsons, 2019; Piccolo & Pellegrini, 2021). The term *tools* is usually used in the context of digitalisation, but can also be used in the context of participation, for instance referring to *engagement tools* (van Beek et al., 2022). Jäske uses the term *participation possibilities* (Jäske, 2019). Another issue is the translation of format names from local languages into English which certainly results in different notions being used for similar formats. For example, the German "Bürgerrat" is referred to as "Citizen council" or "Wisdom council" in English, whereas bürgerrat.de and bürgerrat-klima.de use the translation "citizen assemblies":

As a result, processes called by the same name can look quite different in use, and processes with different names can have many specific components in common. (Dietz & Stern, 2008, p. 112)

For the sake of clarity, we will differentiate in this paper between formats, methods and tools. As a working definition we suggest that formats are defined as a general arrangement enabling a group of citizens and/or stakeholders to take part in the decision-making process. Formats are similar to participation processes as they require the organisation of successive implementation steps starting with the preparation and ending with the follow-up. Formats are generally made up of different methods (such as small group discussions, voting, clustering…), which enable citizens or stakeholders to interact together and contribute to the output of the format. Therefore, a combination of different methods is generally necessary to implement a participation format. On the other hand, a method alone, may not be sufficient to enable effective participation by citizens or stakeholders. Lastly, tools can be defined as simple instruments or equipment that are used to carry out the methods and formats. Tools can be online (communication platform, software, etc…) or offline (pen, paperboard, etc…).

Several projects have already listed, analysed and categorised the various participation formats (ex. ISEED project, Participedia, Involve.uk, or engage2020.eu, to name but a few). The OECD Database of Representative Deliberative Processes and Institutions (2021) mentions twelve models (what we call formats here) of deliberative processes and collects cases: citizen's jury (170) - citizen's dialogues (44) - G1000[3] (12) - Consensus Conference (21) - CIR - Citizen's Initiative review (11) - Citizen's Council (40) - Ostbelgien Model (1) -

[3] https://participedia.net/case/485

Citizen's Assembly (31) - Deliberative Poll (18) - World Wide Views (4) - Planning Cell (221) - City Observatory (1). Figures in parenthesis indicate how often the format has been mentioned in the OECD database.

In most of the typologies the formats are categorised according to the *level of engagement* or aim based on Arnstein's ladder of participation (Arnstein, 2019). The second dimension considered here is the *main target group* of the formats. This leads to a grid in which a wide range of formats are mapped. Out of those we focus on the following twelve formats (see table 6) representing a great diversity in terms of related concepts (see table 5 in the previous section) and target groups as we aim to engage both stakeholders and citizens.

Format	Description	Sources
Planning cells (or: Citizen's panel, citizens´juries)	Random selection of citizens, to learn and deliberate on a topic and produce recommendations for decision-making; plus quest for consensus	Chwalisz 2021; Dienel et al., 1995; Dienel, 2005; Dienel 2009; European Commission 2022; Garbe, 1986; involve.co.uk; Kantar Public 2022; OECD 2020
Focus group (or: study group, community panel)	Semi-structured group discussion with invited persons with the goal of elicitation of different viewpoints	Lutz & Hoffmann 2017, involve.co.uk, Zuckerman-Parker & Shank 2008 ; Parker & Tritter, 2006; Renn & Schweizer, 2020; involve.co.uk; participedia.net
Citizen assembly (or: citizen parliament)	Assembly of citizens based on random selection, get informed and deliberate about a topic, and provide recommendations on policy making and policy	Harris 2021, Abels et al. 2022, Gerwin 2018, Devaney at al 2020, Dryzek et al 2011, Escobar & Elstub 2017; Parsons, 2019, involve.co.uk; participedia.net
Participatory modeling	Co-creation process engaging stakeholders in bringing in their knowledge into the development of "formalised and shared representation(s) of reality".	Quimby & Meresford 2022; Jones & al. 2009; Haapasaari et al., 2013; Voinov & Bousquet 2010; Voinov et al., 2018
21st Century Town Hall meeting	Public forum where citizens meet at different locations to deliberate simultaneously about a pre-defined issue in small groups; Voting;	Involve.co.uk; participedia.net; americanspeaks.org
Delphi method	Sample of different expert communities giving their opinion on the future development of a relevant topic, calibration of consensus and dissent	Webler et al 1991, Revez et al 2020, McMillan 2015
Public participation network	Network of local authorities and community groups where local authorities can profit from community and voluntary expertise and civil society members can have their voice heard and provide input into decision-making processes.	https://www.gov.ie/en/publication/9db5e3-ppn-handbook/ https://www.roscommonppn.ie/about/what-is-a-public-participation-network/

Roundtable (or: stakeholder panel, negotiated rulemaking, mediation, arbitration)	Assembly of stakeholders, equal powers at the table, consensus or consensus on dissent	https://cocoate.com/files/places2b/guide.pdf Renn & Schweizer 2020; Rauschmayer & Wittmer2006; Stoll-Kleemann & Welp 2006
Stakeholder Salons	Experts with different backgrounds, experiences and viewpoints enter into creative exchanges and debates about a specific socially relevant topic in a relaxed atmosphere;	Utne 1991, Dienel 2005, Jain et al., 2013, Dienel et al., 2015
Analytic deliberative discourse (or: cooperative discourse)	Combination of an expert driven analytic part and a deliberative process	Renn et al., 1993; Renn, 1999; Peterson St Laurent et al., 2020; Renn & Schweizer 2020; Rauschmeyer & Wittmer, 2006
Public-expert hearing (or: public inquiry, panel discussion)	Experts as well as public officials representing the various perspectives as panellists, audience for raising questions could be representatives of stakeholders or the affected public	Leino, M., Kulha, K., Setälä, M. *et al.* 2022; Renn, 2015; Renn & Schweizer, 2020; Williamson and Fung, 2004; participedia.net
Experts panel	Experts and public officials with different backgrounds and opinions are invited to deliberate upon the future of a give topic.	http://foresight-platform.eu/community/forlearn/how-to-do-foresight/methods/expert-panels/ Pulkkinen & Simola 2000; Waltz et al. 2015,

Table 6 Short description of the twelve formats and sources considered from Zotero group library

In Annex 1, twelve factsheets provide a short description of the method and further information for each of these formats in table 6. They contain several categories such as the level of participation, main target groups, the selection of the participants, group size and inclusion of further stakeholders as well as expected results, and options for blended implementation of the formats and last but not least, references.

2.2.1 Mapping and clustering the existing methods and tools

There are many typologies that map and cluster the existing methods and formats in deliberative democracy, each of them having different focus depending on the research interest. Jäske, for instance, uses mode of communication (expression of preferences - discussion and deliberation) and empowerment and institutionalisation (low - high) in her typology of participatory innovations (Jäske, 2019, p. 607f.). Renn & Schweizer have mapped the different participatory practices according to different risk types - complexity, uncertainty and ambiguity (Renn & Schweizer, 2020, p. 73). The Horizon 2020 project ISEED (Inclusive Science and European Democracies) mapped 64 existing participatory tools and practices in a figure using two classification criteria: aim and citizen role. Aim covered inform - consult - deliberate and citizen role passive - intermediate - active (Piccolo & Pellegrini, 2021). The Imagining2050 Project (Engaging, envisioning and co-producing pathways for a low carbon, climate resilient Ireland) mapped community engagement

techniques in climate action in a conceptual map based on Hopwood et al. (Revez, 2020). On one axis is the degree of community engagement (non-participatory - participatory) and the on other axis are the resources (low - moderate - intensive).

For the REAL DEAL project empowerment, deliberation and inclusion are considered to be most relevant. Therefore, when visualising the different formats, we focussed on two criteria: a) the level of participation and b) the selection of participants.

2.2.1.1 Levels of participation

One recurring criterion in many of the existing typologies in other projects and initiatives is the degree to which citizen's participation has an influence on the actual decisions being made. One of the seminal works on the level of participations has been published by Arnstein in 1969. In this paper, the author examines the involvement of citizens in planning processes and develop various steps of empowerment which take the form of a ladder with eight levels starting from nonparticipation and going to levels of citizen control over the decision-making process. The ladder is made up of the following steps: 1) Manipulation, 2) Theory, 3) Informing, 4) Consultation, 5) Placation, 6) Partnership, 7) Delegation, 8) Citizen Control.

Following Arnstein's ladder of participation, scholars have meanwhile cut the initially eight levels down to four or three: Inform, Involve and Engage (Dietz & Stern, 2008, p. 129) or Inform, Consult, Involve and Collaborate (Williamson & Barrat, 2022, p. 14).

When **informing** the target groups, the decision makers bring issues to people's attention in top-down process. They transmit relevant and up-to-date information to the public, for example via a media campaign. Thus, the target groups should better understand the process and it is made more transparent. Citizens are not actually involved in the decision; they only react passively.

In a **Consultation** the decision makers and target groups discuss in a two-way communication. Usually, decision makers ask target groups for their feedback on specific plans, ideas or options. So, the target groups can give a minimum of input. The feedback is not binding for the decisions though. This is the first step to citizen participation.
At the level of **Collaborating** decision makers share their power and actively involve citizens. They let them also engage in the decision making in order to find a consensus. Both sides might even work together as equals and co-create. Although the citizens' input is considered, the final decision authority remains with the decision makers.

Some scholars (Jäske, 2019; Williamson & Barrat, 2022) add another level: The **Empower** level. At this level the citizens are encouraged to manage programmes independently and make decisions for themselves. This is the highest level of participation. It requires quite some care in regard to being fair, legitimate, and inclusive.

2.2.1.2 Main target groups

The main target groups who are included and represented in the formats serve as a second dimension for mapping participatory processes. Who is invited to participate? Again, four levels apply: Stakeholders, directly affected public, observing public and general public.

- **Stakeholders**: organised groups, and or individuals, which are or will be affected by or that have a strong interest in the outcome of a decision;
- **Directly affected public:** individuals and non-organised groups that will experience positive or negative effects from the outcome;

- **Observing public**: the media, cultural elites, and opinion leaders who may comment on the issue or influence public opinion; and
- **General public**: all individuals who are not directly affected by the issue but may be part of public opinion on it. (Dietz & Stern, 2008, p. 15)

As one of the main quality criteria of citizen participation processes, the notion of "inclusion" represents an important concept for the project. Inclusion means that all citizens get an equal chance of participating. As stated by Renn and Schweizer (2009, p. 175), inclusion is, together with closure, an important aspect of decision-making processes. Inclusion in participatory processes means therefore to think about whom to include in the process and how. According to Fung (2003, 2006) various methods for selecting participants can be found (Captive Sample; Random Sample; Stratified Random Sample; Appointment; Election) Inclusion can be interpreted either in a quantitative or qualitative way. While quantitative inclusion rather refers to the number of participants who have been engaged in the process, qualitative inclusion aims at collecting the highest diversity of opinions on the issue being addressed during the process and at considering all interests and backgrounds of participants. That is part, for example, of the rationale for random selection of citizens for minipublics, which bring together people from very different backgrounds. To that end, various kinds of random selections can be implemented (for more details see OECD, 2020, p. 15). The issue on how to get under-represented groups on board of a process is central and several authors have already developed some techniques and recommendations to improve inclusion in participatory processes: "Inclusion should be achieved by Supporting the goals and visions of the EGD considering how to involve under-represented groups. Participation should also be encouraged and supported through remuneration, expenses, and/or providing or paying for childcare and eldercare." (OECD, 2020, p. 7). In that case, random selection coupled with targeted selection can be helpful to reach out hard-to-reach groups (OECD, 2020, p. 15). Moreover, Inclusion is not only limited to citizens but also refers to the larger group of stakeholders, including governments (represented by the administration and elected representatives), organised interests (such as civil society or economic interests) and various experts. The importance of inclusion in participatory processes is not limited to the selection process but also important during the implementation of the process itself, while considering the interactions between the various participants of the process. "So far, research has mostly focused on the recruitment stage and found random selection of participants as the best way to prevent exclusion. Less attention has been paid to the two following stages of deliberation: the event itself and its outcome." (Gherghina et al., 2021, p. 633). One aspect of inclusion (inclusiveness) focuses for instance on the ability of the process to provide an interesting role to participants, and reduce, as far as possible, the power imbalances among them during their interactions within the process.

2.2.1.3 Matrix

The matrix based on the two criteria used here shows quite a variety of options in almost every one of the quadrants. Each participation format has its own potentials and limitations. Depending on the specific context, circumstances, and last but not least personal preferences, some formats might be more suitable than others. The twelve formats coloured in blue are explained in more detail in a factsheet each (see Annex 1).

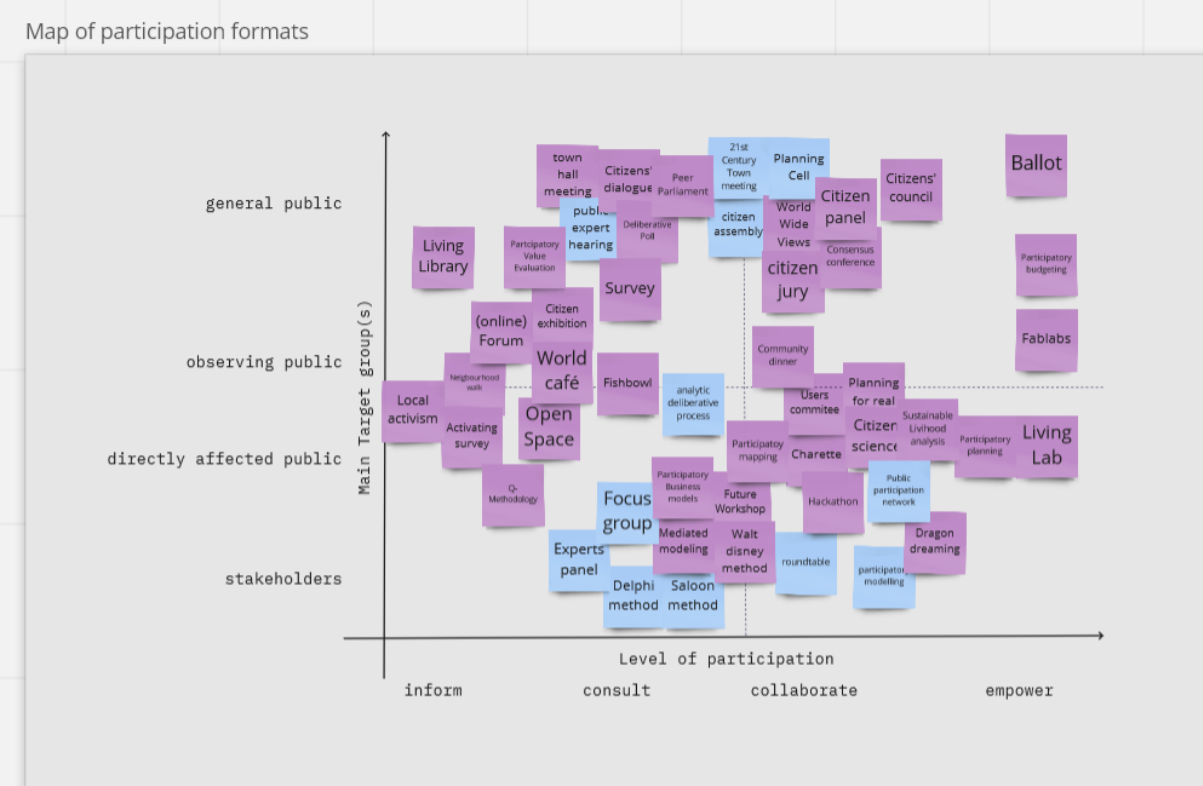

Figure 1 Map of participation formats (last updated on September 30, 2022)

2.2.2 Deliberation and participation as blended online and offline processes

With the rise of ICT technologies in the last decades, increasingly more attempts to introduce online elements within deliberative and participatory processes have been carried out. This trend has been confirmed and even reinforced due to the spread of the COVID-19, where deliberation processes have completely taken place online, offering therefore new possibilities in the design of participation and deliberation processes (Chwalisz, 2021). Hence, organizers of deliberative processes can carry out their deliberative process 1) entirely online, 2) entirely in person, or 3) as a hybrid process including online and in person events. To support the digitisation of deliberative and participatory processes, organizers can rely on various tools, such as communication or collaboration platforms (see a non-exhaustive list of tools in annex).

While the use of ICT is becoming more frequently used in deliberative processes, there are still a lot of debates in theory and practice about the advantages and limitations of online deliberation. Westerholm (2002) underlines, for instance, the use of online elements as a supplement and not a replacement of in-person participation processes. On the one hand, online tools can offer a lot of advantages in terms of inclusion of often marginalised parts of the population who have online access, (especially youths, e.g. Mouter et al., 2021) of scalability of the process (in regard to the number of participants in time and space) (Jankowski et al., 2019), of cost reduction and flexibility of the process, or in supporting the development of innovative formats (Mouter et al., 2021). Moreover, the use of ICTs can support deliberative processes at various stages, for instance during the agenda-setting process, “to discuss and elaborate proposals on concrete reforms”, during the deliberation “to inform and interact in real time”, or after the process to inform political decision-makers or the general public.

On the other hand, this adaptation raised several questions, such as: How to foster exchange between people who cannot meet in person? Is it possible to carry out participation and especially deliberation digitally? Is it possible to reach out to target audiences who are not used to relying on the internet? In this regard, several observers have stressed that the use of ICT in deliberative and participatory processes is not a panacea by showing some limitations in using digital elements. Firstly, while online tools enable the inclusion of certain elements of the population, it might also contribute to the exclusion of others, such as elderly, lower-income people or rural inhabitants without a good internet connection (Lutz & Hoffmann, 2017; Sæbø et al., 2008). In that case, it seems necessary to implement some mitigation measures to accompany such participants in using ICTs, such as findings the right tools without using too many of them, ensuring that participants have access to the necessary infrastructure, explaining how to participate online (with guidelines and hotlines), providing offline support to some participants etc. Finally, Mosca (2020, p. 17) shows that online tools can sometimes miss a "collective motivating dimension" that might affect the sustainability of the engagement of the participants in the process.

2.2.2.1 Digital deliberation tools

D1.2 offers an extensive overview of participatory and deliberative techniques and processes that are presently used in different settings, and an overview of literature relating these techniques and processes to deliberative democracy. According to the overall project plan, the second point builds on D1.1. These two overviews are clearly essential as the basis for the effort of REAL DEAL.

According to the project proposal, this basis is provided to build on existing tools and processes in innovative ways. For this purpose, it is important to look beyond existing techniques and processes in view of innovations for participatory and deliberative techniques and processes that will help to realize the European Green Deal in inclusive, fair, and effective ways. In the face of global digitalisation, some key innovations will concern ways to use and deal with digital tools in general, and social media in particular (Gastil, 2021).

The relevant digital tools need to perform the following tasks (see Annex 2 for an overview of digital tools):

1. Provide to potential and actual participants in a specific deliberative event, information about it (e.g., information about a pending political decision to be taken, rules of the deliberation process).
2. Enable the participants to interact with the information about issues to be discussed so that they can form opinions about it, e.g., by adding items they consider essential, skipping elements they do not consider to be helpful, and challenging assumptions they have doubts about. One of the most promising innovations in this regard are efforts in participative modelling currently under way.
3. Enable the participants to engage in a real-time exchange of arguments with each other. Typically, the main medium is the spoken word, sometimes complemented by visual displays ranging from body language and facial expression to images and graphs. Real time exchange may as well be complemented by sequential contributions with time lags, as with written arguments.
4. Allow for an appropriate moderation of the collective deliberation. Fully automated systems are technically possible, but are inadequate in parsing the nuances of verbal, gestural, and "body language" expressions. However, a moderating person can use technical tools to get the conversation close to an "ideal speech situation" that fits the goal of the specific deliberation.
5. Support the participants and the moderator in getting to useful conclusions and decisions in limited time. Conclusions may be controversial but need to convey a

reasonably clear picture of the deliberation process so far; this requires an intuitive visual interface where participants can grasp proposed conclusions at a glance.

6. Facilitate the analysis of the deliberation process to produce a report acceptable to the participants and useful for the relevant decision-makers. The minimum here is simply recording everything; however, this is rarely sufficient. Automatic transcription that can be amended in person is already better, but producing a useful report takes instruments of its own.

By now, tech conglomerates are working hard on tools with related functions, but mainly in view of business and entertainment. It would be highly problematic for a democratic public sphere if the EU would let efforts towards deliberative democracy depend on the products and strategies of such corporations. The tension between digitalisation and democracy - in particular, deliberative democracy - is the subject of a rapidly growing body of literature. Fortunately, just a few weeks before finalising the present document, Jürgen Habermas published a new book (presently available in German only) about this tension: “A New Structural Change of the Public Sphere, and Deliberative Polity” (Habermas, 2022). The book is important for two reasons. First, because Habermas is one of the leading thinkers worldwide on deliberative democracy, and his work is one of the core reference points for the REAL DEAL project. His reputation is due to a large extent to his hugely influential 1962 book on “The Transformation of the Public Sphere” (German edition, 1962, Neuwied/Berlin). Sixty years later, he now addresses the new challenges created by digitalisation for the pursuit of deliberative democracy. The second reason why we must take the new book into account for our work is the fact that he now modifies key (of course not all, but really important) aspects of his previous work.

The key challenge relates to the fact that the public sphere, on which democratic deliberation relies, is presently disrupted in new ways by social media and other digital communication tools. Until recently, what we now call the public sphere has developed in three forms.

The first form are face-to-face conversations in assemblies where deliberations about political decisions take place. A paradigmatic example of these is given by the assemblies of the citizens in ancient Athens. Similar assemblies are known from many different cultures, but they have been especially influential in the history of Europe, where over a long historical development they have morphed into parliaments of one kind or other. Important steps were the citizens assemblies in some medieval cities and similar assemblies in some rural cantons of early Switzerland.

The second form unfolded when the rising bourgeoisie in England begun to use the combination of newspapers and coffee-houses (where newspapers were read) to establish social networks in which all sorts of information, often business relevant, could be exchanged, debates could take place, and out of information exchange and open debate a domain of public opinion could emerge. The use of printed newspapers enabled these networks to establish a dense fabric of connections not only in single cities or rural communities, but across the territories of whole nations. This created the conditions for representative democracy with national parliaments representing the people as a whole.
The third form crystallised when the organs of representative democracy had to represent not only a bourgeoisie of economically independent, and therefore to some extent equal individuals, but the masses of the working class, including the employees of the tertiary sector. The mass media became less and less platforms for critical-rational political debate and instead became media of entertainment and instruments for those with political power and immense economic resources to shape public opinion to foster their interests.
Roughly around the beginning of the second millennium, the public sphere was gutted by the advent of internet-based social media: the distinction between an author and her public disappeared because now everybody can slip into the role of the author. Fake news may be produced by anybody, replied to, and amplified by any other, until they are consumed by

fractions of the electorate large enough to open the door of the White House to the likes of Donald Trump.

The election of Trump and the related conspiracy theories and misinformation campaigns are indeed egregious examples of the danger of the rapid rise of social media. It is important to recognize that an important aspect of this societal change is the enabling capacity via many-to-many communication for very rapid evolution and selective adoption of narratives that become "sticky" or resonant in different groups. This exacerbates social and political polarisation, which is a critical obstacle to deliberative democracy (Helgeson et al., 2022). For Habermas, another aspect is even more important: that the "authors" of contributions to social media lack the professional background of the authors and editors of classical print media and of at least some conventional radio and TV stations.

Whilst in his seminal book about the transformation of the public sphere he considered the world of mass media like newspapers, radio and television an instance of refeudalisation, where tycoons and elites increasingly shaped public debates while citizens became the consumers of the messages produced by those mass media, he now advocates a return to that world for two connected reasons. First, classical mass media produce filtered opinions, and the filters are handled by professionals who try to weed out mistakes, misinformation, blatant lies and more. Second, under conditions of a democratic rule of law, mass media are obliged to retract and correct misleading messages. Social media, it seems to him, should be subject to the same conditions, thereby losing the very characteristics that have made them so innovative and influential.

It is remarkable that in his new book Habermas does not ask how the communicative turmoil generated by the advent of social media could lead to a new public sphere that might support a deliberative democracy for the masses no less than for the elites. He rather proposes an approach that, in ways that are far from clear, would integrate the critical-rational political debates of the emergent bourgeoisie of yore with the ability of a tiny minority of authors to feed the rest of society with the product of their efforts. The possibility of everybody assuming the role of author now and then would disappear, and with it the current role of digitalisation in supporting the many worlds of social media.

If in this document we look at digital tools for deliberation we do so out of the recognition that the internet, social media, and digital communication structures are here to stay, and out of the insight that they may be used by civil society to achieve major innovations in the deliberative processes without which democracy would indeed die in darkness. As such, digital tools can increase the impact of deliberative and participatory processes by helping participants and the public to better monitor the status of the proposed recommendations and the impact they had on final decision-making. Digital tools can also facilitate transparency across the process by using collaborative tools that support transparency regarding who wrote the final outcome of the process (ability to trace the contributors of the document and the different versions). In addition, publishing the code and the algorithms applied for the random selection (sortition) process and the data or statistics used for the stratification could give total transparency on how participants are selected (https://thelivinglib.org/how-can-digital-tools-support-deliberation/).

In view of the EGD, there are two reasons why it is essential to develop innovative digital tools in a perspective of deliberative democracy. One concerns the role of science, the other the development of a European public sphere with its corresponding "demos". In representative democracies the public sphere is supposed to enable citizens to choose their representatives wisely, to influence the decisions of those representatives, and to hold them accountable for their decisions. At the same time, the public sphere enables those representatives to nurture legitimacy and trust by intervening in public debates, especially through mass media. In today's world, however, the public sphere does not only establish a

vital relation between the demos and its representatives, but also one between the demos and scientific institutions. This is particularly relevant in view of the fact that political measures in the context of the EGD cannot be evaluated without taking into consideration heterogeneous knowledge claims from the natural sciences, from engineering, from economics and other social sciences. And nowadays such knowledge claims cannot be assessed without some familiarity with computer models and the inevitable uncertainties they imply. If participatory methods and procedures are to foster a well-informed public sphere, they must include digital tools that enable the participants to engage with relevant computer models so as to get familiar with the knowledge claims these models may support or disprove. And if the science-society interface is to offer a valid contribution to deliberative democracy, participatory methods and procedures need to help scientists improve their models through feedbacks supported by these methods and procedures.

The second reason is the difficulty to develop a European demos with its specific public sphere. These obvious difficulties have far-reaching historical roots, and in the past decades they have become even harder to overcome. To some extent, digital tools with embedded automatic translation can offer some help, but automatic translation comes with its own pitfalls (see also section 2.3.4, page 48). The challenge is to enable a wide array of different cultural traditions (entwined with technologies, natural resources, and more) to peacefully enlarge their respective horizons so as to encompass other traditions without losing the vitality of their own sources. This can only happen through a historical process where members of different traditions interact with each other to solve shared problems. The REAL DEAL project will contribute to this long-term process by developing and implementing participatory methods and procedures that through the combination of digital tools with face-to-face interactions are suitable for this kind of social learning.

2.2.2.2 The Digital Gender Divide

The digital divide refers to the disparity in the online community, referring to both access and ability (Antonio & Tuffley, 2014). This divide is more pronounced in the Global South, such as Africa or South Asia (Plan Internacional, 2022). The rate of IT diffusion is subject to the existence or level of primary technologies such as electricity, as well as cultural and institutional factors, such as literacy rates and income levels (Alozie & Akpan-Obong, 2017).

The *gendered* digital divide then refers to the gendered gap regarding participation and safety in online spaces. Women and girls in all their diversity have less access to online spaces as well as digital technology, which is due to *inter alia* an inability to afford such technology (due to the gendered income gap), lack of time to participate online (due to the care burden), as well as the harmful stereotype that technology is masculine, which results in women and girls being less educated in digital literacy (Antonio & Tuffley, 2014). When we refer to the gendered digital divide, it encompasses such participation as owning a mobile phone or computer, or having readily available access to the internet, as well as being safe online. An intersectional understanding of this divide is important, as gender intersects with other identities such as racialised group and location.

The movement to online spaces during the Covid-19 pandemic has exacerbated gender inequality due to the pre-existing digital divide, but also inequality between countries as those in the Global North have better access to electricity and internet due to colonial legacies. As social movements increasingly adopt online technologies, shifts toward privileged participants will lead movements to largely ignore lower class and minority concerns. Neighbourhoods with high concentrations of racial minorities are less likely to have access to broadband internet; and technology is not gender neutral, the acquisition of Internet skills and/or self-efficacy about online skills favour men (Elliott & Earl, 2018).

Additionally, women and girls in all their diversity are much less likely to be safe online, as online gendered violence is prevalent. 52% of young women globally have experienced some form of digital harm, and 87% believe this problem is getting worse (Tyers-Chowdhury & Binder, 2021). This is even more disproportionately targeted to women of colour and is more prevalent when expressing opinions on political topics such as the EU, gender, and race (Galpin, 2022). It is imperative to consider the gendered digital divide when we speak of online participation, as not everyone can participate in online spaces equally. Social media has the potential to be transformative to the way we participate in politics, but considering the above outlined divide; women, nonbinary, agender and gender-variant people, people of colour, and other marginalised groups face formal exclusions, and online debates about European politics often do not conform to deliberative standards of argumentation, including uncivil and derogatory comments from unrepresentative, mostly male users (Galpin, 2022).

2.3 Institutionalising Deliberation and Participation at the EU level

2.3.1 Next level citizen participation in the EU: Institutionalising European Citizens' Assemblies

There have already been experiments with citizens' assemblies in different parts of Europe, and at various levels: the French Climate Convention, the Irish Citizens Assemblies, the UK Climate Assembly, Iceland's Constitutional Convention. In Austria, Germany and Belgium, policymakers at regional levels have attempted to make citizens' assemblies permanent, such as the Ostbelgien model in Belgium (Abels et al., 2022, p. 5).

Citizens' assemblies are convened at different governmental levels (regional, national and local) to seek citizens' input on issues of a different scale (constitutional, global, dividing domestic issues) and end up with different degrees of success. Researchers concluded that the existing research on the effects and added value of citizens' assemblies does not draw unequivocal conclusions about their potential (Abels et al., 2022, p. 5).There are cases of citizens' assemblies having led to the introduction of progressive regulation at various levels, better governance and better public satisfaction with policymaking.

2.3.1.1 Selection criteria

A citizens' assembly is a form of direct citizen participation in policy-making that brings together randomly selected citizens (and residents) representative of a larger public with respect to the key socio-demographic characteristics such as gender, age, geographic location, and education. They are convened to engage citizens in an open and informed deliberation on a given policy issue and produce recommendations. Citizens' assemblies can differ in size, scope (local, regional, national), tasks (agenda-setting, scrutiny, evaluation), permanence and other characteristics. The topics for deliberation can be selected by governing authorities or the citizens themselves (Abels et al., 2022, p. 6).

2.3.1.2 Examples and outcomes

In Europe, citizens' assemblies have been established (mostly on an *ad hoc* basis) by local, regional, and national governments. Four genuine transnational citizens' assemblies (Citizens' Panels) have run as part of the Conference on the Future of Europe.

The research concludes that there is still a need for empirical knowledge on how citizens' assemblies can be made most productive, but they have been deemed to have some clear advantages (Abels et al., 2022, p. 10). Citizens' assemblies have proven able to give impetus to policy files (like abortion in Ireland or climate change in France) where the usual decision-making process risks getting stalled. Assemblies are supposed to be premised on a process of open deliberation, such as the genuine exchange of arguments and the willingness to change one's mind. The authors of the study believe participants enter these assemblies without any specific affiliations or commitments to parties or other kinds of constituencies, and this is why citizens' assemblies are expected to produce new and original ideas (Abels et al., 2022, p. 10).

2.3.1.3 Equality and representation

The authors believe that the principle of equality of access (Article 9 of the Treaty of the European Union) is deeply enshrined in the organisation of citizens' assemblies, as they consider all citizens to be genuinely treated as full equals in that they have an equal chance of being selected (Abels et al., 2022, p. 11). By relying on random selection (while possibly checking for certain demographic characteristics), the selection procedures can be simple and transparent. This stands in marked contrast to the complex and highly selective procedures that decide over access to elected office, and which are known to be systematically biased towards certain kinds of profiles (higher educated, male, majority members) (Abels et al., 2022, p. 11). The citizen assemblies' format is therefore more conducive to gender parity and general inclusiveness.

2.3.2 Conference on the Future of Europe: Citizen Participation in the European Union

The study found that the use of public participation tools varies from Member State to Member State based on their broader context (particularly with complaints- and request-based instruments): European Parliament petitions have considerable usage in Spain and Italy but much less in other countries; the Ombudsman tends to be more used in countries with pre-existing and highly visible national ombudsmen than in countries where there are no comparable institutions or they are less known (Hierlemann et al., 2022a, p. 35).

As for new instruments for participation, they were found to be largely unknown, difficult to navigate, and rarely produce policy outcomes (Hierlemann et al., 2022a, p. 6). European Citizens' Consultations were a one-time initiative in 2018 featuring an EU-wide online survey, a European citizens' panel and various events in the Member States. They influenced the overall objectives and shape of the Conference on the Future of Europe, but were found to lack any concrete follow-up by decision makers (Hierlemann et al., 2022a, p. 9).

2.3.2.1 European Citizens' Consultations

The Conference on the Future of Europe featured several European Citizens' Panels with randomly selected citizens from the entire EU. These new models were found to be relatively resource-intensive and difficult to undertake in large numbers, but effective in reaching out to communities and citizens that so far have not participated in EU politics. Thus, it is a format that increases inclusivity. All events were required to involve a deliberative aspect, with a focus on citizens' input rather than politicians' views. Their long-term impact on the system of EU participatory democracy, however, remains to be seen (Hierlemann et al., 2022a, p. 172).

The authors (Hierlemann et al., 2022a) found that most EU participation instruments are not very representative by design; Citizens' Dialogues and European Citizens' Consultations have been mainly self-selecting events and public consultations mostly attract participants who have an interest in the topic, rather than a diverse sample of the population. The authors considered that the diversity of formats of the Consultations made it hard to draw common conclusions and hindered brand awareness; as for their impact, it was seen as lacking since, despite formally targeting the European Council summit, the initiative ended with virtually no discussion or follow-up (Hierlemann et al., 2022a, p. 189).

2.3.2.2 Citizens Dialogues

Citizens' Dialogues are events organised by the European Commission where citizens can meet face-to-face (or online) with Commissioners and other EU officials in order to discuss policy topics in a relatively informal setting. Citizens' Dialogues were found to primarily take place on the local level (lacking transnationality), and participants are generally from that location, often conversing with an EU representative from their country. While the authors consider the Dialogues to be accessible (anyone can participate, without having to have expertise or putting in a lot of effort), they also found that they lack impact, as there are no formal channels through which citizens' ideas raised in Dialogues can be translated into policymaking. Additionally, they found there is a lack representativeness in practice, as the audience at Dialogues is disproportionately pro-EU and well educated, and a that the standard question-and-answer Dialogue format offers few opportunities for genuine deliberation (Hierlemann et al., 2022a, p. 170).

2.3.2.3 Public consultations

Public consultations are used by actors and organisations from all over Europe, who all answer the same questions, but do not meet or discuss directly with each other. They were found to not promote conversation between the European, national, and sub-national levels. The instrument is therefore characterised by a low level of engagement, apart from a handful of extreme outliers.

The assessment carried out by the authors concluded that public consultations lead to systematic input, as they are embedded in the EU's policymaking process (a consultation for every proposal); are accessible to all with an internet connection (at least in theory). On the downside, the high workload responses generate was found to be very resource-intensive, which leads to delays in feedback; poor language availability (i.e., not being available in all EU languages) skews responses towards educated multilingual citizens; and they have inconsistent output since, while most feedback acknowledges that consultations are not representative, sometimes the results are presented as decisive (Hierlemann et al., 2022a, p. 131).

2.3.2.4 European Citizens' Initiative

Established in April 2012, the European Citizens' Initiative (ECI) allows one million EU citizens to invite the European Commission to propose legislation. Within the first nine years, 102 initiatives have been started and six of these have been successful in collecting the necessary signatures. ECI strengths were considered to be agenda-setting, transnationality and accessibility, and the shortcomings the lack of visibility, the digital campaigning infrastructure (organisers are limited in their opportunities to campaign digitally – only very few reach the one million threshold) and the lack of impact, since the follow-up given to 'successful' initiatives is not in line with organisers' hopes and expectations (Hierlemann et al., 2022a, p. 74).

The European Citizens' Initiative and public consultations were assessed to function based on the involvement of organised civil society rather than individual citizens. The research shows that, in European Parliament elections, citizens over 55 are most active, those under 40 much less, but when it comes to the European Citizens' Initiative, it is citizens between 21 and 30 who are most represented among organisers. Most instruments are used mainly by highly educated citizens with pro-European convictions, and the empirical analysis conducted in the context of the study has shown that this is related to the low visibility of all instruments, given that participation opportunities are known mainly by those who are already active in EU politics.

An example given is that several European Citizens' Initiatives have reached beyond those already active in EU politics by being able to get signatories from a more diverse group of individuals as a result of outreach activities by the organisers and not due to the design of the instrument itself. Citizens' Dialogues are usually attended by pro-EU individuals, diminishing their potential for contentious discussions or breaking new ground (Hierlemann et al., 2022a, p. 35).

The study found that one of the accomplishments of the European Citizens' Initiative has been that, when successful (six initiatives have gathered the required one million signatures), it has managed to connect existing national debates. Examples are the ECI on banning glyphosate started from the initiative of several domestic conversations on the use of the pesticide and managed to connect them in one European initiative as well as the public consultations on summertime clock changes attracted millions of responses (Hierlemann et al., 2022a, p. 37).

2.3.2.5 Petitions to the European Parliament

European Parliament petitions are EU's oldest participation instrument (1952). The process consists of one or more EU citizens or residents developing a petition, the EP Committee on Petitions assessing admissibility and next steps, the European Commission giving an opinion, the Committee on Petitions inviting petitioner(s) and the Commission to a Committee meeting and the Committee on Petitions assessing whether and how to follow up further.

The authors found that the petitions are accessible, since any single EU citizen or resident can petition the Parliament with few official requirements; deliberative, as around 200 petitioners are annually invited to present and discuss their petition in the Committee. On shortcomings, these consists of low visibility, since very few people know about the work of the Committee on Petitions, there is little effort to involve the wider public in the petition process and the petition portal shows only some basic information, and impact, as the authors find there is a lack of the necessary political will and resources to make every petition count (Hierlemann et al., 2022a, p. 97).

2.3.2.6 Digitalisation/digital tools

Several Citizens' Dialogues have taken place in cross-border formats, but the norm remains Dialogues in one country and one language. During the Covid-19 pandemic, digital means have been found to open a door for more transnationality. Simultaneous translation has become part of meeting software and digital spaces. The Conference on the Future of Europe was considered by the authors to have made progress by offering a multilingual digital web-platform that allowed the automatic translation of citizens' ideas into any official EU language. It is not known yet whether these technical advances and the new Zeitgeist of digital interaction are taken on board by the EU's participation instruments, but the authors believe it fosters truly transnational conversations (Hierlemann et al., 2022a, p. 37).

However, it is worth considering that online tools can be exclusionary, since not everyone has access or equal access to them, for example those without internet access, older people and people with disabilities. There still exists a digital gender gap, meaning that women have less access to and make less use of online worlds (Fatehkia et al., 2018).

2.3.3 The Peer Parliaments: Citizens' Views on How to Tackle Climate Change

The European Commission invited citizens from all over Europe to come together and form Peer Parliaments to discuss the future of EU climate policy, which they did from November 2021 to March 2022. In this period, European citizens conducted 461 small-group debates across 26 EU Member States. Debates and exchanges were carried out locally, among friends, family, neighbours or colleagues, and the results were submitted to the European Commission.

Peer Parliament Hosts and participants could choose between three different discussion topics (modules): (1) how we move and get around (sustainable mobility); (2) how we make energy green and fair (sustainable energy); (3) and how we eat and consume (sustainable food and consumption). For each thematic module, the Peer Parliaments focused on two key questions. In this guise, the most preferred policy options for each of the six debate questions were identified.

Three different sociodemographic criteria were collected for each Peer Parliament: the country that a Peer Parliament was hosted in; average age (divided in the six age groups '16-25', '26-35', '36-45', '46-55', '56-65', and '65+') and gender distribution (the gender that participants identified with, divided in three categories 'mostly male', 'mostly female', and 'equal) (European Commission, 2022, p. 32).

The report found that there is a mobilising power of citizen engagement and deliberation (thousands of EU citizens gathered across Europe to debate how to fight the climate), particularly for bottom-up deliberative formats in familiar environments that involve low costs and can engage a high number of participants. Participants of the Peer Parliaments consistently expressed enthusiasm about the discussions, the creativity and the diversity of views in their groups, and considered the format useful to raise awareness on climate issues and to train people in discussing them. Plus, they found that submitting the outputs directly to the European Commission was particularly satisfying and raised their hope to have an influence on policymaking. The report found that more decentralised, deliberative formats lead to particularly valuable and more informative outputs than public opinion surveys, but it is worth noting that gender disaggregated data was mostly not available and therefore there are analyses and considerations that cannot be made (European Commission, 2022, p. 30).

2.3.4 Multilingual Digital Platform of the Conference on the Future of Europe Report

As part of the Conference on the Future of Europe process, a Multilingual Digital Platform was launched on 19 April 2021. In this platform, every EU citizen could participate in any of the 24 official EU languages, by putting forward their ideas, endorsing other people's ideas and commenting on them. All contributions on the platform were collected and analysed to serve as input into the work of the European Citizens' Panels and the Conference Plenary.

The report covers the activity on the Multilingual Digital Platform for the Conference on the Future of Europe from its launch up to 20 February 2022, a period in which 43,734

contributions were recorded on the platform, with 16,274 ideas, 21,264 comments and 6,196 events covering all 10 topics. The main focus of the report is on a qualitative analysis of the contributions on the platform, carried out on the basis of the ideas, event reports and comments submitted by contributors to deliver a broad overview of the content of the platform (Kantar Public, 2022, p. 5).

As regards participation, the report states that some events were organised with the aim of including the contribution of specific categories of participants, such as women, young people, or people living with a disability. A few events were organised on community level, for example a participatory event with inhabitants of a certain city or region or with inhabitants of a cross-border region discussing a common challenge such as adaptation to climate change impacting the Spanish-Portuguese border (Kantar Public, 2022, p. 7).

Prior to engaging on the platform, contributors are asked to provide information on their country of residence, educational background, age, gender, and employment status. The data is processed anonymously, and the information is shared voluntarily, so there are limitations on the insight that can be provided on this basis. When assessing the profile of contributors who provided information on their country of residence (73%), including those from countries outside the EU, the report concluded that around half of contributors identified themselves as men (49.1%) and 16.1% as women. More than a quarter (33.9%) did not provide information on their gender and 0.9 % identified as non-binary – the figures only give a limited view of the gender landscape of participation, although it would seem men were overrepresented. The representation of age groups was diversified, with 55–69-year-olds being the most active age group in terms of contributions (18.3%), followed by 25–39-year-olds (17.1%) and the 40-54 age group with 15.3%. When it comes to education, people with higher levels of education have been most active (43.2%) (Kantar Public, 2022, p. 18).

The report, in their quantitative analyses, concluded that there are limitations on the insight that can be provided into the profiles of participants, since they observed that respondents are particularly unlikely to provide information on their occupation, education and country of residence. In their qualitative analyses of events, the research team focused on closed events with an event report and paid particular attention to the more participatory and deliberative consultative events, to include the voices and opinions of those citizens who might otherwise not find their way to the digital platform (Kantar Public, 2022, p. 120).

2.4 Empirical applications and case studies

In this paragraph, we first provide an overview of the empirical examples of citizen participation and deliberation formats, method, and tools we found as a result of our literature search. Of course, there are many more empirical examples that are not mentioned below because examples like these take place constantly, on different levels and in all places of the world. We limited ourselves to a selection of empirical examples that were found in our literature search.

After providing an overview over case studies that we found, we present in-depth descriptions of a few case studies in which we show how these cases were organised, set up and to which result they led. This allows us to show how formats are applied in practice, which methods are part of them and what tools are employed and what can be learned from them for the EGD because, as Eymard (2020, p. 140) argues:

‘What remains however is that the future of Europe does not have to be the affair of EU experts and professional politicians only, and can be drawn by citizens, experts in their own life in Europe.’

As mentioned before, several Zotero folders were created in which the articles that were found during our literature search were divided. The Zotero subfolder relevant for this overview of case studies is 'empirical applications of formats, methods and tools. Articles that described case studies of participative or deliberative formats, methods, or tools were added to this folder to create an overview of all case studies that were mentioned. On the 10th of August 2022, this folder contained 112 articles. Nine articles could not be retrieved and were therefore excluded from the analysis. Out of the other 103 articles, 19 articles did not include case studies. This left 84 articles that did describe a case study.

Out of these 84 articles, 30 articles described case studies that were not relevant for our study. They either did not describe a participatory or deliberative empirical example (e.g., an empirical example of health impact assessment and neo-liberalism and urban politics in Norway) or were very specific on one aspect (e.g., voting age or the experience of former women leaders in participatory budgeting processes and their current life situation). We left these out of scope.

2.4.1 Overview of empirical examples

While reading the 54 articles, we focused on the formats used to give shape to the participation processes and the types of methods and tools that we encountered. We also looked at the topic that was discussed in the deliberative or participative process, the geographical place, and the level on which it took part (local, regional, national, international, or online). The following table gives an overview of formats we encountered in the articles and the table that follows it provides an overview over tools that were adopted.

Formats	Topic	Scale	Location
Ballot	Environmental legislation (Dell, 2009)	National	USA
	General (Stadelmann-Steffen & Dermont, 2016)	National	Switzerland
	Urban transport (Fenton, 2016)	Local	Switzerland
	Sustainable transport (Bendor et al., 2012)	Local	Canada
Citizens' assembly	Climate change (Eymard, 2020; Fabre et al., 2021; Torney, 2021)	National	France
	5 issues (i.e., climate change) (Chwalisz, 2019, 2021; Devaney et al., 2020; Farrell et al., 2013, 2020; Torney, 2021)	National	Ireland
	General (G1000, n.d.; Niessen & Reuchamps, 2022; Stadelmann-Steffen & Dermont, 2016)	Regional	Belgium
	General (Stadelmann-Steffen & Dermont, 2016)	National	Switzerland
	Climate change (Wells et al., 2021)	Local	UK
Citizens' dialogue	European politics (Hierlemann et al., 2022a)	International	Europe
Citizens' jury	Climate change (Wells et al., 2021)	Local	UK
	Management tracks and rivers (Niemeyer, 2011)	Regional	Australia
	Sustainability (European Commission, 2022)	National	Several European countries
	Conference of Europe (Conference on the Future of Europe, 2022)	International	Several European countries

Citizen science	Bird watching (MacLeod & Scott, 2021)	National	New Zealand
Consensus conference	Genetically modified food (Dryzek & Tucker, 2008)	National	Denmark, France, USA
Community dinner	Management public lands (Carr & Halvorsen, 2001)	Regional	USA
Deliberative polls	Resettlement, land management (Fishkin et al., 2017)	Regional	Uganda
	General (Kariuki, 2020) (chapter e-participation by Mapfumo and Mutereko)	Local	Zimbabwe
Fab labs	Collaborative infrastructure (Fasoli & Tassinari, 2017)	National	Italy
Focused conversations	Management public lands (Carr & Halvorsen, 2001)	Regional	USA
Forum	Climate communication (Dryzek & Lo, 2015)	Local	Australia
	Water supply strategy (Coenen et al., 2002)	National	Australia
	Management bridge (Niemeyer, 2011)	Regional	Australia
	Marine regions (Weiand et al., 2021)	International	International
	General (Kariuki, 2020) (chapter e-participation by Mapfumo and Mutereko)	Local	Zimbabwe
Living lab	Sustainable transport (Sagaris, 2010)	Local	Chile
	Urban food system (Brons et al., 2022)	Local	Netherlands
Participatory budgeting	Budgeting (Bassoli, 2012)	Local	Italy
	Budgeting (Moir & Leyshon, 2013)	Regional	UK
Participatory business models	Energy transition (Lennon et al., 2019)	Local	Several European countries
Participatory decision-making	Sustainable consumption (Coenen et al., 2002)	Regional	Denmark
	Urban mobility (Coenen et al., 2002)	Local	Netherlands
Participatory planning	Urban planning (Ortiz et al., 2021)	Local	Cuba
Participatory Value Evaluation	Energy transition (Mouter et al., 2021)	Local	Netherlands
Peer parliaments	Sustainability (European Commission, 2022)	Local	European countries
Perspective taking	Inclusion of migrants (Siddiqui et al., 2021)	Local	Bangladesh
Politique de la ville	Urban development (Sintomer & De Maillard, 2007)	Local	France
Q-methodology	Management bridges (Niemeyer, 2011)	Local	Australia
	Management of grizzly bears (Chamberlain et al., 2012)	Local	Canada
	Forest planning (Krueger et al., 2001)	Regional	Northern England and New York
Sustainable livelihood analysis	Desertification (Fraser et al., 2006)	Regional	Botswana
Town Hall Meeting	Landscape development (Makhzoumi & Al-Sabbagh, 2018)	Local	Lebanon

Workshops	Urban facilities (Attolico & Smaldone, 2020)	Local	Italy
	Sustainable transportation (Campbell-Arvai & Lindquist, 2021)	Local	USA
	Design power station (Ackermann et al., 2014)	Regional	Scotland
	Exploration agroforestry option (Dumont et al., 2019)	Local	Congo
Worldviews	Management marine systems (Billing et al., 2017)	Regional	Scotland

Table 7 Overview of formats used in case study articles

Tools	Topic	Scale	Location
3D visualisation	Sustainable transportation (Campbell-Arvai & Lindquist, 2021)	Local	USA
Facebook	Sustainable transport (Bendor et al., 2012) General (Kariuki, 2020) (chapter e-participation by Mapfumo and Mutereko)	Local Local	Canada Zimbabwe
Modelling	Sustainable development (Antunes et al., 2006) Green projects (Gerard Olivar-Tost et al., 2020)	Local Local	Portugal Colombia
Online platform	Social innovation (Radin & Lam, 2015) Sustainability strategies (Muresan, 2010) Urban development (Westholm, 2003)	Local Regional Local	South Korea Romania Germany
Photographs	Landscape development (Johnson & Castleden, 2011) Management marine systems (Billing et al., 2017)	Local Regional	Canada Scotland
Photovoice (visual ethnography)	Inclusion of migrants (Siddiqui et al., 2021)	Local	Bangladesh
Public GIS	Water service delivery (Hoyt et al., 2005)	Local	India
Risk maps	Design power station (Ackermann et al., 2014)	Regional	Scotland
Survey	Landscape development (Johnson & Castleden, 2011) Management public lands (Carr & Halvorsen, 2001)	Local Regional	Canada USA
Storytelling	Cultural heritage, urban development (Rivero Moreno, 2020)	Local	Europe
Twitter	General (Kariuki, 2020) (chapter e-participation by Mapfumo and Mutereko)	Local	Zimbabwe
Website	General (Kariuki, 2020) (chapter e-participation by Mapfumo and Mutereko)	Local	Zimbabwe
Wellbeing assessment	Forest management (Fraser et al., 2006) Impacts of changing economy (Fraser et al., 2006)	Regional Regional	Canada UK

Table 8 Overview of tools used in case study articles

These tables show that different formats and tools are described in the case studies, which focus on different topics such as climate issues or sustainability, urban design, sustainable mobility, or landscape management. While examples that focus on climate issues relate most to the EGD, empirical examples that focus on other topics can also be a source of inspiration for citizen participation or deliberation for the EGD.

Figure 2 shows that most articles described case studies that took place on a local level. Only three articles describe international case studies. One article describes multiple case studies that take place on different levels.

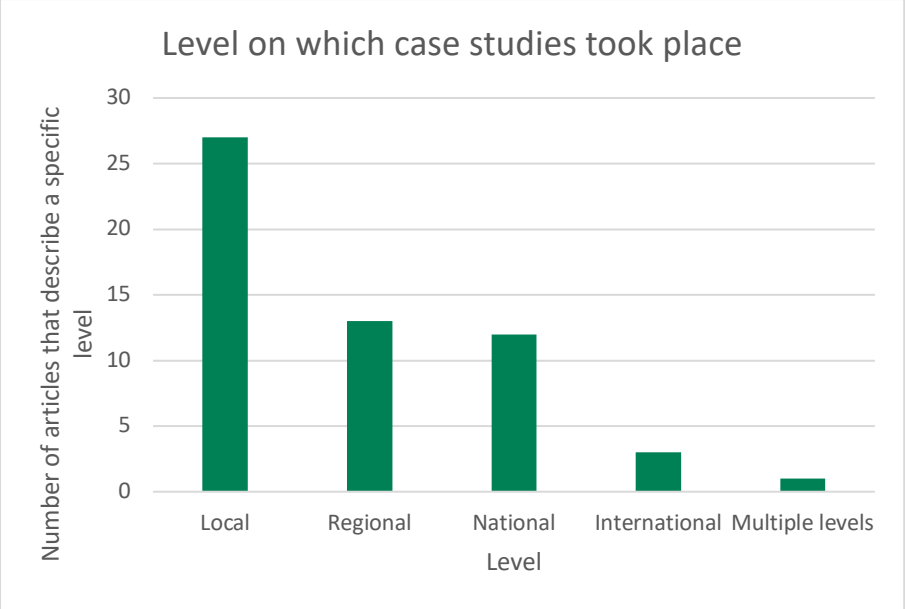

Figure 2 Level on which case studies took place

By far most case studies that were described in our articles took place on the European continent. Figure 3 below shows the division over the several continents.[4]

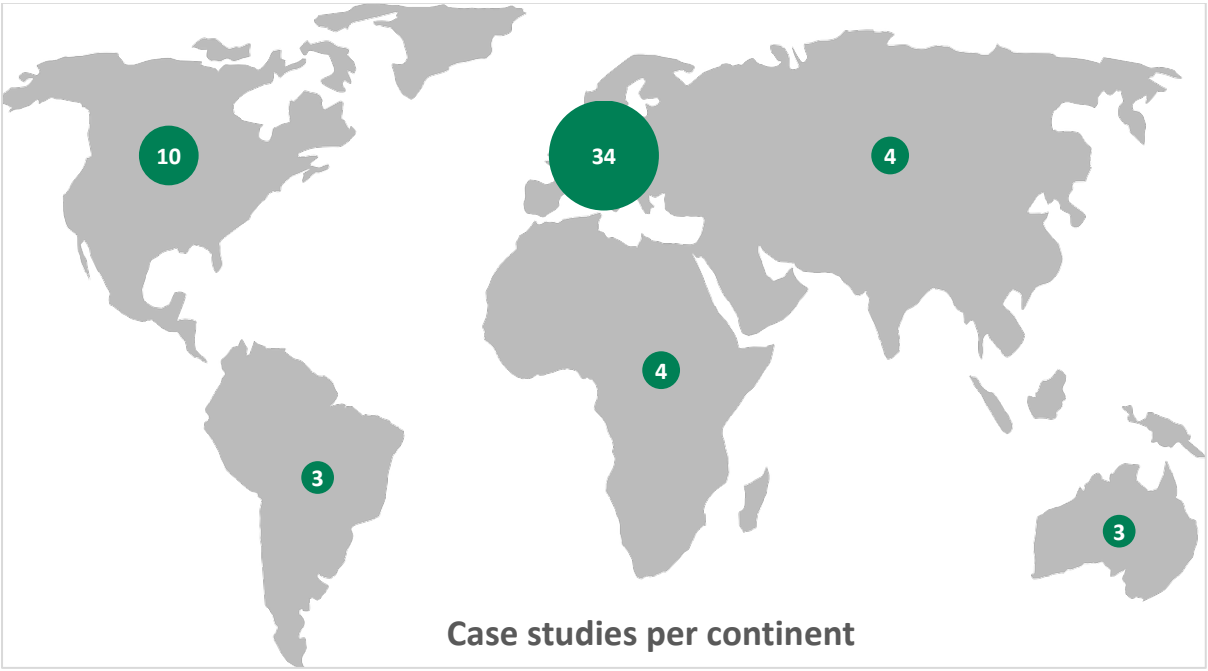

Figure 3 Map with case studies per continent

Figure 4 zooms in on the European continent and shows the division of case studies within the continent. Most case studies that were described took place in Ireland, Italy and France (respectively 6, 6 and 7). Furthermore, it is evident that most case studies were located in the Western half of Europe.

[4] Figure 3 shows more case studies than the total number of articles analysis. This is because some articles describe multiple case studies that take place in different continents.

Figure 4 Map with case studies per European country

2.4.2 In-depth description of case studies

In this section, several case studies are described in more detail. In the choice of the case studies that are described below, we took the following three aspects into account, as we wanted to provide a relevant and diverse overview:

First of all, we wanted to describe several participative or deliberative formats. As can be seen in the tables above, many articles describe citizens' assemblies. These assemblies, like the one in Ireland and France, are one of the best described empirical examples of deliberative processes. However, we did not only want to give an overview of citizens' assemblies since that does not do justice to the broad range of formats that have been executed. Therefore, we focused on smaller examples too.

The second aspect to which we paid attention is the level on which an event took place; local, regional, national, or international level. Most examples took place at local level. However, these were often poorly described and because of their narrow focus, not much has been written about these examples. Case studies on citizen participation and deliberation processes that cross national borders would have been interesting for the EGD, but these were scarce. However, examples at national or regional scales can also be interesting since processes can also be upscaled to a higher level to reach more people. Also, since this project is also organising an online deliberative process, we also wanted to describe empirical examples of online deliberative processes.

Third, we looked at the subject that the formats focused on. Obviously, empirical examples that focus on topics related to environmental policy are most relevant for the EGD. However, empirical examples about other topics can be applied to environmental policy areas as well. In the selection of case studies described below, we therefore did not necessarily only address processes that had focused on EGD topics.

Besides these aspects, we were dependent on the available scientific and grey literature that reports on specific participation processes. Some processes were given way more attention compared to other participatory or deliberative actions. By far, most information could be found on citizens' assemblies, specifically on the citizen assemblies in France and Ireland. However, we did not only want to elaborate on actions that are already well-known, but we wanted to pay attention as well to practices that are less known, and we can learn much from them. Because of the scarce availability of literature on deliberative or participatory processes that took place in Eastern European countries, we unfortunately were not able to elaborate more on examples from these countries. Two of the case studies below, the online crowdsource on off-road traffic laws in Finland and the conference and dialogues on radioactive waste in Belgium, were not described in one of the articles in our Zotero folder. We found these examples in Participedia (www.participedia.net).

Method/tool	Subject	Scale	Location
Citizen Assembly (We the Citizens)	5 topics, amongst which climate change	National	Ireland
Citizen Assembly (Citizens Convention for Climate)	Climate	National	France
Permanent citizens' council (Bürgerdialog)	General	National	Ostbelgien, Belgium
Dialogues and consensus conference	Management of radioactive waste	National	Belgium
Use of an online platform as a tool	Urban development	Local	Horn-Lehe, Germany
Use of online crowdsource as a tool	Off-road traffic laws	National	Finland

Table 9 Overview of selected case studies

2.4.2.1 We The Citizens – Ireland (see also Annex 6.3.)

Ireland hosted a citizens' assembly 'We The Citizens' between 2016 till 2018. To select the 99 citizens that could participate in this assembly, a random sample was taken of the population. To ensure this group of citizens to be an equal representation of the total Irish population, certain demographic characteristics were considered in forming this group like gender, age, social class, and region of residence (Farrell et al., 2020; Torney, 2021). This group of 99 participants was led by one independent group leader, leading to a group of 100 people (Devaney et al., 2020). No high-ranking politicians were included in the group of participants. During the process also advocacy groups were excluded (Devaney et al., 2020).

The participants of this assembly were given five diverse and complex policy questions to work on, namely, the constitutional abortion ban, how referenda are held, fixed term parliaments, the challenges as well as opportunities of an ageing population and how Ireland can become a leader in the fight against climate change (Devaney et al., 2020). The specific question for this last topic was "How can the State make Ireland a leader in tackling climate change?". No further elaboration on what it entails to be a leader and no specific timeframe was given (Torney, 2021). These themes were the result of regional gatherings that were organised where citizens could share their vision of the future of Ireland. This was done because it was deemed important that citizens shaped the agenda instead of politicians (Farrell et al., 2013) and this way, more people felt included in the debate (Devaney et al., 2020). The formulation of themes is described as the first stage of the Citizens' Assembly.

The second phase was the presentation of evidence by expert witnesses to the participants of the citizens participating in the citizens' assembly. For the sessions on climate change, 15 experts of climate change as well as 6 people who are pioneers in the battle against climate change were present as expert witnesses (Devaney et al., 2020). These experts were selected by an Expert Advisory Group, which itself was made up by academic experts on relevant areas.

The third stage was the actual discussion and deliberation by the citizens. The participants of this assembly gathered 12 weekends over a period of 15 months to discuss one of these issues per weekend (Torney, 2021). All citizens were divided in groups of eight people and the process was guided by a trained facilitator to make sure that all citizens were included in the deliberative process. Each table had a notetaker as well. The expert witness was still around to be able to answer questions or provide more detail whenever that was necessary for the citizens (Farrell et al., 2013).

The fourth and last phase of the citizen assembly was ballot voting. All citizens participating in the assembly could vote on proposed recommendations. This was done anonymously and used to identify to which extent the participants reached consensus on the recommendations. In terms of agreement, the deliberations on climate change were most successful, with 80% or more of the participants voting in favour (Devaney et al., 2020; Torney, 2021).

A parliament committee was then established to consider these recommendations and further develop them. This committee published their own recommendations, which were largely based on the recommendations given by the citizen's assembly (Torney, 2021).

2.4.2.1.1 Reflection

After analysing this citizens' assembly, Devaney et al. noted several lessons that can be learned from this example (Devaney et al., 2020). They divided the lessons learned into three categories: input legitimacy, throughput legitimacy and output legitimacy.

- Input legitimacy: Devaney et al. argue for a transparent selection procedure for citizens and for a clear communication process about the methodologies that are used for this. The decision not to include politicians is encouraged by them.
- Throughput legitimacy: Regarding the decisions made during the process, Devaney et al. advocate for the use of more personal and emotional stories and voices of young people amongst the witness experts. Other ways of communication styles can be included, like inviting documentary makers, so people can learn in different ways. Also, because the assembly covered many topics, there was not much time to devote to each of the topics. This caused some time pressure for citizens to make decisions (Participedia, 2022c).
- Output legitimacy: the follow-up procedure could be more concrete, and the assembly should have a mandate (Participedia, 2022c). Members of the assembly should be kept up to date regarding the implementation of their recommendations (Devaney et al., 2020).

2.4.2.2 Citizens' Convention for Climate – France

The Citizens' Convention for Climate in France (Convention Citoyenne pour le Climate, CCC) is seen as a political response to the *movement des gilets jaunes*[5] (Eymard, 2020). Between October 2019 and June 2020, seven sessions that lasted 2,5 days were organised. The mandate of the convention was pretty specific, with the ambition to reduce greenhouse gas emissions between 1990 and 2030 by 40%. Hereby, participants had to pay attention to the principle of social justice (Eymard, 2020; Torney, 2021). The agenda was shaped with the cooperation of the *Gilets Citoyens* (Citizens Vests), and civil society representatives (Mellier & Wilson, 2020).

150 French citizens took part in the CCC. Just as with the Irish Citizens' Assembly, random sampling was used to create a fair representation of the total French population. Gender, age, educational level, metropolitan area (rural, urban, suburban etc.), geographical area and socio-professional category were considered (Fabre et al., 2021; Torney, 2021). Citizens living in overseas areas were also included in the convention. Fabre et al. (2021) analysed the representativeness of this group of citizens and argued that it was in general a realistic representation of the French population, but that the participants of the convention were "somewhat more favourable (sic) to climate policies than the general population at start" (p. 26). The group of 150 citizens was divided into five different groups, all working on one of the following themes: consuming, travelling, housing, eating, and producing and working. These groups independently formed recommendations on the respective theme.

Several experts were invited to provide information from different perspectives. They were therewith seen as neutral actors. Besides this, citizens also organised gatherings with policymakers and civil society themselves, making it a co-construction process. Participants were allowed to somehow shape the process, by for example choosing experts. Also, they were encouraged to speak to the media, and engage with communities and members of the France parliament (Mellier & Wilson, 2020).

Eventually, the convention led to 149 recommendations, presented in a 460-page report. The citizens recommended organising a referendum for three of the proposals. President Macron supported all but three of the recommendations. As a response to the recommendations given by the convention, the French government published the Climate and Resilience Bill. The members of the convention as well as civil society criticised this Bill for being an insufficient response that was inconsistent with the original recommendations (Torney, 2021).

2.4.2.2.1 Reflections

In this paragraph, we point attention to several reflections on the CCC on different levels: representation, the design of the process, and the aftermath of the CCC.

First reflections on the representation of the CCC. One prerequisite for people to be invited to this citizens' assembly was to have a phone number. While phones are an omnipresent item in today's society, not everybody has access to a phone. This would likely be people in marginalised positions, lowering the representativeness of the citizens' assembly (Participedia, 2022c). This critique leads to a larger debate on democratic representativeness. While several characteristics were considered in the gathering of participants for this assembly, some wonder whether it is enough to look at these aspects and try to form a diverse group. Democratic representativeness could also give more voice to people in marginalised positions, like people living in poverty or living with a disability. And

[5] *Mouvement des gilets jaunes,* or yellow vest protests were weekly protests in France against the rise in fuel tax that started in the end of 2018.

besides including people, non-humans like rivers or mountains could be given a voice for their interests to gain more weight.

Regarding the design of the process, Meller and Wilson (2020) were surprised that the CCC did not have facilitators who lead the different discussions. Usually, these facilitators make sure that everybody is heard and that the discussions stay focused on the topic that is being discussed. While they do not elaborate on how the discussions in the CCC went, it can be expected that the absence of facilitators ensured that not everybody would have been able to express their opinions equally. Furthermore, Meller and Wilson emphasise that there should be more space for emotional engagement with the topic in citizens' assemblies like these.

Citizens' assemblies on climate issues are often initiated to give more attention to the issue and with the idea that citizens can break open the often-rigid debates on climate change. Meller and Wilson (2020) do argue that the CCC resulted in more ambitious climate policy recommendations compared to proposals that have been made by politicians. However, the question is to which extent these recommendations are implemented. And even if all recommendations are implemented, experts argue that it is still difficult to reach the 40 per cent reduction in emissions by 2030. Not all relevant data was shared with the participants of the CCC, making it hard for them to address systemic drivers of climate change.

2.4.2.3 Bürgerdialog – Ostbelgien

Other than the citizens' assemblies in Ireland and France that both functioned for a set time period, the council in Ostbelgien[6] that first took place in the end of 2019 has a permanent character. The Bürgerdialog is set up without the explicit involvement of citizens. The initiative itself and implementation have been determined by experts or by politicians. In the development phase, the initiators collaborated with the steering committee of the G1000. The Bürgerdialog consists of two main bodies: a citizens' council and citizens' assemblies (Niessen & Reuchamps, 2022). The council consists of 24 randomly selected members who will all be part of the council for eighteen months. Every six months, eight council members are replaced by eight new citizens. The council has three main roles: it monitors debates in the parliaments to keep track of the agreed actions and it organises and selects issues that are assigned to citizens' assemblies (OECD, 2020). The council appoints one president who has an organisational function in leading and preparing meetings and discussions. Decisions can only be made when a majority of the members is present and in principle the decisions are made based on consensus. When that cannot be reached, a two-thirds majority of the people who are present will do as well. Citizens get a fee and a reimbursement for their travel costs for every meeting they attend (Niessen & Reuchamps, 2022).

These citizens' assemblies consist of 25 to 50 randomly selected citizens. The selection criteria are age, gender, socio-economic context, and geographical origin and cannot be active in a political function. The assembly also referred to as the citizens' panel, comes together at least three times in three months. They deliberate topics that have been determined by the citizens' council. Just as with the citizens' assembly, decisions are preferably made on consensus. When that proved to be impossible, a majority of 80% of the participants and when at least 80% of the participants are present will do as well. Minority opinions are included in the reporting of the final recommendation as well. Through deliberation, they come up with recommendations for the parliament. The parliament is obliged to discuss these recommendations and reply to them (Niessen & Reuchamps, 2022; OECD, 2020).

[6] Ostbelgien ('East Belgium'), is the German speaking federal sub-state in Eastern Belgium.

2.4.2.3.1 Reflections

Niessen and Reuchamps (2022) described several factors that made it possible that this Bürgerdialog could be implemented. These factors were divided into 5 categories: context, triggers, opportunities, the avoidance of oppositions and the willingness of actors.

- Context: most elected officials were open to the involvement of citizens because they had a lot in contact with citizens already. Because of this, it might seem redundant to instal this Burgerdialog. However, mainly people with loud voices are heard by politicians, which makes this contact not inclusive at all. A citizens' assembly and panel can make the whole process more inclusive.
- Triggers: citizens had a great interest in participatory approaches like these, which was fuelled by their mistrust of politics, and had good experiences with earlier forms of citizens' assemblies. Because the organisers were in contact with the G1000 steering committee, an ambitious model could be established.
- Opportunities: the Bürgerdialog provided opportunities for both the citizens and politicians of Ostbelgien. Because this was one of the first times that such a far-reaching citizens' assembly approach was established, it served as a model for others. Also, politicians could use the Bürgerdialog in their campaigns as it was being established in the pre-election period.
- Opposition avoidance: all political parties were included in the management of the Bürgerdialoge, making sure that a hostile political environment could be avoided. Furthermore, a collaboration with G1000 was seen as a good initiative as they were seen as a neutral actor in the process.
- The willingness of actors: there was support for the Bürgerdialog at a high level with the main political decision-makers for Ostbelgien initiated it. The support from the G1000 steering committee led to a great momentum in launching the Bürgerdialog.

2.4.2.4 Disposal of radioactive waste

In Belgium, the ONDRAF (Walonian name) / NIRAS (Flemmish name) is responsible for the management of radioactive waste. In 2009, they initiated a participatory process about high-level and long-lived radioactive waste. As a highly technical and controversial problem, this issue was now discussed with citizens instead of only with experts (Participedia, 2022a). The expectation was that including people in the decision-making process would lead to less controverse and better solutions (Dialogue Learning Center, 2009). Already from the start of the decision-making process, the Belgium population was invited to share their concerns and needs. An independent organisation was asked to organise this participatory process. The ONDRAF/NIRAS drafted five key elements that the participatory process should take into account (ONDARF/NIRAS, 2012, pp. 310–311).

1. The process must break the decision-making process down in steps, so consequences of actions for other stages and stakeholders are clear.
2. The process must be participative, and all stakeholders must be able to have a say. Amongst the stakeholders, ONDRAF/NIRAS lists waste producers, safety and environmental protection authorities, local, provincial and regional authorities, NGO's, science, professional authorities, foreign parties, local communities and the general public.
3. The process must be adaptable so new developments and assessments can be taken along.
4. The process must be transparent and credible. An independent body was taken along to monitor and document the process.
5. The process must ensure continuity so interactions with society have to be recurrent.

Specific for this participatory decision-making process was that it focused on long-term management, approximately over 100 years (ONDARF/NIRAS, 2012). Several dialogue sessions and a conference were organised in 2009. In the dialogue sessions, citizens, civil society organisation, experts, and other stakeholders could express their expectations, requirements, and concerns regarding the long-term management of the high-level and long-lived radioactive waste. Evaluation criteria were discussed regarding the options for waste management. This resulted in an environmental assessment report for the Belgium government (Participedia, 2022a).

32 citizens participated in the conference, which took place in three weekends over three months' time. The question they addressed was: 'How to decide about the long-term management of high-level and long-lived radioactive waste?' (ONDARF/NIRAS, 2012, p. 309). Six possible options were presented and explained to the participants. The participants were divided in four groups and formulated criteria to tests and compare these six options. The goal was not to reach a solution, but to make the choice easier (Dialogue Learning Center, 2009). This consensus conference resulted in a report for the Belgium government with recommendations on what principles the government should consider when they decide on the management of this waste (Participedia, 2022a).

2.4.2.4.1 Reflections

One of the criteria by ONDRAF/NIRAS was that independent actors would evaluate the processes. In a report that is formulated by independent process managers, the dialogues, conference, and also online participation is evaluated (Dialogue Learning Center, 2009).

First some reflections on the dialogues. While the ONDRAF/NIRAS wanted the participants to be 'representative of the diversity of the Belgium society', the report described that the majority of the participants of the eight dialogue sessions were men. Other demographical aspects were not highlighted in the evaluation. The participants of the dialogue sessions were satisfied with the dialogue, saw the importance of such practice, and claimed to have learned much that day. Critical points raised by some of the participants was that some needed more time, they would have liked more citizens to join the debate, and the main focus on questions (instead of formulating solutions) was what bothered some of them.

Additionally, some participants wondered if their involvement came at a good stage. According to one of the independent observers of the conference, the working documents that the participants received led one to suspect that the process was already in an advanced stage and that their involvement was redundant. Furthermore, many discussions circled around the themes' transparency, insecurity, or irreversibility. However, these concepts were not conceptualised to begin with and thus were interpreted in multiple ways in the conference. One of the recommendations was to conceptualise these concepts in advance the next time so everybody can understand and use them in a similar way.

One of the criteria of the ONDRAF/NIRAS was that the process should ensure continuity. From the documentation that can be found online, it is not clear whether this is actually the case.

2.4.2.5 Online participation – Germany

Facilitating communication between citizens and government by making use of polling, e-consultation and other communication tools was the objective of the Electronic Democracy European Network (EDEN), an EU-supported project in Germany. In this project, an online tool for discussions was applied and an evaluation with which the future of the Horn-Lehe district in Bremen was discussed. Citizens could discuss multiple topics related to their district on the forum like city planning or youth culture. Information about these topics could be gathered on the site, like the minutes of meetings and the master plan for the development of the city of Bremen. Also, it was possible to use various tools, like maps for visualisation and round-table discussion areas. On this forum, citizens could register under their name, with a pseudonym or anonymous and citizens themselves were in charge of moderating the discussions (Westholm, 2003).

2.4.2.5.1 Reflections

Online participation or e-democracy[7] has its advantages and disadvantages compared to physical forms of participation (see also chapter 2.2 in this report). Advantages are the fast and relatively easy way to retrieve information, the ability to participate from a physical place of your choice, and the visualisations that can support the provision of information (Westholm, 2003). It would also create new spaces for interaction between government and citizens (Muresan, 2010). Online participation can be more anonymous and therefore remove certain barriers that are in place with physical participation and increase the equity of participants. For this reason, many hope that online ways of participation will increase the political communication and involvement of citizens (Westholm, 2003). On the other hand, discussions and debates can become more rationalised, and participants do not always tend to listen to each other. Digital participation can also lead to the exclusion of certain people as not everybody is familiar and handy with online tools or has access to online tools in the first place. The digital gender gap is still present, describing that women have less access to and make less use of the internet (Fatehkia et al., 2018). Furthermore, people without internet access, people of older age and people who are visually impaired can experience exclusion by online participation. And by some, ICT is seen as the key way to solve the problem of a lack of political engagement, while "[a]ccording to the standard model of political participation, citizen involvement is not mainly a question of the technology, but of the political efficacy anticipated" (Westholm, 2003, p. 223).

When analysing the online forum in Horn-Lehe, Westholm (2003) looked at several criteria:

- Number of users – out of the 24.000 inhabitants of this district, between 260 and 1.000 users were engaged with the forum and 70 to 100 people actively contributed to discussions. Compared to offline forms of consultations Horn-Lehe used before, this is way more since offline public meetings organised in the evenings usually had 50 to 150 people who visited and 10 to 20 people who actively contributed. Most of the users did not follow discussions on the forum regularly but only occasionally. No information is provided on the gender division of the participants.
- Citizens as moderators - because of the limited capacity on the administrative side of the government, there is no adequate coordination of the discussions on platforms like these. While this is often seen as a disadvantage of online consultation, Westholm regards this as a success factor of the forum.

[7] E-democracy refers to "the possibility to develop the influence and participation of the public in the political sphere" (Muresan, 2010, p. 243) and includes many forms of online interaction, such as e-voting and email-bombing (Westholm, 2003).

- The quality of the submissions - 67% of the postings as valued as being constructive and 13% as not constructive at all.
- The quality of the communication in discussions - most of the communication was expressive, with a smaller share of the communication being valued as reciprocate, responsive or empathic.

While Westholm's reflection was mainly positive, politicians of Horn-Lehe pointed towards disadvantages of the use of this online forum (Westholm, 2003):

- Not all citizens have access to the Internet or know how to use it. Therefore, they believe that the results of the discussions are not representative. Also, it seemed that the people who contributed to the online forum were committed and actively involved people that were already known to politicians.
- Four citizens, together with a researcher and the head of the district administration, were enrolled to act as a moderator on the forum. Not all of them did as much work as the others regarding moderating the forum because of some experienced problems with using the forum. One of the lessons learned here is that volunteer moderators should be trained on the technical, social, and organisational features. Governments should pay for the moderators; either by providing resources or by paying for professional moderators.

While online participation or consultation of citizens can be an interesting way to involve citizens in the debate, online applications have to be made adaptable in technical, economic, cultural, organisational, and legal ways to processes in the real world.

2.4.2.6 Crowdsourcing off-road traffic law – Finland

In Finland, new proposed laws were 'crowdsourced'. When crowdsourcing is used in political decision-making processes, it 'aims to involve citizens in a public good and to link their suggestions with the institutionalised decision-making processes' (Participedia, 2022a). The Finnish Ministry of Environment used this to involve people online to give their opinion on new controversial laws regarding traffic on unpaved roads, which mostly affects off-road vehicles and snowmobiles (Aitamurto & Landemore, 2016). All Finnish citizens could make an account under their own name or anonymous, no maximum number of participants was determined. To stimulate people to be actively involved, they were rewarded points for every contribution, ranking them compared to other people on the website. In the end, 700 people participated in the online debate and more than 14.000 people visited the website. The participants could reject proposals and decide on whether citizens should have a legal right to build new roads when they would comply with ecological guidelines. Furthermore, they could give their opinion on whether these decisions should be made at national, municipal, or local level.

In the first phase of the experiment, from January to March 2013, participants were involved in the identification of problems by commenting on ten different areas of unpaved roads or addressing issues themselves. The main issues citizens seemed to be concerned about were safety issues and illegal driving. The focus of the second phase, from March to June 2013, was to discuss solutions of the problems identified. Moderators stimulated people to deliberate, think about issues in more detail, and ask questions to the Ministry. The participants argued that this way of decision-making was interactive, provided them with more knowledge, and made them understand the visions of others better. A minority indicated that they changed their mind about several issues after the discussions. Phase two

led to 500 ideas, 4000 comments and 25000 votes from 731 users. The ideas were bundled in a report and handed to the Ministry of Environment.

2.4.2.6.1 Reflections

Besides the more general reflections for online participation on which is elaborated in paragraph **Error! Reference source not found.**, we will list more specific reflections for the Finnish experiment in this paragraph. Aitamurto and Lademore, who were involved in the process as researchers, analysed the experiment and questioned whether it could be qualified as 'democratic'. To determine this, they emphasised whether it took place between 'free and equal' citizens and whether it was 'public' (Aitamurto & Landemore, 2016).

Because all Finnish residents could decide for themselves if they would participate in the experiment, it was seen as a 'free' and 'public' experiment. No one was forced to participate. This freedom led to some worries that this would lead to a bias. Aitamurto and Lademore (Aitamurto & Landemore, 2016) argued that there was a wide diversity of viewpoints and opinions amongst the participants, which tempered this worry. Also, they argued, 90 per cent of the Finnish residents had access to the Internet, making it one of the most digitally connected countries in the world. However, this leaves the 10 per cent of Finnish residents who did not have access to the Internet to be excluded. The absence of statistical numbers makes it hard to say something about the level of inclusiveness and 'equality' of this experiment. Out of the people who filled in the survey (186 completed surveys), the majority of the participants identified as male (80 per cent), educated and familiar with online participation. This is linked to the topic, as Aitamurto and Lademore assume that this composition can be different when other topics are discussed. Furthermore, freedom was analysed as transparency in the sense that expectations were clear, and everybody was free to express their opinion.

Aitamurto and Lademore interviewed 21 participants and half of them indicated that they did not think that the level of respect and civility was high. Whenever people used negative wording, others experienced the platform as less civil and respectful. The opposite counts for when positive wording was used. Also, half of the respondents argued that not everybody tried to understand others' viewpoints. A solution that is brought up for this, is that the design of the crowdsourced process could be changed into a design that fosters listening and learning from each other. Participants themselves did not think that their involvement would change policy outcomes but valued the procedure of the experiment that made the process more inclusive and fairer (Aitamurto & Landemore, 2016; Participedia, 2022b).

2.4.2.7 Gender

In this section, we focus on how gender issues are discussed in the articles that describe case studies. We have found that the main way in which attention is given to gender, is when descriptions are given of the inclusiveness and representativeness of participation. Whenever a random sample of the population is taken, gender is one of the key aspects (often together with age and place of residence) that is considered to create a fair representation of the total population. However, the understanding of gender is binary and therefore limited as studies only differentiate between women and men and do not consider other genders. Also, articles that analyse or reflect on a specific form of citizen participation, gender is not explicitly mentioned as an important topic while gender structures and power dynamics that are connected need to be considered in all aspects and stages of a format, method, or tool (see also discussion of gender issues in section 2.7, page 81).

Karpowitz et al. (2012) argue that not only representation and inclusion of systemically excluded groups are important in deliberation and participation, but it matters as well in what

number of women or other systemically excluded groups they are included. Just one person airing the voice of a systemically excluded group is not enough to bring these points to attention. Fishkin et al. (2017) endorse this. One of the critics of deliberative democracy is that privileged groups often dominate the deliberation, in number and voice. Fishkin et al. argue that in citizens' juries, men, educated people and people with higher social status are often in the majority. This raises questions about the representativeness of these practices and whether predominantly people who are regarded as having more competencies are included in these deliberative processes (J. S. Fishkin et al., 2017). Stadelmann-Steffen and Dermont (2016) argue that some forms of participative and deliberative processes are more "emancipated" compared to others (p. 110). Citizens' assemblies, they claim, are a form of democracy where mainly men dominate. Ballot boxes, on the other hand, are better designed to overcome gender gaps.

One could also wonder whether a representative sample of the total population is what should be strived for. Some claim that people in marginalised positions should be overrepresented in participatory approaches because their vision has been underexposed so far.

When women are the numerical minority in deliberation and decisions are made on a majority rule, the opinions that women bring forward are less likely to be heard and changes are that the outcome is not in favour of women. Karpowitz et al. (Karpowitz et al., 2012) argue that when women are the minority, it is better to use a unanimous rule to minimise male advantage (see also section 2.7.2, p. 82). Mellier and Wilson (Mellier & Wilson, 2020) emphasise on the importance of hiring a trained facilitator who can ensure that everybody at the table is heard. When there are no facilitators, it is likely that certain people talk more compared to others. Overall, men tend to be more assertive, independent, and focused on power compared to women who are generally more tentative, polite, and focus on creating relationships. In discussions that are not moderated, men often override women (Merchant, 2012). They do not elaborate on specific aspects or criteria these facilitators need to be trained in, like power dynamics between participants.

Besides their focus on facilitators, Mellier and Wilson (2020) also call for more space for emotional engagement in citizens' participatory approaches. They argue that people should be able to emotionally assimilate with the reality of the issue that is discussed, specifically they refer to issues related to climate change. Emotional engagement and emotional arguments are seen as feminine issues and generally less desirable in decision-making compared to rational discussions, which are seen as masculine traits. Making more space for emotional engagement in discussions could therefore be in favour of women. Of course, this is not black-and-white, and some women will be more in favour of rational discussions and vice versa. Also, the strong focus on quantitative data undermines the role that qualitative data can have. Beliefs, biases, values, and heuristics of participants can be a way for people to absorb information and express themselves. Not everybody can flourish in a surrounding that is driven by quantitative data. Creating space for biases, beliefs, values and heuristics will lead to a more inclusive atmosphere (Glynn et al., 2017). While it is refreshing that Mellier and Wilson show interest in a more emotional attachment to the topic, they do not elaborate on how this engagement could look like or how this could be facilitated. Devaney et al. (2020) also argue for more emotional engagement in citizens' assemblies. They specifically refer to creative storytelling, personal engagement, and the use of images.

2.5 Evaluation and validation of formats, methods, and tools

In Task 1.1 a deliverable was produced which provides criteria for the evaluation of citizen participation. Here we looked into different types of literature (such as environmental justice or ecofeminism etc.) in order to find out what relevant criteria should be taken into account when we consider citizen participation for the green deal. In this deliverable 1.2 we have done something else. We have looked into the literature available on citizen participation. Based on a reading of that literature, we will in this chapter identify the criteria that have been hitherto used to evaluate citizen participation processes that focused on green deal topics.

The selection of literature that contained reflections on the criteria that should be used to evaluate citizen participation was rich and diverse. It contained a lot of publications which do not focus only on evaluation of citizen processes, but which couple an evaluation to case studies, or which provides a comparative analysis of different case studies, or which compare the value of different methods and tools such as digital tools. The richness of the sources allows to choose many different approaches to evaluation, for example focusing on specific methods and tools, or on specific levels at which an engagement activity is realised; for example, at a national level (eg. Torney, 2021; Longstaff et al., 2015; Boswell et al., 2013), or a local/regional level (eg. Granvik et al., 2008; Banjade & Ojha, 2005; Carr & Halvorsen, 2001; Costello, 2011; Fraser et al., 2006; Olausson, 2020). Furthermore, some literature focusses specifically on digital tools to conduct citizen participation (Deligiaouri & Suiter, 2021; Hofmann et al., 2020). After talking to the authors of the previous chapters, and with the entire team, we chose to focus this chapter just on the identification of quite general evaluative criteria, which can be used to evaluate a variety of methods and tools and which could be used to assess citizen engagement at various levels. This chapter therefore aims to find an answer to the following very general question: what are the evaluative criteria with which we can assess the success of citizen engagement and citizen deliberation for the EGD?

Based on the articles, we conclude that there are in general two types of criteria: (1) criteria that determine the value of the outcomes of citizen engagement and deliberation and (2) criteria which determine the value of the process of citizen engagement and of citizen deliberation. In the following we speak therefore about ‘outcome criteria’ and ‘process criteria’, although (as will become clear below) the two cannot be separated as strictly as we may like: outcome and process are also closely connected.

2.5.1 Outcome criteria

It is often mentioned that it is important that citizen engagement cannot be non-committal; it should have concrete outcomes. But what should these outcomes be? Given that different actors may have different ideas about the outcomes that would make citizen engagement successful, some authors claim that it is important to specify in advance what the goals are of the endeavour and who should be involved in specifying the goals and setting the criteria that determine whether and to what extent the goals have been reached (Finardi et al., 2012; Hofmann et al., 2020; Rowe et al., 2004). Setting the goals therefore involves specifying for whom the evaluation is conducted (e.g., for national policy makers, municipalities, state forest management, public health authorities, citizens themselves, NGO’s), as they need to be included in it. It also means that any attempt to evaluate whether goals are reached will have to be specified in the context of a concrete engagement activity, and that the list of general criteria mentioned in Table 10 needs to be specified in the beginning of every citizen engagement activity.

In spite of this need to specify, we however found a lot of similar criteria across the various sources that we read. Table 10 provides the criteria that we encountered most often. In the text below it we explain the criteria and also offer some additional criteria that we encountered less often.

	Outcomes
	Effects on policy/government
1	Citizen engagement should help to legitimize governments
2	Citizen engagement should have effects on political or technical decision making
3	Citizen engagement should lead to more public support for policy/government
	Effects on participants
4	Citizen participation should lead to more agreement (or consensus) between citizens about policy decisions
5	Citizen engagement should lead to more mutual understanding between people who have different opinions or who belong to different interest groups
6	Citizen engagement should lead to informed and deliberative citizenry
7	Citizen engagement should empower citizens
	Effects on environment
8	Citizen engagement should have effects on sustainability outcomes (and/or help participants to consider the interests of non-human agents)

Table 10 Outcome criteria

Citizen deliberation roots in democratic ideals (see also chapter on concepts in this report) and some authors who discuss how citizen participation should be evaluated also explicitly mention that citizen engagement **plays a crucial role in legitimising political government** (Banjade & Ojha, 2005; Costello, 2011; Carr & Halvorsen, 2001; Olausson, 2020; Granvik et al., 2008). This is therefore the first criterion in the list in Table 10. This is the goal that figures in the background of any citizen participation activity, as any use of power and coercion (such as exercised by the government) '(...) is democratically legitimate when it is constituted through reasoned debate among concerned citizens, free from strategic manipulation and deception. The idea of deliberative governance is that rules or norms (which define relations of coercion and power) are created through open and reasoned debates among the concerned individuals.' (Banjade & Ojha, 2005, p. 404) Others add that it can be seen as a way to hold the government directly accountable to the citizens, and to avoid corruption (Schatz, 2013). And there are authors who see citizen participation as a way to realise a more direct democracy (Carr & Halvorsen, 2001; Granvik et al., 2008; Olausson, 2020).

Given this general democratic goal, it is perhaps unsurprising that many authors also mention the second criterion: **citizen engagement should have effects on political or technical decision making** (Table 10). Many authors consider it a success of citizen engagement if its results have a direct impact on policy making or on decisions of the government (Hofmann et al., 2020; Font et al., 2017; Torney, 2021; Finardi et al., 2012; Boswell et al., 2013; Glucker et al., 2013). It is however hard to verify and quantify a causal effect of public participation on policy, as there may be a time lag between the participation and the decision of policy makers, or outcomes of citizen participation may not lead to specific policy decisions but may inspire and educate policy makers and change the way in which they approach their further policy making on a particular topic (Hofmann et al., 2020, p. 6). It is for this reason that there are also critical attitudes toward citizen participation. Boswell et al. (2013), for example, who analysed critical perspectives on citizen participation on the topic of government measures to counter climate change in Australia, noted that critics think citizen participation is used as a political tactic to push through controversial measures regarding the avoidance of climate change, or as a way to avoid doing one's duty by placing the responsibility elsewhere (in the people's hands) (Boswell et al., 2013, p. 170).

Font et al. (Font et al., 2017) write that public authorities are often 'cherry-picking' or listening 'selectively' to the proposals that citizens bring forward, or they modify citizen's proposals.

Given the sometimes hampered influence of citizen participation on policy or on the decisions of government authorities, different authors look into the factors that could help foster that influence, such as Font et al. (2017) who look at factors that contribute to success. This includes factors such as previous acquaintance with citizen participation outcomes, direct exchange between citizens and policy makers (which happens more frequently in smaller communities, at the local level), the number of proposals that citizens produce (a lower number increases chances of success), the coherence of citizen proposals with already existing practices of an administration, or with the viewpoints of politicians, proposals that cost less will have a higher chance to be implemented and it helps when budget has already been reserved beforehand for implementation of citizen proposals in policy decisions (Font et al., 2017, pp. 6, 7, 8 respectively). None of these factors however offers a guarantee that something will be done with the results of citizens participation, as there are also examples of citizen engagement where all of these factors were in place and which did not influence government's actions, or where almost none of these factors were in place while the results lead to drastic changes in the government's approach. It is for this reason that Torney (2021) prefers not to speak about concrete 'effects' on decisions of governmental authorities, but about 'turbulence' that deliberative minipublics may bring about in the context of the EGD. Using Ansell and Trondal, Torney (2021) defines 'turbulence' as the "increasingly volatile context for complex problem solving" (quote in Torney, 2021, p. 282). Citizen participation can influence the political context of problem solving by causing turbulence. This concept allows for a more fluid conceptualisation of 'effect' on policy and government, than do Font et al. (Font et al., 2017), who look at the effect on decisions of governmental authorities.

The third criterion we found in the literature is: **citizen engagement should lead to more public support for policy,** as some sources study the effects of citizen participation on the acceptance of policy (Granvik et al., 2008). Others mention that while citizen participation may reveal what type of policy is supported by the public, it is not such a good idea to organize public participation with the goal to organize support for policy consensus, as this may diminish the variety of outcomes that processes may have (Longstaff et al., 2015). This is underlined by the study of critical newspaper articles by Boswell et al. (2013) about the proposal of the Australian prime minister Julia Gillard to organize citizen assemblies about policy that reduces the risk of climate change. Critics were in advance suspicious of this proposal as they suspected that it would be impossible to provide politically neutral information to citizens which would not steer the opinions of participants toward agreeing with a leftish and green viewpoint (Boswell et al., 2013, pp. 168–169).

To assess the success of citizen participation one can look at the relation to policy and government, but one can also look at the effects on citizens. One of the outcomes that is proposed as indicator of success is **that citizen participation should lead to agreement (or consensus) between citizens**. This criterion comes forward in a variety of publications, which mention this aspect as a positive result of cases of citizen participation or of proposals to organize these (Banjade & Ojha, 2005; Granvik et al., 2008; Longstaff et al., 2015; Webler & Tuler, 2006; Boswell et al., 2013). According to Banjade & Ojha (2005), for example, deliberative processes are important in situations where interests conflict, such as in forestry; policy and legislation regarding forestry may undermine the basis on which the livelihoods of people with low income in a community are built. Furthermore, market forces play a role. To get a perspective on this, it is important to involve the community to 'make people talk across differences (Banjade & Ojha, 2005, p. 403). At a larger national level, building consensus between citizens and government is considered one of the goals of citizen engagement put forward by Australian's prime minister Julia Gillard's campaign team in Australia (Boswell et al., 2013). However, Boswell et al. (2013) conclude that it is not

realistic to realize consensus about a complex theme such as climate change (Boswell et al., 2013, pp. 168–169).

Horton et al. (2019) go even a step further, suggesting that it may also not be desirable to strive for consensus when considering the deep conflicting interests and values of people related to scare natural resources. This suggests that participation is also successful when it contributes to **realising more understanding between people with different opinions**. Rozema and Bond (2015), for example, look at effects of citizen participation on environmental sustainability impacts, but conclude that it especially leads to better insight into the differing understanding of environmental impacts between citizens. Others consider more understanding between citizens with different viewpoints is a positive effect of citizen participation, and suggest including people from different interest groups into the process (Webler & Tuler, 2006).

Resolving conflict is however perhaps not a desirable goal to strive toward, as is questioned by Horton et al. (2019). They point out that leaders active along the Yellowstone River in Montana, USA are dealing with very diverse values and interests regarding the watershed governance, which cannot be reconciled. Building on Chantal Mouffe's approach, they argue that these leaders are actually practicing a pluralistic perspective to democracy, which describe democratic politics as an 'ensemble' of practices, discourses, and institutions which seek to establish a certain order in human coexistence which may always be inherently conflictual (Horton et al., 2019, p. 2). Instead of buying into a dominant liberal democratic model that relies on reason to bring all members of the polity into unity, Horton and al. suggest considering Mouffe's concept of pluralistic democracy as a way to integrate and accept the heterogeneity of perspectives surrounding environmental issues as a necessary and ineradicable part of society. While there may be consensus among some people in society, this will always be accompanied by dissensus of others, which requires debate (Mouffe, 1999). Trying too hard to reach consensus in a deliberation process may lead to the unfortunate effect that concerns of those dissenting are marginalised or even excluded from the decision-making process, which leads to anger and aggravates the conflict. It is better to take conflict seriously and accept it as part of democracy.

An often-mentioned indicator of success is summarised in criterion 6**: citizen engagement should lead to informed and deliberative citizenry** (Hofmann et al., 2020; Ingham & Levin, 2018; Torney, 2021; Jacquet, 2017; Boswell et al., 2013; Banjade & Ojha, 2005). Understanding of the subject matter at hand, should ideally have increased during the participation process, which can come about through citizen's engagement with the subject matter, but also through the information provided in advance, and through learning from the other participants and the process of collaborative knowledge construction. Bago et al. (2020) note that citizens who take part in participative processes have better skills in separating headlines based on factual news from fake news, regardless of whether the headlines aligned with their ideology (Bago et al., 2020, p. 11). Citizens who participate in participation processes will furthermore learn participation competencies, such as deliberation skills that allow them to engage in an open, considered (rational) exchange of ideas. In this process every participant strives to make their own view understood by the others, but is also exposed to the views of others that they may not share, but which they are expected to try to understand and accept and adopt if they are better than their own (see also Torney, 2021, p. 281). Furthermore, citizen participation is supposed to not only educate the citizens who are actually participating, but also those who are not participating. As Ingham notes, the policy conclusions of the participating citizens: '(..) could have recommending force for outside observers, serving as imperfect, but informative signals of what observers themselves might conclude about a policy if they had the same opportunity to engage in meaningful deliberation as the members of the deliberative minipublic. Outside observers who treat their conclusions as such signals would adjust their opinions accordingly.' (Ingham & Levin, 2018, p. 654)

Criterion number 7 is: **citizen participation should empower citizens**. This criterion is closely linked to the previous one about informed and deliberative citizenry and is sometimes just mentioned in passing, as knowing more about a subject and being able to deliberate and exchange ideas about it with others is considered empowering for participants, as is the opportunity to participate in government at all. For citizens that are marginalised in society, and who are not often heard, empowerment is considered crucial (Glucker et al., 2013). Empowerment, however, demands that the level of participation that is needed or desired in participation processes is specified. Referring to Arnstein's participation ladder of participation (see chapter 2.2 in this report) which indicates different levels of participation that citizens may have, Glucker et al. (Glucker et al., 2013) talk about aiming for 'democratic capacity'. This capacity is different when citizens figure as informants of the government, than when they are consultants, decision-making partners or when citizens take control. Criteria that determine the success of citizen empowerment will differ accordingly. This criterion is also elaborated in articles that focus on local community-based participation processes (Banjade & Ojha, 2005; Carr & Halvorsen, 2001; Costello, 2011; Fraser et al., 2006; Granvik et al., 2008; Olausson, 2020) or in processes focusing on locations where there is not a long democratic history, such as communities in Russia (Granvik et al. 2008). In these sources it is mentioned that local decision processes have positive effects beyond the actual outcomes of the process by empowering communities to participate more fully in subsequent decisions.

Most articles that evaluate the success of citizen participation focus on outcomes that involve the decisions, deliberations, education of people. Few articles about citizen participation around themes of the EGD thought that environmental impacts should be included in the evaluative criteria. We saw the following criterion only a few times: **citizen engagement should have effects on sustainability outcomes (and/or help participants to consider the interests of non-human agents)** (Fraser et al., 2006; Rozema & Bond, 2015; Carr & Halvorsen, 2001; Torney, 2021). Fraser et al. state that sustainability indicators are needed to point out whether activities contribute to sustainable development and environmental management goals. Fraser et al. (2006) suggest that these indicators should be co-shaped by communities as this means that they capture factors that are considered locally important. Carr et al. (2001) also choose a community-based approach (rather than a national one) arguing that this leads to better sustainable outcomes, which allows to integrate physical and biological dimensions of concrete ecosystems with social ones via the participation of citizens in a local community (Carr & Halvorsen, 2001, p. 109). Torney (2021) by contrast looks at national-focused citizen participation endeavours and suggests to include environmental aspects in a different way; instead of using environmental outcomes as indicators of success, he suggests that citizen participation can enable participants to consider the interests of non-human agents, such as animals or nature (Torney, 2021, p. 381).

2.5.2 Process criteria

Next to outcome criteria, we identified process criteria, which indicate aspects which should be taken into consideration when the citizen deliberation process is shaped. The following Table 11 represents the criteria that we encountered in the literature. There seems to be a lot of agreement about some of the criteria, as a lot of the authors agree at least in the abstract about particular goals of design features, such as fairness, access, and competence. But they may emphasize them differently and deal with possible conflicts between criteria differently in different engagement processes in diverse contexts (Granvik et al., 2008; Torney, 2021). Furthermore, as mentioned in the beginning of this chapter, the criteria of success may differ significantly depending on the goals a particular participation process needs to serve, which may also lead to different criteria to assess the quality of the

process. Much of the guidance provided to set up engagement endeavours is quite general, just like the list of criteria in Table 11 suggests. It is hard to derive a more nuanced advice necessary for specific cases from that, which eventually we need to do in the REAL DEAL project. At the outset it is therefore perhaps important to take into consideration that there are different ways to approach citizen participation and deliberation, and that this may lead to a different interpretation of criteria, a different assessment of which ones deserve priority, or which ones need to be taken into consideration at all (see also Tuler & Webler, 1999, p. 718).

	Process
1	Any citizen participation process should respect normative principles (such as equality, equity, fairness, transparency), which are key to democracy
2	The selection of individuals that will engage in a participation process (the participants) should be representative of the population affected by the topic under consideration
3	Citizen participation should be inclusive: everyone should have the opportunity and ability to equally contribute to the process.
4	Citizen participation should contribute to realising meaningful deliberation
5	Goal of the process should be clearly defined & decision process should be structured (and citizens should have a role in that)
6	Citizen participation should be coupled to policy from the beginning onward/should be integrated into policy
7	Citizen participation strategies should take context into account and accept that there may be contingency
8	Citizen participation procedures should be cost-effective

Table 11 Process criteria

The first criterion is actually a combination of a set of criteria, as it demands citizen participation processes to **respect normative principles such as equality, equity, fairness, openness, transparency, which are key to democracy**. Many authors mention these criteria, although few actually spend time on elaborating their content (Hofmann et al., 2020; Krause et al., 2013; Finardi et al., 2012; Musiał-Karg & Kapsa, 2019; Stadelmann-Steffen & Dermont, 2016; Webler & Tuler, 2006; Horton et al., 2019; Deligiaouri, 2018). They are also included in the Core Principles for Public Engagement (NCDD, 2009, mentioned in Hofmann et al., 2020, p. 4) and set the standards for the participation process as a whole, as well as each process step and for the evaluation of every tool used in a step. These principles are key to deliberative democracy theory and come forward in all the works of the ground layers of citizen participation (such as Habermas and Benhabib). They also guide the development and evaluation of the performance of digital methods to facilitate citizen participation (Deligiaouri, 2018; Hofmann et al., 2020). Despite the plurality of approaches to citizen deliberation, Deligiaouri et al. argue that '(..) there are constants: the need for public deliberation and citizen-centered decision making; the preservation of fair and reasonable, justified argumentation and equality among participants. In its essence, then, deliberative democracy is an effort to broaden democratic practices and deepen citizens' engagement involving competent and reflective participation' (Deligiaouri and Suiter 2021) .

Democratic values, however, may come under pressure when environmental issues are at stake in participatory processes, as conflicts between human users may intensify in case of scarce natural resources and incompatibility among different values and goals. Based on interviews with community leaders (municipalities, agriculturalists, recreationalists, residentialists, biotic communities) along the Yellowstone River in the US, Horton et al. (2019) suggest that values such as individual liberty and group sovereignty may be in tension and that it may be wise to adopt a pluralistic democracy that allows for heterogeneous perspectives. Tolerance for opinions that differ fundamentally from one's own is key in such a democracy.

A criterion that needs to be respected in the process of citizen participation **is the representativeness of the choice of individuals that is engaged in a participation process (the participants) of the population affected by the topic under consideration**

(Banjade & Ojha, 2005; Carr & Halvorsen, 2001; Costello, 2011; Deligiaouri & Suiter, 2021; Finardi et al., 2012; Hofmann et al., 2020; Jacquet, 2017; Torney, 2021). Representativeness is considered 'crucial to ensure the democratic legitimacy of the whole process' (Hofmann et al., 2020, p. 4), but it is also a challenge in any participation process. In a community approach, such as Carr & Halvorsen (2001) adopt, it is noted that if members of the community who will be affected by the outcome are not part of the process, important dialogue and issues will be lost. Therefore, it is important to look at who is likely to be affected by a decision and represent those in participation processes. If government decisions about public lands is at stake, then it is reasonable to expect that nearly everyone in the community would be affected by management decisions in some way '(..), so that participants would be expected to represent the demographic composition of the community (at least approximately).' (Carr & Halvorsen, 2001, p. 110). In many communities, however, involving all those who will suffer the effects of a government decision, may be challenging, such as Banjade & Ojha (2005) note about a case study in a community in Nepal where it is difficult to include women and people living in poverty and in marginalised castes (Banjade & Ojha, 2005, p. 405).

This is also challenging in large national contexts, leading to critical comparisons of methodologies and tools such as Stadelmann-Steffen & Dermont (2015) who note that citizens' assemblies are successfully involving participants that are representative of various income groups. However, they especially include 'middle-aged men', whereas decisions at the ballot box have more equitable participation in terms of gender and age (Stadelmann-Steffen & Dermont, 2016, p. 111). Deligiaouri et al. (2021) consider problems for representation at the level of the European Union, which is particularly challenging as it is composed of different member-states, language groups and cultures of participation, which each may have their own marginalised groups. This raises challenges for the democratic legitimisation of the European Government, especially in light of the widespread, dramatic changes in Europe in delivering the EGD. Scholars therefore propose digital tools as an enabling mechanism for improving representativeness of the population (Hofmann et al. 2020). Online tools have potential to foster representation, but also raise new challenges. E-participation and e-regulation, requires a strong participatory culture to actually do what a digital tool requires/demands, and this differs in various European contexts (Deligiaouri & Suiter, 2021). Realising representativeness may according to Hofmann et al. (2020) also be particularly challenging when using digital tools for participation (see chapter 2.2 in this report) because (a) not everyone has access to digital tools or possesses digital proficiency, (b) people may be less motivated to participate as digital results are more abstract and people may miss the gratification of having come to shared conclusions in an interactive process. Furthermore (c) digital involvement may exclude people with disabilities that prevent them to participate digitally, such as visual deficiencies, cognitive deficits etc. (Hofmann et al., 2020, p. 5). This may result in a failure in representativeness, as some people are excluded from the process altogether. This failure partly overlaps with a hampered inclusiveness of the process, which is the topic of the next criterion.

The third criterion demands that **citizen participation should be inclusive: everyone should have the opportunity and ability to equally contribute to the process**. This criterion is about the quality of the communicative exchange and is reiterated in virtually all sources, although not all make explicit what they mean with it (Banjade & Ojha, 2005; Costello, 2011; Glucker et al., 2013; Guziana, 2021; Hofmann et al., 2020; Jacquet, 2017; Krause et al., 2013; Longstaff et al., 2015; Stadelmann-Steffen & Dermont, 2016; Torney, 2021) Schatz 2013. The basic thought behind inclusiveness is well described by Hofmann: '[i]nclusiveness refers to the opportunity and ability of all participants to equally contribute to the process. Although in theory, each participant may be equally able to voice their opinion, in practice, certain groups of participants are more likely to do so than others. In this regard, gender, age and education are important factors to consider.' (Hofmann et al., 2020, p. 5) Social mechanisms functioning to marginalise some groups, or powers that people may hold

over each other outside of the participation processes are important to take into account. Language that is used should be chosen carefully, as this may lead to exclusion of certain groups (Guziana, 2021). Abilities and communication habits of groups that tend to be marginalised must be taken into consideration in the design of citizen deliberation processes. Furthermore, realising inclusiveness is particularly challenging when digital tools are used, as there is often no facilitator present who cares for inclusiveness (Hofmann et al., 2020).

The fourth criterion requires that **citizen participation contributes to realising meaningful deliberation** (Carr & Halvorsen, 2001; Costello, 2011, 2011; Finardi et al., 2012; Guziana, 2021; Hofmann et al., 2020; Jacquet, 2017; Webler & Tuler, 2006). There are different ideas about what a qualitative 'deliberation' is and how it can be fostered. Some argue that it should ideally bring about a 'consensus' between participants. While Hofmann et al. (2020) agree that a high-quality deliberative process will make it more likely for a decision brought about by a majority vote to be accepted by the outvoted participants' (Hofmann et al., 2020, p. 5), they also focus more on the characteristics of the process of deliberation arguing that 'The mutually respective, factbound exchange of ideas, bearing the potential of changing one's mind, is called deliberation' (Hofmann et al., 2020, p. 5) Hofmann et al. (2020) are however interested in digitalised participation processes, in which there are no facilitators. Designers of digital tools to foster deliberation processes therefore face the challenge of incorporating high-quality deliberation without moderators: '(..) any digital tool used during deliberation processes must allow for each participant to make ideas and arguments heard and for the other participants to improve their comprehension of the respective idea or argument through further inquiry.' (Hofmann et al., 2020, p. 6)

There are a lot of preconditions for good deliberation, and authors do not all agree about those. Many state that the process should be transparent (Hofmann et al.2020; Finardi et al. 2012; Webler & Tuler 2006). This means, for example, that at any time during the process, it must be obvious to everyone where the process is headed, what the next step is and why it is being taken. Hence, the information necessary to understand the process must be up to date, easily obtainable and comprehensible to anyone (Finardi et al., 2012, p. 431; Hofmann et al., 2020, p. 5). It is important that resources are available and accessible that enable participants (but also the public that does not participate) to form an opinion. This includes information, but also insights into the differing opinions that have been voiced (Finardi et al., 2012, p. 431). It is important that this information is accessible to participants in the process, but also to outsiders who did not participate in the process, as they are in that way also enabled to shape an informed opinion. In face-to-face settings, the quality of deliberative processes is often the task of facilitators who need to create a trusted environment in which people can voice their viewpoints. According to Finardi et al. this facilitator needs to be neutral and unbiased and create an open atmosphere that allows people to reflect, take the opinions of others into account, and possibly change their own opinion (Finardi et al., 2012; see also Costello, 2011 about openness). According to Carr & Halvorsen (2001) participants need to reflect and evaluate the values and beliefs that underlie their viewpoints, which allows to find out which values participants have in common (and even articulate community-values, or a perception of the common good) (Carr & Halvorsen, 2001, p. 110).

The fifth criterion is that **the goal of the process should be clearly defined in advance and the decision process should be structured** (Finardi et al., 2012; Hofmann et al., 2020; Krause et al., 2013; Stadelmann-Steffen & Dermont, 2016; Webler & Tuler, 2006). Some state that it adds to the transparency of the process if the goals are clearly defined in the beginning and the criteria are specified that determine whether and to what extent the goals have been reached (Finardi et al., 2012; Hofmann et al., 2020; Rowe et al., 2004). Some argue that citizens should have room (mandate) to shape the agenda of the deliberation and the deliberative process (Costello, 2011; Finardi et al., 2012; Granvik et al., 2008). Others provide reasons to doubt whether citizens should have such a prominent role

or should be guided more by facilitators. Torney compares, for example, a large-scale French example of citizen engagement in deliberative minipublics to produce policy recommendations regarding governmental measures to reduce climate change, with a citizen assembly carried out in Ireland. In the French example the goals and the process were made clear in advance and were co-created with participating citizens, while the Irish citizens' assembly was much more open-ended, without a specified timeframe or specific climate goal (Torney, 2021, p. 387). These two elements alone, however, did not explain the relative success of both endeavours (see also under criterion six).

The sixth criterion requires that **citizen participation is coupled to policy from the beginning onward and should be integrated into policy** (Cadman & Maraseni, 2013; Costello, 2011; Font et al., 2017; Longstaff et al., 2015; Torney, 2021). It is commonly mentioned that early coupling of the citizen participation process to questions of policy makers or governments helps the successful integration of its recommendations into policy or government decisions. Doing this is however not a guarantee of success, as Torney (2021) shows who compared participation processes in France and Ireland. While both processes were commissioned by government, the Irish one was more successful in influencing the government. This was surprising as it was the French president who pre-committed to submitting the recommendations "unfiltered" either to referendum or to parliament (Torney, 2021, p. 387), whereas in the Irish case, the citizen assembly's recommendations led to a major overhaul of the 2015 climate law, even though in advance there was little pre-commitment by the parliament to do anything with the recommendations (except to consider them). In the French case, by contrast, President Macron did not follow through on this commitment to submit the Convention's recommendations "unfiltered" to a referendum, to parliament, or to direct regulatory application. He rejected three of the 149 recommendations from the start, and the final version of the legislation designed to implement the convention's recommendations, the Climate and Resilience Bill, has been criticised by civil society for not going far enough to honour the spirit of the recommendations provided by citizens.

There is discussion about what the right level of government involvement is in citizen participation (Cadman & Maraseni, 2013; Longstaff et al., 2015). Longstaff et al. (2015) argue that the involvement of the government in participation processes may be too large. They analyse a Canadian example about biofuel policies in which the government mandated the citizen participation, set its goal, and developed the questions that should be answered during the deliberative process. The result pointed out that two thirds of Canadian citizens support biofuel policies and think that it is a good idea to increase biofuel production, but in spite of this support the participants did not feel included in the policy decisions as citizens could not influence the process or the topic talked about, nor could the facilitators of the deliberation alter questions to push the deliberation further. Longstaff et al. (2015) therefore conclude that whenever public engagement events are tied to an official mandate to provide advice from the public on specific questions of interest, this 'must be transparently communicated and justified to participants throughout an event to avoid the appearance of coercion so that the motivations for deliberative inputs are clearly understood.' (Longstaff et al., 2015, p. 111)

The seventh criterion requests **citizen participation strategies to take into account context and accept that there is contingency** (Carr & Halvorsen, 2001; Costello, 2011; Fraser et al., 2006; Granvik et al., 2008, p. 108; Olausson, 2020; Torney, 2021). Some publications demand to consider contextual characteristics, especially in local community-based endeavours, as solutions that flow from a participation process should fit the environmental and socio-economic characteristics of the context for which they are intended, as well as the values and needs of its inhabitants. Some even note that citizen participation should support discussion about the common good; rather than matching individual agenda's, efforts should be put into developing community values related to forest

management (Carr & Halvorsen, 2001, p. 110). Participation processes are seen by Carr also as a way to encourage members of the public to think of themselves as citizens rather than consumers of a product, which can lead to more productive working relationships and more community-minded outcomes. Others note that particular communities may have particular ways to disqualify some citizens from the decision-making processes (such as in a caste-system in India or Nepal), which need to be taken into account to be able to be inclusive (Banjade & Ojha, 2005). Furthermore, the history of participation in context matters, such as Granvik et al. (2008) note who compare four local citizen participation processes in urban communities in Russia (which has no history of citizen participation), with Sweden (which has a long history of participation).

While contextual characteristics can be taken into consideration in the design of a participation process, contingencies cannot be (fully) controlled but can play an important role in their success. Few case studies describe contingencies, except Torney's (2021) comparison of participation processes in France and Ireland. However, even with a careful design of the participation process, contingencies may determine whether it succeeds to influence policy or not.

The last criterion is that **the participation procedure should be cost-effective**. This is mentioned by many authors and forms the precondition of all that is done (Cadman & Maraseni, 2013; Finardi et al., 2012; Fraser et al., 2006). An advantage of the community perspective mentioned by Fraser et al. (2006) is that community input helps to assure that projects continue over time, also when funding stops, and helps to build community capacity to address future problems (it therefore also has an educational role).

2.6 Participatory and deliberative processes in the context of policy fields relevant to the EGD

This chapter is an overview of academic and grey literature references that address and evaluate the desirability of and potential for participatory deliberative decision-making processes regarding EGD policies. It is based on references selected from a database of more than 700 references from inductive "snowball" searches of academic and grey literature sources, as well as additional references from searches on Web of Science and Scopus between February and July 2022. The bibliography of references considered in this chapter is appended.

The challenges of enacting the EGD policies with the active participation and meaningful deliberation of civil society and relevant stakeholders at multiple levels of governance are indeed complex and daunting. The ideas and criticisms advanced in the references cited and in work still to come are essential in addressing these challenges as inclusively, justly, and creatively as possible. Given that framing, how does participatory, deliberative democracy find purchase in realising the EGD and related societal change?

At the heart of the discourse on participatory and deliberative democratic processes, whether addressing the EGD policy directly or viewed more generally, is the need to engage simultaneously with substantive expertise in a relevant field of knowledge and to provide the basis for establishing legitimacy in terms of the norms of affected regions and stakeholders. The case for the necessity of this combination of expertise and value input is made, for example by Baard (Baard, 2021, p. 6) in constructing energy scenarios.

How then should participatory and deliberative processes to implement the EGD policy be conducted, about which specific issues, and who should be at the table? The literature surveyed for the REAL DEAL project overall contains a wide range of case studies spanning

different local and national contexts, methods, scope of issues considered by the participants, as well as numbers of participants, number and duration of meetings, and types of venues. An overall perspective on energy policy decision making was expressed by Renn and Schweizer, who wrote that "The main lesson from these experiences has been that scientific expertise, rational decision-making, and public values can be reconciled if a serious attempt is made to integrate them. The transformation of the energy policy arena into a well-structured and professionally moderated analytic-deliberative discourse seems to be an essential and, ultimately, inevitable step toward improving energy policies and facilitating the transformation toward a sustainable energy future." (Renn & Schweizer, 2020, p. 75).

This view is tempered or contested by several authors. Hierlemann et al. raise concerns about gaps 1) in awareness, i.e., between citizen's interest in participating and their awareness of opportunities for participation, 2) between participation and performance or impact on European policy making, and 3) between the participatory event and political commitment to the outputs (Hierlemann et al., 2022b, pp. 9–11). The same authors note a bias in sampling, i.e., informing and recruiting participants has favored highly educated, pro-EU participants, thereby limiting the viewpoints raised in discussions. To some degree that bias may be mitigated by the deployment of large-scale instruments, such as the European Citizens' Initiative (ECI) begun in 2012 and the recent Conference on the Future of Europe (Hierlemann et al., 2022a, p. 35).

Deployment of digital technologies that have become increasingly sophisticated in part as responses to the pandemic constraints, have also provided new means for assembling in person with multi-lingual support and online assemblies at remarkably large scale, such as in the Conference on the Future of Europe (Hierlemann et al., 2022b, p. 37). These technological advances offer not only the means to engage large assemblies in an active discourse, but even to do so with machine translation of multiple languages.

A rather cynical view of the value of participatory engagements is that they are increasingly used not to empower civil society, but to entrench existing powers and inequities and to conceal institutional changes based on economic and neo-liberal politics (Mert, 2019). This view is supported in part by the empirical data from large scale Irish and French citizen assemblies, but the outcomes also can be seen as partial successes. For example, of the 149 recommendations emanating from the French convention, 146 were supported by President Macron. However, ultimately, the resulting legislative bill was disappointing to the convention participants and was severely criticised for stepping back from the recommendations (Torney, 2021, p. 387).

Taking a more positive and mainstream approach to the economic aspects of EGD than Mert, Bongardt and Torres paint the EGD as a fundamental building block for a sustainable European economic model. The authors state that "Departing from the fact that the EGD stayed on course, we have argued that the pandemic crisis has contributed to reinforce it, making it part of the solution rather than the problem and more than that part of the EU's economic model. The Commission presented the EGD as a new project for reviving European integration." (Bongardt & Torres, 2022, p. 181). A different take is offered in a paper that conceives that the EGD can become a third alternative policy situated between degrowth and green growth (Ossewaarde & Ossewaarde-Lowtoo, 2020, p. 11). Starting from the overall framework of the EGD in their study of the development of the EGD, Rosamond and Dupont note that there was increasing recognition that climate governance requires societal transformation, but also that national positions are not articulated in the EGD policy (Rosamond & Dupont, 2021, p. 357).

Concerns for distributional and procedural equity and environmental justice in the EGD are prominent in many of the references, some taking exception to what they see as inadequate or misdirected approaches, while others read the EGD as addressing those concerns. A very

critical perspective is expressed even in the title and carried throughout the article by Alexander Dunlap and Louis Laratte on “European Green Deal necropolitics.” The authors write “The EGD is a great distance from the values expounded by degrowth (and other anti-authoritarian eco-socialists), suggesting the value of adopting anarchist total liberation ecologies approach that rejects, and works to minimise, all forms of coercive hierarchy and exploitation. Degrowth, in many respects, already embodies or aims for a total liberation ethic, drawing explicitly on feminist research, ecological Marxism and—implicitly—anarchist ideas of mutual aid and direct action.” (Dunlap & Laratte, 2022, p. 15). They follow this with the recommendation to adopt a “whole-of-degrowth” approach combining research, theory, and tactics to avoid co-option of EGD by fake means. This criticism is echoed in a narrow, purely lexical analysis by Eckert and Kovalevska, who conclude that sustainability discourse has become a means for the European Commission to side-line crucial issues and “endorse their own presence.” (Eckert & Kovalevska, 2021)

Fleming and Mauger are critical of how Member States and localities might enact what passes for just transition, but without engaging with local inhabitant or only with certain portions of society, but not all who are affected (Fleming & Mauger, 2021). In a related perspective, Gürtler and co-authors in the context of climate change raise the question of how just transitions depend on who has a legitimate voice in a conflict that spans spatial and moral (normative) dimensions (Gürtler et al., 2021, p. 2).

Strengthening the role of societal actors such as NGOs in mitigating the negative impact on some firms and workers is suggested as having the potential to help create a more just transition by Cabrita et al. (Cabrita et al., 2021, p. 2). In addition, the authors cite the European Pillar of Social Rights as particularly important by ensuring access to essential services of energy and transportation (Cabrita et al., 2021, p. 9). This attention to societal actors is also expressed by the European Environmental Agency, particular mentioning trade unions, Greenpeace, and Attac as important partners (European Environmental Agency & Eurofound, 2021, p. 14). This publication further states in summary that “The EGD aims to address the social and economic effects of the transition and ensure that it leaves no one behind. A key tool for this is the Just Transition mechanism, focusing on support for regions, industries and workers who are likely to be faced with the greatest transition challenges. The Social Climate Fund proposed in the ‘ Fit for 55’ package also aims to address part of the social and distributional challenges of the EU’s transition to carbon neutrality.” (European Environmental Agency & Eurofound, 2021, p. 4)

The range of perspectives on how EGD policy implementation should be conducted, about which specific issues, and who should be at the table indicate that considerable further deliberation among civil society and stakeholders, as well as analysis and research of cases and concepts is needed. Analysis of cases as they occur and further development of ways to realize concepts, methods, and tools will enrich the value of the EGD in practice.

2.6.1 Participation in energy system transitions

Chilvers et al carried out a mapping of participation in UK energy system transitions between 2010 and 2015, which provided insights into system-wide patterns, diversities, and inequalities of energy participation, the significant types of interrelation between practices of public engagement within wider ecologies of participation, and their mutual construction with political cultures and constitutions (Chilvers et al., 2018). The authors adopted an ecologies of participation approach, which was deemed necessary as a means to understand the dynamics of diverse interrelating collectives and spaces of participation and their interactions with wider systems and political cultures (Chilvers et al., 2018, pp. 199–200).

2.6.1.1 Thematic analysis of empirical material from a systematic mapping of public engagement in UK energy system transitions between 2010 and 2015

The authors identified a diversity of different collective practices through which people participate in and relate to energy systems, such as public opinion surveys, deliberative process, behaviour change initiatives, digital democracy, citizen science, protests, activism, community energy, and everyday social practices which consume energy. This diversity led the authors to adopt a more open definition of public participation as a heterogeneous collective practice through which publics engage in addressing collective public issues, whether deliberately or tacitly, which actively produce meanings, knowings, doings and/or forms of social organisation (Chilvers et al., 2018, p. 201).

The paper concludes that diverse models of participation lead to more diverse framings of the issue and alternative models of solutions.Diverse models of participation revealed by the mapping include more bottom up and citizen-led forms of public demonstration through protest, activism, and art/performance-based engagement, through to bottom-up forms of citizen action in community energy projects and energy poverty action groups. Diverse forms of engagement were also evident in the formation of new relationships between public and private spheres, for example through open innovation and co-design in the development of smart energy technologies. These diverse models of participation were found to co-produce with more varied public identities evident in these cases, including more positive constructions of energy publics as active, creative, innovative, resourceful, and knowledgeable. Framings of the objects, issues and visions associated with energy transitions were also found to be more diverse within these cases, often opening up to alternative models of progress or drivers of change, such as ideas about de-growth or energy justice (Chilvers et al., 2018, p. 205).

2.6.2 Citizen participation in scientific processes (Making sense of science for policy under conditions of complexity and uncertainty)

According to the International Association for Public Participation (2014), citizen participation or engagement can be defined along a spectrum of information, consultation, involvement, collaboration, and empowerment. Researchers (SAPEA, 2019) analysed mechanisms that involve citizens as cocreators of knowledge and identifiers of societal problems already practised in Europe.

2.6.2.1 Public deliberation forums

In this mechanism, citizens meet onsite or online to discuss policy questions that have scientific dimensions. Research concluded that, while efficient in catalysing joint reflection, most deliberation forums have a short-term impact on civic society (Jamieson et al., 2017).

2.6.3 Citizen engagement in mobility: the Catalonia mobility pacts

Mobility Pacts in Catalonia were a tool of public participation that involved the creation of advisory councils consisting of vulnerable citizens such as handicapped people, pedestrians, or cyclists, who traditionally lack representation in local decision-making. The first mobility pack was created in 1998 in Barcelona and the practice was subsequently introduced in 15 Catalan municipalities (Evans & Reid, 2013, p. 71). Mobility pacts have been found to have had a significant influence on the development of sustainable and disability-friendly infrastructures in Catalonia, the monitoring of existing infrastructure, and the planning of future infrastructure (Evans & Reid, 2013, p. 71).

This case study explored mobility pacts as an instrument for enhancing the participation of disabled citizens in sustainable accessibility planning and programming. A range of methodologies are used to organise mobility pacts, but they normally have as common features the support of the City Council; a Director, appointed by the Council and responsible for the pact following due process; and, the Director is also responsible for mobilising the participation of vulnerable local citizens. Vulnerable groups can include handicapped people, pedestrians, or cyclists and, through the aegis of the mobility pact, they express their concerns and pressure municipal authorities to finance accessible and safe infrastructures adapted to their needs. The mobility pacts use one of three methods to organise citizen participation: mobility boards, sustainability councils or pact monitoring commissions (Evans & Reid, 2013, p. 73).

2.6.3.1 Mobility boards

This is considered the strongest and most suitable forum for structuring participation (Evans & Reid, 2013). Depending on the size of the municipality, the Mobility Board may contain various working groups which must present their work annually in a plenary session presided over by the mayor. Municipalities which use this system include Barcelona, Terrassa, Olot, Calella, Barberà del Vallès and Girona.

2.6.3.2 Sustainability councils

The Council may be an entity similar to the Board, but it manages a greater number of goals, thus having the danger that mobility issues become subservient to other sustainability issues. The groups are larger and require a permanent secretary. Municipalities organised into Councils include Manresa, l'Hospitalet de Llobregat, Sabadell, Badalona, Granollers and Sant Sadurní d'Anoia (Evans & Reid, 2013, p. 73).

2.6.3.3 Pact monitoring commissions

The Monitoring Commission requires a publicly advertised meeting schedule and effective communication of information to citizens who participate in the project. Municipalities with Monitoring Commissions include Mataró, Lleida, and Sant Boi de Llobregat.

The process for developing and signing a mobility pact can be extensive and confront many obstacles (Evans & Reid, 2013, p. 74). The studies found that It is important to begin from the most direct precedents, for example, if there is a pre-existing Municipal Traffic Council (as in Barcelona and Girona) it is necessary that in addition to the pact, previously realised studies directly or indirectly related to mobility (mobility plans, studies of bike lanes, etc.) be included. In order for a pact to become institutionally embedded, it is believed that the process should last at least 4 years, allowing the implementation period to overlap with municipal elections. It is also considered necessary to provide public education on the pact so that it is not forgotten by new municipal representatives and for the work of pact to be monitored (it is therefore important to establish a set of key performance indicators which can be easily monitored by the local authority and the public - the pact model proposed by the Mobility Network, for example, includes 10 indicators.)

Implementing mobility pacts effectively is seen as a challenge and four municipalities have abandoned the model. Maintaining stakeholder interest in the initiative over time is a key challenge for Mobility Pacts and the case study evidence demonstrates that this requires the ongoing support of the City Council and the development of key performance indicators (Evans & Reid, 2013).

In 2008, a brief survey was distributed to municipalities with pacts and 10 municipalities returned the survey. In response to a question about the principal milestones that had been achieved by the pacts, responses from the various municipalities included: the 'pact in and "of itself'; the 'consensus built by the process', 'reconnecting the pact to the Plan for Urban Mobility', and 'the establishment of the Mobility Council (the board for citizen participation) as a result of signing the pact'. On the question which asked what could be done to improve the pact, they cited greater citizen and political involvement as well as improvements in aligning the pact actions with municipal programming actions. (Evans & Reid, 2013, p. 75).

Mobility pacts have been considered successful in at least six respects: integrating accessibility issues into actions for sustainable development; resolving conflict between different social groups with competing views on accessibility issues; enhancing social capital through building public faith in the system of government on accessibility issues; improving public literacy on accessibility issues; institutionalising expertise on accessibility issues into local government; and, establishing permanent institutional machinery on accessibility issues which can be used by other levels of government. Mobility pacts are viewed as an example of collaborative governance[8] and their creation is considered as a response to these three issues – to lend technical and democratic support to the formulation and delivery of sustainable development policy (Evans & Reid, 2013, p. 76).

2.6.4 Agriculture

2.6.4.1 Irish Citizens' Assembly on Climate Change

All of the resulting recommendations from this Assembly[8] were endorsed by 80% or more, including politically contentious recommendations to increase the level of an existing carbon tax, to place a tax on greenhouse gas emissions from agriculture, and to end subsidies for peat extraction. The parliamentary committee published its own recommendations in March 2019 (Houses of the Oireachtas Commission, 2019), which largely amplified and developed the assembly's recommendations, including developing the assembly's recommendation to place climate change at the centre of policy making into a proposal to comprehensively revise the state's 2015 framework climate law (Torney, 2021, p. 385). However, not all of the assembly's recommendations were implemented, with the most significant exception being the recommendation to place a GHG tax on emissions from agriculture. Accounting for over one-third of Ireland's GHG emissions, the debate on the role of the agriculture sector in addressing climate change is particularly contentious. The assembly's recommendation was not endorsed by the parliamentary committee, which recommended only that the topic be given further consideration. The literature concluded that the most consequential impact of

[8] A description of the key aspects concerning the Irish Citizens' Assembly on Climate Change can be found in chapter 2.4.2.1. In addition, Annex 3 provides an overview (Factsheet) of the Irish Citizen Assembly on Climate Change. This section deals with its policy-relevant aspects regarding agriculture.

the assembly's recommendations may be the revision of the Irish climate law (Torney, 2021, p. 385).

2.6.4.2 Ghana's deliberative poll on agriculture and the environment

A two-day Deliberative Poll (DP) was conducted in Tamale, Ghana, in 2015 on agriculture, environment, and public health challenges. This case study also focused on explaining how communities with poor educational and urban infrastructure can engage in a deliberative process, the richness of their engagement, and the design that facilitates this process (Chen, 2021, p. 180).

In the Tamale DP, 208 participants were selected using a random selection of households in the metropolitan area. The participants are representative of the general population in both demography and attitudes toward city policies: 48% male, an average age of 33.7, 27.9% never been to school, and only 3.9% were first degree holders. Considering that one-third of the participants were illiterate, written briefing material was replaced by videos to introduce the issues. Topics discussed in the Tamale DP were Water, Sanitation, and Hygiene (WASH) and Livelihood and Food Security and the proposals required weighing the trade-off between different values. For example, one proposal asked participants to rate to what extent they agreed with two competing statements: "vegetable farms should produce as much as possible, even if they must use the wastewater from toilets" and "vegetables should only be produced with clean water, even if that means fewer vegetables are produced." Participants needed to consider a trade-off between food sufficiency and public health as each option has risks, spreading diseases through wastewater or reducing food production, which can result in hunger (Chen, 2021, p. 180).

The examining of the pre- and post-survey results found that participants had significant and substantial opinion changes after 2 days' deliberation. For example, on the proposal that requires participants to weigh the trade-off between environmental-friendly farming and food sufficiency, participants' attitude on the importance of farming with clean water increased from 9.0 to 9.5 on a 0–10 scale. The research found that not only did participants change their opinions, but their opinion changes were grounded in thoughtful reasoning and engagement with their peers, e.g., the analysis indicates that, although participants knew that farming with clean water might run the risks of food shortage due to limited clean water supply, participants were willing to engage in more environmental friendly farming as it might help them fight public health issues in the long-run (Chen, 2021, p. 187).

The literature concluded that, for an effective deliberative design, it is particularly important to include a broad range of expertise, especially for cultural settings like Ghana where there is a much more horizontal distribution of expertise: expertise is considered to consist of various types of knowledge from scientists, lay citizens, and policymakers. The findings of this case study were that there is value in consulting local knowledge to address complex policy problems. The article examined what arguments were put forward by the community in the Tamale DP and observed that participants raised prerequisites for existing proposals to work such as providing citizens concrete guidance and education programs and utilising the community financial saving system. Therefore, when deciding which proposals to choose, participants weighed the economic and environmental values suggested by experts and raised the values of education and good financial management habits. These thoughtful arguments were facilitated by effective deliberative designs, that is, moderated small group discussions, which helped to enlighten public knowledge (Chen, 2021, p. 190). In addition, the article found that effective design can empower populations with limited educational and living resources to participate in local affairs - when designing an effective deliberation for these populations, practitioners need to tailor the design in several manners. In the Tamale DP, which differed from many DPs where the information material is in a written format,

because almost 30% of the participants were illiterate, participants watched a video. Moreover, to offer diverse perspectives to the participants about the proposals and make the video more citizen-oriented, many speakers in the video are neighbours/grandmas on the streets familiar to participants, not just scientists and experts. During the small group discussions, moderators practiced conversational style of the locality by calling participants brothers/sisters instead of their names (Chen, 2021, p. 191).

2.7 Gender aspects

Following the collection of articles on Zotero, they were screened and searched for those that contain discussions on gender aspects, for example by searching for key words such as 'gender' and 'patriarchy'. This left sixteen articles to be analysed for their approach to participation and deliberation and how this was related to gender. The following chapter is split into three sections, beginning with approaches conceptualised individually, then on a community level, and finally an institutional / structural level.

It should be noted that in the literature analysed, there was a tendency to refer to men/women, in a binary and dichotomous sense. Where data was disaggregated by gender, there was little discussion of gender identity and gender non-conforming people. This is a trend in academic literature in general as it is slower than civil society in terms of implementing progressive language.

2.7.1 Individual

Two main elements in the literature which focused on individual participation were a sense of women's empowerment, usually explained as the process of ensuring women can make decisions and engage in political and economic spaces by increasing their bargaining power; and leadership, in particular how women in all their diversity could ascend to leadership positions by overcoming structural barriers.

Empowerment is a highly subjective concept, what makes one person acquire the ability to make strategic life choices and turn those into desired action depends on a variety of factors (Lecoutere & Wuyts, 2021). Therefore, it is not enough to say that systematically excluded groups such as women can be 'empowered' out of the systems that oppress them. As Barrios et al. (2020) argue, individual empowerment should be linked to wider structural changes, for example, resource control and remuneration for the unpaid care burden. Lecoutere and Wuyts' (2021) study of household farm systems is valuable in researching women's empowerment as a lived experience. They found that women who increased their financial independence - e.g., through owning small livestock, trade, selling crafts or food, paid labour or a personal coffee plantation - had a better sense of self-worth and bargaining power within the household and community. This is an important lesson for implementing, inter alia, the agricultural element of the EGD, as intra household decision making can be influenced by harmful gender norms. Understanding how such norms impact the everyday life of women in all their diversity, and then making policy based on this will help achieve both gender equality and sustainable development more generally.

Understanding the experience of women's participation is impossible without a parallel understanding of the barriers that hinder this participation. Neocolonialism and patriarchy perpetuate both racism and classism. This creates a hierarchy in which different groups are privileged over others, which means they will be able to participate differently (and unequally). Therefore, when we talk about leadership it must not be divorced from the structural barriers that hinder people becoming leaders. The literature tends to focus on the concept of 'women's leadership', which is over simplistic and lacks an intersectional lens that

takes these structures into account. Nevertheless, some interesting points can still be drawn. Boler et al. (2014) highlight the 'paradox' that horizontalism in organisational structure and decision-making is being increasingly advocated for at a time where women are taking more distinct leadership roles. Although perhaps another way to view this is that this it is not a paradox, but instead when horizontal structures are adopted it allows for fuller diversity in leadership. Similarly, to the writing on empowerment, Dhatt et al. (2017) found in Kenya that gender stereotypes around women's perceived role as carers meant they were less able to take up leadership roles. They argue for gender-transformative approaches to leadership, which they define as equipping women and men with the tools to change the mindset of society in a manner to achieve gender equity at all levels.

One case study that links these concepts together is Barrios et al. (2020) study of Columbian Caribbean fishing communities which followed a participatory approach rooted in the community's own perception of their needs. They found that women's participation in these fishing communities led to the utilisation of their local knowledge, capacity building regarding sustainable development, as well as challenging harmful cultural norms around gender (Barrios et al., 2020, p. 10). However, often these women spoke of their individual experience and knowledge as being embedded within the wider framework of the community, highlighting how we need community support and transformative education to foster the empowerment and leadership of all systematically excluded groups.

2.7.2 Community

This section examines the community, here defined as a group that has a sense of responsibility to each other, and also as Deb (2006) asserts, extends this sense of responsibility to the non-human. The literature tends to focus on how communities can be consulted in participatory processes, rather than organic community organising. However, Boler et al's. (Boler et al., 2014) study stands out in this regard for its focus on the Occupy movement, which began as the Occupy Wall Street movement in September 2011, where participants organised to occupy the United State's economic centre as a protest against economic inequality. This then led to similar 'Occupy' movements across the rest of the United States and subsequently the world. The development of the movement online allowed for participatory cultures to evolve, as many participants used their personal social media to engage with the Occupy movement, subsequently finding likeminded people in their area to then organise demonstrations in person (something that has increased relevance for us today considering Covid-19). Boler et al., (2014) argue that the Occupy movement has allowed for women to participate effectively, as both the use of social media combined with the broad nature of Occupy's aims (tackling economic inequality and wealth concentration) captured the diversity of women's experiences. However, they note that the presence of women does not necessarily mean that women's rights and gender justice are at the forefront of such movements. This is an important concern when we think of gender equality regarding participation in the EGD. It is not enough just to have diversity of participation, but also equality in who gets to speak and how, and as Suiter et al. (2016), assert, the context in which people participate is highly important. Structures such as the patriarchy and its accompanying harmful gender norms are often 'invisible' to those who benefit from them, and so making these elements visible through self-reflection from solidarity movements, and then designing participatory structures that remedy this is an important step to consider (Gould, 2018a).

In order to achieve diverse stakeholder representation grounded in equality, there must be an understanding of incentives to participation. For example, in the community congresses researched by Wilson (2008) following the flood in New Orleans. The first Community Congress was a failure in terms of diversity, as those who participated largely came for the white upper middle-class groups who, although affected by the flood, had largely been able

to return home (Wilson, 2008). Community Congress 2 was then organised, with the organisers America*Speaks* hiring subcontracters to conduct specific outreach programmes. These inclusion outreach programmes included traditional media and online media campaigns in the five target cities, as well as developing a network of paid grassroots organisers to work with community, cultural and faith-based organisations in the areas. The aim of this was to ensure the participation of low-income groups, by utilising networks of trusted members in the local communities. In addition, childcare as well as translation were provided which made the participation more diverse and led to more members of the community having faith in the outcome of the process. Such findings are important considering the rise in such disasters associated with the climate crisis, and that we must listen to those most affected. Similarly, Dumont et al. (2019) found that women had unique agroforestry knowledge in the Virunga National Park in the East of the Democratic Republic of Congo. Their method of tailoring stakeholder consultations to different groups led to a workshop focusing specifically on trees and gender, comprising all of the female participants in the study. They surmise that this is likely to lead to more effective scaling up because the range of options addresses the needs of a higher proportion of the people living there (Dumont et al., 2019, p. 268). When gathering participants for consultations, it is vital that the needs of the community are identified, and that deliberative design is grounded in such needs.

Once a group has been recruited for a deliberative process (inclusion), the idea of 'voice' and how this is expressed (closure) also becomes relevant, as diversity of participants does not always include equitable deliberative outcomes. Voice in the literature was understood broadly as how people expressed their opinions during the deliberative process, and how this impacted the outcome. Suiter et al.'s (2016, p. 202) study of the Irish citizen assemblies on the constitution asserts that deliberation does not always lead to more equal outcomes; and in fact, polarisation may occur during deliberative processes. Harris et al. (2020) highlight a trend in the fact that women are often disadvantaged in deliberative spaces as they speak less than men. Yet this understanding of voice must be grounded in the gender dynamics at play, for example their finding that stereotypes can be activated when there is a group with a clear minority of men or women. Karpowitz et al.'s (2012) study addresses these gender dynamics. They found that the rules of decision-making spaces are important, and that unanimous rule helps women when they are in a minority in a group, and larger numbers of women only help achieve gender equal outcomes under majority rule. This leads to their assertion that 'it is possible to produce equal voice in citizen deliberation by adopting specific decision rules and assigning deliberators to particular gender compositions.' (Karpowitz et al., 2012, p. 33) Achieving equal representation and equal voice, by understanding such dynamics on a community scale where nuances can be identified is vital for effective implementation of the EGD. Repeating such processes in a way that challenges oppressive structures at the institutional level is more of a challenge.

2.7.3 Structural

This section covers two of the more structural and institutional elements of achieving participation.
First, feminist conceptualisations of democratic participation will be outlined and second, an analysis of labour and capitalism and how women can participate in a fairer economy will be given.

Gender inequality undermines deliberative democracy and weakens democratic legitimacy, for the obvious reason that members of the polity cannot participate equally (Harris et al., 2020). Reiterating the findings for individual and community participation, Omotola (2012) highlights how it is not enough to just have women represented in government, but also that there is a true representation of the diversity of society based on feminist principles. One

such method of achieving this is proposed by Dhatt et al. (2017), who found that in Cambodia, gender focal points and gender working groups providing training on gender and leadership skills to ensure women representation at all levels in the health sector led to positive trends in national and provincial government structures in terms of greater gender sensitivity with the implementation of policies.

Yet as Deb (2006, p. 2) states, any form of democracy in a capitalist economy with wealth concentration in hands of elites does not contribute to the idea of participatory civic democracy. Therefore, we cannot understand representation and deliberative democracy without also examining economic participation. As Gould (Gould, 2018b) highlights, some have substantial control over the processes to which others are subjected (e.g., the formal political–economic institutions of capitalism along with racism and patriarchy). Sustainable development is not achievable until this inequality is remedied, and control of resources is grounded in those in the community who have the freedom to participate in decision making (Deb, 2006). Yet this can seem an insurmountable task, and as Barrios et al. (2020, p. 3) astutely put: "women's development projects cannot just sit and wait for a world where capitalism is not a reality." Therefore, NGOs and civil society organisations should challenge existing capitalist structures whilst addressing unequal power relations. For example, Fawaz et al.'s (2015) case study of micro enterprises in rural Chile which led to more autonomy for women and girls in the community as well as accelerating the participation of women in sustainable producer organisations. Local NGO's helped create alternate spaces for economic participation of women, which are less subjective to international markets and gendered spaces of decision making. This highlights how sustainable development must go hand in hand with challenging unequal power dynamics in order to be effective.

3 Discussion: Deliberative democracy and participation in the context of the EGD

3.1 Multi-level governance and cross-sectoral coordination: Aligning different vertical and horizontal governance levels

Multi-level governance (MLG) refers to the collaborative policy-making process of multiple (types of) actors (mainly state and non-state actors) from multiple tiers of governance (general-purpose jurisdictions and task-specific jurisdictions), extending over a variety of political arenas, such as the international, regional, national, and subnational levels of governance, as well as non-state arenas of political decision-making (Trein, 2022). MLG is related to Arnstein's ladder of participation (see Section 2.2) insofar as it reflects differences in the level of engagement in accordance with the effects and complexity of a particular decision-making process. Related processes on different rungs of the ladder cumulatively make up MLG. Due to its collaborative character, MLG prompts reconsideration of what constitutes legitimate rule (in both state and non-state contexts) and thus invites normative reflection on the conditions under which binding decisions gain widespread acceptance and bestow legitimacy on the institutions that produce them (Piattoni, 2010). The concept of MLG can be divided into two types, namely making sense of the interaction between a multiplicity of actors across different levels of government, which can occur either within a general-purpose, territorially-bounded polity (Type I), or according to a task-specific logic where jurisdictions are overlapping and potentially unlimited in number and scope (Type II) (Maggetti & Trein, 2019).

The concept of MLG originates from the literature on European integration and the emergence of a new political order in Europe (Trein, 2022). In the context of EU policy making, Gary Marks (1993) defined MLG as "a system of continuous negotiation among nested governments at several territorial tiers – supranational, national, regional, and local – as the result of a broad process of institutional creation and decisional reallocation that has pulled some previously centralised functions of the state up the supranational level and some down to the local/regional level" (Marks, 1993). To this day, MLG captures important features of how binding decisions are arrived at in the EU (Trein, 2022).

At each level of governance, moreover, there are specific characteristics of multi-stakeholder involvement. These characteristics differ in accordance with the differences in tiers as well as the means and methods of decision-making across sectors. When analysing the impact of MLG on the implementation of deliberative processes and participative methods in environmental matters, assessments should be made from two perspectives: Vertical and horizontal. On the one hand, vertical integration of other levels' insights (e.g., local and regional authorities) to enhance and align higher-level decisions with subnational needs and, on the other hand, horizontal integration to engage peers at the same level from parallel ministries, relevant public agencies, etc. to ensure synergies and avoid misalignment. MLG is most often used as an analytical framework for examination of appropriate relationships among vertical tiers of governance, with an emphasis on territorial scope. Horizontal coordination is typically referred to as cross-sectoral coordination, and while distinct from multi-level governance, it is frequently taken into account in MLG processes. One complex policy development tool that attempts to take into account both vertical and horizontal perspectives is "nexus" assessment, discussed below. Another one, for policy development and implementation, is the 'Policy Coherence for Sustainable Development (PCSD)' approach, as also introduced below.

The following Figure 5. illustrates the three axes of governance for sustainable development, and with this for the EGD: multi-level (vertical), multi-sector (horizontal) and multi-actor (relevant for both perspectives) (Dewulf et al., 2015; Meuleman, 2018; Niestroy et al. 2019):

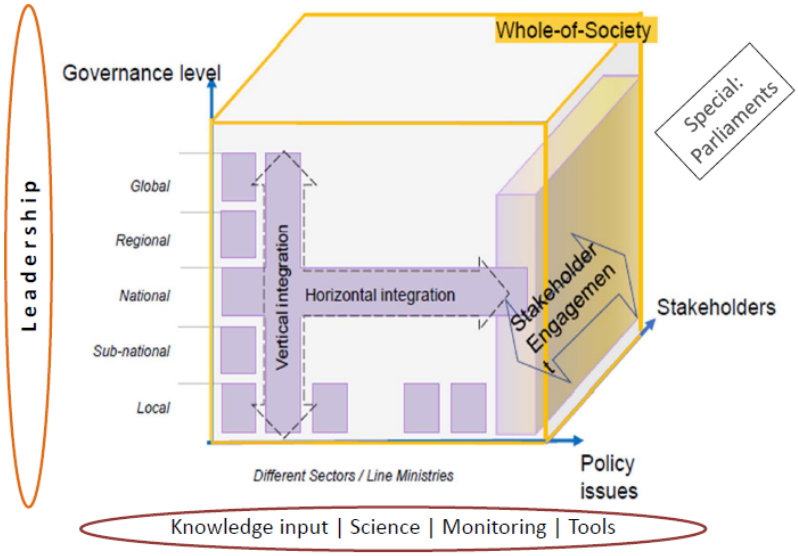

Figure 5 Whole of society: the multi-level, - sector and -actor governance of sustainable development (Niestroy 2021, after Niestroy et al. 2019)

3.1.1 The different levels of multi-level governance: International (UN), EU, national (constitutional arrangements), regional/local-specific arrangements

Environmental competences are distributed among different governance levels, including the international level, the EU level, the national level, and various sub-state levels. The international level comprises the UN and other relevant international treaties that states have ratified and thus form part of their legal domestic systems, as well as international political declarations such as the Sustainable Development Goals (SDGs) which guide policymaking and legislation. For EU member states, the EU level comprises the EU political and institutional framework and the *acquis communautaire* (the body of common rights and obligations that are binding on all EU Member States, including general principles, the EU treaties, EU legislation, etc.). On the national level, the national constitutional arrangements are relevant in addition to institutions and policy and legislative frameworks. The last level of governance to be considered is the sub-national level, including the regional and local governments.

At the international (UN) level, there exists a special model of MLG that dates back to the "Earth Summit" in Rio de Janeiro in 1992 and refers to a system of goal-oriented multi-level and multi-sectoral global governance, aimed at mobilising a broad swathe of actors to pursue sustainability, including civil society actors across all levels (Jaenicke, 2017). In global climate governance, the concept of MLG has become indispensable, not only because sustainable and climate protection are necessarily global approaches and the role of each level – from global to local – is specific (it has its own responsibilities, challenges and opportunities) (Jaenicke, 2017). More specifically, the climate regime of the UN/Framework Convention on Climate Change (UNFCCC)/United Nations Environment Programme (UNEP) provides a global policy arena and has a general catalytic function (Jaenicke, 2017).

At the EU level, the corresponding MLG arrangements are related to the EU institutions that make decisions according to the 'community method' (as defined in Article 294 TFEU), which is characterised by a supranational orientation, and whereby the EC has the sole right to initiate legislation, the Council and the European Parliament hold co-decision power and a qualified majority voting is in use in the Council (Maggetti & Trein, 2019). Here, the problem-solving capacity consists of the creation of higher-level rules to stimulate harmonisation, convergence, and integration (Maggetti & Trein, 2019). As the Charter for Multilevel Governance in Europe states, multilevel-governance in Europe is "based on coordinated action by the EU, the Member States and regional and local authorities according to the principles of subsidiarity, proportionality and partnership, taking up the form of operational and institutional cooperation in the drawing up and implementation of the EU policies (EU E. C., 2014)."

At the national level, governments, acting within networks, remain the key players in the MLG system because they enjoy the highest level of legitimacy, are the main focus of public opinion and have the greatest competencies and financial resources (Jaenicke, 2017). MLG incorporates the argument that decision-makers shift competencies away from the nation state to deal with pressing policy challenges that exceed the competences of the central government (Maggetti & Trein, 2019). In other words, problem-solving capacity is created beyond the national government without dismantling it entirely (Maggetti & Trein, 2019).

On the national level, it is also relevant, when considering how the distribution of powers and its constitutional accommodation affect the development of deliberative forums, to distinguish between three kinds of states: (1) Unitary states (*e.g.*, France, Denmark, Greece,

Portugal, Sweden); (2) mixed states (Italy, Spain); and (3) federal states (Belgium, Austria, Germany).

Finally, at the subnational level, relevant MLG arrangements usually find expression in constitutional provisions conferring more power and autonomy to regional authorities (Maggetti & Trein, 2019). Their main benefit consists of more fine-grained implementation processes, and possibly of increased legitimacy, due to the proximity between target groups and regional authorities (Maggetti & Trein, 2019).

3.1.1.1 The importance of close cooperation between local, regional, national, and European levels

The results of decision-making in a multi-level policy process result in a differentiated integration of policy results (Trein, 2022). In some policy fields, competencies for policymaking are integrated at the EU level, whereas in others they remain at the national level and/or subnational level (Leuffen, Rittberger, & Schimmelfennig, 2012). The principle of subsidiarity is applied to determine the proper level and the proper actors to deal with an issue or policy where there may be conflicting or overlapping responsibilities. This principle is applicable to environmental matters and helps to clearly define which level/actor does what, aiming at producing integrated and coherent policy results.

The purpose of EU Law is to guarantee decision-making as close as possible to the citizen, constantly verifying that the action to be undertaken at the community level is justified in relation to the possibilities offered by the national, regional, or local level (established by Article 5(3) of the Treaty on European Union (TEU) and Protocol (No 2) on the application of the principles of subsidiarity and proportionality). In areas in which the EU does not have exclusive competence, the principle of subsidiarity seeks to safeguard the ability of the Member States to take decisions and action and authorises intervention by the Union when the objectives of an action cannot be sufficiently achieved by the Member States, but can be better achieved at Union level, 'by reason of the scale and effects of the proposed action'.

The general aim of the principle of subsidiarity is to guarantee a degree of independence for a lower authority in relation to a higher body or for a local authority in relation to the central government. It therefore involves the sharing of powers between several levels of authority, a principle which forms the institutional basis for federal states, as well as the EU. From an EU perspective, MLG arrangements can only be optimal if the subsidiarity principle is fully respected, *i.e.* once the responsibilities of each level of government are clearly delineated, MLG kicks in, contributing to the development of a shared vision, greater coordination, information sharing, structural dialogues and joint-implementation agreements amongst all partners (Van den Brande, 2014).

The Member States have the obligation to collaborate, for the preservation and environmental protection, in accordance with the principle of subsidiarity, and if necessary, participate in a complementary manner, in the actions of individuals. Subsidiarity triggers both positive and negative obligations. On the one hand, the national state has the positive obligation to collaborate, while the intervention of the national authority must be exercised only when necessary. On the other hand, the national authority has the negative obligation to refrain from assuming functions that can be performed efficiently by individuals.

In the analyses of legal challenges, we also need to point out that they are very dependent on the sectorial aspect. Competencies lay at different governance levels when, e.g., dealing with energy law, i.e. nuclear energy (which is attributed to the national level, meaning less potential conflict), whereas agriculture or water resources are more inter-sectional and normally with a strong degree of local participation. These differences influence the dynamics of MLG.

3.1.1.2 The vertical perspectives of multi-level governance and how to best link these governance levels in the arena of the EGD

This section covers the vertical perspective, namely challenges generated to the interaction of different levels of government (international, national, subnational, and local) to stop or negatively influence the introduction of deliberative democratic processes for environmental matters. As previously mentioned, the concept of MLG emerged in the context of the study of regional integration in the EU to make sense of processes and institutions by which policies are made through the interaction of public authorities located at different jurisdictional levels. The original understanding of 'levels' is thereby mostly referring to the 'downwards' vertical dimension of interaction but expanded to incorporate 'upwards' vertical dynamics over time, *i.e.,* the relocation of authority to supranational and international organisations (Maggetti & Trein, 2019). Eventually, the concept also expanded to incorporate 'sideward' processes, *i.e.,* the empowerment of independent and non-state actors, such as regulatory agencies, business representatives, NGOs, and social movements (Maggetti & Trein, 2019).

In the case of the EU, it has been argued that the predominant involvement of national governments at the European levels strengthens the executive against the parliament at home because Members of Parliament are confronted with the dilemma that if they constrain the leverage of their government in the European arena, then the government might not be able to pursue national interests effectively (Benz, 2017).

The concept of environmental policy integration seeks to coordinate policy making between sectors. Vertical integration links the different levels of policy making, while horizontal integration concerns the inclusion of climate policy issues between relevant policy sectors and levels (Jensen, Nielsen, & Russel, 2020). Broadly, climate policy integration is a strategy that employs a number of administrative processes (e.g., inter-sectoral consultation or cross-sector procedures) and instruments (e.g., ex ante impact assessment) to ensure that climate goals are factored into sectoral policies at the earliest opportunity (Jensen, Nielsen, & Russel, 2020). As a deep principle of policy, climate policy integration may, however, at any time, conflict with other political values that prevail in national/local policy institutions (Jensen, Nielsen, & Russel, 2020). Crucially, it is unclear at which governance level policy integration is best aimed for mainstreaming climate policy, and how different strategies occurring at different governance levels interact to compliment or undermine each other (Jensen, Nielsen, & Russel, 2020).

3.1.2 What multi-level governance means for citizen participation (generally and in relation to the EGD)

Environmental policy is a problem of collective action, which necessitates government responses from the local to the international levels. Climate change presents a MLG challenge. It is multilevel because it connects policy action from the most local level to the international level and it is a governance challenge because it does not only involve the actions of government actors but also depends on the behaviour of multiple private actors from individuals and local communities to corporations (Jensen, Nielsen, & Russel, 2020). For local actors, this means having decision-making power over relevant aspects of climate policy, but it also means that there needs to be a national, regional, or international framework to support local action (Jensen, Nielsen, & Russel, 2020). Actors across all levels of governance must possess appropriate governance resources, capacity, and competencies (Jensen, Nielsen, & Russel, 2020). Overall, therefore, the MLG nature of climate politics challenges different levels of policy making to bridge jurisdictional and politico-cultural boundaries across these levels (Jensen, Nielsen, & Russel, 2020).

The micro level of the multi-level system of global climate governance is formed by the action of individuals, voters, consumers, or NGO members (Jaenicke, 2017). It is sometimes restricted because the intervention of individuals comes later in the chain of causation of climate problems; as consumers they act at the final stage of the value chain (Jaenicke, 2017). Individuals did not 'invent' most climate problems and therefore cannot be the main source of solutions (Jaenicke, 2017). Nevertheless, individuals switching electricity suppliers or taking part in consumer boycotts or internet campaigns can have a strong impact (Jaenicke, 2017). Private ownership of solar or wind power installations is another strong example of the role individuals can play (Jaenicke, 2017). It should be added that technical innovation and climate policy advocacy coalitions are essentially based on individual core beliefs, which influence the directions in which climate policy is going (Jaenicke, 2017). Therefore, even individuals at the lowest level of the system of climate governance influence the global system.

3.1.2.1 How citizen involvement can be integrated into the structure of multi-level governance (How can citizens get involved?)

In addition to vertical and horizontal cooperation, MLG can be further enhanced by also engaging non-governmental actors, including citizens, for the added value of their perspectives and knowledge claims, especially on topics that directly affect them.

The first step would be to inform citizens, stakeholders, and the public about a specific topic/project (e.g., in relation to the EGD) without expecting a response but meaning that a minimum level of participation is maintained. The next, more advanced step, would be to consult with the public to get their input, not necessarily implying that the relevant authority will take the input into account or provide a response. Third, citizen involvement can evolve into dialogue: Presenting a specific topic/project and request input to make changes to the project if needed, helping stakeholders to accept the project. Nonetheless, the relevant authority may justify any decision that does not take the publics suggestions into account. The most advanced option is to co-develop, meaning to invite stakeholders to jointly develop a project, starting with the collective analysis of an issue. For this, pedagogical tools should be used to ensure that everyone can actively contribute. As discussed in section 2.2 (Methodology regarding formats/methods/tools) of this report, there exist different formats for citizen engagement on the basis of co-development, such as citizen assemblies, Delphi studies, round tables, analytic-deliberative discourse, study groups, expert groups, stakeholder salon and/or voting.

"Nexus Dialogue" is the citizen engagement element of the "nexus approach" to natural resource management (Stec, 2017). While it shares some characteristics with the "multi-use sustained yield" analytical framework applied to resources, the nexus approach applies an assessment framework to take into account the complex interactions and connections among several sectors (e.g., energy, water, food, land, climate, environment and ecosystems) at different levels of governance related to a particular shared natural resource, such as a river basin (De Strasser et al., 2016). Applying the nexus approach involves assessment of the links and dynamics of the different sectors to harmonise their outlook and management as well as taking account of potential conflicts and synergies across sectors and boundaries. The purpose of nexus assessment is to support policy making and coherence between sectorial policies by investigating how the governance setting supports coordinated resource management, including addressing intersectoral issues and accounting for the environment (Stec, 2017). Nexus issues and nexus solutions are defined, respectively, as a problematic situation that affects more than one sector and an intervention that would benefit more than one sector (including environment at large) (De Strasser et al., 2016). To offset the tendency to follow a series of technical analyses that often assume perfect implementation, Nexus Dialogue aims at identifying governance factors within sectors and at all levels of authority that may introduce uncertainty about the level of actual

implementation of a particular solution. Nexus has been applied in several river basins inside and outside Europe and has the potential to be applied in the EGD context (Stec, 2017).

The Dialogue was a response to the call by the Senior Officials of Environmental Management Group (EMG) to address the issue of law for environmental sustainability in the context of the 2030 Agenda for Sustainable Development. The key objective of the Dialogue was to explore ways to strengthen collaboration and coordination in law for environmental sustainability as a means to support enhanced implementation of the 2030 Agenda for Sustainable Development among UN agencies. The Dialogue also served as an opportunity to engage participants' feedback for the development of new proposals for a programme on environmental law led by the UN Environment Programme, which has brought the issue of collaboration on Law for Environmental Sustainability to the attention of the EMG (UN, 2018).

3.1.2.2 What are the potentials and limits of multi-level governance?

As for the normative implications of MLG, the delegation of powers away from the nation state to subnational and international levels of government, as well as to private/non-state actors, improves the quality of governance, for example, as lower levels of government are better equipped to design policy solutions that respond to the needs of the local population (Bache, Bartle, & Flinders, 2016). Furthermore, a stronger role for private and non-state actors in decision-making and implementation is said to result in more efficient policies (Boerzel, 1998). Another argument in favour MLG is that multi-level policy arrangements, such as in the EU, are perceived as economically, administratively, and politically efficient (Piattoni, 2010). On the contrary, other scholars have pointed to the challenge which MLG creates for democracy. For example, authors have held that the delegation of competencies to actors that are not part of the nation state creates problems of democratic accountability (Papadopoulos, 2003), especially if those who decide are not democratically accountable to those who are affected by the policy decisions (Papadopoulos, 2003).

On the one hand, MLG increases flexibility in governance arrangements but, on the other hand, increases coordination costs and creates a coordination dilemma to the extent that policies of one jurisdiction have negative or positive spill overs for other jurisdictions (Trein, 2022). Multi-level perspectives are well suited for the analysis of the policy process regarding reforms of important policy problems, such as the implementation of the EGD (Trein, 2022).

The multi-level perspective is also part of a coordination approach as developed most prominently by OECD (and in UN context for SDG 17.14), called 'Policy Coherence for Sustainable Development (PCSD)'. It is an analytical tool and a set of guidance and practical recommendations to support the implementation of the SDGs, and "to strengthen the capacity of governments to design, implement and monitor coherent and integrated policies for sustainable development" (see https://www.oecd.org/gov/pcsd/). Stakeholder engagement is one of the 8 elements of PCSD, in connection with the other 7, which include vertical and horizontal and coordination (of government level and sectors). The politically agreed recommendations state that adherents should … "engage proactively with stakeholders in different phases of the policy cycle, including through the exchange of knowledge and expertise, to develop and prioritise initiatives for enhancing PCSD, making specific efforts to reach out to the marginalised and vulnerable groups in society and to advance inclusive social and economic development, in line with the aspirations of the SDGs" (OECD, 2019, p. 8). In the EU the PCSD Approach is on the one hand promoted and supported in the context of SDG implementation at EU level and in member states, and as further development of 'Policy coherence for development (PCD)' as enshrined in the EU Treaty. Regarding the relationship between the SDGs and the EGD the European Commission states that the EGD is an integral part of its strategy to implement the 2030

Agenda and its SDGs (European Commission, 2019, p. 3). On the other hand the approach has found its way in recommendations and financing by the EU of member states' public administration and governance reforms. In this context the Commission also states that "… the flourishing of deliberative democracy initiatives leads to greater inclusiveness of people and ideas, stronger legitimacy, enhanced public trust" (European Commission, 2021, p. 19). Member states are hence encouraged and supported to enhance the involvement of stakeholders and citizens in policy making and implementation of the SDGs and the EGD.

3.1.3 Horizontal governance

Compared to horizontal integration (engaging peers at the same level from parallel ministries, relevant public agencies, etc. to ensure synergies and avoid misalignment), horizontal governance constitutes a more complex framework that also should include stakeholder and citizen engagement.

Beyond the discourse on deliberative democracy and citizen participation, the transformations required to meet the objectives of the EGD represent a gigantic challenge for all European nations and the European Union as a whole. After all, the concrete goals of climate protection and sustainability policy must be translated and implemented into real-life changes and actions by all levels of government but also by the corporate sector, civil society and the citizenry at large. While the previous sections (3.1.1 and 3.1.2) addressed the issue of vertical governance, integrating the various political levels from the community level to the EU level, this section is focused on the issue of horizontal governance.

In liberal democratic societies, the far-reaching changes that need to be made on the way to a climate-neutral and sustainable European future cannot be imposed from above and ordered by politically elected bodies alone. Rather, they must be shaped in dialogue with and based on the knowledge of all actors, including business communities, representatives of civil society and the scientific communities and in particular, the citizens in all their diversity and plurality.

The question here is how we can integrate the various actors outside of the political arena on each governance level (from single communities to the EU) to be or become part of the policy forming process. This horizontal level opens the policy process to include organised and non-organised groups and individuals, who are or will be affected by the envisioned transformations. In more general term, deliberative democracy requires new formats of integrating stakeholder involvement and citizen participation.

In addition to the established and institutionalised forms of participation, e.g. in planning law, public officials on all vertical governance levels are therefore asked to experiment with new informal approaches such as round tables, citizens' forums or random-based deliberative processes, e.g. in the form of "mini public" or "citizen assemblies" as explained in the previous sections (Bächtiger et al., 2014; OECD, 2020). In addition, formats such as Round Tables are used to integrate representatives of organised groups or organisations. They also complement the traditional instruments of public inquiries or hearings, which are required in most legislations among European countries. Such highly structured formally prescribed formats have been proven to be rather ineffective in transporting stakeholder concerns as well as public preferences to the decision-making bodies (Schweizer & Bovet, 2016). Thus, new informal formats are urgently needed to meet this demand.

The art of successful participation consists, on the one hand, in reconciling the interests of the organised social groups and associations, which we refer to here as stakeholders, with the values and visions of the affected population (as may be represented, for example, by a

random selection of participants), and, on the other hand, in not overstepping planetary boundaries, i.e., in not diluting or slowing down the goals of the EGD through deliberative processes. Both integration processes pose significant challenges to designers of participatory processes as well as policymakers. For example, what should be done when organised groups express different preferences for climate policy than affected citizens? Or when the participation bodies make recommendations that demonstrably will not achieve the climate goals of the EGD?

Which forms and formats of citizen participation would meet the above requirements for an integration of stakeholders and randomly selected citizens working toward effective and fair solutions for reaching the objectives of the EGD? In this section we focus on two formats that highlight the input from stakeholders and from randomly selected citizens. These two formats refer to all types of Roundtables for stakeholder participation and all forms of citizen assemblies (minipublics, citizens forums, citizen juries etc.) for citizen participation. Detailed explanations of these formats can be found in the factsheets in Annex 2.

Combining citizen assemblies and stakeholder roundtables

For an integrative approach to participation involving both, stakeholders and citizens, there are three options, all of which have been implemented in real situations.
The first option is to view the roundtable as the dominant participatory body and to view citizens' assemblies as suppliers to the roundtable. In this model, roundtable participants can commission citizens' assemblies for dealing with contentious issues or issues where they see citizen preferences as particularly relevant. The results are then fed back to the roundtable, where they further process and use as input for their own evaluation of policy options. Citizens' assemblies here have an instrumental character for informing roundtables.

The second option reverses the relationship: Here, citizens' assemblies constitute the dominant body that organizes a roundtable in order to be continuously informed about the interests of organised groups. Often, the representatives of the organised groups are also called in as witnesses, as in a court case, to explain and justify the positions of their respective groups to the citizens (Bryson et al. 2013). However, the ultimate recommendations are made by the citizen councils.

In the third option, a mutual exchange takes place between the roundtable and the citizen councils. This can be either iterative (citizen councils and roundtable participants meet regularly to coordinate with each other) or consecutive (citizen councils and roundtables meet independently but come together for the final adoption of recommendations) (Stasiak et al., 2021).

In both cases, the goal is to motivate the two bodies to take a joint position, through consensus seeking or developing a joint statement about dissenting views and the reasoning behind them. While options 1 and 2 require integration along the rationales of either the roundtable or the citizens' assembly and thus pre-determine the pathway for any conflict resolution between the two bodies, the mechanisms of integration in option 3 remain open. Who will prevail in the event of conflicts between the two bodies? How can the different objectives between the rationale of common interest and common good be reconciled? How can organised interests and public preferences be harmonised? These questions can hardly be answered theoretically or conceptually. For exploring the potential for cooperation between roundtables and citizen assemblies, empirical case studies are required. However, here are very few studies on the conditions for a successful cooperation between stakeholder and citizen participation beyond a few single case studies (Hilpert & Scheel, 2020).

Lessons learned

The integration of stakeholder involvement via roundtables and citizen participation via citizen assemblies can be successful if, on the one hand, protected spaces to develop and explore the rationale of each target group have been set up and implemented, and on the other hand, the different (but not antagonistic) rationale of each participation body has been recognised and respected by all participants. It has been observed that there can be irritations between the participants of both bodies at the beginning, especially if the consecutive model is chosen (Renn, 2014). However, as soon as the participants have become familiar with each other and have perceived each other's argumentation as being legitimate and competent, the mutual negative expectations recede into the background and are replaced by curiosity-driven search strategies for joint solutions. Another positive effect is that many of the recommendations that may have been developed separately by each body are perceived as quite similar when viewed as a whole. This reinforces the impression of a newly emerging identity as (complementary) policy advisors and increases the willingness to approach each other even where there is still dissent or misunderstanding.

The likelihood of obtaining a common document from all participants is also greatly increased if one does not insist on reaching a consensus on all issues or recommendations. A great deal of potential for tension is avoided if individual contributors can also reject or modify recommendations or add their own recommendations. As empirical evidence shows, there are still enough recommendations or options for action that can be supported by everyone or, as in in one case study on the climate plan in the German State of Baden-Württemberg, recommendations that are strongly favored by some can be tolerated by the others (Schweizer et al., 2016). Consensus on dissent, i.e., a jointly supported explanation of why some argue for solution A and others for solution B, can also be extremely helpful to enlighten the political discourse.

In this context, it is problematic that in many citizen assemblies, contrary to the logic of deliberation, individual voting is conducted, categorising majority and minority opinions. This approach of taking votes is certainly inacceptable for roundtables, since they can never claim proportionality in terms of who is represented. But even for citizens' assemblies, the question of which part of the population represents the majority of a citizens' assembly remains unresolved. As experience has shown around 80-95% of randomly drawn citizens refuse to participate in the citizens' assembly, so a representative sample of the respective populations is far from being realistic (Schweizer et al., 2016). For pragmatic reasons, a quota of 90% can be agreed upon for citizens' assemblies in order not to depend on single individuals but voting in the classical sense to legitimize recommendations is problematic for citizens' assemblies. If one combines both groups, as in the iterative or consecutive model, to abstain from voting in both bodies is almost unavoidable.

Linking citizens' assemblies and roundtables requires a great deal of care, methodological and communicative competence, and sufficient time resources from the organizers. Particularly when representatives of the roundtable meet with the citizens, it is important for the moderator to first reduce skeptical expectations and to take constructive measures to build trust. Playful and creative approaches to work that convey a sense of shared identity can contribute to this goal.

In summary, there is a clear need for integrating stakeholder and citizen participation. The few case studies also demonstrate that this is possible without whitewashing the different approaches, perspectives, and rationales of each constituent. However, empirical studies of this cooperation are extremely rare and there are no evidence-based conclusions that one can draw from the sparse material that has been collected so far. Thus, we conclude that this cooperation is one of the target investigations for the empirical test cases that will be conducted in WP3.

3.2 Implementing the objectives of the EGD: Deliberative participatory processes as enabling mechanism or stumbling block

3.2.1 Potential advantages of deliberative participation

Why do we expect that deliberative processes are better suited to deal with the three fundamental challenges of deliberative and democratic policymaking in Europe, i.e., challenges of methodology, institutional support, and scalability across governance levels (see chapter 1: Introduction) than by using data from surveys among the relevant constituents or organising focus groups or other participatory instruments to collect systematic feedback from the public?

First, deliberation can produce common understanding of the issues or the problems based on the joint learning experience of the participants with regard to systematic and anecdotal knowledge (Pidgeon, 1997; Webler, 1998). Participants can add their lived experience, which often is different from what is discussed in science. Furthermore, it may produce a common understanding of each party's position and argumentation (rationale of arguing) and thus assist in a mental reconstruction of each actor's argumentation (Habermas, 1970; S. P. Tuler, 1996; Warren, 1993). This does not necessarily mean that all parties involved agree on the outcome of the deliberation, but at least they all have a full understanding of the issue involved.

Second, deliberation can produce new options for action and solutions to a problem. This creative process can be mobilised either by finding win–win solutions or by discovering identical moral grounds on which new options can grow (Fisher & Ury, 1981; Webler, 1995, 1999b). It has the potential to show and document the full scope of ambiguity associated with issues related to the EGD and helps to make a society aware of the options, interpretations and potential actions connected with the issue under investigation (De Marchi & Ravetz, 1999). Each position within a deliberative discourse can survive the crossfire of arguments and counterarguments only if it demonstrates internal consistency, compatibility with the legitimate range of knowledge claims, and correspondence with the widely accepted norms and values of society. Deliberation clarifies the problem, makes people aware of framing effects, and determines the limits of what could be called reasonable within the plurality of interpretations (Skillington, 1997).

Third, deliberation can also produce common agreements. The minimal agreement may be a consensus about dissent (Raiffa, 1982; Webler & Renn, 1998, p. 64). If all arguments are exchanged, participants know why they disagree. They may not be convinced that the arguments of the other side are true or morally strong enough to change their own position; but they understand the reasons why the opponents came to their conclusion. At the end, the deliberative process produces several consistent and – in their own domain – optimised positions that can be offered as package options to legal decision-makers or the public. Once these options have been subjected to public discourse and debate, political bodies such as agencies or parliaments can make the final selection in accordance with the legitimate rules and institutional arrangements, such as a majority vote or executive order. Final selections can also be performed by popular vote or referendum. In addition, deliberation creates 'second-order' effects on individuals and society by providing insights into the fabrics of political processes and creating confidence in one's own agency to become an active participant in the political arena (Dryzek, 1994, 2017). By participating

they can enhance their capacity to raise their voice in future issues and become empowered to play their role as active citizens in the various political arenas.

Fourth, deliberation may result in consensus (or a consensus about the reasons for dissent). Often, deliberative processes are used synonymously with consensus-seeking activities (Coglianese, 1997). This is a major misunderstanding. Consensus is a possible outcome of deliberation, but not a mandatory requirement (van den Hove, 2007). If all participants find a new option that they all value more than the one option they preferred when entering the deliberation, a 'true' consensus is reached (Habermas, 1971). It is clear that finding such a consensus is the exception rather than the rule. Consensus is either based on a win–win solution (examples in Waldo, 1987) or a solution that serves the 'common good' and each participant's interests and values better than any other solution (examples in Krueger et al., 2001). Less stringent is the requirement of a tolerated consensus. Such a consensus rests on the recognition that the selected decision option might serve the 'common good' best, but at the expense of some interest violations or additional costs. In this situation, people who might be worse off than before, but who recognize the moral superiority of the solution, can abstain from using their power of veto without approving the solution. In our own empirical work, deliberation has often led to tolerated consensus solution, particularly in siting conflicts (Raiffa, 1982; Schneider et al., 1998). Consensus and tolerated consensus should be distinguished from compromise. A compromise is a product of bargaining, with each side gradually reducing its claim to the opposing party until they reach an agreement (Raiffa, 1982). All parties involved would rather choose the option they preferred before starting deliberations; but since they cannot find a win–win situation or a morally superior alternative, they look for a solution that they can 'live with', well aware of the fact that it is not the best solution for them. Compromising on an issue relies on full representation of all vested interests.

3.2.2 Potential objections against deliberation

Having explored the potential of the deliberative model of stakeholder and public involvement we are also aware of the limitations and potential problems. The main critical remarks can be grouped in three categories (Coglianese, 1997, 1999; Dana, 1994; Lafont, 2015; Rossi, 1997; Sanders, 1997; Warren & Gastil, 2015).

1. Participation compromises the quality of the output (due to erroneous lay people's knowledge and intuitive biases that can only be overcome by rigorous scientific scrutiny).
2. Participation leads to distortions in the representation of the public will (due to power differences among stakeholders and the discrepancy between interests that can easily be organised and interests that defy effective organisation).
3. Participation produces either political paralysis or trivial results, delays the process of decision making and leads to parallel decision-making processes in addition to the prescribed procedures of representative democracy (due to plural interest, lack of common value orientations of the participants, and strategic manoeuvring by powerful actors).

First, are laypeople able to make unbiased and evidence-based judgments? One of the major arguments against participation has been that public input to decision making relies on distorted knowledge and folklore wisdom, replacing institutional or scientific knowledge with intuition and personal interest. Indeed, research shows that public perception of environmental risks differs substantially from professional analysis (Covello, 1983; Fischhoff, 1985; Boholm, 1998; Sjöberg, 1999a; Slovic et al., 1992; SAPEA, 2019; Slovic, 1987). One of the main insights from the study of human decision making has been that these biases exist and that they can distort human judgment. However, several decades of participation

research and its critical evaluation have also demonstrated that a simple division into experts and laypersons does not match the empirical evidence on bias distribution and does not do justice to perceptions or expertise (Hyman & Stiftel, 1988; Slovic et al., 1992; McDaniels, 1998; List, 2006). In many decision-making contexts, experiential and local knowledge has often been proven equally important as the systematic knowledge of experts (Wynne, 1989). Furthermore, the evidence of biases also includes professionals. Some of the practices of bounded rationality may even yield outcomes superior to a full-fledged analysis guided by rational choice parameters (Gigerenzer, 2000; Gigerenzer & Selten, 2002). The juxtaposition of two opposing camps: the rationality camp reserved for experts versus the irrationality camp assigned to a lay public is not congruent with the empirical research results. Both camps have problems with biases and depending on context and issue one may outdo the other. More important, however, is the fact that there is major variation within the expert and the layperson camps that make predictions about their collective judgmental fallacies very doubtful (Sjöberg, 1999b). Nevertheless, there is no doubt that preferences that guide social groups and individuals to assign tradeoffs between conflicting values may be distorted by misconceptions about the factual relationships between assumed causes and effects. Durodie (2003), for example, observed that people in countries that have the least exposure to chemical pollutants show the highest degree of fear and concerns about being exposed to such pollutants.

The argument of distorted knowledge and bias comes in many variations. It is essential, however, to link this argument to the purpose of the participatory exercise. Most participatory processes do not claim to produce new knowledge but to include non-scientific experience and value judgments when making decisions. The idea here is to distinguish knowledge from value input (Renn & Schweizer, 2020). Value judgments play a crucial role in decision making (Renn, 2004). First, value judgments come into play when selecting criteria on which functionally equivalent options ought to be judged. Second, value judgments determine the trade-offs between these criteria. Third, values judgments affect the choice of preferred strategies for coping with remaining uncertainties and ambiguities. Using methods of public participation and deliberation for all three value inputs does not place any doubt on the validity and necessity of applying the best of technical expertise for defining and calculating the performance of each option on each criterion (see also Charnley, 2000). Public input is an essential contribution for determining the objectives of environmental policies and for weighing the various criteria that ought to be applied when evaluating different options. To know more about perceptions can also help to create a more comprehensive set of decision options and to provide additional anecdotal knowledge and normative criteria to evaluate them (Gregory et al., 1993; Mansbridge et al., 2012; McDaniels, 1998; Dryzek et al., 2019).

This distinction in knowledge and values is less pronounced in participatory exercises that are based on the principles of deliberative participation. Participants are supposed to learn and reflect knowledge and value claims at the same time (Daniels & Walker, 1996; Jasanoff, 1991, 1998, 2004). These deliberative platforms necessitate reflections about the legitimate role of systematic, experiential, local and folklore knowledge. The true advantage of these platforms is that all types of knowledge are included and their strength and weaknesses assessed. Selection and evaluation of knowledge is based on discursive methods and procedures, not on persons (such as experts) or status (Shrader-Frechette, 1991, p. 190ff.). If the participation succeeds in integrating these different types of knowledge in a coherent and consistent manner, it is even superior to pure analytical procedures which basically rely on collecting and testing systematic knowledge (Jasanoff, 1993). There is lots of evidence from case study evaluation that this integration can be accomplished and cognitive biases avoided (Beierle, 2000; Rauschmayer & Wittmer, 2006; Roch, 1997; Rowe et al., 2004; US-EPA/SAB, 2001; Vorwerk & Kämper, 1997). Until today, however, there is no statistical proof that in a deliberative setting bias can be overcome and different types of knowledge truly integrated.

Second, who represents whom in deliberative processes? The second line of arguments refers to the problem of scale and representativeness. Inviting stakeholders to take part in the process, implies giving their specific, often self-centred interest special weight in the deliberation (Cupps, 1977; Reagan & Fedor-Thurman, 1987; Lijphart, 1997; Warren & Gastil, 2015). This would not be a problem if all social interests were equally represented and if the representation would be proportional to the population that will experience the potential advantages and disadvantages of the decision option under deliberation. Analysts of pluralist societies have demonstrated, however, that the relative power of interest groups do not match the relative importance of the issue for society but depend on factors such as exclusiveness of representation, availability of power and resources, and potential for social mobilisation (Downs, 1957; Olson, 1965, 1984; Breyer, 1993). Particular interests have usually a better chance to dominate the decision-making process and will use the opportunity of deliberation to influence the opinion-forming process and impose their specific interest on the agenda. Under these premises, deliberative bodies constitute mere mirror images of the current societal power asymmetries rather than a for mechanism supporting and enhancing people's agency (Waller, 1995). This argument refers particularly to deliberative procedures where stakeholder groups or randomly selected citizens are asked to feed their interest into the decision-making process without further public scrutiny (Schoenbrod, 1983; Lafont, 2015; Edwards, 1985).

This argumentation lies at the root of an ongoing debate on the role of representative versus deliberative (or direct) democracy (Radulova, 2007). There is hardly any voice in this debate that would recommend the abolition of representative government. All proposals to increase participation or to make sure that expert judgments and stakeholder values will get more weight in the decision-making process are embedded in a firm commitment towards the institutions of representative government as the final decision maker on environmental policies and risk regulation. Representatives of legitimate decision-making bodies need, however, to prepare decisions carefully. Any legitimate decision-maker is most likely interested in what consequences each decision option might produce and how these consequences are evaluated by those who have to live with them (Chess et al., 1998). It is therefore a constitutive element of representative democracy to ensure a continuous consulting process by which the decision makers become familiar with the state of the art in assessing the likely consequences (knowledge) as well as with the preferences of those that they are supposed to serve (values). Thus, representative democracy requires feedback from constituents. Given that observation, it seems justified and desirable to have participatory processes being organised for informing legitimate representatives bodies or agencies about likely consequences of their decisions and the informed preferences that their constituents share vis-à-vis more or less desirable outcomes of decision options. This is particularly necessary if highly controversial issues are at stake. This is often the case in the issues that are addressed by the EGD.

Third, is consensus more than the most trivial denominator of plural interest groups? The third line of arguments refer to the output of participatory processes. They are supposed to be trivial, overprotective, inefficient, time-consuming, or disproportional to the threat (Dahl, 1994; List, 2006; Cross, 1998; Sanders, 1997). Many critics claim that people are either unable or unwilling to accept trade-offs and to search for efficient or cost-effective solutions (Zeckhauser & Viscusi, 1996). Participatory processes in this view tend to favour solutions that would violate all rules of efficient or cost-effective spending of public money (Cupps 1977; N. Rosenbaum 1978; Viscusi 1998; Graham and Wiener 1995). Deliberation may even aggravate environmental damage or impacts on human health because it is often focused on one issue and does not take into account that minimising the impact of one problem usually increases the impact of related problems (Perri, 2000). By pursuing priorities that the public demands, regulators are likely to spend time and effort on those environmental threats that are relatively benign but highly visible in the public eye and neglect those threats that are publicly unknown but very potent in their consequences

(Coglianese, 1999 w.y.). In the long run more people will suffer from future damages than necessary since the funds for safety and risk reduction are spent inefficiently.

Another argument in this respect challenges the feasibility of deliberative procedures in participatory processes (Rossi, 1997). Advocates of this line of criticism do not necessarily argue that participation is bad for democracy, but there is a deep concern that too much participation may disrupt the normal operation of agencies or representative bodies (Aron, 1979; Cross, 1998). Deliberative participation consumes too many resources in terms of time and finances and might result in increased immobility and stalemate. The more people are asked to take part, the more time it will take to come to any conclusion (Coppock, 1985; Weidner, 1993). Effective government, so the argument goes, rests on a limited opportunity to participate. Too much deliberation immobilizes the political system and delays necessary decisions. In the long run it will hurt the environment more than it will improve environmental quality.

The last argument in this line of reasoning deals with the outcome of deliberative processes. The main criticism is that deliberative processes lead to trivial results (Coglianese, 1999). The more public input is allowed to enter the process the more window-dressing is going to occur. If all have to find a common agreement, the language will remain vague, and the outcomes will lack specificity and clear direction. This argument is directed, of course, against deliberative procedures that require consensus (deliberative and anthropological model).

The argumentation that participatory processes produce problematic or suboptimal outputs compared to either scientific or political decision-making bodies depends, on one hand, on the nature of the expectations that organizers or users associate with these processes and, on the other hand, on the empirical analysis of whether the results match the expectations. Turning to the expectations, it is again crucial to distinguish the various concepts and formats of participation.

Turning to the deliberative understanding of participation the expectation that participatory processes should produce consensus places more stress on the ability of the participants to learn from each other, weigh arguments, and act upon substantial rather than strategic gratifications (Beierle, 2000; Daniels & Walker, 1996). Many designers of these processes claim that given the right structure and facilitation process the expectation of a rational exchange of arguments and a balanced and efficient assignment of trade-offs can be met and has been met in many instances (Webler, 1995, 1999b; Renn, 2004; Renn et al., 1993). In the end it is an empirical question whether these claims can be validated. The little systematic evidence that is available shows that consensus seeking participation processes tend to be more time consuming and intense (US-EPA/SAB, 2001 others). They also fail more often than processes that measure public preferences or display the diversity of opinions. However, the quality of the output seems to be better in terms of meeting the expectations of both the participants and the users (Beierle & Cayford, 2002; Hagendijk & Irwin, 2006; National Research Council, 2008). Furthermore, evaluations of case studies on deliberative processes provide rather convincing evidence that the output of well-designed-processes range far beyond trivial or inefficient results (Rowe et al., 2004; Rauschmayer & Wittmer, 2006). A comparative review of three pan-European deliberative participation projects revealed that the outputs were well balanced between expected benefits and risks, substantial in its content and articulated in practical terms so they could be implemented into the European policy arena (Goldschmidt et al., 2009; Goldschmidt & Renn, 2006; OECD, 2020).

3.2.3 Merits and limits of deliberative processes

Surely, there are as many counterarguments to these points as there are arguments in their favour (see for a review: Warren, 2002; Newig & Fritsch, 2009; National Research Council, 2008; Renn, 2008; Renn & Schweizer, 2020; OECD, 2020). Advocates of participatory and deliberative schemes of governance have argued that many critical assessments of participation hold also true for elected bodies of governance and that the empirical record of increased participation has been much better than the critics assume (see, e.g., Dryzek 2010). Moreover, several studies document that citizens possess the capabilities of engaging in high-quality deliberations about important societal topics such as immigration and climate change (Fishkin et al., 2014).

The review of critical remarks demonstrated that deliberative participation is not a panacea for better quality outputs, including enhanced legitimacy, and higher capacity building. However, most critics fail to provide convincing arguments that alternatives such as litigation, purely parliamentary decision making or confinement to agency staff decision making would fare any better than using deliberative participatory procedures. Moreover, evidence shows that if users and participants are highly motivated even flaws in the design and structure of the process can be overcome (Joss, 1995; Moore, 1996; Beierle & Cayford, 2002). Participation tends to be more robust than critics had assumed.

Given these mixed results, several analysts have proposed two new directions in pursuing a deliberative, participatory approach. One is more theoretical in nature, the other one more empirical.

1. Rather than putting a prime focus on rational argument and reasoned consensus as procedural and outcomes ideals, one should consider a broader batch of communication forms (including stories and narratives, for instance) as well as outcomes such as meta-consensus and reasonable compromise as equally desirable procedural components and outcomes of a participatory and deliberative process (Pateman, 2012; Chilvers et al., 2018; Weymouth & Hartz-Karp, 2015). This widening of concepts breaks both social and political participation forms away from their previously known forms in a significant way and provides new routes for creative formats of participatory policymaking (Dalton, 2008; Deth & Maloney, 2014; Zukin et al., 2006).
2. The second major change is a shift towards a “functional” evidence-based perspective. Scholars who represent this perspective claim that more participation and deliberation is not good by definition or some moral standard, but that “good” deliberation depends on the contextual conditions. Deliberative formats and tools should be deigned to reflect these conditions and serve the needs of the affected population and avoid ritual participation where it is least needed and even dysfunctional (Newig & Fritsch, 2009).

3.2.4 Analysis of the status quo and key take-aways from empirical studies of experiences at the EU and national levels

There is a considerable range of experiences with participatory and deliberative democracy in the EU and outside its bounds using different methods, tools, and formats at several scales and governance levels. The conceptual taxonomy of the salient features of six concepts of stakeholder and public involvement is depicted in Table 5. This is followed by

Table 2 and 3 that organizes the formats and tools described in the surveyed literature. With those frameworks in mind and drawing on section 2.3 and 2.4 above, in which a sampling of prominent experiences is described and reflected upon, here we summarize the current state of play of these efforts to engage populations in guiding their futures towards sustainable lifestyles and call out the key takeaways for the EU in light of the EGD priority and urgency.

Not surprisingly, no single solution or panacea emerges from the literature reviewed. Rather, there are many different and sometimes conflicting conditions that should be considered in evaluating the fit to purpose of each method and tools for participatory processes. The conditions include the following:

1. Scale: number of participants and duration of event(s),
    - There have been several very large scale participatory deliberative events held in person as multiple weekend sessions, such as the Irish "We the Citizens" and the French "Citizens' Convention for Climate". Much larger numbers have participated in online EU consultations, but these are significantly constrained by inequity of access to the internet and limitations of language facility. Citizen assemblies that are populated by random selection offer a degree of equality of representation, but only if attention is given to addressing the differences in access, awareness, and voice in the assembly by the randomly selected participants.
    - Numbers and demographics of those who voluntarily participate whether in physical venues or online processes are constrained by questions of the value of participation because of perceived politicians' lack of interest or their use of input from the events, i.e., does deliberative participation have real impact on policy development? This calls for greater efforts toward transparency in making explicit the grounds for the adoption or rejection of the output from deliberation.
    - Peer Parliaments conducted in many EU member states varied in terms of specific climate change topic chosen and socio-demographic composition. The scope of participation in 461 small group events in 26 nations was substantial, but most important was the positive perceptions of participants and the informative output submitted to the European Commission.
    - While the number of participants can be a valuable criterion to measure the effectiveness of certain deliberative or participatory processes, but a large number of participants does not always comply with the degree of participatory equality (Stadelmann-Steffen & Dermont, 2016).

2. Priority placed on legitimation, inclusion, and closure and how they are achieved,
    - Selection criteria and process of recruitment ranges from random selection based on a mandate for equal representation in citizen assemblies to intentionally segmented recruitment to increase representatives of typically underrepresented populations. In several instances of open recruitment of participants, a demographic bias toward pro-EU and more highly education citizens was noted and ascribed to self-selection of participants. It is also important to go beyond inclusive selection of participants to ensure that the process is functionally inclusive. In other words, the process can be considered inclusive if it functions in such a way that all voices are heard, for example, by attentive, skilled moderation that encourages all voices to be

heard fully in dialogue. Also, making processes accessible for people with a physical disability like deaf or blind people requires adaptations to the way processes are designed.

3. Governance level and impact on policy making,
    - Citizens' assemblies have been called for and conducted by governments at the regional, national, and local levels. But even in cases initiated by a governmental body, the output of participatory deliberation has not necessarily resulted in specific positive impact on policies. The reasons for success or failure of deliberation to have a discernible impact on policy making is a domain in which more research is called for.

4. Scope of content and its complexity,
    - In many cases, the content was chosen by the organizers of the events, but there were notable cases, such as the Irish citizen assembly, in which citizens in a series of local meetings discussed and decided on the topics for deliberation in the agenda of the national assembly. The considerable effort and resources need to initiate and conduct participatory deliberation is directed toward addressing complex issues confronting the society. Therefore, the complexity of the topics necessitates ensuring a minimum level of knowledge that allows meaningful deliberation on the topic.
    - Under the heading of participatory technology assessment, citizen participatory deliberation fora have been conducted by Arizona State University (ASU) over the past decade in the Expert and Citizen Assessment of Science and Technology (ECAST) network. Overall, these have involved thousands of people in several cities across the US and have ranged from tens to several hundred participants in each event, many of which were repeated in multiple locations. An important aspect has been the initiative and support of US federal agencies including NASA (National Aeronautics and Space Administration), NOAA (National Oceanic and Atmospheric Administration), and NIH (National Institutes of Health) in soliciting public input on complex, timely issues, e.g., gene editing, asteroid mining, and climate change in desert regions. The collaboration between university and agency experts and science museum education experts in creating accessible subject matter materials for participants prior to or at the start of the meeting(s) was critical in facilitating informed deliberation among the participants. (Dryzek et al., 2019; Kaplan et al., 2021; Weller et al., 2021).

5. Form and adequacy of preparation of participants for the selected topic(s),
    - In many cases experts have been invited to provide that background knowledge in the event, including experts not only in the topic per se, but also experts in informal learning (Kaplan et al., 2021). In other instances, briefing materials are prepared and distributed beforehand or at the start to participants. Preparing materials and expert input can benefit from prior understanding of and sensitivity to the knowledge and perceptions that different participants might bring to the event.
    - Studies following expert presentations for citizen deliberation in Taiwan indicated that "Ordinary citizens can identify biases, normative positions, and personal preferences expressed in talks by experts. They can be critical

toward expert reasoning. More importantly, they are able and willing to have their voices heard in the policy process through public and informed deliberations. The consensus conference has the potential to make scientific policy dialogues between experts and laypersons more egalitarian and more democratic. In the process, experts are better to use language understandable to laypersons and to base their talks on solid arguments, with perceived persuasiveness, and with relevance to everyday experiences of laypersons (Chen and Deng, 2007, p. 92)

6. Type and quality of moderation,
    - Moderation varied in the cases surveyed from highly trained and experienced moderators/facilitators to local community volunteers with no prior training. Again, the complexity of the issues and the potential for contestation argue for skilled moderation to keep the dialogue on track, civil in tone, and able to reach an agreed upon form of closure.

7. Form of output and to whom it is directed.
    - A significant issue identified in the cases was closure between an output from the participatory event and the uptake of the recommendations by policy makers. It is not only a matter of whether the recommendation was reviewed by the politicians, but also whether there was transparency in how it was reviewed and why it was implemented or not. Failure to allow for that kind of transparent feedback can lead to disenchantment and disengagement of participating citizens. Even if the output is considered, does citizen deliberation yield valuable information for policy makers? This is answered for specific instances in the affirmative in that “more decentralised, deliberative formats lead to particularly valuable and more informative outputs than public opinion surveys (European Commission, 2022, p. 30).”

3.3 Conceptual assessment for evaluating methods and tools drawing on results from T1.1 and this report

One of the essential goals of the REAL DEAL project is to assess different deliberative participation designs and processes. Deliverable 1.1 provided a draft list of criteria to assess whether certain practices of citizens’ participation and deliberation are meaningful. The literature review conducted for this report, i.e., Deliverable 1.2, also yielded results on evaluation criteria. This subchapter is an effort to reconcile those different sets of criteria as a preliminary guidance for decision-makers.

The criteria are intended to define ethical and normative boundaries in implementing the concepts of citizen deliberation and participation. The latter concepts are complementary to each other and will become relevant in applying the methods and tools in Work Package 3 of the REAL DEAL Project. We propose to present the criteria in three steps: first, we will present the meta-criteria developed in Task 1.1. that are based on an analysis of different ecologically normative approaches regarding citizen deliberation and participation. They provide ground for further elaboration in the course of the project. Since citizens are to be included in the environmental policy debates, it is important to identify and gather differentiated, opposing, and complimentary opinions on citizen deliberation and participation. These meta-criteria are sets of values to be considered when engaging in deliberative/participatory processes in the context of the EGD.

The second set of criteria we will present in this section are qualitative (*outcome and process*) criteria of good practice deliberation and participation processes. They are based on the evaluation and validation of tools, formats and processes of events that have already taken place in different countries in Europe and abroad. The *outcome* criteria assess the value of the outcomes of citizen engagement and deliberation and the *process* criteria indicate the value of the process of citizen engagement and of citizen deliberation.

In a third step we will draw conclusions regarding the assessment criteria of *inclusion* and *closure* and how they interact with each other. In order to evaluate different deliberative participation designs, a distinction should be made between who is participating, why they are participating (*inclusion*), how the deliberation process is organised, and how outcomes of deliberation are reached (*closure*).

All sets of criteria provide a guidance for the selection of methods, formats and tools in a complementary way. They will help us to classify and characterize each option of deliberation/participation. They are also relatively easy to communicate and may help decision-makers to evaluate the suitability of each method, format, or tool for the problem that they want to address.

3.3.1 Ground principles for meaningful citizen deliberation and participation in the EGD

To realise the initiatives and ambitions of the EGD it is important to consider the diversity of values and viewpoints of people, and how participation and deliberation are valued or devalued in different philosophical approaches. Overall, deliverable 1.1. established five groups of high-level criteria with 16 sub-criteria for meaningful citizen participation and deliberation, which should provide the basis of citizen involvement in the EGD.

a. Power imbalances in participatory processes create substantial risks to legitimacy, creativity, and meaningful outcomes and therefore should be acknowledged and addressed.
    - Ensuring inclusion and explicit empowerment opportunities for disempowered members of society should be given high priority in designing and conducting participatory deliberations
    - Legislators and policymakers need to consider inequalities (such as racialised group, gender, and class) in the design of deliberative and participative tools.
    - Civil society in the Global North must reflect on its relationship with civil society in the Global South.
    - Alternative spaces should be created for structurally excluded groups.

b. Promoting and Ensuring Inclusiveness:
    - While policymakers need to find a compromise about what citizens deem acceptable, they also need to make difficult decisions to achieve environmental goals.
    - To the degree possible under given circumstances, provisions should be made and offered to citizens with physical or cognitive limitations or handicaps that would allow them to participate meaningfully in the deliberative processes.
    - It is of fundamental importance that the values of citizens are explicitly recognised and considered.

- The participation of local and indigenous groups – especially women - should be promoted.

c. Work with and Protect Nature
   - We should not view ourselves as the only thing of moral considerability. As humanity is an integral and inextricable part of the entire complex social-ecological-geophysical system, the needs of other species should be recognised within environmental policy.
   - Future human generations, non-human organisms, and the environment, cannot voice their concerns politically, yet they profoundly affect present and future human society, so human citizens need to represent them in decision making regarding our collective futures.

d. Collaborating with Bottom-up Activism and Cultivating Environmental Citizenship
   - Policymakers should fairly and transparently incorporate consideration of the views of environmentalists in deliberative processes.
   - Institutions should consult with grassroots groups and promote their full participation in decisions
   - Decision-makers need to create the conditions to foster environmental citizenship, by leading by examples and using the considerations noted above.

e. Reflections on the transition towards a Green Economy
   - Public support for the implementation of Green Economy should be considered. Civic and cultural mobilisation also drive transitions.
   - The role of the individual citizen needs to be extended beyond that of a consumer of the environment.
   - A conceptualisation of wellbeing that moves away from the current focus on growth should be considered.

These 16 meta criteria provide a ground to further extrapolate and refine recommendations through the course of the project.

3.3.2 Qualitative criteria of engagement and deliberation processes

These are evaluative criteria that help assess the success of citizen and stakeholder engagement for the EGD. They are based on good practice cases of processes that have already taken place.

One can distinguish two types of criteria: the *outcome* criteria that determine the value of the outcomes of engagement and the *process* criteria which determine the value of the process of engagement. The two cannot be separated strictly: *outcome* and *process* are also closely connected.

3.3.2.1 Outcome criteria

Deliberative and participatory processes should have concrete outcomes.

Scholars claim that it is important to specify in advance what the goals of the endeavour are and who should be involved in specifying the goals and setting the criteria that determine whether and to what extent the goals have been reached.

Any attempt to evaluate whether goals are reached will have to be specified in the context of a concrete engagement activity. The criteria are organised according to the effects of involvement on policy making, effects on participants, and impacts on the environment.

- Effects on policymaking
  a) Provide legitimacy through direct involvement
  b) Increase civil society's reach and impact towards policymaking
  c) Increase public support for policies
- Effects on participants
  a) Increase mutual understanding for divergent points of view
  b) Support social discourse and increase agreement
  c) Provide information and increase knowledge
  d) Encourage participants to address structural barriers and systemic inequalities
- Effects on the environment
  a) Support the sustainability transition

Deliberative and participatory processes should contribute towards democratic policymaking. This is the goal that figures in the background of any deliberative activity, as any use of power is democratically legitimate when it is constituted through reasoned debate, free from strategic manipulation and deception. Complementary to representative democracy, it enables a continuous legitimation of governments independent of election cycles.

Given this general democratic goal, it is perhaps unsurprising that deliberative and participatory processes should have effects on political or technical decision making. These processes can be considered successful if their results have a direct impact on policy making or on decisions of the government (Hofmann et al., 2020; Font et al., 2017; Torney, 2021; Finardi et al., 2012; Boswell et al., 2013; Glucker et al., 2013; Deligiaouri, 2018). It is however hard to quantify a causal effect of public and stakeholder participation on policy, as outcomes may not lead to specific policy decisions but may inspire and educate policy makers and change the way in which they approach their further policy making on a particular topic (Hofmann et al., 2020).

Deliberative and participatory processes should also lead to more public support for policy as well as the acceptance of policy. They may reveal what type of policy is supported by the public. But organising public participation with the goal to organise support for policy consensus may reduce the variety of outcomes that deliberation processes may have.

To assess the success of deliberative and participatory processes one can look at the relation to policy and government, but one can also look at the effects on participants. An indicator of success is that these processes should lead to agreement (or consensus) between participants. However, it might not be realistic to realise consensus about highly complex issues such as climate change, where deep conflicting interests and values as well as market forces are at stake.

It may even not be desirable to strive for consensus. This suggests that participation is also successful when it contributes to realising more understanding between citizens and/or stakeholders with different points of view. Resolving conflict is therefore not always a desirable goal to strive (Horton et al., 2019). Trying too hard to reach consensus in a deliberation process may lead to the unfortunate effect that concerns of those dissenting are marginalised or even excluded from the decision-making process, which leads to anger and aggravates the conflict. It is better to accept conflict as part of democracy.

Deliberative and participatory processes should lead to informed and deliberative citizenry (Hofmann et al., 2020; Ingham & Levin, 2018; Torney, 2021; Jacquet, 2017; Boswell et al.,

2013; Banjade & Ojha, 2005; Deligiaouri & Suiter, 2021). Understanding of the subject matter should ideally have increased during the participation process, which can come about through citizens' and/or stakeholders' engagement with the subject matter, but also through the information provided in advance, and through learning from the other participants and the process of collaborative knowledge construction. For instance, citizens who take part in participative processes have better skills in separating headlines based on factual news from fake news (Bago et al., 2020).

Deliberative and participatory processes should encourage participants to address structural barriers and systemic inequalities. Knowing more about a subject and being able to deliberate about it with others is considered empowering for participants, as is the opportunity to participate in government at all. For citizens and social groups that are marginalised in society, and whose voices are not often heard in the political discourse, empowerment is considered crucial (Glucker et al., 2013).

Deliberative and participatory processes should have effects on sustainability outcomes (Fraser et al., 2006; Rozema & Bond, 2015; Carr & Halvorsen, 2001; Torney, 2021). Sustainability indicators are needed point out whether activities contribute to sustainable development and environmental management goals in participants' local communities.

3.3.2.2 Process criteria

Next to outcome criteria, process criteria are also important. They indicate aspects which should be taken into consideration for deliberative and participatory processes. Many scholars agree about particular goals of design features, such as fairness, access, and competence. However, the criteria of success may differ significantly depending on the goals a particular process needs to serve, which may also lead to different criteria to assess the quality of the process.

Deliberative and participatory processes should:

1. adhere to fundamental principles of democracy, such as equality, equity, fairness, transparency
2. include participants who are representative of the population affected by the topic under consideration, either because they are directly affected as individuals or because they serve as proxy representative (e.g. stakeholder representatives or randomly selected citizens)
3. be inclusive so that all participants have the opportunity to equally contribute to the process
4. contribute to clearly defined goals and the decision process should be well structured
5. feed into policymaking
6. take into account social context
7. be cost-effective.

The first criterion combines a whole set of criteria, as it demands deliberative and participatory processes to respect normative principles such as equality, equity, fairness, openness, transparency, which are key to democracy. They are included in the Core Principles for Public Engagement (see Hofmann et al., 2020, p.4) and set the standards for the participation process as a whole, as well as each process step and for the evaluation of every tool used in a step. These principles are key to deliberative democracy.

Nevertheless, democratic values may come under pressure when environmental issues are at stake in participatory processes, as conflicts between human users may intensify in case of scarce natural resources and incompatibility among different values and goals.

Another criterion that needs to be respected in deliberative and participatory processes is the representativeness of the choice of individuals who are engaged in a participation process (the participants) and of the population affected by the topic under consideration (Banjade & Ojha, 2005; Carr & Halvorsen, 2001; Costello, 2011; Deligiaouri & Suiter, 2021; Finardi et al., 2012; Hofmann et al., 2020; Jacquet, 2017; Torney, 2021). Representativeness is considered 'crucial to ensure the democratic legitimacy of the whole process' (Hofmann et al., 2020, p. 4), but it is also a challenge in any participation process.

The third criterion demands that deliberative and participatory processes should be inclusive: all participants should have the opportunity and ability to contribute on equal terms to the process. Although in theory, each participant may be equally able to voice their opinion, in practice, certain groups of participants are more likely to do so than others. In this regard, gender, age and education are important factors to consider (Hofmann et al., 2020). Social mechanisms functioning to marginalise some groups, or powers that some people may hold over others within or outside of the participation processes are important to consider.

The process should also be transparent. This means that at any time during the process, it must be obvious to everyone where the process is headed, what the next step is and why it is being taken. Hence, the information necessary to understand the process must be up to date, easily obtainable and comprehensible to anyone (Finardi et al., 2012, p. 431; Hofmann et al., 2020, p. 5). It is very important that resources are available and accessible that enable participants to form an opinion. According to Carr & Halvorsen (2001), participants also need to reflect and evaluate the values and beliefs that underlie their viewpoints, which allows finding out which values participants have in common and articulating community values (Carr & Halvorsen, 2001).

The fourth criterion is that the goal of the process should be clearly defined in advance and the decision process should be structured (Finardi et al., 2012; Hofmann et al., 2020; Krause et al., 2013; Stadelmann-Steffen & Dermont, 2016; Webler & Tuler, 2006). Participants should have a mandate to shape the agenda of the deliberation and the deliberative process (Costello, 2011; Finardi et al., 2012; Granvik et al., 2008).

The fifth criterion requires that deliberative and participatory processes are coupled to policy from the beginning onward (Cadman & Maraseni, 2013; Costello, 2011; Devaney et al., 2020; Font et al., 2017; Torney, 2021). It is commonly acknowledged that early coupling of the process to questions of policy makers helps the successful integration of its recommendations into government decisions.

The sixth criterion requests deliberative and participatory processes to take into account context and accept that there is contingency (Carr & Halvorsen, 2001; Costello, 2011; Fraser et al., 2006; Granvik et al., 2008, p. 108; Olausson, 2020; Torney, 2021). It is important to consider contextual characteristics, especially in local community-based endeavours.

The last criterion is that the participation procedure should be cost-effective. The community perspective helps to assure that projects continue over time and helps to build community capacity to address future problems (Fraser et al., 2006).

3.3.3 Conclusion: Inclusion and Closure as crucial goals in deliberative and participatory processes

Inclusion and *Closure* are essential components shaping deliberative and participatory processes.

Inclusion refers to the composition of the group of participants and stakeholders, the selection of themes and issues as well as the time frame of the engagement activity or process (Renn & Schweizer, 2009). *Closure* refers to the applied methods that help to reach a decision or conclusion at the end of the deliberative process.

There is a first specific set of requirements for a participatory process to be inclusive (Webler, 1999b; Renn, 2008, p. 274). The process should:

- involve representatives of all relevant actor groups regardless of their formal power or mandate in the political arenas
- empower all actors structurally to participate actively and constructively in the discourse
- allow co-design of the framing of the issue in a dialogue with these different groups
- generate a common understanding about the framing of the problem, potential solutions and their likely consequences (based on the expertise of all participants)
- provide a forum for deliberation that provides equal and fair opportunities for all parties to voice their opinion and to express their preferences
- establish a connection between the participatory bodies of decision-making and the political implementation level.

If these conditions are met, participants start to place trust in each other and have confidence in the process of deliberation (Kasperson, 1986; Beierle & Cayford, 2002, p. 30f.; Viklund, 2003) and by extension, more broadly in democratic governance.

Reaching consensus and building-up trust on highly complex and transgressional subjects such as the topics of the EGD (for example, global climate change) is difficult. Being inclusive and open to social groups is therefore essential.

The second goal is *closure*. All participatory processes should set up rules of how the deliberation is conducted and how a final product is reached, i.e., reaching closure on a set of options that are selected for further consideration, while others are rejected (Renn & Schweizer, 2009). *Closure* represents the product of deliberation (i.e., the agreement that the participants reached). The more actors, viewpoints, interests, and values are included and, thus, represented in an arena, the more difficult it is to reach a consensus/agreement. However, even with very heterogenous compositions of participatory bodies, mutually respected agreements can sometimes be reached.

For this purpose, a second set of requirements is needed to evaluate the process by which closure of debates is brought forth (Renn & Schweizer, 2009; Webler, 1995):

- Have all arguments been properly treated?
- Has all the relevant evidence been collected and processed?
- Was systematic, experiential, and practical knowledge and expertise adequately included and processed?
- Were all interests and values considered, and was there a major effort to come up with fair and balanced solutions?
- Were all normative judgements made explicit and thoroughly explained? Were normative statements derived from accepted ethical principles or legally prescribed norms?
- Was every effort made to preserve as much individual freedom as possible whilst acknowledging that some regulation is necessary to protect the environment?

Those sets of questions act as a guiding principle for the selection of methods, formats, and tools. They help us to classify and characterize each option and to conduct a comparative review. It is also relatively easy to communicate and helps decision-makers to evaluate the suitability of each method, format, or tool for the specific issue that they want to address.

4 Conclusions: Conceptual requirements for a protocol leading to an effective, efficient, competent, fair, and ethical implementation of participatory and deliberative approaches

Our conclusions are framed by the following guiding questions:

A) Learning from experiences on the European and national levels (drawing on case studies)

B) Methodological issues (e.g., stakeholders vs public participation)

C) Aligning different vertical and horizontal governance levels

D) Representativeness, Inclusiveness, Ownership

E) Consensus vs dealing with conflicts

A) Learning from experiences on the European and national levels

An important question for the REAL DEAL project is how local initiatives can be scaled up to pan-European citizen participation for the Green Deal. Based on our literature study we conclude that until now there have been no pan-European initiatives for citizen participation on the EGD. But if we want to do this in the REAL DEAL project, it is essential to learn from successful examples at smaller scales and lift that up to the pan-European level.

This report describes several case studies of deliberative or participatory processes. The citizens' assembly 'We the Citizens' in Ireland and the Citizens' Convention for Climate in France are two of the most well-described and well-documented citizens' assemblies that have been organised so far (Devaney et al., 2020; Farrell et al., 2020; Torney, 2021; Eymard, 2020; Mellier & Wilson, 2020; Fabre et al., 2021). These assemblies both managed to get a representative group of citizens of their respective countries to participate and reach consensus about sensitive Green Deal topics. Scholars that evaluated these assemblies argued that the citizens that participated came up with more ambitious policy recommendations compared to recommendations by politicians. Other examples that were described before – such as an online participation forum organised in Germany (Westholm, 2003) and online crowdsourcing in Finland (Aitamurto & Landemore, 2016; Participedia, 2022a) - show that participation or deliberation does not necessarily have to take place in a physical location. As described in section 2.4, scholars that evaluated these processes valued forms of online participation because they reached many people. However, because of a lack of exact numbers, it is hard to compare the level of inclusiveness of these platforms to other fora.

This report also shows that a targeted approach to selecting participants for deliberative processes, in contrast to random selection, has the effect of bolstering the inclusion of groups who traditionally lack representation in local decision-making. The Catalonia mobility

pacts are successful examples of this practice (Evans & Reid, 2013). The tools of public participation used involved the creation of advisory councils consisting of vulnerable citizens such as handicapped people, pedestrians, or cyclists. The result was a significant influence on the development of sustainable and disability-friendly infrastructures in Catalonia, as well as feminist urban design. Very often, the planning of urban spaces prioritises men's routines and side lines women's needs and habits. By using feminist methods of consultation through collective and bottom-up participatory processes centred on women's everyday lives, the city of Barcelona, for example, is drawing on community input to inform redesign and redevelopment agendas. With gender at its centre, the result was improved accessibility, safety, and affordability for everyone (Kern, 2020).

Some formats of participation have led to the unequal representation of different social groups. Citizens' Dialogues lacked representativeness in practice, as it attracted participants who had an interest in the topic, disproportionately pro-EU and well educated, rather than a diverse sample of the population. The European Citizens' Initiatives, which have the same lack of representativeness by initial design, nevertheless reached a more diverse group of individuals as a result of outreach activities by the organisers (Abels et al., 2022). The format of the Multilingual Digital Platform was one where every EU citizen could participate in any of the 24 official EU languages, by putting forward their ideas, endorsing other people's ideas and commenting on them. The personal information participants provided indicated an over-representation of male-identifying participants (49.1%) compared to an under-representation of female-identifying participants (16.1%) (Kantar Public, 2022), despite the fact that some events were organised with the aim of including the contribution of specific categories of participants, such as women, young people, or people living with disabilities.

While there are many more examples like these that are often brought forward as successes, while also revealing aspects that can be improved, it is hard to draw general conclusions from them about what kind of framework, method, or tool works best at a pan-European level. As has been argued in the discussion of this report, there is no single format to conduct citizen participation that is suitable for every type of issue, nor is any method suitable for any context. For example, discussing a more complex issue might require trained moderators to guide citizen's dialogues, whereas that might not be necessary for other topics about which citizens are asked to provide input. The empirical examples of citizen participation reviewed in paragraph 3.4 and the criteria reviewed in paragraph 3.5 emphasize several process criteria that should be taken into consideration in any citizen participation, including that: 1) the participants should form an equal representation of the population and 2) they should respect normative principles, 3) the process should be inclusive, 4) should contribute to meaningful deliberation, 5) have a clearly defined goal, 6) should be coupled to policy, 7) be cost-effective, and 8) that the context should be taken into account. But process criteria such as these leave room for a lot of variation in chosen formats, methods, and tools.

When considering pan-European initiatives, we conclude from the literature that it is important to take the following aspects into account:

First of all, as formulated in one of the criteria above, all processes described need to be seen in their own social, political, and cultural context. As Dryzek and Tucker illustrate in their comparative study of the processes and results of the employment of minipublics that took place in Denmark, France and the US, the potential of these minipublics differ considerably when conducted in different political systems. In states in which the political system, in general, is more open towards civil society organisations and movements, minipublics are more widely accepted and influential compared to states in which there is little political involvement on the part of civil society. Besides the political context, the social and cultural context in which a deliberative or participative process is organised influences what kind of format, method, tool, or communication style would be most useful. When organising transnational processes, it is therefore important to consider the variety of

contexts in which participants live and the effect this may have on the process of the deliberation and eventually on the results. This variety of contexts needs to be considered in the design of the deliberation process.

Second, what is needed in a deliberative or participative process also depends on the desired outcomes, or the intended goals of the intervention. Outcome criteria that we collected on the basis of our review are quite general and taken together they suggest that deliberative or participative interventions should a) help to legitimize the government that genuinely functions on a democratic basis, b) have an effect on political or technical decision making, (c) lead to public support for decision making, d) lead to agreement (or consensus) between citizens about policy decisions, (e) lead to more understanding between people with different opinions, (f) lead to better informed and more deliberative citizenry, (g) empower citizens to engage effectively and (h) have an effect on sustainability outcomes. About each of these desired outcomes, however, there is a lot of debate.

B) Methodological challenges

Our review has shown that a great variety of formats, methods and tools are available to reach out and engage both citizens and stakeholders, through participatory and deliberative processes, in the making of environmental policies. One of the main challenges is to involve, all over the process, participants with a great diversity of backgrounds, with a specific focus on hard-to-reach fringe of the population. Beyond the traditional method of stratified random sampling, which is helpful – but not enough - for selecting participants with a diversity of backgrounds, there is still a need for further experimentations and solutions. It is therefore necessary to rely on further methods or to use dedicated formats in order to secure the participation of these groups throughout the process. For instance, targeting and scouting some categories of participants by contacting, informing and motivating them directly or via civil society associations, can be useful to enhance the participation of these groups. The use of specific “smaller” formats, such as a focus group for instance, where fewer participants are present, can facilitate the participation of some groups and the interaction among the participants. Moderators also need to support the involvement of hard-to-reach participants in order to make them feel at ease and to reduce potential asymmetries with other participants during the process. Finally, the use of digital tools has proven to be useful to involve some fringe of the population (above all younger generations), while a combination of both, online and offline formats, would ideally enable a more inclusive process.

C) Aligning different vertical and horizontal governance levels

The present report also underlines the challenge of participation and deliberation in the context of multi-level governance (MLG).

Climate change poses a MLG challenge. It is multilevel because it connects policy action from the most local/community level to the international level. It is a governance challenge because it does not only involve the actions of government actors but also depends on the behaviour of multiple private actors from individuals and local communities to corporations. For local actors, this means having decision-making power over relevant aspects of climate policy, but it also means that there needs to be a national, regional, or international framework to support local action (Jensen, Nielsen, & Russel, 2020). Therefore, actors across all levels of governance must possess appropriate governance resources, capacity, and competencies. Overall, the MLG nature of climate politics challenges different levels of policy making to bridge jurisdictional and politico-cultural boundaries across these levels (Jensen, Nielsen, & Russel, 2020). Hence, citizen engagement must be integrated into the structure of MLG. In addition to vertical and horizontal cooperation, MLG can be further enhanced by also involving non-governmental actors, including citizens’ groups, for the

added value of their fresh perspective, especially on topics that directly affect them. The most advanced option to do that is to co-develop, meaning to invite stakeholders to jointly develop a project, starting with the collective analysis of an issue.

As we show in this report, there are different forms of co-development with citizens, such as citizen assemblies, Delphi studies, round tables, analytic-deliberative discourse, study groups, expert groups, stakeholder salon and/or voting. Another interesting option is the "nexus" approach. It applies an assessment framework to take into account the complex interactions and connections among several sectors (e.g., energy, water, food, land, climate, environment and ecosystems) at different levels of governance related to a particular shared natural resource (De Strasser et al., 2016). Applying the nexus approach involves assessment of the links and dynamics of the different sectors to harmonise their outlook and management as well as taking account of potential conflicts and synergies across sectors and boundaries.

D) Representativeness, Inclusiveness, Ownership

Drawing upon our analysis of the literature on citizen engagement participation and deliberative processes, we conclude that any process of citizen engagement should respect normative principles, such as equality, equity, fairness, transparency, that underlie democracy.

These principles are included in the Core Principles for Public Engagement and set the standards for the participation process as a whole, as well as each process step and for the evaluation of every tool used in a step. They are key to deliberative democracy. Nevertheless, democratic values may come under pressure when environmental issues are at stake in participatory processes, as conflicts between participants may intensify in case of scarce natural resources and incompatibility among different values and goals.
This is why the representativeness in the choice of individuals who are engaged in a participation process and of the population affected by the topic under consideration is very important. Representativeness is considered 'crucial to ensure the democratic legitimacy of the whole process' (Hofmann et al., 2020, p. 4), although it is also a challenge in any participation process.

Citizen participation should also be inclusive: everyone should have the opportunity and ability to contribute on equal terms to the process. Although in theory, each participant may be equally able to voice their opinion, in practice, certain groups of participants are more likely to do so than others. In this regard, gender, age, and education are important factors to consider. It is important to recognize and address social mechanisms functioning to marginalise some groups, or powers that some people may hold over others within or outside of the participation processes.

A last (but not least) significant issue to be considered in any citizen engagement process is closure between an output from the participatory event and the uptake of the recommendations by policy makers. It is not only a matter of whether the recommendation was reviewed by the politicians, but also whether there was transparency in how it was reviewed and why it was implemented or not. Failure to allow for that kind of transparent feedback can lead to disenchantment and disengagement of participating citizens. Besides which, even if the output is considered, citizen deliberation also yields valuable information for policy makers. It is often acknowledged that more decentralised, deliberative formats lead to particularly valuable and more informative outputs than public opinion surveys.

E) Consensus versus dealing with conflicts

One of the most interesting debates for the REAL DEAL concerns the question whether it is reasonable and desirable to strive for consensus in citizen deliberation. There are deep disagreements between citizens across Europe about climate change and whether humans have to change their way of life to prevent it. Given that natural resources are scarce, and the population is growing, disagreements are likely to grow and deepen, as interests of citizens may conflict. These disagreements may pose a serious threat to European democracies if they are not appropriately dealt with. In this situation, it may also be valuable to get citizens involved without demanding or forcing agreement between them; it can help to keep everyone together, to make sure that their experiences are heard and seek agreements where possible, while agreeing to disagree at other times. This is also a conclusion that we draw from our review.

The challenge is not only for implementing effective citizen deliberation, but there is also a clear need for integrating stakeholder and citizen participation. The few case studies also demonstrate that this is possible without whitewashing the different approaches, perspectives, and rationales of each constituent. However, empirical studies of this cooperation are extremely rare and there are no evidence-based conclusions that one can draw from the sparse material that has been collected so far. Thus, we conclude that this cooperation is one of the target investigations for the empirical test cases that will be conducted in WP3.

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6 Annexes

6.1 Annex 1: Fact sheets on formats

6.1.1 Factsheet Planning Cells

Text	Text
Name of the Format	Planning Cells
Level of participation	Inform – consult – **collaborate** - empower
Short description of the format	Groups of randomly selected citizens are asked to co-develop a set of policy recommendations on a specific issue. The objective is to provide citizens with the opportunity for learning about the technical and political facets of the topic, and for enabling them to deliberate and finally evaluate these options and their likely consequences according to their own experiences, values and preferences (Renn and Schweizer, 2020, P. 71). The recommendations developed by the citizens are expected to help decision-makers to take a decision. Through random selection, this participatory instrument enables a great diversity of citizens to be included in the process.
Short description of the process	- Random selection: Citizens are randomly selected and invited to the event. - Information phase: Experts first provide citizens with input for the discussion to convey information and highlight different perspectives and points of view. - Deliberation phase: Citizens can deliberate in unmoderated small groups. In this phase, citizens endorse the role of experts and debate, based on the information they become from the previous phase. Proposals from the different small groups are then discussed and evaluated in plenary. - Decisions and recommendations: Several policy options drafted by the citizens are weighted and highlighted in a citizen report. Submission: Once finalised, the report with the recommendations of the citizens is submitted to the public authorities.
Target groups	General public
Selection of the participants	Random selection
Group size	Small to medium size groups
Inclusion of further stakeholders	a range of experts and stakeholders recruited to present information and evidence to the jury for their consideration.
Timing/ Duration	Typically lasting 3 days
Expected results/Closure	Consensus or voting No binding decisions Report is made available to public
Options for blended participation (formats, methods, tools)	Such participation processes can also be carried out online relying on various digital tools (see below) or combined digital and face-to-face methods, such as online presentations of experts or priorisation of recommendations, with on-site deliberation in small groups.

	Various tools can be used to implement online elements within this participation process, such as communication platforms (Teams, Zoom, Webex), documentation tools (Mural board or Miro board), or various online tools to prioritize the ideas/recommendations (Mentimeter, for instance)
References and resources	• Involve UK, "Citizens' Jury": https://www.involve.org.uk/resources/methods/citizens-jury • https://jefferson-center.org/citizens-jury/ • OECD, 2020, Innovative Citizen Participation and New Democratic Institutions: Catching the Deliberative Wave • EPA "Public Participation Guide: Citizen Juries": https://www.epa.gov/international-cooperation/public-participation-guide-citizen-juries • https://www.involve.org.uk/resources/methods/citizens-panel • https://www.cndp.us/about-us/how-we-work/ Renn, Ortwin, and Pia-Johanna Schweizer. "Inclusive governance for energy policy making: Conceptual foundations, applications, and lessons learned." *The role of public participation in energy transitions*. Academic Press, 2020. 39-79.

6.1.2 Factsheet Focus Group

Text	Text
Name of the Format	Focus group
Level of participation	Inform – **Consult** – collaborate - empower
Short description of the format	Semi-structured discussion, taking the form of a workshop, with the goal of getting feedbacks from a small group of participants on a specific topic of interest. In contrast to a group interview, focus groups are focusing on the interaction dynamics between participants, less on the relations between participants and organisers/researchers (Parker and Tritter, 2006). Focus groups go one step further by exposing arguments to counterarguments in a small group discussion setting. (…) Focus groups provide more than data about people's positions and concerns; they also measure the strength and social resonance of each argument vis-a-vis counterarguments. (…) [these] instruments are advisable as preliminary steps in understanding the context and the expectations." (Renn and Schweizer, 2020, p. 69-70)
Short description of the process	1. **Preparation**: Framing the topic and selecting/inviting the participants 2. I**mplementation**: introducing the goal and agenda of the focus groups; moderated discussion on the various questions to be addressed during the focus group;

	Summarising the main aspects of the discussion and explaining the next steps to the participants 3. **Documentation**:
Target groups	Depending on the topic: Stakeholders, directly affected public; observing public. The methods is not suitable for representative samples of society. The method is especially suitable for reaching groups who are normally less likely to get involved in other (larger) participatory processes. The method is well suited for participants, who are not comfortable with expressing themselves in larger groups.
Selection of the participants	Participants are selected depending on the topic of interest
Group size	8-15 participants
Inclusion of further stakeholders	Not mandatory but possible depending on the setting. The presence of stakeholders can sometimes influence the discussion among the participants.
Timing/Duration	Lasts generally half a day. Can be implemented at different timing of a participatory process: - in the beginning, in order to frame/consolidate a topic, - in the middle, in order to collect information from specific target groups, - in the end, in order to validate the results of a process
Expected results/Closure	Provide the researchers or decision-makers with a detailed idea of the concerns of a given community, generally taking the form of a report
Options for blended participation (formats, methods, tools)	This method can be implemented both online and offline. There is also the possibility to use online tools (such as Mentimeter or mural) during an offline focus group. Due to the small number of participants, it is also possible to organise a focus groups as a hybrid event. However, the interactions between participants will be affected by it. Several methods can be used in the context of a focus group: Small groups discussions; Priorisation; Brainstorming; Brainwriting; Various online tools can be used: Communication platform for the event: Teams, Zoom, Webex Online tools in order to document your process - Mural board or miro board as an online white board to leave participants write ideas - Mindmeister as an online tool to carry out collaborative mindmapping
References and resources	• https://www.involve.org.uk/resources/methods/focus-groups • https://participedia.net/method/4777 • https://www.epa.gov/international-cooperation/public-participation-guide-focus-groups

	• Parker, Andrew, and Jonathan Tritter. "Focus group method and methodology: current practice and recent debate." *International Journal of Research & Method in Education* 29.1 (2006): 23-37. • Renn, Ortwin, and Pia-Johanna Schweizer. "Inclusive governance for energy policy making: Conceptual foundations, applications, and lessons learned." *The role of public participation in energy transitions*. Academic Press, 2020. 39-79.

6.1.3 Factsheet Citizens' Assembly

Text	Text
Name of the Format	Citizens' Assembly
Level of participation	Inform – **consult** – collaborate - empower
Short description of the format	A Citizens' Assembly is a format that bring together randomly selected citizens to deliberate on a given issue and provide a set of recommendations for policy makers. Similar to citizens' juries or planning cells, the selected citizens are given the opportunity to learn about a topic by obtaining various information and opinions from invited experts. Based on the input, citizen deliberate in moderated small groups and develop a set of recommendations, which are documented in a report for decision-makers.
Short description of the process	1. Preparation stage: In this stage, the main topic and sub-topics are defined, the various experts are invited, citizens randomly selected and invited to the event. During this stage, participants can already be provided with learning materials that introduce them to the topic. 2. Learning Phase: During this phase, citizens will get the possibility to learn more about one sub-topic, generally through presentation of experts' viewpoints. During this stage, citizens also have the possibility to ask understanding questions to the experts. 3. Deliberation: Once citizens obtained the information necessary to discuss the topic, moderated small groups discussions are built in order to exchange the ideas on the various subtopics and develop recommendations on them. 4. Writing and submission of recommendations: In the end, the recommendations are clustered and prioritised in plenary session. Based on the recommendations made by the citizens, are report is written and submitted to the decision-makers.
Target groups	General public
Selection of the participants	Randomly selected
Group size	Variable (from approx. 15 up to over 200 participants)
Inclusion of further stakeholders	Various experts are integrated to the process and provide inputs to the citizens before the deliberation

Timing/Duration	Several days
Expected results/Closure	Voting (majoritarian) General Agreement – Consensus Non-binding recommendations on a policy issue for decision-makers
Options for blended participation (formats, methods, tools)	Such participation processes can also be carried out online (See for instance, Citizens' Assembly on Germany´s role in the world). Some recommendations on how to design such processes online are also available (https://medium.com/participo/designing-an-online-citizens-assembly-a-practitioner-perspective-2c87122e1af2). In such a process, it is also possible to combine online with face-to-face elements. Various tools can be used to implement online elements within this participation process, such as communication platforms (Teams, Zoom, Webex), documentation tools (Mural board or Miro board), or various online tools to prioritize the ideas/recommendations (Mentimeter, for instance). For more information on which tools to use depending on the stags of the process, see Parsons (2019).
References and resources	• https://www.involve.org.uk/resources/methods/citizens-assembly • https://participedia.net/method/4258 • Parsons, A. (2019) Digital Tools for Citizens' Assemblies. https://research.mysociety.org/publications/digital-tools-citizens-assemblies • 10 + 1 Guidelines for EU Citizens' Assemblies https://citizenstakeover.eu/wp-content/uploads/2021/04/10-1-GUIDELINES-FOR-EU-CITIZENS-ASSEMBLIES.pdf • UK Parliament: "What Is a Citizens' Assembly?" https://www.parliament.uk/business/committees/committees-a-z/commons-select/housing-communities-and-local-government-committee/citizens-assembly-faq-17-19/. • https://deutschlands-rolle.buergerrat.de/en/

6.1.4 Factsheet Participatory Modelling

Text	**Text**
Name of the Format	Participatory Modeling
Level of participation	Inform – consult – **collaborate** - **empower**
Short description of the format	Co-creation process engaging stakeholders in bringing in their knowledge into the development of "formalized and shared representation(s) of reality" through the use of digital or analogue modeling practices. This method is often applied in environmental and resource management in order to analyse socio-environmental systems. Through the development of "internally valid models that can inform policy and increase engagement and trust between communities

	and research teams". (Quimby and Beresford, 2022). Besides assisting collective decision-making, participatory modeling contributes to reducing conflict, improving the legitimacy of a model, informing collective action, enhancing learning, and gaining a common understanding of a complex system (Jones et al., 2009)
Short description of the process	The participatory modeling method can be divided into several steps (see for instance: Haapasaari et al., 2013 or Voinov et al., 2018): - Identify project goals - Select and invite stakeholders - Choose modeling tools - Collect and Process data - Discuss system, build conceptual model - Run model and discuss results - Discuss and define scenarios - Analyse model, discuss improvements Present results to other stakeholders and decision-makers
Target groups	Stakeholders, community groups
Selection of the participants	Invited based on expertise
Group size	Variable depending on the process
Inclusion of further stakeholders	Possibility of including decision-makers or further stakeholders, especially in the end of the project or in the identification of the project goals
Timing / Duration	Variable
Expected results/Closure	Development of a model as a tool for deliberations and consensus
Options for blended participation (methods, formats, tools)	Various tools and methods can be used in order to carry out a participatory modelling (see for instance: Voinov et al., 2018): Brainstorming, facilitation, role playing game, decision tree analysis, causal loop diagrams, social network analysis, agent-based modeling, etc... Moreover, various tools can be used to support the implementation of such methods during the participatory modeling process: FCMapper for Fuzzy cognitive mapping, Netica, Hugin, Analytica, DBLi (for Bayesian networks), or Repast, NetLogo, Mason or Cormas (for agent base)
References and resources	https://participatorymodeling.org/ https://www2.econ.iastate.edu/tesfatsi/ParticipatoryModelingWhatWhyHow.AVoinov.March2010.pdf http://actioncatalogue.eu/method/7426 Quimby, Barbara, and Melissa Beresford. "Participatory modeling: A methodology for engaging stakeholder knowledge and participation in social science research." *Field Methods* (2022): 1525822X221076986. Jones, N. A., Perez, P., Measham, T. G., Kelly, G. J., d'Aquino, P., Daniell, K. A., ... & Ferrand, N. (2009). Evaluating participatory modeling: developing a framework

	for cross-case analysis. *Environmental management*, *44*(6), 1180-1195. Haapasaari, Päivi, Samu Mäntyniemi, and Sakari Kuikka. "Involving stakeholders in building integrated fisheries models using Bayesian methods." *Environmental Management* 51.6 (2013): 1247-1261. Voinov, A. and Bousquet, F. 2010. Modelling with stakeholders. Environmental Modelling & Software, 25, 1268-1281. Voinov, Alexey, et al. "Tools and methods in participatory modelling: Selecting the right tool for the job." *Environmental Modelling & Software* 109 (2018): 232-255.

6.1.5 Factsheet 21st Century Town Meeting®

Text	Text
Name of the Format	21st Century Town Meeting®
Level of participation	Inform – consult – **collaborate** - empower
Short description of the format	Public forum where citizens meet at different locations to deliberate simultaneously about a pre-defined issue in small groups. Through the use of ICT technologies, citizens can eventually vote in plenary on the results of the events. Developed by AmericaSpeaks, this method wants to improve the functioning of traditional town meetings by allowing every participant to meaningfully contribute to the process. Therefore, it aims to increase the number of citizens taking part in the deliberation without affecting the quality of the deliberation itself.
Short description of the process	1. Preparation of the process and recruitment of participants 2. Preparation of the participants through the diffusion of information material prior to the discussions 3. Implementation: can take place in one or several locations; moderated small groups discussions on already prepared questions (with 10-12 participations each), whose results are digitally summarised and centralised. The results of all the small groups are compiled and provided to all small groups for feedbacks and comments. In the end, a vote can take place on all the results of the small group discussions. 4. Reporting on the main results which are then diffused to the citizens, decision-makers and media
Target groups	General public
Selection of the participants	Stratified random sample (by contrast to tradition Town Hall meetings, where all interested citizens are welcome to join)
Group size	100 to 5,000
Inclusion of further stakeholders	CSOs can be asked to support the outreach and registration of citizens
Timing / Duration	1 day

Expected results/Closure	Voting; report with recommendations for decision-makers; High visibility of the process as it includes a lot of citizens;
Options for blended participation (formats, methods, tools)	This format generally relies on both online and offline methods: While discussion generally take place offline; commenting and voting are taking place online. Methods used in this format include moderated small group discussions; voting; commenting Tools used to carry out the process are generally pads for voting, and computers for centralising the results;
References and resources	• https://www.involve.org.uk/resources/methods/21st-century-town-meeting • https://participedia.net/method/145 • http://www.americaspeaks.org/

6.1.6 Factsheet Delphi Method

Text	Text
Name of the Format	Delphi method
Level of participation	Inform – **consult** – collaborate - empower
Short description of the format	Referring to the oracle of Delphi, this forecasting process aims to look at long-term developments of a specific issue relying on a panel of experts with different backgrounds and opinions. Relying on various quantitative or qualitative methods, such as survey techniques or face-to-face meetings, its aim is to assess and evaluate these long-term developments and to build assertions about futures that are helpful in dealing with decisions. Eventually, one of the main functions of a Delphi is to reduce uncertainty concerning the issue at stake. Several criteria have been defined in order to maximise the quality of Delphi processes (Grime and Wright, 2016), such as for instance, choosing heterogenous experts with enough/appropriate knowledge in the field, relying on at around 5 to 20 experts, preserve the anonymity of the experts, secure a clear and transparent feedback, let the expert also assess their expertise/confidence on the issues or answers provided, allow several rounds of answers to enable participants to correct their assertions. The process can be declined in different ways going from a simple survey until relying on a deliberative Delphi process, which also integrates stages of deliberations among participants. "During a Group Delphi, all participants meet face to face and make the assessments in randomly assigned small groups of three and four. The groups whose average scores deviate most from the median of all other groups are requested to defend their position in a plenary session. Then the small groups are reshuffled and perform the same task again. This process can be iterated three or

	four times until no further significant changes are made." (Renn and Schweizer, 2020, p.68).
Short description of the process	The Delphi process is divided into several steps: - **Preparing the process**: In a first step the organizers of the Delphi prepare the questionnaire and select/invite the experts to be part of the process. - **Answering the questions:** In a second step, the experts invited to answer the survey are granted a specific amount of time to carry out the task. "The scientists provide their best assignments, possibly including some type of uncertainty interval to their answers" (Renn and Schweizer, 2020, p.67). - **Analysing the answers:** In a third step, the organizers of the process analyse the answers provided by the various experts by compiling and visualising the scores of the whole group. - **Feedback to the experts:** The organisers feed back to each participant the scores of the whole group, including medians, standard deviation, and aggregated uncertainty intervals. - **Answering the questions II:** Each individual is then asked to perform the same task again, but now with the knowledge of the responses of all other participants. (…). This procedure is repeated until individuals do not change their assessment any more." (Renn and Schweizer, 2020, p. 67). - **Reporting**: In the end, the organizers summarize the results and articulates the conclusions. Optional: At this stage, it is also possible to organize a workshop with the experts in order to discuss the conclusions.
Target groups	Stakeholders (experts)
Selection of the participants	Invitation/selection
Group size	5 to 20
Inclusion of further stakeholders	Not foreseen
Timing / Duration	Several weeks
Expected results/Closure	Consensus building; Scenario building; Forecasting
Options for blended participation (formats, methods, tools)	Delphi method can be carried out online or offline (by sending the printed copy of the survey to the participants). Both can be done in order to enhance the response rate. When using groups discussions during the process, organisers of the Delphi can also moderate these meetings offline or online. Several online tools, such as lime-survey or survey-monkey, can be used in order to implement the Delphi survey.
References and resources	• https://www.rand.org/topics/delphi-method.html • https://thedecisionlab.com/reference-guide/management/the-delphi-method • https://participedia.net/method/7786

	• McMillan, S. S., King, M., & Tully, M. P. (2016). How to use the nominal group and Delphi techniques. *International journal of clinical pharmacy*, *38*(3), 655-662. • Revez, A., Dunphy, N., Harris, C., Mullally, G., Lennon, B., & Gaffney, C. (2020). Beyond forecasting: using a modified delphi method to build upon participatory action research in developing principles for a just and inclusive energy transition. *International Journal of Qualitative Methods*, *19*, 1609406920903218. • Grime, M. M., & Wright, G. (2016). Delphi method. *Wiley StatsRef: Statistics Reference Online*, 1-6. • Webler, T., Levine, D., Rakel, H., & Renn, O. (1991). A novel approach to reducing uncertainty: the group Delphi. *Technological forecasting and social change*, *39*(3), 253-263. • Renn, O. & Schweizer, P.-J. "Inclusive governance for energy policy making: Conceptual foundations, applications, and lessons learned." *The role of public participation in energy transitions*. Academic Press, 2020. 39-79. • http://actioncatalogue.eu/method/7400

6.1.7 Factsheet Public Participation Network

Text	Text
Name of the Format	Public Participation Network (PPN)
Level of participation	Inform – Consult – **Collaborate** – **Empower**
Short description of the format	Structure or network that "**allows local authorities to connect with community groups around the country"**. Through the creation of this network local authorities can profit from community and voluntary expertise from all over the country in a specific area, and civil society members can have their voice heard and provide input into decision-making processes. PPNs "provide a mechanism to facilitate the two-way flow of information between the local authority and their groups to influence policy development and the delivery of services to the wider community." (PPNs Handbook, 2020, p.3).
Short description of the process	The PPN is an established structure with a physical presence within the local authority building of the concerned area. Also, the municipality has to provide resources (such as employees) for the functioning of the network. The network is made up of several entities each having a specific function: - The **plenary** regroups all the members of the network. It set the agenda and influences the work programme of the PPN. The plenary meets at least twice a year. Each independent full Member Group has one vote in the Plenary. Plenary meetings are an

	ideal forum for Member Groups to meet and network and to hear about matters of interest to them. - The **secretariat** is the implementation body of the PPN, which is elected by the plenary, and should represent the whole PPN (various groups and areas). - The **workers** (resource and support) support the implementation of the PPNs actions - The **linkage groups "**nominate, and in some cases elect, PPN Representatives to Boards or Committees, receive feedback from those Representatives, and give views and information that feeds into the Representatives' mandate." - The **colleges** regroup members sharing the same interest.
Target groups	Community groups
Selection of the participants	Open to interested representatives of non-profit organisations
Group size	Variable
Inclusion of further stakeholders	Not directly
Timing / Duration	Ongoing process, institutionalised form of participation
Expected results/Closure	Direct feedback into decision-making processes, co-implementation of policy processes
Options for blended participation (methods, fomats, tools)	Format is mainly to be applied offline Online tools such as communication platforms, participation platforms, voting/priorisation tools, brainstorming tools etc can be used during the process.
References and resources	https://www.gov.ie/en/publication/9db5e3-ppn-handbook/ https://www.roscommonppn.ie/about/what-is-a-public-participation-network/

6.1.8 Factsheet Roundtable

Text	Text
Name of the Format	Roundtable
Level of participation	Inform – consult – **collaborate** - empower
Short description of the format	Small group discussions between interest groups and administrations to discuss a central issue on a equal footing and try to find a common solution. In such a process, everybody has an equal right to participate. "Normally, the participants represent the major social groups, such as employers, unions, and professional associations, [leaving] groups outside the roundtable and representatives of the general public [to be] left out" (Ibid., 2020). "Essential for organizing a successful roundtable is the involvement of a professional moderator. Moderation should be performed by a neutral institution rather than the organizer." (Renn and Schweizer, 2020, p.68-69)

Short description of the process	1. **Preparation**: Framing the topic and selecting/inviting the participants 2. I**mplementation**: introducing the goal and agenda of the focus groups; moderated discussion on the topic. 3. **Documentation:** In form of a protocol to be sent to the various participants and wider audience if necessary
Target groups	Stakeholders
Selection of the participants	Roundtables are generally not open to the wider public; Participants are invited by the organisers of the event.
Group size	Works for smaller groups (20-30 people)
Inclusion of further stakeholders	Inclusion of further stakeholders, e.g., experts, is possible.
Timing/Duration	Several hours; can take place several times
Expected results/Closure	Variable depending on the context. Possibility of providing set of recommendations for the decision-makers
Options for blended participation (Formats,methods, tools)	This method can be implemented both online and offline. Due to the small number of participants, it is also possible to organise as a hybrid event, there is also the possibility to use online tools during an offline meeting. According to Rauschmayer and Wittmer (2006), various methods (such as value-tree analysis, multiattribute decision-structuring, and metaplanning exercises) can be implemented during such a roundtable. Various online tools can be used during a roundtable: Communication platform for the event: Teams, Zoom, Webex Online tools in order to document your process - Mural board or Miro board, which are online white boards to allow participants to collaboratively or independently write ideas visible to all participants - Mindmeister as an online tool to carry out collaborative mindmapping
References and resources	https://participedia.net/method/5309 https://cocoate.com/files/places2b/guide.pdf Renn, O., & Schweizer, P.-J. (2020). Inclusive governance for energy policy making: Conceptual foundations, applications, and lessons learned. In *The role of public participation in energy transitions* (pp. 39-79). Academic Press. Rauschmayer, F., & Wittmer, H. (2006). Evaluating deliberative and analytical methods for the resolution of environmental conflicts. *Land use policy*, *23*(1), 108-122.

6.1.9 Factsheet Salon Method

Text	Text
Name of the Format	Salon Method
Level of participation	Inform – **consult** – collaborate - empower

Short description of the format	This method was developed by the nexus Institute in the mid-2000s as an instrument to develop consensual visions on a specific topic (Dienel, 2005). It Builds on the salons in the 19th century, where the Salons represented a private space for discussion on socially relevant topics. Therefore, in this method, regroups experts with different backgrounds, experiences and viewpoints in an exclusive location to enter into creative exchanges and debates about a specific socially relevant topic in a relaxed atmosphere. The goal of this method is therefore to create the optimal conditions for in-depth discussions. This is possible through a choice of a specific location, the implementation of various creative methods, and the importance granted to informal discussions among the participants. All this should help the experts to contribute to the development of shared visions concerning the future of the topic.
Short description of the process	The salon method is generally divided into the following steps (Dienel et al., 2015): 1. Thematic introduction of the event: Welcoming the experts, introduction of the event (agenda and topic, organising team); round of introduction of the experts, presentation of the input paper, which has been prepared and sent to the participants prior to the event. As options, a Delphi survey can be prepared and submitted to the experts before the official introduction. 2. Counterpoint - Reflection on the present situation and its problems: Dialog walk in team of two experts in order to identify specific problems related to the topic and exchange viewpoints on them and analyse the cause of these problems. The results of the discussions are documented posters at various stations during the walk and presented at the end in a gallery walk. 3. Interludium - Vision development: Experts create visions based on the problem the identified on the previous stage. 4. Table speeches during dinner 5. Reprise on day two: New assessment of the visions developed on the previous day and development of concrete solutions in small groups. 6. Finale Grandioso: Draft of positions and recommendations. Optional submission of the second round of the Delphi survey.
Target groups	Expert group/Stakeholders
Selection of the participants	Invited
Group size	Small (around 15 participants)
Inclusion of further stakeholders	No
Timing / Duration	1,5 to 2 days

Expected results/Closure	Consensus building, paper published with shared visions as a result
Options for blended participation (formats, methods, tools)	Due to the necessity to create a specific atmosphere and the importance of informal interaction, the salon format should rather be implemented offline. However, several online tools can be used in order to implement this format and its various methods. - The Delphi survey can be implemented via an online survey tool, such as SurveyMonkey for instance - The development of visions or concrete solutions can be supported by boards, such as paddlets, or murals
References and resources	• https://partizipative-methoden.de/portfolio-items/salon-methode/ • Jain, A.; Bonaker, A.; Dannenberg, S.; Pradeep N.C. (2013): Scenarios for the Future of Governance and Participation in the Telangana Region with Special Focus on the Minor Irrigation Sector. Publikation der Friedrich-Ebert-Stiftung. • Utne, E. The Salon-Keeper's Companion, 1991 • Dienel, C. (2005): Vision Sachsen-Anhalt 20-xx Zukunftsperspektiven für nachhaltiges staatliches Handeln. Publikation der Friedrich-Ebert-Stiftung. http://www.nexusinstitut.de/images/stories/content-pdf/13-09-16_Vision_2020.pdf. • Dienel, H-L-, Böhm, B., and Manthey, A. (2015). "Best-Case-Szenario. Mobility2Grid2025. Methode, Ablauf, Ergebnisse" http://www.technik.tu-berlin.de/fileadmin/fg301/Projekte/EUREF-Campus/EUREF_M2G_Technologiesalon_2015.pdf

6.1.10 Factsheet Analytic Deliberative Process

Text	Text
Name of the Format	Analytic deliberative process
Level of participation	Inform – **consult** – collaborate - empower
Short description of the format	The aim of an analytic-deliberative process is to involve public, experts and stakeholders in decision-making on complex issues with conflicting values and knowledge systems (Peterson St Lauran et al., 2020). Relying on both elements of analysis and deliberation, such process aims "first, to enhance the competence in the decision-making process and, second, to assign a fair share of the responsibility of managing risks to those who are or will be affected by the potential consequences". (Renn, 1999). The rationale behind this process is that all participants (experts, stakeholders, citizens) have a specific role to have and, by bringing their own expertise and, through dialogue, and exchange of arguments and information, can resolve the

	issue at stake. Stakeholders are here to bring opinion on their specific interests, experts to bring the technical expertise and information, and citizens to evaluate the decision options (Renn, 1999). This complex process can rely on a variety of other formats, especially citizen panels, but also roundtables, and use a variety of methods (see below). A specific form of analytic-deliberative process, called the cooperative discourse, has been implemented in a variety of context (energy, waste disposal etc...) in various countries (Germany, USA; Switzerland). (Renn, 1999).
Short description of the process	According to Renn et al. (1993) and Renn (1999), can be divided into 3 major stages: - **Identification and selection of concerns and evaluative criteria (stakeholder groups):** The goal is here to ask the relevant stakeholder groups to reveal their values and criteria for judging different option. As an output of this stage, a list of hierarchically structured values that represent the concerns of all affected parties should be developed. - **Identification and measurement of impacts and consequences for each policy option (experts):** Based on the results of the first stage, indicators are developed by experts and researchers, which are then reviewed by the stakeholders. The outcome of this stage is "a specification of the range of scientifically plausible and defensible expert judgments and a distribution of these opinions among the expert community with verbal justifications for opinions that deviate from the median viewpoint" (Renn, 1999, p. n.a.). - **Evaluation and design of policies by randomly selected citizens**: The last step consists of the evaluation of potential solutions by randomly selected citizens. Evaluation takes place in one or several groups and focus on an evaluation of the policy options and their consequences. During this stage, all "participants are exposed to a standardized program of information, including hearings, lectures, panel discussions, videotapes, and field tours. The main deliberation process takes place in small groups of up to five persons ... After these intensive group discussions, all groups reconvene in plenary sessions, exchange their findings, insights, and proposals, and work together on a joint solution. (Renn, 1999, p. n.a.).
Target groups	Stakeholders, directly affected public, general public
Selection of the participants	Stakeholders and directly affected public are invited depending on the topic; General public is randomly selected.
Group size	Variable but generally large (around 20 stakeholders; over 100 citizens)

Inclusion of further stakeholders	Experts/researchers are included in the second stage of the process
Timing / Duration	Variable: depending on the process and the complexity of the topic – from several days to several weeks
Expected results/Closure	Reduction of uncertainty, consensus building; outcomes are a set of non-bindings recommendations
Options for blended participation (formats, methods, tools)	This relatively complex process is made up of several stages, which combine several other formats. In stage 1 for instance, organizers can rely on a roundtable format, on stage 2, they can use a Delphi group, and on stage 3, they can rely in citizens panels. This process can be therefore carried out at least partially online, relying on various communication and cooperation tools and platforms. Moreover, various tools and methods can be used in order to implement this format, such as the value-tree analysis and clustering techniques (for stage 1), moderation techniques for the group Delphi (Stage 2), white board or priorisation tools (stage 3).
References	Renn, O.; Webler, Th.; Rakel, H.; Dienel, P. C.; Johnson, B. Public Participation in Decision Making: A Three-Step Procedure. Policy Sci. 1993, 26, 189-214. Renn, O. (1999). A model for an analytic− deliberative process in risk management. *Environmental Science & Technology*, *33*(18), 3049-3055. Peterson St-Laurent, G., Hoberg, G., Sheppard, S. R., & Hagerman, S. M. (2020). Designing and evaluating analytic-deliberative engagement processes for natural resources management. *Elementa: Science of the Anthropocene*, *8*. Rauschmayer, F., & Wittmer, H. (2006). Evaluating deliberative and analytical methods for the resolution of environmental conflicts. *Land use policy*, *23*(1), 108-122.

6.1.11 Factsheet Public Expert Hearing / Public Hearing

Text	Text
Name of the Format	Public experts hearing / Public hearing
Level of participation	Inform – **consult** – collaborate - empower
Short description of the format	In this method, experts with different opinions and positions are asked to testify before the representatives of an organising institution (most often a regulatory agency), a deliberative panel and/or participants from the public. In such a process, the organisers develop questions which are asked to experts. Experts have the opportunity to give their opinion/argue on the issue at stake. “Occasionally, hearings allow for open discussions among the experts, but the final judgment is left to the organizing committee or the deliberative panel” (Renn and Schweizer, 2020: 67). In the case of public hearings participants are also allowed to take

	part in the process and to offer comments or ask further questions on the issue. It enables therefore to "gather public opinions and concerns on political issues before a legislature, agency, or organisation makes a decision or takes action. Public hearings can be called on more or less open topics or else are held on pre-drafted legislation, agendas, or action items (…). However, while public hearings are typically required by law, the agency or organisation is not required to base their decision on the views and issues presented at the hearing. Rather, hearings simply offer citizens a chance to share their opinions." (www.participedia.net, accessed 05.10.2022)
Short description of the process	Depending on the context, the issue and the organisers, the organisation of a public hearing can vary. But generally, the process can be divided into the following stages: - Opening of the hearing and introduction by the organiser - Presentations/statements made by the various invited experts on the issue at stake. - Comments and questions by the public
Target groups	Stakeholders – directly affected public – observed public – general public
Selection of the participants	Open to everyone
Group size	Variable depending on the issue
Inclusion of further stakeholders	Stakeholders are selected by the organisers in order to present different viewpoints on the issue and answer questions from the public
Timing / Duration	Several hours; Hearings generally take place before decision are made by officials; It enables both to inform and consult the population before the decision is taken (Williamson and Fung, 2004)
Expected results/Closure	Hearing enables to get aware of the diversity of opinions and judgements around a specific issue. "Hearings are excellent and fairly inexpensive settings, if the objective is to get a clearer picture of the variability of expert judgments and to become aware of the arguments supporting each position. Hearings do not provide consensus and may not resolve any conflict. However, they may clarify the basis of the conflict or the different points of view in a contested risk issue." (Renn, 2015, p. 13)
Options for blended participation (formats, methods, tools)	Public Hearing can be organised online quite easily as it does not require any complex forms of interactions among experts or between experts and the public. It is also possible to integrate online elements during the process, for instance, by having experts joining online, by gathering opinions of the population trough online surveys or voting tools.

References and resources	Renn, O. (2015). Stakeholder and public involvement in risk governance. *International Journal of Disaster Risk Science*, *6*(1), 8-20. Renn, O., & Schweizer, P. J. (2020). Inclusive governance for energy policy making: Conceptual foundations, applications, and lessons learned. In *The role of public participation in energy transitions* (pp. 39-79). Academic Press. https://participedia.net/method/162 Williamson, A., & Fung, A. (2004). Public deliberation: Where are we and where can we go?. *National Civic Review*, *93*(4), 3-15.

6.1.12 Factsheet Experts Panel

Text	Text
Name of the Format	Experts panel
Level of participation	Inform – **consult** – collaborate - empower
Short description of the format	In this format, experts and public officials with different backgrounds and opinions are invited to deliberate upon the future of a give topic. This format is commonly used in foresight in order to gather and elicit expert knowledge on a specific issue. “The aim of an expert panel is to achieve a balanced utilisation of information and expertise from several disciplines in decision-making including probabilistic safety assessment as one decision criterion. (...). An expert panel is also important in forcing the expert to discuss the bases of their argumentation among each other and the decision-maker. Further, the panel sessions serve as a tool for revealing new aspects that experts would not have considered without communicating together in a structured discussion” (Pullkinen and Simona, 2000, p.7).
Short description of the process	According the Pulkinen and Simona (2000), an expert panel can be divided into several stages: - **Structuring the problem:** In this stage, the organisers describe the problem and provide analysis for potential solutions to be distributed to the participants. - **Development of suitable formats:** In this stage, the formats for the form and documentation of the panel is developed, together with the technical experts. - **Preparation of the panel:** In this stage the information necessary for the expert to prepare the panel is distributed and the expert discussion is structured. In this stage, it is also possible to review the information material and complete in case of some missing information.

	- **Organisation of the panel:** The panel sessions are the core of the process. The technical experts present their view and analysis about the issue during a facilitated process. In this process, the facilitator has a central role as the aim is to achieve a consensus among experts with potential diverging views. Thus "it is essential to make the argumentation as clear as possible (…), and it is important that these [conflicting] points are discussed openly". Finally, the panel aims at ranking decision alternatives developed on the base of the technical expertise and on the view of all experts involved. Moreover, further needs are identified and the experts in charge of taking care of these blind spots nominated. - **Reporting:** The results of the discussions and main findings of the panel are documented in line with the format defined in the second stage of the process.
Target groups	Stakeholders
Selection of the participants	Invited
Group size	12-20
Inclusion of further stakeholders	Not foreseen
Timing / Duration	3-18 months
Expected results/Closure	Documenting diversity of opinions, consensus building, supporting decision-making process
Options for blended participation (formats, methods, tools)	According to Waltz et al. (2015) several methods and tools can be used to carry out expert panels online. - Web-based modified-Delphi processes to obtain expert consensus on a compilation of discrete implementation strategies. - Concept mapping method to characterize the interrelationships among the strategies in the compilation. - Methods used to engage multiple stakeholders to develop a structured recommendation process. Expert panel's activities can rely on a variety of tools such as software platforms or tools "to host structured discussions and post-discussion voting that provided participants with real time feedback on the recommendation outcomes". (Waltz et al., 2015, p.1)
References and resources	http://foresight-platform.eu/community/forlearn/how-to-do-foresight/methods/expert-panels/ Pulkkinen, U., & Simola, K. (2000). An expert panel approach to support risk-informed decision making. Waltz, T. J., Powell, B. J., Matthieu, M. M., Chinman, M. J., Smith, J. L., Proctor, E. K., ... & Kirchner, J. E. (2015, December). Innovative methods for using expert panels in identifying implementation strategies and obtaining

	recommendations for their use. In Implementation science (Vol. 10, No. 1, pp. 1-3). BioMed Central.

6.2 Annex 2: Clustered list of online tools to support the implementation of deliberative processes

List adapted from: https://involve.org.uk/resources/knowledge-base/where-do-i-start-digital-engagement/digital-tools-database

Category of tool	Name	Link
Online participation platform	**Adhocracy**	https://adhocracy.plus/
	Airesis	https://www.airesis.eu/
	CitizenLab	https://www.citizenlab.co/
	CitizensOS	https://citizenos.com/
	Citizen Space	https://www.delib.net/citizen_space
	Civocracy	https://www.civocracy.org/
	CMNTY	https://www.cmnty.com/#how-it-works
	CONSUL	https://consulproject.org/en/
	Opin	https://opin.me/en/
	Decidim	https://decidim.org/
	DemocracyOS	https://democraciaos.org/en/
	Fluicity	https://get.flui.city/
	commonplace	https://www.commonplace.is/
	make.org	https://make.org/EN
	Ethelo	https://ethelo.com/
	PlaceSpeak	https://www.placespeak.com/en/?h=1
	Pol.is	https://pol.is/home
	Social Pinpoint	https://www.socialpinpoint.com/
Videoconferencing	**Adobe Connect**	https://www.adobe.com/de/products/adobeconnect.html
	Teams	https://www.microsoft.com/de-de/microsoft-teams/log-in
	zoom	https://zoom.us/signin
	webex	https://www.webex.com/de/index.html
	Stormz	https://stormz.me/en
Online Whiteboard	**conceptboard**	https://conceptboard.com/
	miro	https://miro.com/
	Mural	https://www.mural.co/
	Padlet	https://de.padlet.com/

	Ideaflip	https://ideaflip.com/
Voting, priorisation tool	**Election buddy**	https://electionbuddy.com/
	Mentimeter	https://www.mentimeter.com/
	Polleverywhere	https://www.polleverywhere.com/
	Ranked Vote	https://www.rankedvote.co/
	Slido	https://www.sli.do/
Online survey tools	**Limesurvey**	https://www.limesurvey.org/de/
	Survey monkey	https://www.surveymonkey.com/
Mindmapping tool	**Mindmeister**	https://www.mindmeister.com
Discussion forums	**common ground for action**	https://www.nifi.org/en/cga-online-forums
	Flarum	https://flarum.org
	ConsiderIT	https://consider.it/
	discourse	https://www.discourse.org/
	Your priorities	https://yrpri.org/domain/3
Brainstorming tool	**Groupmap**	https://www.groupmap.com/
	crowdspot	http://crowdspot.com.au
	Wisembly	https://www.wisembly.com/en/
Online project management tool	**Howspace**	https://www.howspace.com/
	slack	https://slack.com
	Trello	www.trello.com
Co-drafting (collaborative document tools)	**dropbox paper**	https://paper.dropbox.com/
	cryptpad	https://cryptpad.fr/
	Etherpad	https://etherpad.org
	Joe Docs	https://joedocs.com/

6.3 Annex 3: Factsheet Irish Citizen Assembly on Climate Change

Factsheet Ireland - "We the citizens"

Summary

The Citizens' Assembly 2016-2018 was an exercise in deliberative democracy in Ireland, where 100 citizen members considered 5 topics total. One of them being Climate Change.
Participants & duration & themes

Consisting of 99 participants plus a chairperson, the assembly debated on five discrete topics in 12 sessions between 15 October 2016 and 15 April 2018. Furthermore, the Irish public was invited to make online submissions.
Topics:

- The Eighth Amendment of the Constitution
- Challenges and opportunities of an ageing population
- Fixed term parliament
- The manner in which referenda are held
- How the State can make Ireland a leader in tackling climate change

It was intended that Climate Change would be the final topic at one weekend, but due to the members' interest a second weekend was added. In the end, Climate Change was the third topic discussed by the Assembly.
Format/Method

The Irish Citizen Assembly was constructed as a Citizens'/Climate Assembly. A Citizens' Assembly is a participatory deliberative method, which aims to bring everyday voices in discussions on how to tackle difficult problems. It is characterised by assembling a randomly selected group of citizens who are brought together to reach consensus about what they think should happen.
Ordering Entity

After the election of February 2016, the new Irish Government ordered the implementation of a new Citizen Assembly. The Citizens' Assembly's terms of reference were agreed by the Houses of the Oireachtas in July 2016.[9]
Goal

[9] https://2016-2018.citizensassembly.ie/en/

The goal is to contribute to broader public engagement and national discourse on the 5 topics through the recommendations of the Citizens' Assembly. The project also aimed to add value to the government's current work by making informed recommendations.[10]

Important Dates Start: 15.10.2016 End: 15.04.2018
Climate Topic: Weekends of 30. September and 04. November 2017

1 Inclusion & Selection Process

1.2 Inclusion

Deliberative formats/methods may be characterized by two criteria: inclusion and closure. With respect to inclusion, a Citizens' Assembly is composed of (randomly selected) citizens. However, Stakeholders and Scientific experts might participate. Through online submissions (4.2) the greater Irish public was encouraged to participate as well.

1.2 Selection Process

Following a public tendering process, **RED C** Research and Marketing Ltd. was engaged to select the 99 citizen members and 99 substitutes for the Assembly.[11]
The members were initially recruited in September and October 2016, but additional recruitment was undertaken as the need for substitutes arose.

The recruitment was carried out across 15 broad regional areas throughout the country. The sampling points were selected on a random basis in accordance with Census 2011 data and QNHS population estimates to ensure that they were nationally representative in terms of geography. This did not mean however, that each county was necessarily represented. The process used by RED C was designed to ensure that the members are broadly representative of Irish society including urban rural divide.

RED C interviewers recruited participants by cold calling door-to-door to households in their allocated DED area, which was issued to them by RED C. No other method of recruitment was permitted. The interviewers recruited half of their participants to be full members and half as substitutes. The quotas each interviewer had to reach in their allocated District Electoral Division (DED), were based on a number of demographic variables.

1.3 Selection Criteria

It was intended that the participating members will be broadly representative of Irish society. The criteria used in the selection were: **Gender, age, region of residence, social class and being entitled to vote.**

The social class groups are based on the citizens' occupation. These groups are shown in the table below. Interviewers verified the accuracy of the socioeconomic criteria during recruiting. Each member also confirmed that they were entitled to vote at a referendum, and confirmed that they have not been nor intend to be acting in an advocacy role for any interest or lobby group currently campaigning on any of the issues to be considered by the Assembly.

[10] https://knoca.eu/national-climate-assemblies/ (See section titled "Ireland's Citizens Assembly", subheading: "Commissioning.")
[11] "Recruitment Methodology" (Pages 1-3)

To prevent biases, unwanted influences and the confidentiality of the Assembly high-ranking politicians, journalists and members of advocacy groups were excluded from the pool of randomly selected Citizens. People working in market research were excluded as well, because of their knowledge of & influence in the Assembly processes.[12]

The selection process was able to control for the socioeconomic factors. Due to the restriction to the table above it was possible to represent the socio – economic factors in the Irish society.

Social Class – Basic Definitions

Class	Letter
Higher managerial/ professional/administrative (e.g. Established Doctor, Solicitor, Board Director in a large organisation 200+ employees, top level Civil/Public Service/Government employee	A
Intermediate managerial/ professional/administrative (e.g. Newly qualified (under 3 years) Doctor, Solicitor/Lawyer, Board Director small organisation, Middle manager in large organisation, Principal Officer in civil service/local government)	B
Supervisory or clerical/junior managerial/professional/administrative (e.g. Office worker, Student Doctor/Med Student, Foreman with 25+ employees, Salesperson, Nurse, Teacher etc.) OR Student	C1
Skilled worker (e.g. Skilled Bricklayer, Carpenter, Plumber, Painter, Bus/Ambulance Driver, HGV driver, AA patrolman, Police, Firefighter, Chef, Barman etc.)	C2
Semi or unskilled work (e.g. Manual workers, all apprentices to be skilled trades, Caretaker, Park Keeper, non-HGV Driver, Shop Assistant)	D
Casual worker – not in permanent employment OR Housewife/Homemaker OR Retired and living on state/Government pension OR Unemployed or not working due to long-term sickness OR Full-time carer of other household member	E
Farmer/Agricultural worker	F

2 Participants & Stakeholders

2.1 Participants

There were 99 citizen participants of the Assembly, in addition to the Chairperson. The Chairperson was not randomly selected, but appointed by the Government.
Since the inaugural meeting on 15 October 2016, 53 participants have been replaced in subsequent phases of the process. All members substituted on to the Assembly have been recruited by RED C in accordance with the demographic quotas in the Census. Most of those who have withdrawn have done so for personal reasons including illness, illness of a family member, change in employment or other circumstances.
These withdrawals were the reason that only 95 members attended the first April 2017 meeting of the Assembly.
On the two Climate change topic weekends the member turnout was 82 and 80 members respectively.[13]

[12] „Recruitment Methodology" (Page 2)
[13] „Third Report" (Page 51)

2.2 Expert Advisory Group

The main roles of the Expert Advisory Group were:

- Supporting the Chair and Secretariat in constructing a fair, balanced and comprehensive work programme for the Assembly on each of the topics;
- Providing background expert advice on the issues being discussed;
- Advising on the criteria for selecting specialists/ experts to appear before the Assembly;
- Recommending names for the specialists/ experts to appear before the Assembly, for ratification by the Steering Group;
- Working with the Chair and Secretariat to select speakers from civil society and advocacy groups.

On the topic of Climate Change 15 specialists/experts and 6 additional speakers held presentations. They were selected by the Expert Advisory Group using these criteria:

- Demonstrated expertise in the field, e.g. university academics, members of the legal or medical profession or other subject specialists;
- Good communicators, capable of expressing themselves clearly to a diverse audience;
- People who are not seen primarily as advocates on one side or another of the issue at hand;
- In the case of issues where expert views are contested (i.e. where experts can make credible arguments that directly conflict with one another) the Expert Advisory Group will ensure that both sides of the argument will be represented.[14]

The members of the Expert Advisory Group were chosen by applying the following criteria[15]:

- Relevant expertise and experience, with a special focus on natural sciences, political sciences and economics
- Impartiality / objectivity on the respective topics;
- Willingness / availability to participate.

On the Climate Change topic the experts were academics from 5 different disciplines in addition to a member of the EPA (Political Behaviour, International Relations, Natural Sciences, Environmental Law, Physical Geography). Each expert had own staff to support them; they all were paid by a fixed budget and a daily rate.

2.3 Stakeholders

Members of the public were not granted access to any of the meetings.

Regarding Stakeholders the Irish CA favoured a restrictive observatory role:
Interested parties like Advocacy Groups, NGOs, Religious groups, Embassies, Political parties, Academics & Social Partners could attend meetings as observers. This meant that they were not allowed to hold presentations of their viewpoint on the topic or influence members with impulse papers. Even the attempted contact of any Assembly member to influence their views would have led to an exclusion of the observer from the Assembly[16].

[14] "Expert Advisory Group" (Page 1-4; 8-9)
[15] "Third Report" (Page 54)
[16] "Third Report"(C1)

Inputs could be made by stakeholder groups in the Online Submissions process which allowed them to have the same input as any CSO and citizens (See 4.2).

3 Process, Organisation & Budget

3.1 Process

Citizen Assembly - topic climate change

The work programme divided the topic of climate change into a broad overview of climate change science and policy, sectoral consideration of energy, transport, and agriculture, food and land use, as well as a session on international perspectives on climate leadership featuring contributions from Scotland and Denmark.

What?	Date	Activity/Themes
First Meeting Saturday	30.09.2017	Seven sessions on different aspects of climate change science and policy, with presentations by experts (like: The Science of Climate Change, Climate Change in a broader Environmental Context, as well as : National Mitigation Plan and Draft Adaptation Framework, National Dialogue on Climate Change)
First Meeting Sunday	01.10.2017	Six sessions on different aspects of climate change science and policy, with presentations by experts (like: How would I heat, power and service my home and place of work if Ireland was a world leader?, as well as: Energy Generation and Efficiency Examples)
Second Meeting Saturday	04.11.2017	Six sessions on different aspects of climate change science and policy, with presentations by experts (like: If Ireland was a leader in tackling climate change what would Transport Policy look like in Ireland?, as well as; How to be a leader in tackling Climate Change- the Scottish experience)
Second Meeting Sunday	05.11.2017	Six sessions on different aspects of climate change science and policy, with presentations by experts (like: Deliberation, Vote for the final recommendations from the Assembly)

3.2 Implementing Actors

Lead organisation: a **Steering Group,** consisting of the Chairperson[17], the Assembly Secretariat and a group of members. The Secretariat was drawn from the Irish civil service. The group of members were elected by the wider Assembly membership.

Role:

- Oversight of all planning and operational issues for Assembly meetings;
- Ongoing monitoring of the Work Programme;
- Ratification of the specialists/ experts to appear before the Assembly following advice from the Expert Advisory Group and the Chairperson; and
- Evaluation of the Assembly procedures and arrangements.

[17] See “Third Report” (C1) 2. Role and duties of the Chairperson

The Assembly had agreed to its own rules of procedure for the effective conduct of its business in as economical a manner as possible. Issues were resolved by the Steering group which decided by majority voting.

3.3 Budget

Participants were not paid an honorarium.

The budget for the Citizens' Assembly totaled €1,505,960.90. Roughly one third went to Conference/Catering and accommodation. Specific costs for the work on climate change were not calculated.[18] As twelve sessions were held, a session had a budget of estimated €125,496.74. The Irish Times reported that about 60 % of the budget were used for facilitation, travel and hotels. However, they were harsh critics that participants were not paid an honorarium and some experts, who were written background information's received a daily rate up to 2000 Euro a day.

4 "Ways to get to closure"

4.1 Closure

With respect to closure, decisions were made by majority voting. Only the members who were present were considered in voting. In case of an equality of votes the Chairperson's vote would decide.
A draft ballot paper was prepared by the chair and secretariat, with input from the expert advisory group and steering group, and then put to the full membership for discussion and approval. Once it was approved, at the last day the assembly members voted by secret ballot on 13 recommendations. They received majority voting support between 80 and 100%.[19]

Citizen Assembly - climate change recommendations

Number	Support	Recommendation
1	97%	to ensure climate change is at the centre of policy-making in Ireland, as a matter of urgency a new or existing independent body should be resourced appropriately, operate in an open and transparent manner, and be given a broad range of new functions and powers in legislation to urgently address climate change.
2	100%	the State should take a leadership role in addressing climate change through mitigation measures, including, for example, retrofitting public buildings, having low carbon public vehicles, renewable generation on public buildings and through adaptation measures including, for example, increasing the resilience of public land and infrastructure.
3	80%	that they would be willing to pay higher taxes on carbon intensive activities, subject to the qualifications identified in the question.
4	96%	the State should undertake a comprehensive assessment of the vulnerability of all critical infrastructure (including energy, transport, built environment, water and communications) with a view to building resilience to ongoing climate change and extreme weather events. The outcome of this assessment should be implemented. Recognising the significant costs that the State would bear in the event of failure of critical infrastructure, spending on infrastructure should be prioritised to take account of this

[18] https://knoca.eu/national-climate-assemblies/ (See section titled "Ireland's Citizens Assembly", subheading: " Participant recruitment" and "Budget")
[19] "Third report" (Page 5)

5	99%	the State should enable, through legislation, the selling back into the grid of electricity from micro-generation by private citizens (for example energy from solar panels or wind turbines on people's homes or land) at a price which is at least equivalent to the wholesale price.
6	100%	the State should act to ensure the greatest possible levels of community ownership in all future renewable energy projects by encouraging communities to develop their own projects and by requiring that developer-led projects make share offers to communities to encourage greater local involvement and ownership.
7	97%	the State should end all subsidies for peat extraction and instead spend that money on peat bog restoration and making proper provision for the protection of the rights of the workers impacted; and (b) 61% recommended that the State should end all subsidies on a phased basis over 5 years.
8	93%	the number of bus lanes, cycling lanes and park and ride facilities should be greatly increased in the next five years, and much greater priority should be given to these modes over private car use.
9	96%	the State should immediately take many steps to support the transition to electric vehicles.
10	92%	the State should prioritise the expansion of public transport spending over new road infrastructure spending at a ratio of no less than 2-to-1 to facilitate the broader availability and uptake of public transport options with attention to rural areas.
11	89%	there should be a tax on greenhouse gas (GHG) emissions from agriculture. There should be rewards for the farmer for land management that sequesters carbon. Any resulting revenue should be reinvested to support climate friendly agricultural practices.
12	93%	the State should introduce a standard form of mandatory measurement and reporting of food waste at every level of the food distribution and supply chain, with the objective of reducing food waste in the future.
13	99%	the State should review and revise supports for land use diversification with attention to supports for planting forests and encouraging organic farming.

4.2 Online Submissions

The CA involved the greater public with an open submission period, which was organised prior to the star of the Assembly, lasting 33 days (June to August 2017). During this period interested citizens and CSOs could submit their own ideas and recommendations through an online platform or via mail[20]. A call for submissions[21] appeared in national newspapers on June 12th 2017.

Roughly 1200[22] recommendations were submitted during the allocated period.
In addition to these submissions a total of 164 NGOs, representative and advocacy groups, political parties, commercial entities and academics entered submissions as well[23].

According to the CA the submissions played a key role in helping the secretariat and the Expert Advisory Group develop the work programme on the topic and also ultimately shape the recommendations being made by the Assembly. The Assembly Secretariat prepared a "signpost document"[24] for the Assembly members, summarizing and selecting the submissions.

[20] See all submissions on https://2016-2018.citizensassembly.ie/en/Submissions/How-the-State-can-make-Ireland-a-leader-in-tackling-climate-change/Submissions-Received/
[21] "Online Submissions" (Page 41)
[22] A more detailed breakdown here: "Online Submissions"(Page 5)
[23] "Online Submissions" (Page 32-38)
[24] „Online Submissions"

5 Impact

The overarching Citizen's Assembly comprised by the 5 topics created 5 different reports. These individual reports and recommendations would go to Houses of the Oireachtas. The Houses Committees would consider the report and discuss its conclusions in the Houses via debate. In concrete: "the Government will provide in the Houses of the Oireachtas a response to each recommendation of the Assembly and, if accepting the recommendation, will indicate the timeframe it envisages for the holding of any related referendum."[25]

The "Climate Assembly" (Topic 3) created the third report, covering the two weekends when climate change was discussed. The report has 13 recommendations and more detailed explanations. It was presented to Parliament on April 18, 2018. The Citizens' Assembly had no mandate to shape the country's 2030 climate change targets or a specific climate change policy framework. However, the Parliament had committed to consider the recommendations of the Assembly through a joint committee of both Houses and to bring its conclusions to the Houses for debate:
This Joint Oireachtas Committee on Climate Action (JOCCA) published a report[26], generally supporting the Citizens' Assembly's recommendations. The exception was the proposal to introduce a tax on greenhouse gas emissions from agriculture.
The CA deliberations led to the declaration of a climate emergency by the Dáil (Lower House). According to a cover note by the Irish government published alongside the bill, the JOCCA report heavily influenced the cross-government Climate Action Plan published in June 2019 and the subsequent Climate Action Bill 2020[27].

Worldwide it was positively received how precisely these proposals were worked out.
The Irish Climate Assembly was seen as a model for further implementations.
Inter alia due to the positive reception, the Irish government has held three more Citizen Assemblies in the following years, most recently on Biodiversity Loss in 2022.

6 List of References

"Third Report": Third Report and Recommendations of the Citizens' Assembly; (18.04.2018) Climate-Change-Report-Final.pdf (citizensassembly.ie)

"Recruitment Methodology": Recruitment of the 99 Citizen Members and Substitutes of the Citizens' Assembly. Note on Methodology. Red-C-Methodology-Document.pdf (citizensassembly.ie)

"Expert Advisory Group": Expert Advisory Group. Terms of Reference EAG-December-2017.pdf (citizensassembly.ie)

"Climate Bill": Your questions answered: Climate Action and Low Carbon Development (Amendment) Bill 2021. gov.ie - Climate Action and Low Carbon Development (Amendment) Bill 2021 (www.gov.ie) (see Downloads)

[25] „Third Report" (A2)
[26] "JOCCA Draft"
[27] "Climate Bill" (Page 2)

"Online Submissions": Submissions to the Citizens' Assembly on the third topic for consideration. How the State can make Ireland a leader in tackling climate change. Signpost Document for Assembly Members. Key issues raised and themes covered. Signpost-Document-May-2018.pdf (citizensassembly.ie)

"JOCCA Draft": Joint Committee on Climate Action. Pre-Legislative Scrutiny on the draft of the Climate Action and Low-Carbon Development (Amendment) Bill 2020 (December 2020) 2020-12-18_pre-legislative-scrutiny-on-the-draft-of-the-climate-action-and-low-carbon-development-amendment-bill-2020_en.pdf (oireachtas.ie)