RESHAPING CITIZENS' DELIBERATION FOR THE EUROPEAN GREEN DEAL

RESHAPING EUROPEAN ADVANCES TOWARDS GREEN LEADERSHIP THROUGH DELIBERATIVE APPROACHES AND LEARNING

D1.1 Criteria for assessing citizen participation in 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 civil society organisations (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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Logo	Partner	Abbreviation	Country
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	EUROPEAN ENVIRONMENTAL BUREAU	EEB	Belgium
	ALLEANZA ITALIANA PER LO SVILUPPO SOSTENIBILE	ASviS	Italy
	ASSOCIATION DES AGENCES DE LA DEMOCRATIE LOCALE	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	SOL	Belgium
	TECHNICAL UNIVERSITY OF BERLIN	TUB	Germany
	TRILATERAL RESEARCH	TRI IE	Ireland
	WAGENINGEN UNIVERSITY & RESEARCH	WR	Netherlands
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Executive summary

With increased frequency and intensity of climate change related impacts, huge losses of biodiversity, and increased concern about future environmental and climate-related disasters, there is an urgent need to implement environmental policy to avoid these issues. One of the milestones in European environmental and sustainability policy is the European Green Deal (EGD), which was first presented in December 2019. The EGD focuses on ways that we can continue to develop and grow as a continent, while also ensuring that we meet our environmental and climate-related targets over the coming decades. It proposes a strong emphasis on improving the health and well-being of citizens and future generations through appropriate climate action. However, these goals cannot be met without citizens, businesses, and society as a whole doing their part to develop, implement, fulfil the objectives, and societal support for these goals. Therefore, it is important to ensure that public participation and deliberation are factored into environmental policy and action, with the EGD itself explicitly stating the importance of this.

It is vital that citizens are included in the ongoing dialogue, but it is also important to identify the different viewpoints on citizen participation and deliberation in environmental policy to gather contrasting, opposing, and complimentary viewpoints. The main objective of this task is to focus on how the eight different approaches analysed view, and value, citizen participation and deliberation. The EGD aims to bring about environmental change, but it is unclear how it values or incorporates citizen deliberation and participation within this.

This report will provide a systematic review of some of the most prevalent positions on why, and how, citizen participation and deliberation should be valued. To realise the ambitions of the EGD, it is important to consider the diversity of values and viewpoints of citizens, and how the eight approaches value (or disvalue) participation and deliberation. Overall, this deliverable contains five sections, with 16 criteria for meaningful citizen participation and deliberation, which should function as boundary conditions for citizen involvement in the EGD.

A summary of criteria for effective and meaningful citizen participation:

a. Be Aware of Power Imbalances

1. Policymakers should not lose sight of examining who benefits most from the policy, give attention to current and historical power asymmetries, and empower the disempowered.
2. Legislators and policymakers need to consider inequalities (such as racialised group, gender, and class) in the design of the legal framework and deliberative and participative tools.
3. Civil society in the Global North must reflect on its relationship with civil society in the Global South and build movements based on solidarity.
4. Alternative spaces that address power imbalances should be created to foster more equal participation from structurally excluded groups.

b. Promoting and Ensuring Inclusiveness

5. While policymakers often need to find a compromise about what citizens deem acceptable, sometimes they need to make difficult decisions to achieve environmental objectives.
6. Citizens should not be left out because they are unable to reason and debate as strongly as others. Group deliberation should not be the only form of participation.
7. While being pragmatic about participation and deliberation on environmental policy is often effective, it is fundamental that the values of citizens are not lost along the way.

8. The participation of local and indigenous groups - in particular women - within the scientific community should be promoted (their participation is often hindered by structural barriers).

c. Work with and Protect Nature

9. We should not view ourselves as the only thing of moral considerability. The needs of other species and the environment should be recognised within environmental policy.
10. Non-human organisms, species, and the environment cannot voice their concerns politically, so human citizens need to represent them within a policy that impacts them.

d. Collaborating with Bottom-up Activism and Cultivating Environmental Citizenship

11. Policymakers should incorporate the views of environmentalists in environmental policy. Bottom-up climate activism initiatives should contribute to political dialogue.
12. Institutions like the United Nations and the European Union should consult with grassroots groups and promote their full participation in decisions that affect their environment.
13. Decision-makers need to create the conditions to foster environmental citizenship and to improve the environmental awareness of citizens.

e. Transitioning the Economic Model to a Green Economy

14. Transitions are not only driven by politics and the market. Civic and cultural mobilization should become the main advancing agents of change. Societal groups could create new institutional forms, or new lay-expert modes of, engagement to build new design ecologies.
15. The role of the individual citizen needs to be extended beyond that of a consumer of the environment, and they need to be involved in active participation based on collective action.
16. A conceptualisation of well-being that moves away from the current economic focus on growth and instead centres care for people and the planet should be promoted.

These 16 criteria are further developed in Section 4 of this report. They provide a stepping-stone for the REAL_DEAL project to further extrapolate and refine recommendations through the course of the project, while also developing practical steps for how they can be implemented. This report provides high-level criteria for, and acts as a first step towards, meaningful citizen participation and deliberation in the EGD.

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List of acronyms/abbreviations

Abbreviation	Explanation
EGD	European Green Deal
SMEs	Small to Medium Enterprises
CSOs	Civil Society Organisations
LGBTIQA+	Lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual and other sexualities such as non-binary and pansexual)
NGOs	Non-governmental Organisations
EM	Ecomodernism

Table 1 List of acronyms/abbreviations

1. Introduction

The REAL_DEAL project's methodology (section 1.3.b of Annex 1 to the Grant Agreement) states that: the criteria with which we start in Real Deal are fairness, competence, transparency, efficiency and legitimacy (which can be applied to any participation processes) and that we will review them and enrich them through the process of our research. The 16 criteria that are developed in this report closely align with these principles, as there is a strong emphasis on them throughout. In particular, these principles can be reflected in the categories that were derived from our analysis: be aware of power imbalances (transparency and fairness), promote and ensure inclusiveness (fairness and legitimacy), work with and protect nature (efficiency and fairness), collaborating with bottom-up activism and cultivating environmental citizenship (legitimacy, competence, and efficiency), and transitioning the economic model to the green economy (legitimacy and efficiency). Thus, the criteria categories, and criteria themselves, enrich and complement the REAL_DEAL principles.

This report will evaluate how citizen participation and deliberation[1] are discussed in the literature. The main objective of this task is to focus on how different approaches view and value citizen participation and deliberation in the context of the EGD. The EGD aims to bring about environmental change, but it is yet unclear how it values or incorporates citizen deliberation and participation within this. Therefore, this task concentrates on a wide diversity of approaches found within academic literature to identify an array of approaches and how they value citizen participation and deliberation.

To realise the initiatives and ambitions of the EGD it is important to consider the diversity of values and viewpoints of its citizens, how they value (or disvalue) participation and deliberation, and how they can respond to these values. The task carries out the actions outlined in the REAL_DEAL project proposal of systematically reviewing a range of environmental normative positions and providing a (draft) list of criteria to assess citizen participation and deliberation (see Table 2).

Task 1.1 – Review criteria for meaningful citizens deliberation on the EGD
This task will involve a systematic review of the normative frameworks found within academic and grey literature such as civil society reports identifying the values underpinning citizen participation and deliberation in the policy areas most relevant for the EGD. The partners will analyse frameworks such as environmental rights and citizenship, environmental ethics and ecofeminism to identify criteria to assess practices of citizen participation and deliberation towards the EGD. The review will provide a draft list of criteria to assess whether certain practices of citizens' participation and deliberation are meaningful, as well as an articulation of the EGD's implicit and explicit values. These draft criteria will be revised and improved in iterative phases with stakeholders during the project.

Table 2 Task 1.1 Description of Action

This description of action was followed and the steps leading up to this report were carried out from February to July 2022, by REAL_DEAL partners (IASS, CEU, TRI, WECF, and TUB), led by Wageningen Research (WR). Eight approaches were analysed through a systematic review process (see Section 2) to provide a list of criteria for meaningful citizen participation and deliberation (see Section 4).

[1] Participation means the act of taking part in something, it involves the inclusion of citizens within the debate. It is the process of involving, engaging, and sharing information with the public. It is the bringing together of different opinions and values about a particular topic. Deliberation means to discuss, speak about, and exchange one's thoughts on a particular topic (in our case, environmental policy). It focuses on ensuring a dialogue, discussion, and debate around the particular topics.

Overall, this report is structured into five main sections: this first section introduces our research and acknowledges the requirements and description of action outlined in the REAL_DEAL proposal. Secondly, we provide a clear methodology of the systematic review process. Thirdly, our results section provides eight of the individually assessed systematic reviews of normative approaches conducted by the research team: ecocentrism, environmental pragmatism, biocentrism, ecofeminism, ecomodernism, environmental citizenship, environmental rights, and environmental justice. Fourthly, we provide a list of criteria for meaningful citizen participation and deliberation. Lastly, our conclusion finishes with some reflections on the findings of our report.

It is important to mention that whenever we in this report refer to 'women', we mean women in all their diversity. This means that we specifically do not refer to socially constructed gender aspects or norms, nor to sex (biologically determined characteristics) but to all that refer to themselves as a woman. Naturally, the same counts for when we refer to 'men'.

2. Methodology

At the start of this task, the team had several rounds of discussions about the methodology, the steps that should be implemented, the approaches to analyse, and the distribution of tasks and workload among the partners. Throughout these sessions, the team voiced their opinions on the best approach to take to ensure that the most relevant research was found. This led to a six-step procedure for methodological implementation, which is described below.

2.1. Step 1: Deciding on approaches to review

The first step involved in our methodology was to identify how to cover the wide diversity of approaches on the topic of citizen participation and deliberation. It was important to include several specific disciplinary approaches. We identified four normatively-driven pillars to focus on: law, ethics, politics, and feminism (see Figure 1).

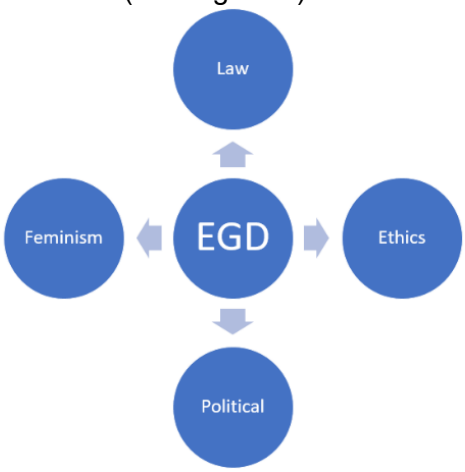

Figure 1 EGD normative pillars

While we accept that one could include other additional pillars/disciplines (e.g., sociology, geography, economics, etc.), our main purpose was to provide some of the key approaches relevant to this debate whilst bearing in mind the abilities of the team to evaluate these approaches (e.g., there was no economist in the team, so evaluating economic literature would be challenging). The partners felt that it was important to identify specific environmental positions within these four pillars so that it becomes more focused on citizen deliberation and participation in the context of *environmental* concerns and policy (i.e., the goals of the EGD).

After multiple discussions about socio-environmental approaches within the field, we arrived at eight approaches under the four pillars that would form the basis of our systematic review (see Figure 2).

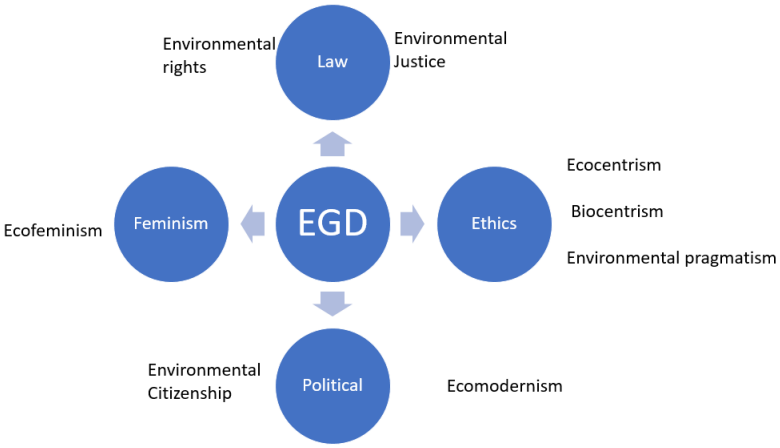

Figure 2 The eight approaches that we analysed for the review

These eight approaches were chosen because they were seen as being some of the strongest approaches within the field focusing on the topic of environmental change. The eight approaches were identified as providing an eclectic mix of different approaches, but should also offer some insights on the topic of citizen participation and deliberation. It must be noted that during our discussions, it was emphasised that feminism should not be demonstrated as a separate fourth 'discipline' (as illustrated in Figure 2) in the same way as ethics, political, and law. Partners felt that this was misleading, as feminism more accurately rests between and intersects with these three other disciplines. Following these discussions, a clearer figure was drawn up to illustrate this interlinking relationship (see Figure 3.

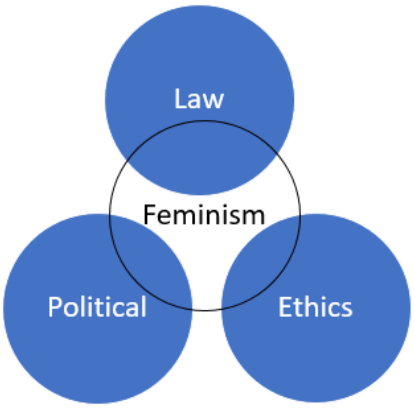

Figure 3 Feminism intersection

Furthermore, it may be argued that not all the environmental approaches neatly fall into one of the four disciplines illustrated in Figure 3. For example, ecofeminism could be described as a philosophy, an ethical theory, an activist approach, or a social framework. Other approaches such as environmental justice could relate to legal analysis but can also be more philosophical or political in emphasis. Our initial rationale for splitting the approaches in the manner shown in Figure 2 was simply to get a diverse collection of environmental approaches to citizen participation and deliberation. However, these approaches could also be seen more generally as standalone positions, without affiliation to specific disciplines, as seen in Figure 4.

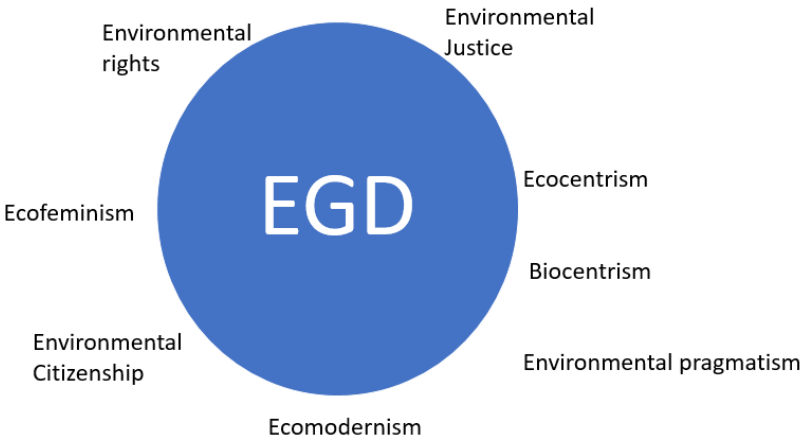

Figure 4 Environmental Approaches and the EGD

It was evident from the range of approaches shown in Figure 4 that some partners would be more suited to evaluating certain approaches from the eight selected approaches. Based on the skills and background of the team, we divided the approaches among the researchers (see Table 3).

Approach	Researcher(s) profile
Ecocentrism	Environmental ethicist
Environmental pragmatism	Environmental ethicist
Biocentrism	Environmental ethicist
Ecofeminism	Anthropologist Political scientist
Environmental citizenship	Political scientist Sociologist
Ecomodernism	Political scientist Sociologist
Environmental justice	Environmental law and policy Law and philosopher
Environmental rights	Human rights law Human rights law

Table 3 Division of Labour Among Researchers

After the division of labour, we agreed on having a single approach for the systematic review to ensure consistency. It was decided to take a unified systematic review process, both in the tools used for collection. The following section will discuss the steps taken in the systematic literature search.

2.2. Step 2: Systematic literature search

A systematic review is a form of review that applies analytical methods, that can be reproduced, to collect and analyse data. This data is organised, structured, and carried out in a systematic way to ensure a robust and repeatable method of data analysis is implemented. Systematic reviews are designed to provide a detailed analysis of data on a specific topic or review question.

For this project, we conducted systematic reviews of the eight approaches and their position on citizen deliberation and participation in environmental policy. The systematic reviews were conducted to collect English-language books, book chapters, papers, and conference

proceedings. The systematic reviews aimed to provide new findings and research on these approaches and their valuation of participation and deliberation.

It was understood that some of the approaches may have more, or less, to say about citizen participation and deliberation. For example, environmental ethics approaches rarely discuss politics or citizen involvement, so it was assumed that fewer articles would be retrieved on this topic from this area of research.

To retrieve a sufficient collection of documents, the systematic reviews were conducted using two prominent databases: SCOPUS and Web of Science. In addition to these, each team was free to supplement their searches with additional documents, from Google Scholar or grey literature. For some of the approaches like environmental rights, it was important to include grey literature. For other approaches such as ecocentrism, there is very little grey literature on the topic of citizen deliberation and participation, so it was not possible to include these. Each partner followed the same search queries, outlined by the task leader (see Table 4, using ecocentrism as an example).

Source	Search Query
SCOPUS	(TITLE-ABS-KEY (("ecocentrism") OR ("ecocentric")) AND ALL (participation) OR ALL (citizen) OR ALL (involvement) OR ALL (deliberation) OR ALL (deliberative) OR ALL (dialogue) OR ALL (public) OR ALL (collaborate) OR ALL (collaboration) OR ALL (involvement) OR ALL (democracy) OR ALL (democratic) OR ALL (governance) OR ALL (citizenship)) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (LANGUAGE , "English"))
Web of Science	((((((TI=(ecocentrism)) OR AB=(ecocentrism)) OR AK=(ecocentrism)) OR TI=(ecocentric)) OR AB=(ecocentric)) OR AK=(ecocentric)) AND ((ALL=(participation) OR ALL=(citizen) OR ALL=(involvement) OR ALL=(deliberation) OR ALL=(deliberative) OR ALL=(dialogue) OR ALL=(public) OR ALL=(collaborate) OR ALL=(collaboration) OR ALL=(involvement) OR ALL=(democracy) OR ALL=(democratic) OR ALL=(governance) OR ALL=(citizenship)) OR ALL=(deliberative))

Table 4 Search Queries for SCOPUS and Web of Science with ecocentrism as example

2.3. Step 3: Systematic Literature Refinement

For some of the approaches, the searches brought back over 1,000 articles. However, much of that literature was not relevant. Because of the broad search terms, there was overlap with other topics, areas, and applications of the approaches searched for. To refine these lists, the partners implemented the PRISMA systematic review flowchart (see Figure 5).

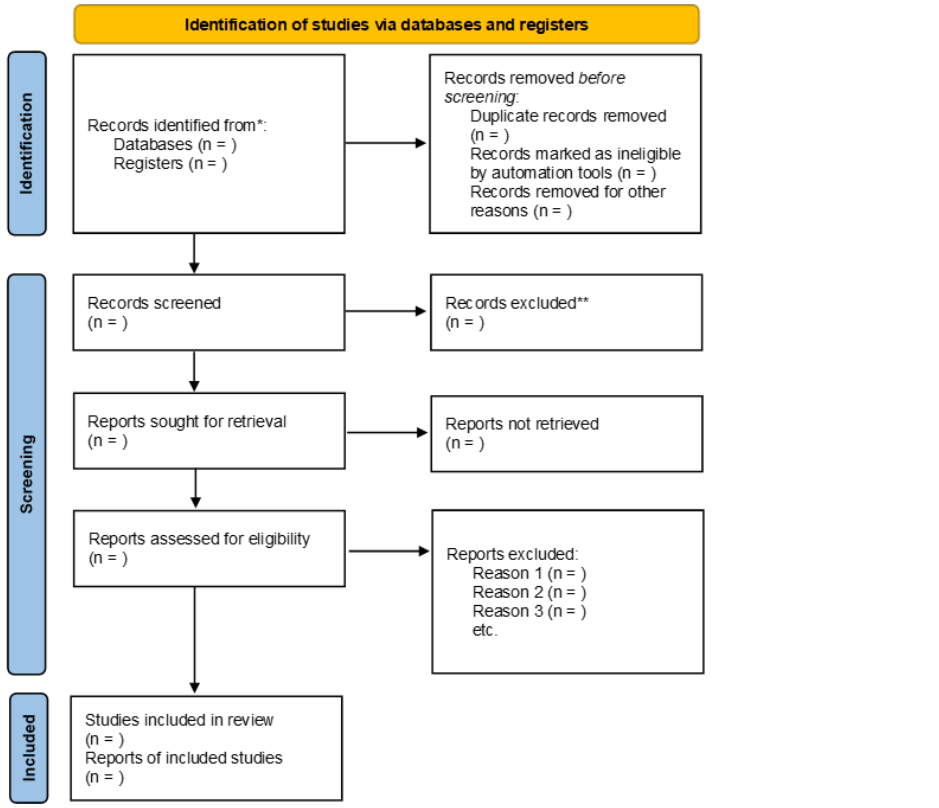

Figure 5 PRISMA Flowchart, taken from Page et al. 2020.

The PRISMA flowchart allows researchers to demonstrate the refinement and exclusion process of their systematic reviews. It is useful because it allowed everyone to follow the same procedure and steps for refining their article searches. The first step in narrowing down the large list of articles was to remove duplicates and non-English files. After that, three exclusion criteria formulated by the task leader were applied to the literature searches. Articles should be excluded if they are not:

- Relevant to the approach that the partner is examining.
- Focused on the topics of citizen participation and deliberation.
- Focused on topics relevant to the EGD (i.e., environmentally-focused).

After applying these exclusion criteria, articles would be removed from the list if the partners could not retrieve the articles (e.g., online or a PDF of the article). When this process was finished, each of the partners uploaded their collection of articles to ATLAS.ti for the next stage of analysis.

2.4. Step 4: ATLAS.ti qualitative analysis software

ATLAS.ti is a qualitative analysis software tool that gives users the possibility to analyse large bodies of text in one place by 'coding', grouping, and writing memos and notes on the text. It provides users with the capacity to code their texts and sort by theme and topics the content of their documents. Coding involves creating groups or themes on the topics analysed in the documents. Codes represent when a specific word is used or when a topic is discussed, to

highlight a sentence(s) and to contextually classify it. It is particularly useful for conducting thematic reviews, as it allows researchers to examine individual themes separately.

The task leader created a broad overarching codebook[2] that contained a wide number of codes and code groups that the partners could apply in their thematic analysis. This is considered a 'deductive' approach to coding. Partners then also inductively created codes throughout their analysis because it was understood that different approaches would raise different issues. This resulted in an overall mixed-methods approach (deductive and inductive). The first draft of the deductively-derived code groups and the number of subsequent codes created can be seen in Table 5.

Code Group	Number of codes
1. Description	2
2. Deliberation and participation value (theory)	29
3. Deliberation and participation value (empirical)	35
4. Implementing deliberation and participation (theory)	21
5. Deliberation and participation in practice (empirical)	23

Table 5: Coding Groups and Number of Codes in each Group

The draft codebook had 110 codes in five code groups. Code group 1 concentrated on descriptions of the approach and how it describes participation and deliberation. Code groups 2 and 3 focused on the normative reasons *why* the approach values or disvalues participation and deliberation (cod group 2 focused on theoretical examples, while 3 focused on empirical examples). Code group 4 focused on providing examples of *how* the approaches propose deliberation and participation should be implemented while code group 5 focuses on empirical examples of how the approaches already implemented them. The reason for dividing empirical and theoretical studies was to identify if there were similarities or differences between the two and to see if further insights could be derived from contrasting the two. A more elaborate definition of the five categories can be seen in appendix 1.

For the analysis of the documents, the partners analysed the texts for specific words and phrases that would identify themes around citizen participation and deliberation. Each partner both used the deductively-derived codes as well as created new codes themselves for the specific thematic relevance among the approaches being assessed. After we analysed our articles and created codes, we began the process of writing up our findings in a report.

2.5. Step 5: Analysis of the approaches by partners

For the analysis of the approaches, partners wrote a broad overview of the approach and a brief history of its development and implementation. Secondly, each partner evaluated what the literature says about the normative reasoning behind the approaches' valuation of citizen participation and deliberation in the EGD. Partners evaluated their findings based on the headings of the codes outlined by the task leader in ATLAS.ti. Thirdly, partners evaluated the remaining code groups and used them to supplement, support, or challenge, their findings from evaluating code groups 2 and 3. This resulted in eight fundamental stand-alone pieces of literature that offer valuable insights into each approach's understanding, description, and valuation of citizen deliberation and participation.

[2] This codebook is available on request.

2.6. Step 6: Collective analysis to establish participation and deliberation criteria

After the partners produced the eight individual systematic reviews of their approaches, it was important to collectively analyse the overall scope of the literature and what it says about citizen participation and deliberation on environmental policy. During a 2-hour workshop, each partner briefly presented their approaches to the group, followed by a short round of feedback and discussion. Partners provided 2-6 key recommendations from their approach to achieve meaningful citizen participation and deliberation (see Figure 6)

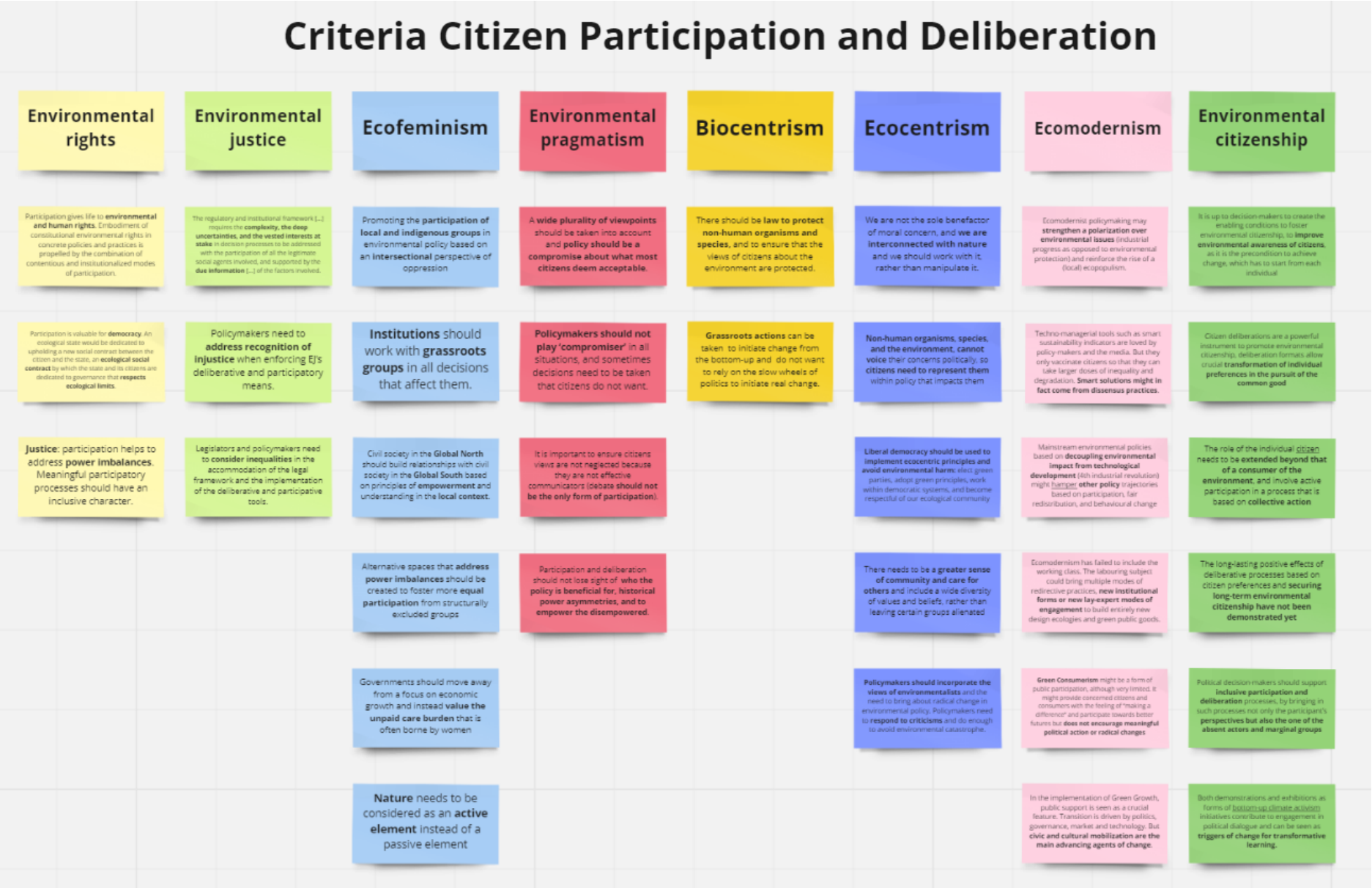

Figure 6 Criteria from the Eight Approaches

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This list of 35 criteria was used as a first step to provide recommendations for meaningful citizen participation and deliberation. During a further group analysis, partners were tasked with providing arrows to link criteria, find commonalities, and better group the criteria together. This resulted in many links and clarified the similarities between the criteria as in the figure below.

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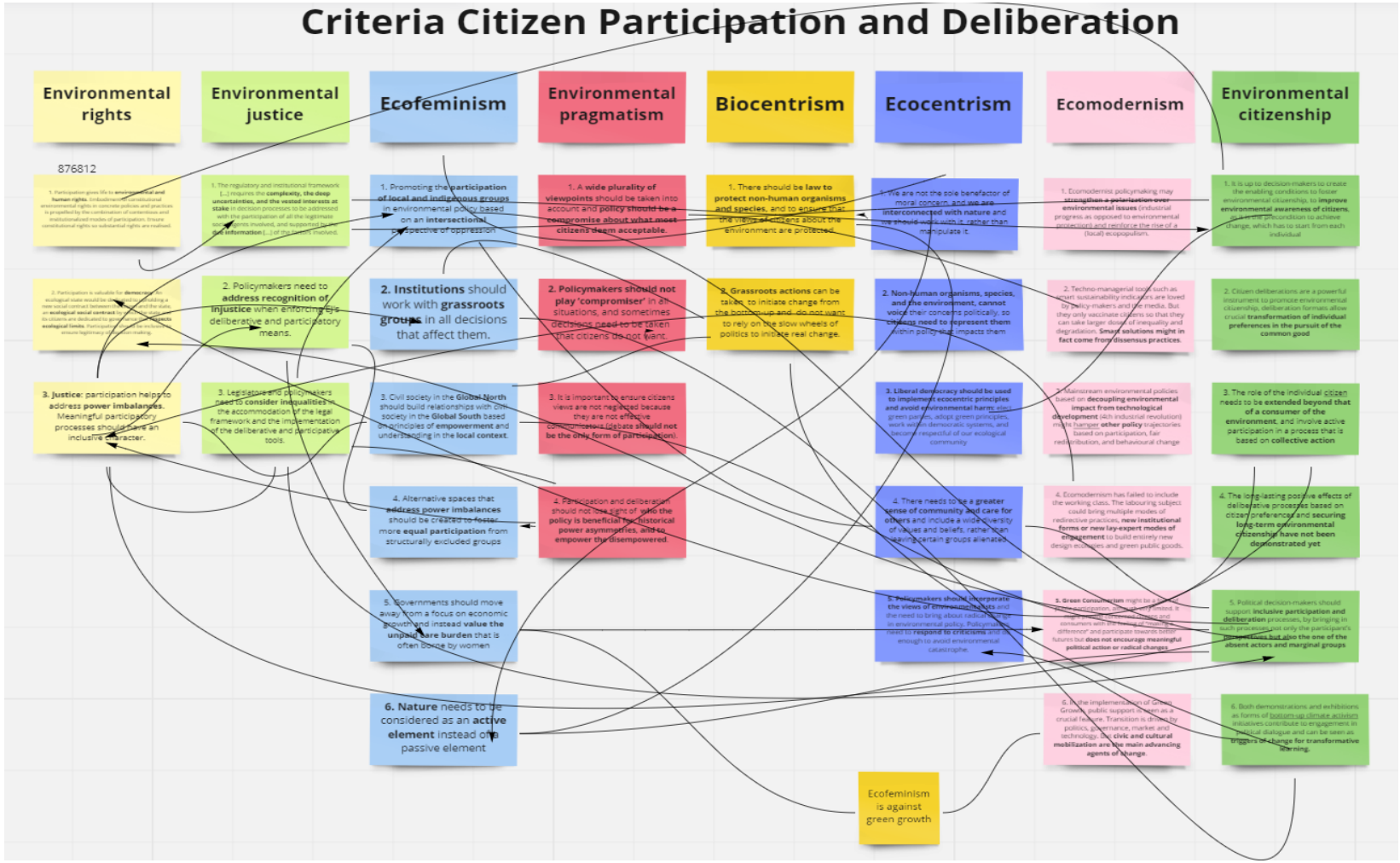

Figure 7 Linked criteria

During this process, there was a wide degree of variation in some criteria and sometimes contradictions between them. When there was a strong degree of overlap or repetition, these criteria were merged to bring a total of eight thematic sections where all of the 35 criteria fit. Figure 8 shows a screenshot of the eight different groups. Some of the criteria were posted in multiple groups, which is why more than 35 criteria are listed in this figure.

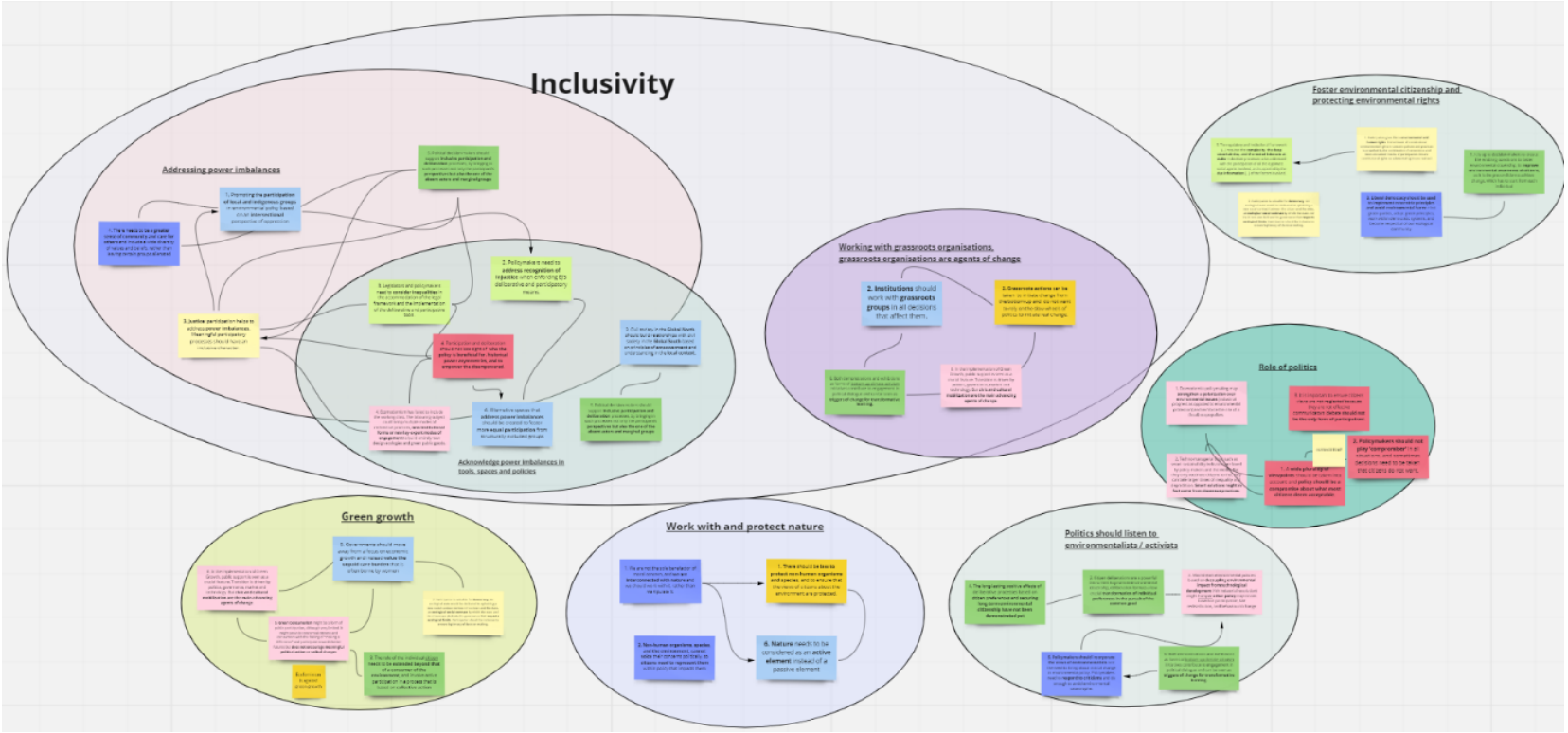

Figure 8 The Criteria Mapped into Eight Thematic Sections

Initially, there were eight thematic sections, but because of overlap, merging, and streamlining, this was reduced down to five main categories and a total of 16 criteria categories. The five categories are: be aware of power imbalances; promoting and ensuring inclusiveness; work with and protect nature; collaborating with bottom-up activism and cultivating environmental citizenship; and reflections on green growth. The 16 criteria will be further explained in Section 4 of this report, but before we come to that it is important to first evaluate the systematic reviews of the eight approaches that we focused on for the purpose of this task.

3. Findings: eight systematic reviews

Each of the following eight sections will provide a brief overview of the methodology employed, the PRISMA flowchart used, the exclusion criteria, and the number of articles analysed. This will be followed by a concise overview of the approaches and their positions on citizen deliberation and participation. The length and depth of analysis for each of the eight approaches varies because of the number of articles retrieved and the coverage of this topic within each approach. Thus, the variances are illustrative in the size, composition, and detail of each of the following subsections.

3.1. Ecocentrism

Following the methodology outlined in Section 2, the SCOPUS search brought back 498 results and the Web of Science brought back 143 results. To produce an accurate and accessible number of results, several screening stages were employed using the PRISMA 2020 Flow Diagram for new Systematic Reviews (see Figure 9).

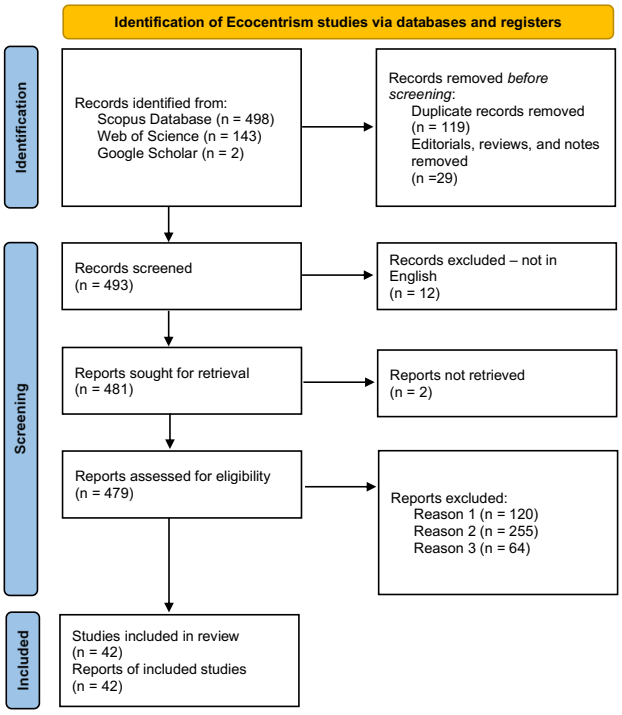

Figure 9 PRISMA Systematic Review of Ecocentric Citizen Participation and Deliberation (Page et al., 2021)

3.1.1. Ecocentrism overview

Ecocentrism is often defined by our relationship with nature, with ecocentrists stating that our actions are having a detrimental effect on the environment and are causing an imbalance in environmental stability and regulation (Aguilar-Luzón et al., 2020). This form of 'human exceptionalism' (Pesch, 2022, p. 2) places humankind as the sole benefactor of moral concern. Ecocentrists claim that this is a misguided form of human chauvinism (the superiority of humans over other species), which does not recognise the importance of other species ; . Ecocentrism places a greater emphasis on 'the interconnectedness of nature, humankind's inability to control nature, and working with nature rather than using technological fixes to control and modify nature for our purposes' (Beckwith et al., 2003a, p. 135).

Ecocentrists extend the human moral circle to include animals, plants, and their habitats (Matzek & Wilson, 2021); emphasising the importance to refrain from exploiting them (Skollerhorn, 1998). Ecocentrism widens the parameters of moral concern to include other living beings, not just human beings (Rülke et al., 2020). Ecocentrism is a more inclusive moral framework than anthropocentrism (which only includes human beings as of moral considerability) (Batavia et al., 2020). It states that there is no good reason for taking the human case as being the paradigm to determine what is morally considerable (Eckersley, 1995). It opens the parameters of moral considerability to include all living organisms, species, ecosystems, and the biosphere as a whole (Eckersley, 1995).

Ecocentrism emphasises the intrinsic value of nature (Taylor et al., 2020), as opposed to anthropocentrism, which focuses only on the physical and psychological benefits of nature for human beings (Aguilar-Luzón et al., 2020). We should value nature for its own sake, irrespective of the benefits that it brings to us (Casey & Scott, 2006; Grendstad & Wollebaek, 1998; Kaida & Kaida, 2016; Kloek et al., 2018; Papadakis, 2000).

The ecocentric approach also adopts a sceptical view of an overreliance on technology (Salazar, 2009; Salazar & Alper, 2002) and science to solve environmental issues (Beckwith et al., 2003; Eckersley, 1992). Everything is connected in nature and humankind should try to grasp this notion when we are implementing policy, action, and interacting with the non-human world around us (Eckersley, 1992).

For democratic participation to be ecocentric, it needs to take into account the needs of non-human beings and the impact our actions have on the environment (Skollerhorn, 1998) and acknowledge and incorporate the value of nature and our relationship with it (Payne, 2010). Ecocentrism states that humankind should be responsible for non-human organisms and species, and we must represent them within public participation and deliberation on environmental policy (Eckersley, 1995, p. 179). However, determining how much of the population shares ecocentric values, or ecocentric views on certain environmental policies, is not always straightforward. Ecocentrism is divided between liberal and global forms of ecocentrism (Salazar 2009).

3.1.2. Liberal Ecocentrism

The liberal ecocentrists support liberal democracy, but believe our current liberal democracy is broken because of corporate interests getting in the way (Salazar, 2009). Global ecocentrism differs because of its stronger emphasis on the need for global action and a rejection of liberal political procedures, such as voting, elections, and compromise (Salazar, 2009). There is a strong commitment to grassroots movements and activism in comparison to traditional political means (which are encouraged by liberal ecocentrists) (Salazar, 2009).

Liberal ecocentrists are worried about the influence of corporations (Salazar & Alper, 2002), that threaten political power to implement positive environmental change (Mathews, 1995). Corporations have too much influence, while the environment is being destroyed for profit, and greater ecocentric political representation is required to initiate change (Salazar, 2009). Liberal ecocentrists view liberal democracy as a way to counter environmental destruction (Mathews, 1995). This can be achieved by voting for parties with stronger environmental convictions (Aguilar-Luzón et al., 2020). They use parties' environmental standpoints to determine whom to vote for (Papadakis, 2000). Liberal ecocentrists view this as a way to reclaim democracy and protect other species and the environment (Salazar, 2009). Global ecocentrists, on the other hand, strongly reject the liberal democratic proceduralism of voting and elections, because of corruption, corporate influence, and voting's general ineffectiveness on environmental change (Salazar, 2009).

The liberal ecocentric must address the claim that liberal democracy proposes that human beings have political status because of our unique capacity to reason (Mathews, 1995). The

idea that we are the only species that can reason places us (dualistically) above nature. This belief in our superiority over nature hinders any ability to incorporate a politics that is respectful of nature. Liberal thought makes it difficult to initiate ecocentrism because they are split on humankind's essential place within the world. Human autonomy is seen as a cornerstone that differentiates us from other species, thus justifying our place in the world.

Eckersley (1992) states that autonomy can be promoted in the same sense as it is in liberal democracy, through rights discourse. While rights discourse can account for human beings, and to a certain extent it has been done with human environmental rights and animal rights, it becomes more challenging when contextualising it for the entire biotic community (Eckersley, 1995). However, if we view rights discourse being the connecting point between liberalism with democracy, and autonomy being the underpinning principle of rights discourse, then we may be better positioned to extend it to the ecocentric goal of including the biotic community (Eckersley, 1995). We can use the autonomy of all life forms as the objective to include other species within our ecocentric agenda.

While liberal democracy does not necessarily provide the conditions for an ecocentric consciousness, it does provide a political starting point from which individuals can come together to begin counteracting the individualistic approach underpinning it (Mathews, 1995). Liberal democracy focuses on self-realisation as the result of freedom from political domination, ecocentrism tries to 'bring individuals out of self-absorption, into sympathy with others' (Mathews, 1995, p. 18). Both positions encourage the development of individuals' autonomy and self-realisation, but they view self-realisation in different ways (the former is out of freedom from political domination, while the latter is about freedom from human self-absorption).

Democracy needs drivers to push it out of complacency and into action, more rapidly initiating policy that otherwise would be quite slow (Eckersley, 2002). The liberal ecocentrist needs to use the system to convince others about the importance of protecting nature. Essentially, they must work within the system to change it (Mathews, 1995). Ecocentrists must externalise their values and stimulate members of society to become more active members of their ecological community (Pavalache-Ilie & Unianu, 2012).

3.1.3. Global Ecocentrism

Global ecocentrists begin from the same premise of liberal ecocentrism, that there is a tension between liberal democratic ideals and those of ecocentrism. Liberal democratic ends are to free individuals, provide greater autonomy and control, and encourage self-realisation and individual benefits (Mathews, 1995). Whereas, global ecocentrism is diverting away from this individualistic framing, placing a greater emphasis on the importance of community and expanding our moral circle of care (diZerega, 1996; Mathews, 1995).

Global ecocentrists claim that organisms, species, and ecosystems are fundamentally dependent on, interdependent with, and linked to their interactions with other organisms, species, and their environments (diZerega, 1996). Global ecocentrists claim that liberal democratic ideals may create irreversible and harmful environmental practices (Skollerhorn, 1998). Thus, the individualism that underpins liberal democracy may be in tension with ecocentrism, with global ecocentrists saying it is not inclusive enough (Eckersley, 2002).

Global ecocentrism promotes a type of global community that is not possible in liberal democracy (Mathews, 1995). Community is the primary political requisite to develop a form of political ecocentrism, rather than the individualism found in liberal democracy (diZerega, 1996). Global ecocentrists are critical of national politics because ecological issues are not confined to national boundaries. External authorities are necessary to override regional authorities that are not meeting their environmental responsibilities, and local political power is often weak in comparison to the strength of transnational corporate interests (Mathews,

1995, p. 18). Ecosystems and the fundamental nature of environmental relationships are unbounded, so regional politics will always fall short of being able to account for these impacts. So, global ecocentrists call for 'transnational networks or communities of resistance' (Mathews, 1995, p. 30).

Global ecocentrists are often involved in radical environmental movements, proposing that slow deliberation and participatory democracy have not worked in the past and it will not initiate the steps needed to realise the change that we need (Eckersley, 2002). They claim that traditional politics is often too slow to react, filled with bureaucracy and red tape, politicians are too myopic and greedy and powerful interests slow effective environmental policy.

Global ecocentrists view the current political system as being ineffective for real environmental change and that ecocentric values 'are underrepresented in the most powerful strata of society' (Kopnina, 2012, p. 248). As a result, global ecocentrists often reject conventional channels within a liberal democracy and look towards protests, civil disobedience, and sabotage, to have their voices heard (Eckersley, 1995, p. 170). Civil disobedience and destruction of property are seen as justified for the damage being caused to the natural world (Kopnina, 2012). As one activist stated: 'The level they [politicians] understand is rotten tomatoes and civil disobedience. The facts don't usually make any difference' (Salazar & Alper, 2002, p. 547). For global ecocentrists, the processes of liberal democracy do not work and acts of vandalism and destruction of property are required actions to draw attention to social injustices being perpetrated against non-human species (Kopnina, 2012).

Global ecocentrists often end up taking the law into their own hands, viewing the principles and values of environmental protection as being more important than the loss of their civil liberties (by being arrested, imprisoned, etc.). There is a form of self-sacrifice for the sake of the movement or the greater good, as citizen participation and deliberation are simply not enough to initiate awareness and action (Eckersley, 1995). This self-sacrifice is necessary to force governments to liberate nature, in a similar way that social movements in the past called for the liberation of slaves, women, and members of the LGBTQIA+ community (lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual and other sexualities such as non-binary and pansexual) (Kopnina, 2012).

Global ecocentrists feel alienated from politics because of the lack of action and change within political discourse and are disillusioned about participation and deliberation (Salazar & Alper, 2002, p. 545). This disenfranchisement materialises in a rejection of political parties, politicians, and economic institutions, as being corrupt, ineffective, and destructive of the environment (Salazar & Alper, 2002, p. 545). Citizens are disempowered and they are left feeling that they are not the subjects of change (Biagi & Ferro, 2011, p. 6).

Some global ecocentrists believe that the ecological crisis has gotten so bad that very drastic action is required, which sometimes points towards anti-democratic action (such as destroying meat companies, freeing farm animals, and destroying logging machinery) (Barry, 1994). There are varying positions on what type of anti-democratic action may be needed. What is sometimes claimed is that there should be 'less, not more democracy, or at best they [eco-saboteurs] consider that the deepening and extension of democratic institutions and norms is not an essential part of the green project' (Barry, 1994, p. 377).

Some fear that if global ecocentrists were to gain state power then it would lead to a form of eco-authoritarianism, where environmental policy is enforced with little say or agreement from citizens (Eckersley, 2002). Some claim that eco-authoritarianism should be ruled out in the same way that liberalism rules it out – that 'it fundamentally infringes on the rights of humans to choose their destiny' (Eckersley, 1992, p. 180). However, global ecocentrists would retort that if drastic steps are not taken, then our liberalism will infringe upon all future generations

of humans, as well as other species, to choose their destiny. They claim the trade-off is too large to ignore.

3.1.4. Criteria for Meaningful Citizen Participation and Deliberation

As a result of the research conducted on ecocentrism, five criteria emerged to ensure meaningful citizen participation and deliberation in the EGD (see Appendix 7.2).

3.2. Environmental pragmatism

Only 57 articles were retrieved from the two search databases and 16 of these were duplicates or editorials/reviews. This resulted in only 41 articles left to meet the screening process. Articles were excluded because they did not reference environmental pragmatism enough (7), because they were not focused on citizen participation and deliberation (22), and finally because they did not focus on environmental policy (3). This resulted in 9 articles for analysis on the topic of environmental pragmatism (see Figure 10).

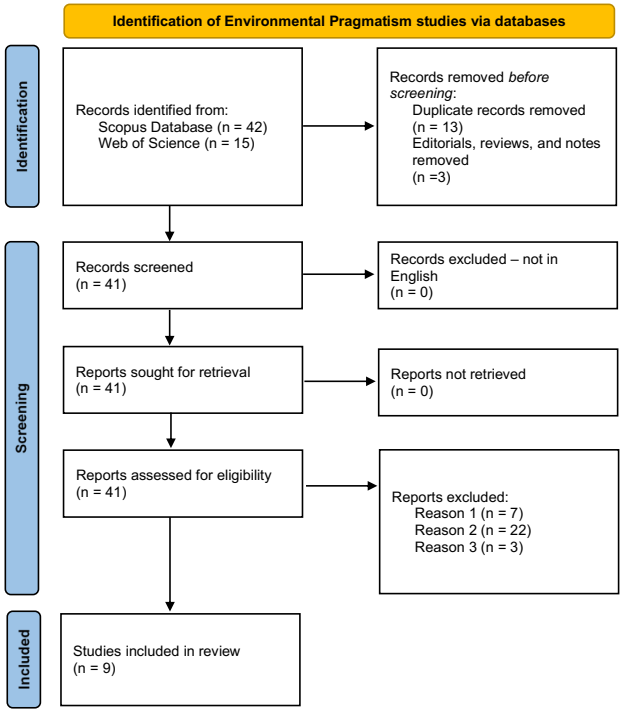

Figure 10 PRISMA Systematic Review of Environmental Pragmatism Participation and Deliberation (Page et al., 2021)

The 9 articles had a strong leaning toward critical reflections against the approach, which will be shown in the following sections.

3.2.1. Environmental Pragmatism Overview

Environmental pragmatism originated out of a desire to cut out all of the unnecessary dialogue within environmental ethics and theoretical debates. It views these as often misguided, creating roadblocks for environmental change, and essentially being a waste of time. Environmental pragmatism claims that debates about intrinsic vs. instrumental value, non-anthropocentric dialogue about nature's inherent worth, and deep theoretical conversations about intricate differences between positions are not necessary and ultimately a hindrance to the environmental cause. They view the inability of environmental ethics to hold sway over environmental policy in the past as a demonstration of its ineffectiveness (Brush, 2020).

Environmental pragmatism attempts to steer clear of the 'hippy spiritualism' and vagueness of deep ecological and ecocentric positions, opting for a more tangible and practical approach to environmental issues and challenges that we face (Irwin, 2007). It tries to be the 'voice of reason in a debate that it sees as mired within environmental fundamentalism and dogmatic views of nature and our place in the world' (Irwin, 2007). It attempts to get away from the 'moral dogmatism' that was rife within environmental ethics and to pioneer a more unified and pluralistic approach to environmental concerns.

Environmental pragmatism focuses on what it considers to be the most important topics and themes within the environmental movement to initiate real change within policy (e.g., climate change, biodiversity, etc.). Environmental pragmatists emphasise practical concerns over theoretical concerns, achieved through local action and community initiative (Booth, 2012), as well as achieving 'policy consensus over theoretical disputes' (Brush, 2020, p. 160). There is a need to focus on practical, real, societal issues, rather than philosophical ideas and theories that are only relevant to academics (Loman, 2020).

One of the main focal points of environmental pragmatism is its aim to promote citizen engagement, dialogue, and public action. It strongly believes in the power of dialogue and communication to overcome theoretical disputes among groups and strives toward achieving consensus on environmental issues (Loman, 2020). It does this by conducting open-ended inquiries into issues and incorporating 'all relevant stakeholders in a rational discourse' (Loman, 2020, p. 286).

3.2.2. Deliberation and Participation

One of the main objectives of environmental pragmatism is to spur public debate and dialogue about environmental issues and to reclaim the importance of nature protection from the hands of academics. It aims for a practical identification of consensus and tolerance, achieved through dialogue and discussions to uncover what the public considers the most important environmental issues to address (Brush, 2020). The aim is to redirect policy towards what citizens want and value (Irwin, 2007).

> *[P]ragmatic thought has much to add to contemporary discourse regarding environmental laws and policies. Pragmatism's stress on concrete facts, flexibility, experimentation, and practical, workable solutions to real-world problems, combined with its clear preference for democratic consensus-building and social justice, appears to provide a sensible intellectual framework for innovation and reform in environmental decision-making at all levels (Mintz, 2004, p. 25).*

This consensus-building is an important component of democratic thought and practice. It attempts to redirect stimulating, yet not very conducive, dialogues within environmental ethics towards more practically-oriented concerns, guided by public action. One of the main assumptions within environmental pragmatism is that it purports that truth and the most moral answers will emerge from public discourse (Loman, 2020). It achieves this by 'continuously and consciously considering a plurality of values using deliberation, discussion and open debate' (Loman, 2020, p. 288).

Environmental pragmatism is stating that when there are conflicts and challenges between different viewpoints and values, we still need to come to a decision that takes everyone's views into account, even if the result may contravene or conflict with these views. Environmental pragmatism is more concerned with achieving a 'workable policy' (Maboloc, 2016). The goal of environmental pragmatism is to facilitate a situation where people can join together to discuss, debate, and find common ground about environmental issues (Maboloc, 2016). It accepts that not all of these agreements will be perfect, but one where policy is acceptable to most citizens (Maboloc, 2016).

Environmental pragmatism does not claim that anthropocentric or non-anthropocentric politics are better or worse than one another. It attempts to move away from both positions, providing a 'third way' of viewing the environmental challenge, namely, through deliberative, inclusive, pragmatic decision-making (Michael, 2020). It attempts to minimise the distinction between these two conflicting approaches and claims that often their end goals are the same and that convergence can occur (Minteer & Manning, 2000; Norton, 1994).

3.2.3. Deliberation and Participation Theory

Environmental pragmatism advocates for citizen science that forwards an ideal of collective thought and collective decision-making. There is a philosophical faith in the harmony of the masses, that they will provide a collectively-correct decision for environmental policy (Brush, 2020). Through participation and deliberation, citizens can become more informed, while also informing others, and a balance or consensus will be arrived at (Brush, 2020). This approach is pluralistic and inclusive, and is fundamental to preventing authoritarianism and non-democratic political representation. There is an acknowledgement that while this process is not perfect, it is the most democratically-sound and pragmatic approach to take (Brush, 2020).

> *[P]ragmatism treats difference as a resource for learning and growth by foregrounding the limitations of any one discursive or political position—if all knowledge is situated, no one's standpoint holds enough information to solve collective problems. Instead, continual cross-group negotiation and experimentation are required to assess and advance various proposals for social and environmental amelioration. Ideas from various ideological corners emerge as tools, and distinct worldviews become useful, rather than obstructive, in offering partial proposals for confronting complex challenges, with which no one single moral or political approach can be capable of addressing on its own (Brush, 2020, p. 162).*

This is somewhat naïve, however. To believe that more opinions will somehow lead to fairer and better environmental decision-making is idealistic. This has not worked in the past and often when many individuals get together to discuss environmental concerns, anthropocentric goals get pushed to the front because jobs and income usually win over the interest of other species. Furthermore, the group thought may be a force for good in many situations, but it can also be the opposite, with the group thought in the past justifying slavery, the exploitation of indigenous people and their land, and the repression of members of the LGBTQIA+ community and other minorities. Groups of humans are not necessarily rational, or more rational than individuals within that group.

Additional criticism of this viewpoint is that simply allowing someone, or a group, a place at the negotiating table does not mean that their voices will be heard or their values considered (Booth, 2012). Some claim that it may even do the opposite and work as a form of co-optation, subsuming the voices of marginalised groups and silencing discord and opposition (Booth, 2012). Sometimes there is a need for political disruption and changing the orders of power, rather than simply being co-opted and silenced.

However, dissent and discord are often seen as anathema to environmental pragmatism. It represents a threat to instability, misdirection, and misguidance from coming to more effective and practical actions. It 'distracts' from policymaking and implementing effective environmental policy (Brush, 2020). While they believe that disagreement is a fundamental component of democracy, they believe that it can be resolved through dialogue and communication, rather than divergence or dissent (Brush, 2020).

Eckersley is critical of environmental pragmatism because it takes on the mediator role in all situations and this limits itself when it comes to democratic action and environmental aims (Eckersley, 2002). If environmental pragmatism is always playing the compromiser in

situations, it never takes serious or drastic actions that may be required in environmental crises. Compromise is not always necessary, achievable, or desirable (Brush, 2020).

3.2.4. Expediency and Values

Environmental pragmatism assumes that citizens will be able to put aside their values and beliefs to a large degree for a more 'rational' and structured discussion about environmental protection. It emphasises the importance of coming to a compromise, which in most instances will involve a degree of giving up one's values and beliefs to reach an agreement. This may be at fundamental odds with individuals' moral and political worlds and is far from an easy or fair thing to achieve: 'Debates on basic moral principles are important. One cannot just call for an end to the "humans first" and "nature first" debate based on expediency' (Maboloc, 2016, p. 110).

This repression of values and beliefs is not representative of democratic institutions, but rather represents intolerance, repression, and ignorance towards other citizens' deep-rooted moral convictions and values. Environmental pragmatism favours expediency but creates a forced homogeneity between its citizens that is not conducive to democratic communities. 'Policies advanced based on expedient outcomes would be ethically and democratically deficient' (Maboloc, 2016, p. 110).

Environmental pragmatism also emphasises the power of reason, dialogue, and debate to reach a consensus. Unfortunately, this gives a much stronger role to those who can vocalise their concerns most coherently and convincingly. Environmental pragmatism favours those who can debate, dominate, and make their voice seem the most rational. It places lesser-educated, more emotionally driven, and less eloquent citizens at a disadvantage. In addition, rationality is often considered a masculine trait and emotional a feminine one (see the Section on ecofeminism later in this report), which exacerbates gender power imbalances.

3.2.5. Power Asymmetries

One of Eckersley's criticisms of environmental pragmatism is that it is not critical or reflective enough on oppressed and marginalised groups, as well as non-human species (Eckersley, 2002). Environmental pragmatism focuses too much on the result or outcome of particular situations and fails to acknowledge the big picture of how the system allowed environmental destruction to occur in the first place. 'It prefers incrementalism rather than a radical overhaul of social institutions because such an overhaul is too contentious' (Booth, 2012, p. 77). This slow-and-steady approach is not necessarily always enough when dealing with broad impactful issues, such as environmental destruction. Sometimes radical shifts and changes are required.

Environmental pragmatism has very lofty goals and objectives, desiring more environmentally-sustainable policies, achieved through dialogue, consensus, and agreement. An issue with environmental pragmatism is that because of its very future-oriented, pragmatic, and action-guided approach, it often fails to examine who the policies are beneficial for, who has benefitted from environmental destruction historically, and the relevance of power asymmetries within these relationships (Booth, 2012).

One of the main issues with this type of approach is that it has the potential to overlook institutional failures and weak systems because it is so action-focused and driven toward policy within the current system (Maboloc, 2016). In countries where systemic oppression is overt, environmental pragmatism may condone these systems and argue against reform as it would be too inconvenient or misdirected away from more 'pragmatic' environmental concerns (Maboloc, 2016). Environmental pragmatism may be ineffective for changing the political status or circumstances of oppressed societies (Maboloc, 2016).

> *Treating all parties as equals ignores differences in economic and political power. [...] pragmatism's narrow focus on problem-solving between stakeholders tends to ignore these power differences and is thus insufficiently empowering for marginalized groups such as indigenous peoples, people of colour, and environmental protectionists (Booth, 2012, p. 77).*

Environmental pragmatism would require a type of egalitarianism, where everyone is entitled to their say, it will be taken into account in an equal way, and they have as much power as their neighbour to influence change. However, this is simply not realistic and it places too much trust in society and the goodwill of individuals. There are obvious power asymmetries within society and environmental pragmatism tends to look the other way or downright devalues them.

3.2.6. Instrumentalist Democratic Encounters

Another criticism against environmental pragmatism is that it is specifically geared towards instrumentalist citizen engagement and dialogue (Eckersley, 2002). Its main focus is on using the democratic process to identify what are the most pressing environmental issues and what is considered most important for the public. A problem with this is that very often the most tangible and easier to discuss topics revolve around instrumental economic issues, much to the neglect of 'spiritual or aesthetic values, which are sometimes defended by environmentalists' (Booth, 2012, p. 78).

3.2.7. Criteria for Meaningful Citizen Participation and Deliberation

As a result of the research conducted on environmental pragmatism, we provide five criteria to ensure meaningful citizen participation and deliberation in environmental policy, such as the EGD (see Appendix 7.3 for environmental pragmatism criteria).

3.3. Biocentrism

The biocentrism search brought back a total of 343 results from a combination of Scopus and Web of Science. After duplicates were removed, this resulted in 279 screened articles. A further 12 articles were removed because they were not in the English language. With the remaining 267 articles, I applied the exclusion criteria developed in the early stages of the project, with 36 results being removed because they did not focus on biocentrism, 156 removed because they did not concentrate on citizen participation and deliberation, and a further 66 were removed because they did not concentrate on environmental policy concerns. This resulted in only 7 articles for analysis (Figure 11).

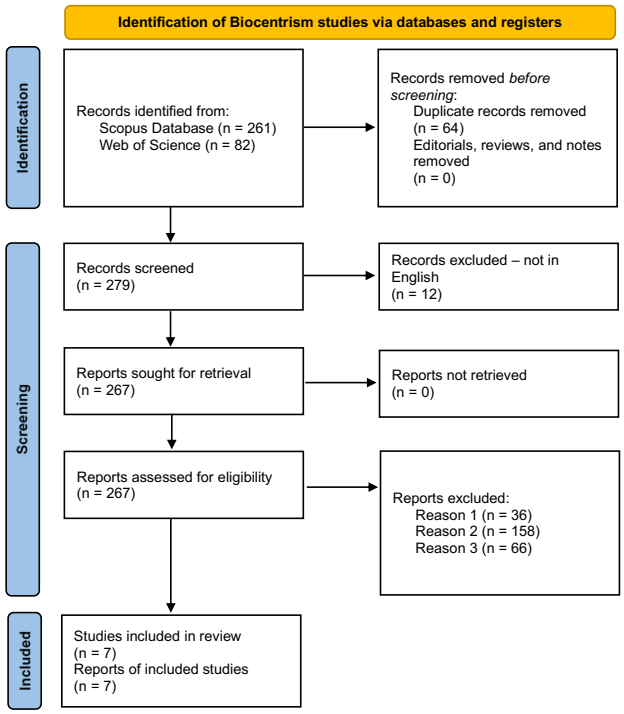

Figure 11 PRISMA Systematic Review of Biocentric Citizen Participation and Deliberation (Page et al., 2021)

Much of the remaining 7 articles were not strongly focused on participation and deliberation. This points to the fact that very little has been written on the topic of biocentric politics or how citizens can engage in biocentric participation, showing that biocentrism is difficult to implement in practical terms in political settings.

3.3.1. Biocentric Citizen Participation and Deliberation

Biocentrism views all living organisms as having intrinsic value and that their needs are not greater than those of human beings (Ajibade & Boateng, 2021). Nature is not there simply to provide us with resources to overexploit and destroy, but is holistic and systemic, providing the life source for all other living entities on the planet, and our actions should reflect this (Barranquero Carretero & Sáez Baeza, 2022; Laastad, 2020). We are equal to all other species and fair competition should be allowed among the community of organisms in the world: 'Natural competition of diverse entities even includes the extinction of some species (natural selection), as long as the rules of the game are fair' (Emmenegger & Tschentscher, 1993, p. 578).

Biocentrism fundamentally views human beings as part of nature, not apart or distinct from it (Ingalsbee, 1996). However, biocentrism makes clear that 'nature's rights do not guarantee the existence of every species forever; they give a right to existence under fair conditions of natural competition' (Emmenegger & Tschentscher, 1993, p. 580). Biocentrism proposes that human beings should be respectful of the intrinsic value of nature and we should strive to live in harmony with nature, rather than above it or in opposition with it (van Norren, 2020). The ability of other organisms to live and flourish is at the heart of biocentrism (Wienhues, 2017). To do this, we must increase an ecological consciousness toward the environment, raise awareness about our impacts on other organisms, and cultivate an approach to the non-human world that transforms our interactions with nature (Anker & Witoszek, 1998).

The foundational idea of biocentrism is the attitude that individuals should live simply so that there is no overexploitation of nature and resources, and that others can do the same. It is based on the premise that if humans live simply, it will allow many other organisms and species

to simply live (Ingalsbee, 1996). However, there are many problems with how to implement these opinions within political systems that try to ensure that citizens are treated equally, and fairly, and have the means to live their lives freely.

When one takes the next step of implementing rights for non-human organisms or taking into account the intrinsic value of nature, one is often left with the challenge of how to accommodate the views of biocentrists within political action. This is because of the very tenets that undermine this ideology and what would be required of democratic institutes to take it seriously. For example, 'the biocentric "marketplace of interests" poses new problems for the balancing of conflicting rights. A virus that is deadly for humans, for example, has nevertheless an intrinsic value as a part of nature; its extinction is not "natural" but has to be justified' (Emmenegger & Tschentscher, 1993, p. 583).

The marketplace of interests for non-human organisms must be taken into account, but this may cause dramatic effects on the health and safety of human beings. There needs to be a clear indication of whose interests and rights to exist should be taken into account. Surely, it is logically inconsistent for biocentric advocates to promote the implementation of political action that would represent all living organisms and species equally as it would be far too difficult to give the same kinds of rights and protection to them as we do other human beings. While there have been efforts to incorporate animal rights, this has largely been centred around animals with sentience. Even then, these animals have very low levels of protection in comparison with human beings.

Biocentrists claim that while there is not a consensus for environmental protection for the intrinsic value of other organisms, this does not necessarily mean that it is something that is not important or that should not be implemented in policy and law. Biocentrists would argue that humankind has had a history of unfair and inhumane practices, which were only absolved through law and restrictions on individual practices. Biocentrists aim to provide the representation of those who cannot represent themselves (namely, non-human organisms), giving a voice to the voiceless in global environmental participation and deliberation (Emmenegger & Tschentscher, 1993).

Some claim that biocentrists should become more proactive and should try to initiate change based on their deeply-held values and beliefs (Anker & Witoszek, 1998). They should attempt to do this through nonviolent means and attempt to help build a new society formed on the values of biocentrism (Anker & Witoszek, 1998). There will also be conflicting opinions and values when real societal change occurs, so the biocentrist must account for this: 'Very much like the struggle for a better society, the struggle for a better environment is inevitably accompanied by controversy over conflicting values. A democratic pluralist society should, in principle, work out a consensual basis for the resolution of environmental conflicts' (Anker & Witoszek, 1998, p. 241).

Biocentric reformists claim that they should work within the system and encourage and develop biocentric values through grassroots movements and by educating citizens, and public debate. Their main aim is to engage others, create better democratic participation and deliberation, and reform societal values towards more biocentric ones. This position is not against the current system but attempts to reform and change it in a more biocentric direction (Anker & Witoszek, 1998, p. 242).

Some biocentrists are critical of the current liberal democratic system because it has always placed human needs first and when it concentrated on better environmental practices, it did so for the wrong reasons (e.g., for anthropocentric reasons, such as for human survival, rather than the rights of other organisms to flourish without interference). Liberal democratic countries are too focused on economic growth and the only reason that they change their behaviours is when environmental pressures threaten economic growth (Boxley, 2019).

3.3.2. Criteria for Meaningful Citizen Participation and Deliberation

As a result of the research conducted on biocentrism, we provide five criteria to ensure meaningful citizen participation and deliberation in environmental policy, such as the EGD (see Appendix 7.4).

3.4. Ecofeminism

The Scopus search led to 532 articles, and the search in Web of Science led to 320 articles (852 total). The PRISMA Flow Diagram was used to eliminate articles that were not relevant. As Figure 12 shows, duplicates (92), non-scientific readings (17) and non-English articles (26) were removed. That left us with 717 articles. The titles and abstracts of these articles were scanned for three reasons for exclusion. The first reason was articles that were not relevant to ecofeminism (204). The second reason was articles that did not focus on citizen participation or deliberation (253). The third was articles that did not focus on topics related to the EGD (213). Out of the papers and book chapters that were left, 7 could not be retrieved. This led to a total of 40 articles that were read for this systematic review.

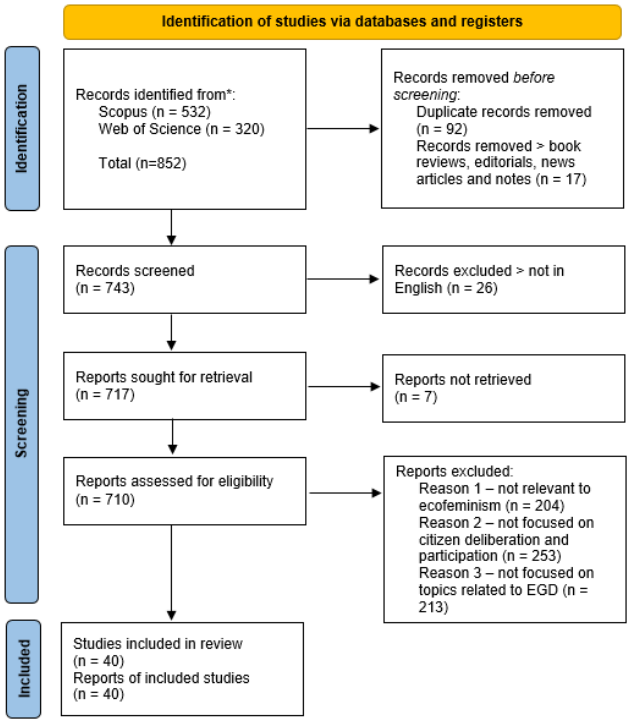

Figure 12 PRISMA 2020 Flow Diagram Ecofeminism

While some articles critically reflected on ecofeminism, most articles advocated for an ecofeminist approach. All but one of the 40 articles are used in our report. Furthermore, some other articles were added, mainly to clarify 'ecofeminism' in the introductory part.

3.4.1. Ecofeminism overview

Ecofeminism arose during the second feminist wave and is influenced by other social coalitions like peace activism and ecological movements. The first to use the term 'ecofeminism' was Francoise d'Eaubonne in 1974 (Baker, 2004; Fakier, 2018; Mies & Shiva, 1993). Besides the feminist focus on the effect of social and ecological approaches on people, ecofeminism also focuses on the effects these approaches have on nature (Pilgrim & Davis, 2015). According to ecofeminists, modernisation and 'progress' are responsible for the degradation of nature (Mies & Shiva, 1993). While both modernisation and progress are usually framed as general improvements, not all creatures benefit from them. Besides nature,

women are also often negatively affected by these structures which are in general created by and based on white men from the Global North (Salman & Iqbal, 2007). Ecofeminism, therefore, takes the position that the oppression of women is inherently entwined with the destruction and exploitation of nature by people (e.g. Ajibade & Boateng, 2021; Anahita, 2009; Baker, 2004). The same structural source is seen for both forms of oppression, namely western science which is based upon rationality, objectivity and control (Bäckstrand, 2004) and patriarchal domination (Anahita, 2009; Buckingham, 2015; Nugent & Shandra, 2009).

Ecofeminism takes an intersectional approach in claiming that women are oppressed for more reasons than only their gender. Aspects like racialisation, sexuality, class, location, religion, dis/ability, physical appearance and nationality also shape people's individual identity (Lee, 2018). When an intersectional approach is taken, individuals are not only defined by their gender but also by other societal aspects and characteristics. All aspects that contribute to someone's social identity affect how this person experiences their being in several contexts. One of the aspects in which ecofeminism differs from feminism is that it considers the environment to be one of the factors influencing women's identity and contributing to the oppression of women (Lee, 2018; Pilgrim & Davis, 2015). For example, women are often responsible for the provision of food, fetching of water, and caring tasks (Nugent & Shandra, 2009) and therefore, immediately notice when water levels are changing or when the quality of the soil worsens. Because of this, effects of climate or environmental change such as drought or heavy rainfall will often be noticed by women first and will affect women most (Hunt, 2014; Kesting, 2011; Lee, 2018).

Because of the interlinkages that are seen between the oppression of women and nature, some ecofeminists, like Littig, argue that women and nature have to be liberated together because 'women's emancipation goes hand in hand with the establishment of non-destructive and power-free nature-society relationships' (in Nugent & Shandra, 2009, p. 210). Neither the oppression of women nor environmental degradation can be solved independently. A specific focus has to be given to their interlinkages and their mutual interactions.

While all ecofeminists will agree that the linkage between women and nature is important to consider, there is a discrepancy between cultural and social ecofeminism and the way they perceive this link. Cultural ecofeminism arose from radical feminism[3] and supposes that the female's reproductive power is what causes the closer connection of women with nature, which also has life-giving powers (Baker, 2004; Wehrmeyer & McNeil, 2000). Reproduction is not seen as oppressive in itself but rather as a tool of oppression. By celebrating the female body, liberation can be achieved. This movement shares ideas with spiritual and affinity ecofeminists who see women as agents for ecological change because of the close connection to live-giving Earth as a result of women's live-giving, caring, and nurturing characteristics (Foster, 2021). Many other ecofeminists reject this vision because they argue that focussing on this link between women and nature because of their reproductive powers is a step back in the fight of women to gain bodily freedom and to be valued for more than their reproductive powers (Baker, 2004; Stevens, Tait, & Varney, 2017) Furthermore, it reinforces a binary concept of gender and in that way ignores women in all their diversity.

Social ecofeminists, also referred to as materialist ecofeminists, strongly reject the essentialist claim that women have an innate connection with nature. Social ecofeminists argue that the oppression of nature should be linked to exploitation and socially constructed ideas of gender in society. For them, economic and social arrangements in our society are the root cause of oppression. Because our society is gendered, women have a socially constructed connection with nature and therefore experience nature differently compared to men (Baker, 2004;

[3] Central to the argument of radical feminists is that women's oppression is related to male sexuality. The oppression of women is seen as the root cause of other forms of oppression (Gaard, 2003). They believe there is a difference between 'an innate female nature, which differs from the gendered self of the male' (Baker, 2004, p. 17). Because of this difference, which expresses itself in the life-giving power of women, some radical feminists argue that women are superior to men.

Morrow, 2017). Due to the way Western societies are structured, women can see the negative effect of social relations on nature Wehrmeyer and McNeil (2000). Men are not able to see this impact because of their privileged position. Both capitalism and patriarchy are highlighted as structures that flourish due to the oppression of women and nature (Foster, 2021; Stevens et al., 2017).

In this report, we will first focus on arguments given for citizen participation and deliberation by both cultural as well as social ecofeminists. Afterwards, we will formulate criteria for meaningful citizen participation or deliberation from an ecofeminist perspective.

We assigned the arguments for citizen participation and deliberation into five different categories: participation and deliberation are important because i) the marginalised or oppressed can be heard, ii) the planet can be valued and protected, and sustainability can be promoted, iii) it contributes to bringing about systemic change and iv) human development. The last part focuses on v) the limitations of participation.

3.4.2. Participation is important because the marginalised and oppressed can be heard

3.4.2.1. Critique of scientific knowledge

Bäckstrand (2004) argues that scientific knowledge, just like every type of knowledge, is formed in a certain social and cultural context. Therefore, it cannot represent power relations but is embedded 'in all building blocks of what we term the social' (Jasanoff, 2004 in Bäckstrand, 2004). Furthermore, scientific knowledge is framed as being objective and rational; characteristics that are often historically linked – particularly in Western societies – to masculinity. These characteristics are ascribed to a higher value in science compared to values that are seen as feminine. For example, there is a focus on monoculture in agricultural practices, which is seen as masculine, at the expense of enlarging or maintaining biodiversity, which is regarded as a feminine principle (Bäckstrand, 2004). Also, science is regarded as hierarchical as it is a one-way flow of information from top to bottom (Rocheleau, 1991). In response to this hierarchical and exclusionary approach within science, ecofeminism claims that we need to include local experiences and knowledge for a more inclusionary and complete picture of the issue involved (Morrow, 2017).

Shiva states that marginalised people often have access to traditional or indigenous knowledge about food, the environment and medicinal plants that are often learned outside official education and handed down from generation to generation. There is often a gendered dimension here, as women are mostly the custodians of this kind of knowledge (Agarwal, 1998; Morrow, 2017; Rocheleau, 1991; Stevens et al., 2017). Due to their position in the world, these women have a 'privileged position to make visible the invisible oppositional categories that they are custodians of' (Shiva in Li, 2007, p. 364). Usually, when global issues are discussed, the focus is on the Western mainstream context and the issues are viewed through that particular lens. However, when global issues like environmental justice and gender equality are discussed, ecofeminists argue that local and regional perspectives need to be included to fully understand the multi-layered nature of these issues (Ilishko, 2008; Morrow, 2017). Only by acknowledging and including women who are custodians of this knowledge, can this wisdom be taken into account. An example of this is rural women in Pakistan, where traditionally men are the owners of agricultural land. Since the Sindh Rural Women's Uplift Group helped women to work in organic farming, more has been done on environmental conservation. These women use their knowledge on herbs, medicine and sustainability for, inter alia, sustainable soil management (Salman & Iqbal, 2007).

3.4.2.2. Include the people who are most affected by environmental degradation

The needs and interests of women from the Global South are often not reflected in capitalist systems in which economic growth is seen as the main indicator of development (Cross, 2016;

Giacomini, 2016). Besides that, the lives of marginalised groups - particularly women in all their diversity - are often most affected by environmental degradation and climate change, underlining the moral argument for their participation (Anahita, 2009; Morrow, 2017). 'Green or sustainable growth' projects, like for example nuclear power or dam-building for energy, suggest that they do good but most often do not recognise the significant negative effect they have on indigenous communities (Cross, 2016).

Ecofeminists, therefore, argue that especially the needs of the affected group should be prioritised and that they have to be included for this to be possible. It is crucial that by including marginalised people and grassroots knowledge, ecofeminism should 'not "borrow from another group" when attempting to identify tools or resources to aid them in their struggles, but rather learn to "locate sources of empowerment in one's own heritage and context"' (Daly in Kao, 2010, p. 628). Inappropriate use of grassroots beliefs and traditions must be avoided by listening to local people about their connections to nature (Wilson, 2005). This can be done, for example, by keeping local people in the lead as is done in the Indigenous Organization of the Ecuadorian Amazon (CONFENIAE). In this organisation, local people have a key strategic role in determining how the movement collaborates with other indigenous women to work on local environmental problems (Li, 2007). Local women who started environmental movements at grassroots level play an important role in the continuation and successes of these movements and therefore in the realisation of environmental conservation (Stevens et al., 2017) as demonstrated by the Green Belt Movement (GBM). The organisers of the GBM claimed that it is necessary to have committed local people working on sustainability processes for the process to succeed. Their engagement will lead to the involvement of a broader community as well, which will enlarge the local support for sustainable movements (Hunt, 2014). However, as Devika (2010) indicates, in most development projects in the Global South, women are still seen as the object of development instead of empowered creators.

3.4.3. Participation is important to value and protect the planet and promote sustainability

One of the reasons why participation is important according to ecofeminist literature, is that it can help to value and protect the planet and our environment. Besides that, sustainability can only be promoted when many people are involved in implementing it because sustainability will not be achieved with only a few behaving sustainably, while the rest of the population continues to pollute and degrade the natural world. This section of the report will discuss the position of ecofeminism in relation to why citizen participation is important for protecting the environment and promoting sustainability. We divided this paragraph into two parts. The first part describes that participation of people can show a connection to nature. The second part elaborates on the claim that participation is key in actually fighting environmental degradation.

3.4.3.1. Show interconnection with nature

Ecofeminists argue for a different understanding of the human-nature relation. Nature is seen as an "active subject" (Stevens et al., 2017, p. 10) whose own needs need to be taken into account. In today's beliefs, nature is often regarded as a passive object that can be dominated by human beings for people's needs and wishes (Stevens et al., 2017). Because nature and people are interconnected, ecofeminism believes that small actions on the micro-level have effects on larger actions and structures (Ilishko, 2008).

Anahita (2009) analyses the landdyke movement and describes how this movement creates other ways of living together with nature. They do not free their living spaces from natural aspects like insects and participate in organic gardening. They feel that the oppression of women, and nature, is part of everyday practices in patriarchal societies. Therefore, women living on these lesbian lands argue that ecofeminist resistance also needs to be implemented in everyday life (Anahita, 2009).

Some ecofeminists argue that women should be included because they have maternal duties not only to people and future generations but to the earth as well (the Tzu-Chi Foundation in Taiwan adopted this idea) (Kao, 2010). Other women strictly advocate against putting even more care responsibilities on the shoulders of women and explicitly distance themselves from maternal duties. Devika (2010) provides examples of women living in and around Kerala whom all have their own battle of caring for a part of their local surroundings. These women live alone and apart from their children and are heavily involved in earthcare of their local surroundings, for example by protecting birds, refusing to leave their houses to make place for sand mining or fighting against the placement of a dam. Devika argues that this earthcaring cannot be confused with mothering. The care for the environment is seen by some women as reciprocal and instrumental and therefore as different from mother-child relations (Devika, 2010).

3.4.3.2. Key to solving environmental problems

McKinney (2014) states that 'ecological inequalities are related to social inequalities and vice versa' (p. 211). Gender and political inequality are concepts that contribute to ecological degradation. However, Topić, Lawson, and Kelsey (2021) argue that sustainable development often strives for gender equality. Several scholars argue that including citizens in actions against environmental degradation is key to actually solving environmental problems (Li, 2007; Pandey, 2010). Some specifically argue that the inclusion of women is crucial in 'the defence [sic] of the commons' (Giacomini, 2016, p. 95) as their interdependent relationship makes women crucial actors to engage on behalf of nature (Baker, 2004). McKinney and Fulkerson (2015) examined the relationship between the status of women and environmental conditions and climate justice in several countries and argued that the role of women in overcoming ecological battles should be highlighted and promoted because 'it does seem that when women suffer, so does the environment' (McKinney & Fulkerson, 2015, p. 310).

In many environmental organisations or movements, women make up most of the members, although not necessarily in leadership positions (Topić et al., 2021). Also, several ecological movements all over the world that protect and strive to heal the earth have been established by women and/or indigenous people (Salman & Iqbal, 2007) like the Wecan movement in Ecuador (Giacomini, 2016) and the GBM in Kenya (Hunt, 2014). Women living in Uttaranchal, India defend the forest in their region (Pandey, 2010) and Aboriginal Australians use their knowledge to care for nature and their land because nature has an intrinsic value to them (Stevens et al., 2017). According to Perkins (2019) some, mainly indigenous, women's movements advocate for forms of participation of citizens because they point to 'the importance of participatory democracy and local responsibility for preventing the commodification of water, mineral sources, forests, fisheries, information, collective transportation and other widely shared systems' that are of importance for these indigenous communities (Perkins, 2019, p. 188). Besides participation in sustainable organisations, women are also seen as "ecological citizens" who focus on consumption and their ecological footprint and therefore advocate for change (Maleta, 2018).

While some scholars like Nugent and Shandra (2009) do not find evidence to support the reasoning that the oppression of women and the oppression of nature have the same source. However, they did find both theoretical and empirical evidence that women take a more pro-environmental position compared to men. Involving women in politics then leads to more environmental protection. McKinney and Fulkerson (2015) illustrate that in countries where women have a higher political status, the emission of carbon dioxide is significantly lower compared to countries with a low political status of women. This is why they, and others (Fakier, 2018; Topić et al., 2021), argue that including women in politics enlarges the chances of reaching pro-environmental policies.

Besides contributing to solving environmental issues, involved citizens also increase the visibility of these issues. Salman and Iqbal (2007) show that women who participated in the

GBM increased public awareness of environmental problems. However, some ecofeminists argue that for women to be able to equally contribute to environmental sustainability, gender relations have to be taken seriously. Women have to be able to control their own reproductive activities and domestic work. Only when they can balance that with their participation in environmental sustainability actions, will the 'responsibility for sustaining life […] be sustainable socially, politically, or ecologically' (Pilgrim & Davis, 2015, p. 128).

3.4.4. Participation is important because it can contribute to bringing about systemic change

Ecofeminism conceptualises citizenship and participation not as legal-territorial but as ethical and political participation in democracy and equality. This bringing together of different movements can foster environmental citizens who come together based on a 'radical revisioning of the world' (Sandilands, 1997, p. 135). It is important that inequality is paid attention to here, as Maleta (2018) highlights that a generic form of ecofeminist citizenship would reify existing inequalities rather than dismantle them. This paradox is at the heart of the debate in the literature; how can increased participation foster systemic change if you are participating in the very structures that perpetuate inequality?

Suresh (2021) posits that mechanisms in which structures are perpetuated should be continuously questioned. Similarly, Maleta (2018) ascertains that women's ability to contribute to active environmental citizenship should encompass a resistance to formal structures. Additionally, ecofeminist activism presents an alternate vision for participation which challenges existing institutions. This is not a homogeneous opinion, for example, Pandey (2010) celebrates that women's voices in forest management were heard by participating in 'modern' institutions (voting, democracy, state). Ecofeminism advocates for better representation of systematically excluded groups in institutions, but in order to ensure systemic change, participation should challenge existing narratives and structures (Agarwal, 1998; Cross, 2016; Giacomini, 2016; Hunt, 2014).

3.4.4.1. New Forms of Participation

An ecofeminist method of participation that has transformative potential is new ways of activism. Not all activist organisations declare themselves to be explicitly ecofeminist, yet often the literature will highlight various ways in which they have ecofeminist aims or structures. For example, Giacomini (2016) outlines the protests by indigenous women in the U.S. and Ecuador against oil concessions in 2016 as ecofeminists due to their bringing of women's experiences to the fore in discussion around harmful environmental practices. Grassroots voices of those directly impacted by climate change seem to be a key feature of ecofeminist activism, with Stevens et al. (2017) article on the Australian 'Climate Guardians' protests showing that they engaged with the broader community. This is arguably a feature of many different types of activism, yet it can be considered a core principle within ecofeminist activism, which often tries to bring the experiences of systematically excluded groups into environmental discourse. Baker (2004) states that non-violence and non-hierarchical organisational structure are two key pillars of ecofeminist activism and that they have the potential to expand the environmental movement. There was no explicit definition of what constituted ecofeminist activism in the literature, but the bringing together of social and environmental movements under non-hierarchical frameworks that put local voices to the forefront are all key features that have transformative potential.

Grassroots knowledge and experiences are key for ecofeminist activism, however, participation in a global ecofeminist movement also has the potential to bring about systemic change. Similarly, the Global North should bear a great level of responsibility for climate change, and Maleta (2018) argues that it is the responsibility of women in the North to network with those in the South and conduct joint ecofeminist actions. She argues that the collaborative

transnational nature of ecofeminism allows for a shift away from western dominated knowledge construction and exploitative research. However, her focus solely on women, due to their belief in a 'just social and natural world', romanticises women's closeness to nature, which indicates a cultural rather than social conception of ecofeminism. Successful participation that brings about systemic change should be intersectional and draw on commonalities, for example, women in the Global North who experienced persecution in the aftermath of Hurricane Katrina, or those in the South who have been harmed by exploitative mining practices (Salman & Iqbal, 2007) may find commonality in their exclusion and use this to foster joint activism. As Morrow (2017) asserts, ecofeminism can expand the debate, not by utilising the personal connection as outlined in cultural ecofeminism but by bringing together ideas to see how the personal can enact political change, as evidenced by Global North and South movements protesting resource extraction (Perkins, 2019). Civil society has been changing too in this regard, as Kao (2010) describes Women's Environment and Development Organisation as using essentialist rhetoric in a 2010 article, yet at the time of writing (2022), this organisation has moved away from essentialist narratives.[4]

Evidence of this activism changing the narrative agenda can be seen in Wilkinson's (2016) analysis of the outcome document of the UN Conference on Sustainable Development (UNCSD). Wilkinson asserts that women NGOs participation led to an ecofeminist critique of the outcome document's framing of 'green economy' which separates humanity and non-human nature and devalues women's non-productive work, and includes women's full and equal participation (Cross, 2016). Additionally, Maleta (2018) asserts that protests around the Copenhagen talks show public activist consciousness through empowered community networks. The new forms of participation put forward by ecofeminist activism allow for grassroots and systematically excluded voices to come to the fore. In doing so, there are new spaces for Global North and South collaboration, which has transformative potential to challenge existing narratives within global governance structures rather than being co-opted into them, and in doing so can bring about systemic change.

3.4.4.2. Challenging Exploitative Structures

A trend in the literature when discussing systemic change is the tendency to focus on how women in all their diversity are creating new forms of participation at the local level to challenge their exploitation and promote equitable resource access. Racialised and colonised women are exploited in low-paid service work and commodity production, and Giacomini (2016) states that when they deny their labour this has the potential to move away from exploitative practices. Giacomini (2016) asserts that men and white women must fight with racialised women at the bottom of the capitalist hierarchy to create horizontal relations to bring about systemic change. Here they emphasise the dual oppressions racialised women face due to both their gender and racialised group. Similarly, women's voices are often only heard post-policy implementation, which is a barrier to meaningful system change (Ajibade & Boateng, 2021). Some cases in the literature point to participation that challenges this, for example, La Via Campesina farmers prioritise the perspectives of those women most exploited by capitalism (Giacomini, 2016). Anahita (2009) ascertains that ecofeminist approaches must be embedded in everyday life to counter the daily realities of oppression. For example, the landdyke movement in Anahita's study created niches in rural spaces which empowered women.

Scaling up these everyday practices can lead to alternate participatory spaces that change resource access and challenge patriarchal politics. Women from low socio-economic backgrounds in rural Kenya had invaluable knowledge which led to fairer resource distribution and survival during a drought (Rocheleau, 1991). Yet this was also conditional on men's granting access to resources, which reinforces Agarwal's (1998) claim that women will need to bargain for their position in order to create change. This bargaining and creating of new

[4] Women Environment and Development Organisation, 2020 [online] https://wedo.org/about-us/

political spaces are evidenced in the literature (Hunt, 2014). Sometimes participation involves a changing of structures to meet ecofeminist demands, for example, Pandey (2010, p. 16) describes the women of Uttaranchal in Northern India, who: "in order to gain power in the civil society, […] need to gain control of the state and, in that process, truly reform and democratise [sic] it. Thus, they are increasingly making themselves heard by demanding greater participation in the Van and Gram Panchayats." A final relevant example is from Rocheleau (1991) where women have been exploring and challenging male domains of management. By incorporating ecofeminist principles into their everyday life, and then challenging existing structures, there is potential to change resource access, which can then move away from neo-colonial and patriarchal practices.

3.4.5. Participation is important for human development

Human development is understood in this context as aspects of improving society, individual life, wellbeing, and health. Obviously, the term encompasses more than this, however as political implications such as gender equality and challenging oppressive systems are covered in the previous section, this section will hone in on other aspects of human development covered in the literature. This will be done in three different stages. The first focuses on individual wellbeing and how participation in an ecofeminist sense can improve this. The second focuses on societal level development; under key values of ecofeminism such as stronger community and diversity. These are important facets which the EGD should aim to cultivate. Finally, two overarching key issues related to human development are examined; spirituality/religion and health. One key issue in the literature seems to be the romanticisation of the benefits of participation from an ecofeminist perspective, often expressed as women's closeness to nature. This reasoning behind the value of participation of women in particular is perhaps unhelpful, and its limitations will be explored.

3.4.5.1. Individual Development

Anahita (2009) emphasises how women felt they had a connection with the natural world and lived their politics through their everyday life. To value the natural world and eradicate the human-non-human hierarchy we should feel connected to environmental spaces and not fearful of them. However, this was framed by Anahita in an essentialist understanding of women's connection to the land, which romanticises women's position. Without engaging critically with such narratives, we risk adding to women's burden by assuming they should care for the land because they are connected with it. Rather than focusing on women's closeness with nature, another study attributes caring for the environment to personal values (Ajibade & Boateng, 2021). This was linked to participation in pro-sustainable behaviours in the U.S., defined 'as enduring and repetitive actions taken with the intention to change, benefit, or minimize human impact on the environment' (Ajibade & Boateng, 2021, p. 1). It was found that those with more altruistic principles had a stronger self-identification with environmental issues. Ecofeminist principles were also a large factor in engaging in pro-sustainable behaviour. Perhaps as Pilgrim and Davis (2015) suggest, the goal should be to encourage moral responsibility. Fostering certain values within people has the potential to transform their everyday lives and how they relate to the environment, leading to more sustainable outcomes.

3.4.5.2. Society: Diversity and Community Development

Moving on from the individual level experience, the literature also focuses on societal change and community development. Perkins (2019) focuses on indigenous peoples and how the recognition of their diversity and cultural rights, as well as their knowledge, is seen to be a token of respect for their identity and community. This is a valuable insight, however, it should be noted that this conceptualisation of participation of indigenous peoples should be led by these groups, as a top-down approach is likely to reinforce inequality rather than celebrating indigenous diversity and knowledge (Wilson, 2005). Maleta (2018) emphasises women's grassroots leadership and points out how those leading environmental justice movements tend to be women from working-class, indigenous or culturally/linguistically diverse

backgrounds. Diverse participation is vital to sustainable development, and this must come from the bottom-up, rather than as a tokenistic exercise implemented from above.

Stephens (2013) argues against top-down approaches, and how ecofeminist approaches could lead to project managers recognising their own socio-cultural reality. Yet it is not enough to say that diversity in participation can lead to community development. Agarwal (1998) astutely points out that the decentralisation of power and community control can also strengthen localised pockets of power, including patriarchal. Diverse participation should be matched with an understanding of local contexts and challenging existing power relations to ensure sustainable communities and human development.

3.4.5.3. Key Issues in Human Development: Spirituality and Health

Some examples from groups in Chile and Latvia highlight how women's groups view their relationship to their own bodies, spirituality, religion and the earth (Ilishko, 2008; Kao, 2010). An inclusive ecofeminist movement that appropriates narratives of spirituality being beneficial to nature will do nothing to challenge patriarchal models. But those studies that are ethnographic, interview-based, and reflect an indigenous understanding of local spirituality seem to have a better conceptualisation of the nuances between spirituality, religion, and our relationships to ourselves and the earth (Ilishko, 2008; Kao, 2010).

Improving our understanding of our bodies and health is also a key part of ecofeminism as it relates to participation. Reproductive health and universal access to healthcare are key to sustainable development (Cross, 2016). This has specific gendered dimensions, as Pilgrim and Davis (2015) highlight, women are often marginalised from meaningful civic engagement, both in terms of access to reproductive agency and health, as well as the inability to manage the unpaid care burden. Ecofeminism then has a liberatory potential as it celebrates women's agency over their own bodies (Ilishko, 2008) and addresses some of the disconnects between our bodies and the world around us, as perpetuated by consumer culture and patriarchal values (Anahita, 2009).

3.4.6. Participation is limited

In order to fully understand how ecofeminism is conceptualised in the literature, it is important to outline the limitations to participation. Indeed, one aspect of ecofeminism is its ability to highlight how participation of structurally disadvantaged groups can be hindered by various power matrices. Here we will focus on neo-colonialism, patriarchy, and capitalism (mainly the care burden and how care and participation relate to each other). Not only are these three areas with commonly analysed in the literature, but they provide valuable input into understanding participation. It should be noted that these forces intersect, but we shall consider them in turn for the sake of clarity.

3.4.6.1. Neo-colonialism

Participation of local communities and indigenous peoples is vital to achieving the goals of ecofeminism. However, often these groups are excluded by neo-colonial structures. Suresh's (2021) analysis of two villages in Tamil Nadu, India asserts that post-independence colonialism has been perpetuated by the local bureaucracy, which hinders effective solutions due to a romanticised idea of the local people and their relationship to the land. Effective participation should include the knowledge of local people, but as Rocheleau (1991) asserts, often indigenous ecological science is obscured by the invisibility of women, who are custodians of such knowledge. Here, neo-colonial and patriarchal structures intersect to hinder meaningful participation. Another barrier to participation is who has access to land itself. Perkins (2019) argues that solutions need to extend beyond just returning land to local communities, and ecofeminists should engage with the privilege they experience as settlers.

3.4.6.2. Patriarchy

Three case studies in the literature effectively highlight how patriarchal structures can exclude women from decision-making and participation related to ecological management. First, Rocheleau's (1991) case study of Kenya, shows how women's exclusion from agroforestry practices led to a reduction in the quality of fuel wood. Additionally, women had to ask a wealthy head of household to secure site access and negotiate time and space for tree nurseries, highlighting the gendered division of control over land and labour. Men's access to land was assumed and inherent, they did not have to worry about losing access when moving for education, whereas women had to bargain for access to land. Secondly, Suresh's (2021) study in Nigiris, India found that women only successfully benefited from forest management schemes when they were granted access to masculine spaces. The women in the case study expressed they were more comfortable in spaces not dominated by men. Thirdly, Agarwal's (1998) study found that all-male groups of forest management meant women were not listened to and felt they needed to reach a critical mass before they could contribute. These case studies are evidence of Cross' (2016) assertion that women and other traditionally excluded groups are often incorporated into institutions that maintain dominant ideologies and devalue their contributions. Meaningful participation is limited, and creating spaces for women's 'empowerment' without critically addressing local power structures will hinder ecofeminism.

3.4.6.3. Capitalism

The rationalist ideologies in the current dominant economic system devalue care and the natural world due to a narrow focus on growth and profit (Cross, 2016). Ecofeminism addresses this by highlighting how caring for people and the planet is valuable outside of this dominant paradigm. The participation of women in all their diversity is also impacted by the current system of neoliberal capitalism under which women are expected to handle the unpaid care burden. This is outlined in the literature as Ilishko (2008) highlights that women's participation in public life is limited by their double workload of the workplace and home. This reality is reflected in Agarwal's (1998) study where women said they could not join forest management meetings as they had care work to do. Often women with more resources have their ability to enter the workplace predicated on the ability to pay other women to do the care work (Buckingham, 2015). Methods of increasing women's participation in environmental movements must address this burden, however, this is an area with many pitfalls. Care has not yet been politicised, which various writers in the literature (Devika, 2010; Kesting, 2011) assert have led to the appropriation of ecofeminism by development agencies, which aim to 'empower' women through stressing the connection between mothering and earthly care. Not only does this narrative reify binary ideas about caregivers and gender, but it again adds a double burden to women which an ecofeminist conceptualisation of participation seeks to avoid. This is labelled by MacGregor as the 'feminisation of environmental responsibility' (2014). Some aspects of the literature put the onus on women to make environmental decisions, for example, the study of Topić et al. (2021) on sustainable food purchasing, or Mellor's (2017) assertion that women's care work becomes more difficult in a post-carbon world. Although raising important points, these again highlight how capitalism not only expects women to work and do unpaid care work but also to be the ones to care for the planet. An emancipatory reimagining of this is needed to achieve women's full and effective participation.

3.4.7. Criteria for Meaningful Citizen Participation and Deliberation

As a result of the systematic literature research conducted on ecofeminism, we specified six criteria that from an ecofeminist perspective should be considered to ensure meaningful citizen participation and deliberation in environmental policy (see Appendix 7.5 for the list of ecofeminism criteria).

3.5. Environmental citizenship

For this section, the SCOPUS search brought back 372 results and the Web of Science brought back 271 results. To produce an accurate and accessible number of results, several screening stages were employed using the PRISMA 2020 Flow Diagram for new Systematic Reviews. As the figure below shows, first duplicates (231), non-scientific readings (3) and non-English articles (0) were removed. That left us with 399 articles.

Many articles included environmental citizenship in the keywords but did not reference it in the article, or in other papers that mentioned it in passing in the abstract (Reason 1; n=100). In other situations, some articles did discuss the topic but it had nothing to do with the topic of citizen participation and deliberation (Reason 2; n= 196). This was because of the relatively broad nature of the search terms. For example, a very large percentage of these articles concentrated on citizen science or teenager environmental education, which arose from the keywords 'participation' and 'involvement', but which were not relevant to the focus of this paper. Other papers did not focus on specific environmental policy issues relevant to the green deal (Reason 3; n=55) (see Figure 13).

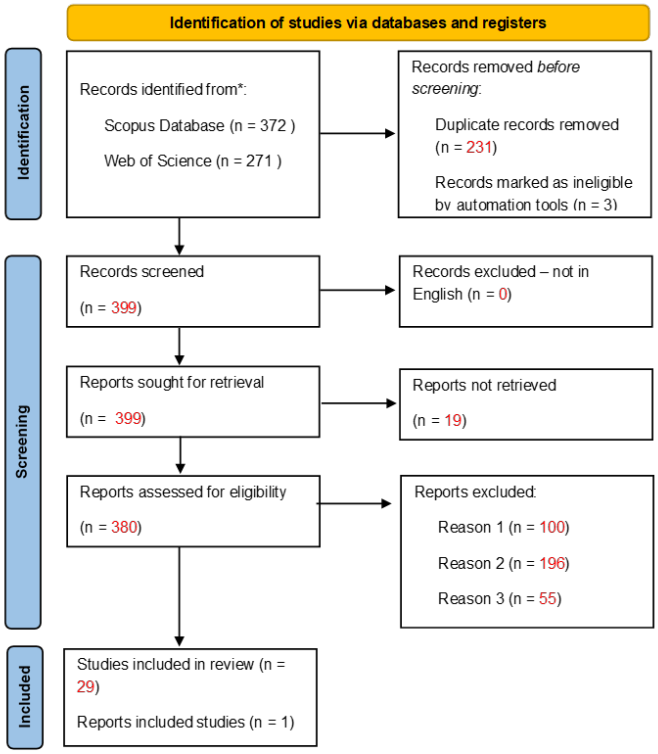

Figure 13 PRISMA 2020 Flow Diagram Environmental Citizenship

3.5.1. Environmental citizenship overview

Environmental citizenship entails the right to participate in environmental policy making, choose sustainable actions, obey just environmental law, and promote sustainable and just arrangements (Bell, 2005). Environmental citizenship is also about attitude, behavioural change, mentality change and engagement towards sustainability. Attitudes towards sustainability raise questions around models of citizenship ranging from compliance through democratic deliberation to active dissent (Levinson, 2020). Environmental citizenship advocates both bottom-up and top-down initiatives (Cuesta and Amand, 2021).

The urgency of the climate crisis and global movements for climate obviously have brought the concept of environmental citizenship to the fore again. Addressing the climate crisis requires a systemic and radical transition towards a low-carbon, sustainable social model. As

it concerns everyone, this transition must involve all members of society. Thus, fostering a "common environmental citizenship" contribute to accelerating and facilitating this transition, while ensuring that all voices are heard and no one is left behind (Cuesta and Amand, 2021).

Not only national and global economies will benefit from climate protection measures, but also individual citizens. The European Union wishes to develop itself as a pioneer in the practical implementation of the environmental citizenship concept, especially in new methods of cooperation with citizens to choose sustainable actions (Cuesta and Amand, 2021). The EGD marks an important step into integrating environmental citizenship concretely in all spheres of society, and nurturing a sense of ownership, common responsibility and accountability. However, there is also a need for a real EU environmental governance and a new European model of society (Cuesta and Amand, 2021).

3.5.2. Individualism versus Collective Action

Citizens can play a crucial role in establishing a "socio-environmental pact", by helping to reconsider the role that humans have on the planet and what will be left for future generations (Cuesta and Amand, 2021). This pact should follow an inclusive approach that fairly and truly valorises natural ecosystems, acknowledges and respects their limits, and places environmental concerns within larger societal dilemmas. Environmental citizenship states that it is therefore essential to support public engagement and acknowledge the complementarity between individual and collective actions.

Traditionally, citizenship has been associated with public spaces when citizens debate, act, protest or demand in public. Environmental citizenship shares this traditional element. Environmental citizens debate, act, and protest in public, while they also know that their private actions have public implications. From an environmental point of view, all actions are public actions – even those that originate in the home (e.g., we heat our homes, we cool our homes, we buy food to consume in our homes) have implications for the environment. Each of these apparently 'private' decisions has public environmental implications, so environmental citizenship is a citizenship of the private sphere as well as the public sphere. (Dobson, A. (2007).

Environmental citizenship based on a policy system of carrots and sticks, economic and fiscal incentives, might change behaviour only superficially. Citizens may not act in sustainable ways solely out of economic or practical incentives: people sometimes choose to do good for other reasons than fear (of punishment or loss) or desire (for economic rewards or social status). People sometimes do good because they want to be virtuous (Beckman, 2001, in Dobson, A. (2007). Environmental citizens have a responsibility to work toward a sustainable society, and this embraces all the activities one might normally think of as relating to "good" environmental citizenship: recycling, reusing, and conserving (Dobson, A. (2007).

An environmental citizen should have a coherent and adequate set of knowledge, as well as the skills, values, and attitudes necessary to be able to act and participate in society. As an agent of change, they are expected to solve contemporary environmental problems, prevent the creation of new environmental problems, achieve sustainability, and develop a healthy relationship with nature (Monte and Reis, 2021). An environmental citizen is an individual who practices their environmental rights and duties, can identify the structural causes underlying environmental degradation and environmental problems, and has the skills for critical and active involvement and civic participation to address these structural causes and to act individually and collectively within democratic circles, taking inter and intra-generational justice into account (Monte and Reis, 2021).

A recent iconic example of environmental citizenship and collective action is the youth activism and climate strike movements of the Fridays for Future - an international movement of school students who demonstrate to pressure political leaders and raise awareness on climate

change issues. According to scholars, the movement problematises the issue of the recognition of young people's agency by their adult contemporaries, at a watershed moment for global environmental activism (Kyroglou, 2020).

Demonstrations, protests and exhibitions function as forms of bottom-up climate activism and these initiatives contribute to better engagement in political dialogue and knowledge transfer based on scientific evidence. They can be seen as "triggers of change" for transformations towards sustainable futures. Civic engagement and mobilization depend on confidence in the effectiveness of participation, and beliefs about one's own capacity to become actively involved. Active involvement as an agent of change is strongly associated with the exercise of environmental citizenship and climate awareness seems to be a major reason to participate in the movement.

The Fridays for Future movement has led to a reflection on a better integration of climate activism and environmental citizenship into education for sustainable development (Kowasch and al., 2021). Environmental citizenship should be supported by providing space for participation of citizens (students) in political dialogue; incorporating climate activism and critical reflections on activism into school curricula, including the discussion of different perspectives and also dissent; training teachers in scientific knowledge on climate change and environmental justice and in climate activism (Kowasch and al., 2021).

3.5.3. Environmental Citizenship and deliberative and participatory democracy

Through deliberation and participation, it is possible to engage a vast diversity of citizens in debates and reflections on issues that affect them (Latta, 2007: 8). Citizen deliberations are a powerful instrument to promote environmental citizenship and deliberation formats allow the crucial transformation of individual preferences in the pursuit of the common good (Batterbury, 2015, p. 15; Luque, 2005, p. 9), (Bull et al., 2008), (Bohn, 2019, p. 2).

Researchers also focus on the educative aspect of deliberation, where deliberative processes can be seen as a form of social learning, especially through the interactions with other participants, with potentially diverging interests and preferences. Deliberation is seen as a "public form of pedagogy" (Bohn, 2019:8). To Bull et al. (2008, p. 2), an effective dialogue promotes learning, the emergence of new ideas, and the confrontation of various points of views. These benefits emerge through the opportunity for discussion, debate and questioning of issues with a broad range of people. (Bull et al., 2008, p. 11).

Although these authors advance a promising potential for deliberation in the field of environmental citizenship, several limitations have been pointed out in the literature. To Bohn (2019), the conditions under which deliberation leads to preference transformation and how these formats should be designed depending on the deliberative context are still unclear (Bohn, 2019, p. 3). Another issue lies in the capacity to assess the long-term impact of deliberative processes on participants' learning, preferences, and practices.

According to Bull et al. (2008, p. 14), it remains difficult to measure the impact of participatory processes more than a decade later. To Hobson, central questions remain, such as whether deliberation processes have a sustainable impact on broader social change trajectories (2013, p. 12). He concludes that while participants want and can make small changes in their everyday life, such changes are not always easy to implement. Hobson (2013, p. 16) also warns against the unintended long-term consequences of deliberative processes on participants, especially when participants are disillusioned about the process and go back to an unsupportive context. Furthermore, the inclusion aspects of deliberative processes are influenced by the socio-demographic characteristics of the participants (Luque, 2015, p. 10), such as gender, age, region and educational level (Bohn, 2019, p. 4). In response to this, we should ensure the co-construction of the issue where the priorities of the various target groups are taken into account (Bull et al., 2008, pp. 12-13.) Merritt and Stubbs (2012, p. 3) advance

the necessity “to engage the most marginalized groups and foster a sense of collective ownership of community action on sustainability.”

3.5.4. Criteria for meaningful Citizen Deliberation and Participation

The overall list for meaningful citizen deliberation and participation from our research conducted on environmental citizenship can be seen in Appendix 7.7.

3.6. Ecomodernism

Only 71 articles were retrieved from the two search databases (Scopus and Web of Science) and 5 of these were duplicates. 2 records were excluded for other reasons, 1 because the article was not in English. This resulted in 63 articles left to meet the screening process. 8 articles were excluded because they did not reference ecomodernism enough, 35 were excluded because they did not refer to citizen participation and deliberation, and another 3 because they did not focus on environmental policy. This resulted in 17 articles left for analysis on the topic of Ecomodernism (see Figure 14 below).

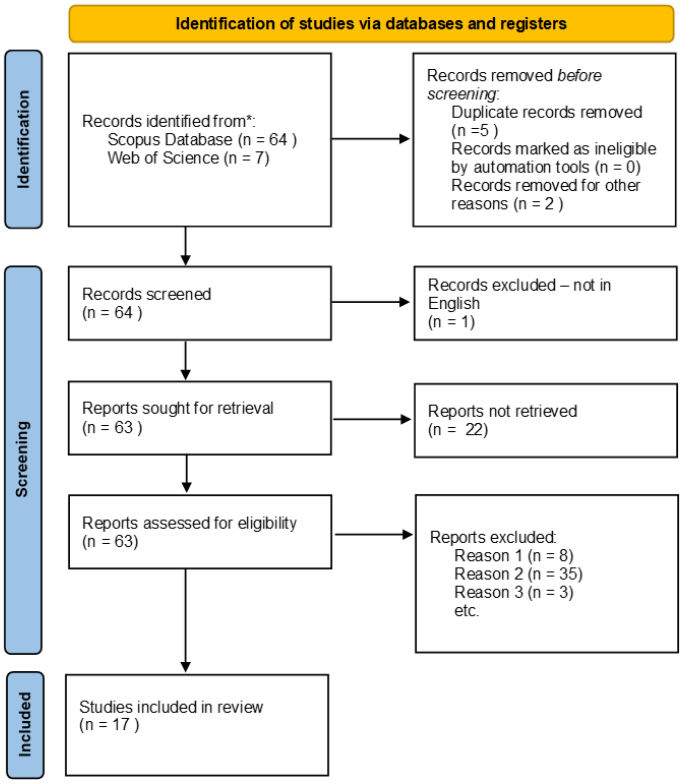

Figure 14 PRISMA 2020 Flow Diagram Ecomodernism

From the 17 articles, there was a very strong leaning toward critical reflections against the approach, rather than reasoning for its adoption. This report provides a critical reflection on ecomodernism and points out the limits of the approach and even potential threats to democracy.

3.6.1. Ecomodernism overview

The concept of Ecomodernism (EM) was developed in 2004 by two former environmental activists (Michael Shellenberger and Ted Nordhaus) and published in a Manifesto, aimed at making environmental protection appealing to the general public and especially working-class people (Kallis and Bliss, 2019). In this manifesto, the “limits to growth” idea is deemed

unattractive and unfair for people in the Global South to limit their development and economic progress when the Global North has profited from long periods of growth (often at the expense of the Global South).

Ecomodernists believe that technology (nuclear power, carbon storage etc.) can save humanity. The modern project consists in decoupling economic growth from damages to the environment. EM is based on the belief that green growth is possible. It stands consequently in sharp contrast to degrowth theories which are described as “ecological austerity” or “neo-primitivists” (Karlsson, 2016).

3.6.1.1. Capitalism, market and green growth as solutions to the climate crisis

Ecomodernism explicitly advocates the substitution of energy, technology and artificial solutions for natural ecological services. Ecomodernists promote agricultural intensification, synthetic and/or genetically modified foods, fish from aquaculture farms, desalination and waste recycling, urbanisation, and the replacement of less 'dense' energy fuels with more dense ones (e.g., nuclear power plants and advanced renewables), as well as fossil fuel power plants equipped with carbon capture and storage systems. The use of technology to intensify human activity and to give more space to wilderness is central to the aims of Ecomodernism. Enabling green growth is the priority of ecomodernism (Wiedmann and al., 2020).

3.6.1.2. Circular Economy

Another pillar of the project lies in the circular economy, according to which infinite growth and consumption are not only possible in a finite world, but also desirable. There needs to be a greater emphasis on disassembling industrial products to recycle them in the upstream design and production process (McDonough and Braungart, 2002). As McDonough and Braungart insist, 'nature has no bins', the notion of waste has no meaning, and everything can be recycled. One can reduce costs and make profits, while also building an ecological future (e.g., by integrating itself into the economy, which would not hinder growth or consumption) (McDonough and Braungart, 2002).

3.6.1.3. Vision of nature

Whereas traditional environmentalists believe that the root of the ecological trauma is humanity’s separation from nature, ecomodernists take the opposite view, that only by separating the natural and the human world can sustainability become possible. In the very long run, ecomodernists envision that practically all terrestrial metabolic processes can be replaced, either through space colonisation or by nanoscale manufacturing technologies, but in the meantime, they believe that intensification in global trade and agriculture can reduce the burden on nature (Karlsson, 2018).

3.6.2. Normative Political Theory and Philosophical Findings

The Ecomodernist Manifesto (2015) marked a set of ideas that reject limits and instead advocate urbanisation, industrialisation, agricultural intensification, and nuclear power to protect the environment (Kallis and Bliss, 2019). The Manifesto stated that technological innovation, if applied with wisdom, held the key to a ‘good, or even great, Anthropocene’ in which all of the world’s inhabitants will be able to live prosperous lives (Karlsson, 2018).

Using publicly-funded innovation to make clean and reliable energy significantly cheaper than fossil alternatives will overcome domestic political divides and accelerate economic growth in Global South countries, while simultaneously decarbonising their energy supply. Rather than focusing on achieving a nominal measure of ‘energy access’, ecomodernists argue that the proper aim should be to provide the energy necessary to effectively eradicate poverty and raise overall productivity through comprehensive urbanisation and industrialisation. Only then will it be possible to imagine a future of open borders and a material basis sufficient to ensure universal welfare provision. (Karlsson, 2018).

Rather than assuming that human behaviour and preferences will fundamentally change in the future, ecomodernists would ask 'what kind of technologies would be required to achieve climate stability in a world of 10+ billion people living prosperous lives', then work backwards from that question. Such an approach does not preclude behavioural change but rather takes as its starting point that any voluntary reductions among the most environmentally conscious are likely to be matched by increasing consumption among others as people move out of poverty (Karlsson, 2018).

3.6.2.1. Conflicts and negative side effects of Green Growth

Midttun and Witoszek underline that the green transition preached by ecomodernists is not without societal conflicts and risks. For instance, the enthusiasts of hydropower may clash with desperate communities living on rivers whose lives and futures are affected by dams; the proponents of conservation react fiercely against windmills, which spoil and pollute unsullied landscapes and disturb biodiversity. Last but not least, the fans of solar cells and electric cars like to forget ongoing research on the influence of electromagnetic fields on human health, whose results— although inconclusive—may yet prove that the glorious "electric future" is not without potential negative side effects. (Midttun and Witoszek, 2015)

3.6.2.2. Criticism of techno-optimism and greenwashing

Berglund and Julier, taking the example of the green policy in the city of Helsinki, warn of the potential "greenwashing" effects of ecomodernism. Specifically, both the proposed "close-to-nature" and "smart city" concepts may serve to greenwash the urban growth agenda (Berglund and Julier, 2020). The 'green' progress of cities is part of the very dynamics that accelerate environmental damage. Construction changes environments and puts pressure on daily routines and quality of life. While large-scale construction generates new structures, promises of improvements are, at best, only partial. (Berglund and Julier, 2020).

The technological optimism long associated with the politics of sustainability is illusionary and dishonest. It tries to make what is very probably unsustainable simply *appear* sustainable or to turn environmental policy-making into a theatre for securing public acceptance of policies that support the established order (Blühdorn and Deflorian 2019, in Berglund and Julier, 2020). Post-political environmental consensus leads to a politics that is reactionary and elitist, since it may only profit the most powerful and not effectively include people in the green transition processes (Swyngedouw, 2013) (in Berglund and Julier, 2020).

Maria Kaika also criticises the techno-managerial solutions of Ecomodernism. She argues that the New Urban Agenda rooted in United Nations-level agreements and what she calls "greening by numbers" may be loved by the media and policymakers, but close examination shows populations around the world have been rejecting the depoliticising rhetoric of "inclusion" and "participation". *"People are refusing to reduce urban politics to the production of "safe, resilient, sustainable and inclusive" spaces and to the "systematic monitoring and reporting" of all this activity"* (Kaika, 2017, in Berglund and Julier, 2020, p.19).

3.6.2.4. The Rise and reinforcement of Ecopopulism

Leonard in his study of ecomodernist policies in Ireland opposes ecological modernisation to populist rural sentiment. One of the criticisms levelled by ecopopulist groups is that ecomodernist policies strengthen closer relationships between administrative policy makers and industry in relation to the environment. Therefore, the independence of the legislative and regulatory process may become compromised. In the event of environmental regulations hampering the operation they may often be altered or overlooked. Moreover, in the easing of conflicts of interests, the public is often caught up in a propaganda war over the merits of industrial progress as opposed to environmental protection. In addition, the ongoing

democratic deficit in Ireland, which is the result of weakening local authority decision-making, has further strengthened the cause of regional ecopopulists (Leonard, 2005, 2006).

3.6.2.5. Ecomodernism against just and equal transitions

Collard, Dempsey, and Sundberg also criticise Ecomodernism for its amnesia regarding the violence of the modernisation processes and the social struggles that have been fundamental to all progress toward equality and liberation for the group's modernisation have oppressed (Collard et al., 2016). In this sense, ecomodernist policies ignore oppression and exclusion issues in modernisation processes. Ecomodernism's emphasis on technological advancement undermines inclusive, justice-oriented proposals for climate mitigation and human progress (Kallis and Bliss, 2019).

3.6.3. Technocratic Ecomodernism and Elitism

3.6.3.1. Regime of control, hegemony, and exclusion

Foster (2012) underlines the hegemonic and exclusive dimensions of ecomodernism. The new consensus is a “hegemonic consensus of power” in which elite white businessmen undertake the task of solving environmental problems. This approach places faith in business while ignoring economic, environmental and social inequalities faced by working-class people, particularly women and people of colour, and dismisses their long tradition of radical activism for environmental justice (Dalby, 2016; Elliott, 2013; MacGregor, 2010). These positions acknowledge climate change as an existential threat but ignore the disproportionate impact of it on people from low socioeconomic backgrounds, women, and people of colour (Foster, 2012, in Dockstader and Bell, 2020).

3.6.3.2. Fail to include the working class

White (2019) underlines that a great deal of transition thinking, and particularly ecomodernism, has failed to develop a complex politics of labour and work that could provide the basis for building broader audiences and alliances towards sustainability. The suffering and exploitation of the labouring subject within existing unsustainable systems of extraction, production and disposal are missing from a great deal of technocratic ecomodernist transition discussions. The potential creative role that the labouring subject could play in redirecting practices, developing new institutional forms or new lay-expert modes of engagement to build entirely new design ecologies and green public goods is not addressed by the ecomodernist approach. The proposition that industrial ecologies could be improved if the knowledge of working people contributed to the construction of closed-loop systems of production, consumption and waste disposal is rarely mentioned in current discussions of the circular economy. The proposition that workers across the supply chain might have a great deal to offer in attempts to redirect our material economy towards more sustainable and humane ends is not discussed in the Ecomodernist transition discourse (White, 2019).

3.6.3.3. Lack of participation or poor use of participation

The depoliticizing rhetoric of 'inclusion' and 'participation' in ecological modernization is criticised by Maria Kaika. Techno-managerial solutions can only act as immunology: they vaccinate citizens and environments so that they can take larger doses of inequality and degradation of environments in the future (Kaika, 2017).

The absence of a comprehensive consultation process with local communities faced with development-related infrastructural challenges is also criticised by Leonard. Ecological modernisation, while acknowledging the role of the citizen, fails to address the social reality underpinning the politics of environmental protest (Leonard, 2007).

3.6.3.4. Consequences of technology and securitization on democracy

Albert (2020) alerts the dangers of decoupling earth systems and technological progress. He argues that techno-authoritarian trends are already evident in some countries. States are

encouraged to extend and deepen surveillance and their security apparatus while making democratic populations more willing to accept intensified securitization. Thus, other policy trajectories based on participation, fair redistribution and behaviour change might be neglected (Albert, 2020).

3.6.4. Green Consumerism and Participation

Another aspect of ecomodernism is the promotion of green consumerism as a solution to the climate crisis and green consumers as agents of change. EM promotes a consumer-led, monetised future rather than an equal and democratic process towards sustainable development. However, Dockstader and Bell point out the limits of promoting market-based solutions to solve environmental issues: it transforms the state from a regulatory body to a cultivator of technological innovations (Anshelm and Hultman, 2014). Ecomodernism celebrates consumerism of higher-priced "green" products (Schlosberg and Rinfret, 2008), while treating the class, gender, and racial inequalities embedded in capitalism as solvable through liberal democracy and local control (Foster, 2012; Sharzer, 2012). (In Dockstader and Bell, 2020). Sharzer observes that the voluntarism of "buying local" or "buying sustainable" carries implicit judgments of working-class behaviours and appetites while enabling privileged consumers to "live what 'ought to be' in the present," but does not encourage meaningful political action. (In Dockstader and Bell, 2020). Altogether, the use of Green Tech may provide concerned consumers with an easy way to feel like they are making a difference and a sense of participation but is not sufficient for radical, necessary changes (Sharzer, 2012) (in Dockstader and Bell, 2020).

3.6.5. Criteria for meaningful Citizen Deliberation and Participation

The general concept of ecomodernism is rather elitist and technocratic – the changes needed to reach sustainability are not supposed to stem from limitation and reduction but from technological green innovation. Current power structures are not generally questioned or challenged (even though some scholars point to injustices and inequalities on global and local scales). Ecological transformation is usually not envisioned to come along with a fundamental change in societal structures. Ordinary citizens have ascribed a passive role, and the necessary change will principally come from above (governments, corporations etc.). Our list of criteria for meaningful citizen participation and deliberation, based on our review of ecomodernism, can be seen in Appendix 5.7.

3.7. Environmental justice

The Scopus search brought back 1063 papers. After a first reading of the titles of the papers, this was reduced to a list of 127 papers for this study. The reasons for this first range of exclusion are non-scientific research, non-English articles, and duplicates, not related to the topic. The first reason (articles not relevant to environmental justice) excluded 6 papers; the second reason, (papers not related to deliberative and participation) 24 papers, and the third reason (papers not related to the European Green Deal) removed 48.

This led to a total of 49 papers that were read for a systemic review. After the systemic reading of all these papers, 10 more papers were excluded (8 of them because they did not fulfil one of the three requirements and two that were written in Spanish but were not relevant). This left a total of 39 relevant articles (see Figure 15 below).

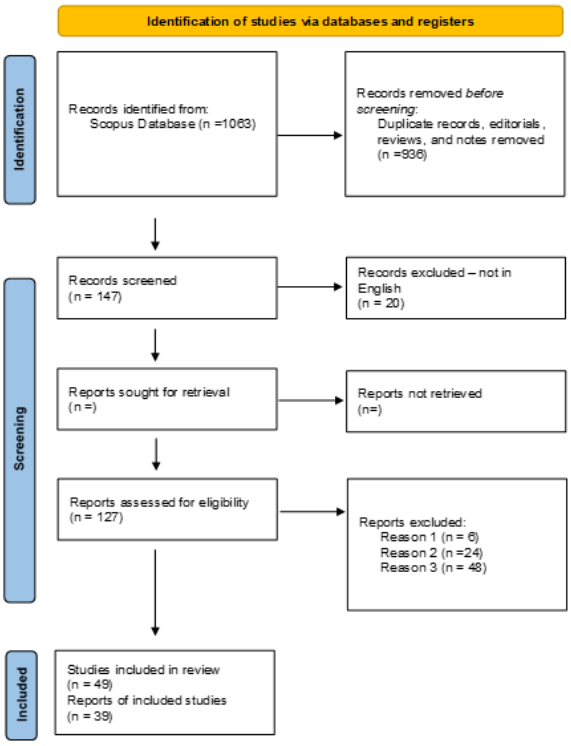

Figure 15 PRISMA 2020 Flow Diagram Environmental Justice

3.7.1. Environmental Justice overview

Environmental Justice guarantees that all people have equal access to a healthy, safe and sustainable environment, as well as equal protection from environmental harm (US Environmental Protection Agency). These two words have become used in many different ways – as a campaigning slogan, as a description of a field of academic research, as a policy principle, as an agenda and as a name given to a political movement (Gordon 2012). environmental justice refers to the conceptual connections and casual relationships between environmental issues and social justice (Figueroa & Mills 2001). Environmental justice is that which adheres to the four dimensions: (1) distributional justice, (2) recognitional justice, (3) procedural justice (e.g., participation, decision-making), and (4) the capabilities approach (Fraser 1995, 1998; Schlosberg 2007; Young, 1990; and Menton et al 2020, p. 1624).

Environmental justice has manifested through procedural justice, i.e., in the context of public participation (Ballesteros, 2010; Esteve Pardo, 2014; Beck, 2002). It has taken a unique path and has evolved independently from justice in other forms, even reaching international treaties and international negotiations that deal with participation exclusively in environmental matters (Soto Barrientos and Costa Cordella 2019, p. 243). Finally, another aspect of environmental justice is related to the close relationship between participation in environmental matters and access to justice. The application of justice principles in environmental matters is an extension of participation in environmental decision-making, which requires collective action and decentralised access (Soto Barrientos and Costa Cordella 2019, p. 251). The principle of environmental justice has different connotations depending on time and geography. Environmental justice literature highlights a *geographical context*. The environmental justice concept developed at an early stage in the United States where it had a focus on the unfair burdens placed on minority groups living in areas of poor environmental quality. Consequently, the United States Environmental Protection Agency defines environmental justice as "fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income concerning the development, implementation, and enforcement of environmental

laws regulations and policies" (Krämer 2020, p. 1). This approach is discussed further below in connection with “environmental racism.”

3.7.2. Environmental Racism

Several authors have stressed the elements of racial justice and equal protection in environmental justice definitions remarking that environmental justice in its original meaning developed as a response to "environmental racism" and other forms of exclusion (Szulecki 2008, p. 26; Banzhaf, 2012). Environmental racism refers to any policy, practice, or directive that differentially affects or disadvantages individuals, groups, or communities based on race or colour (Nelson and Grubesic 2018, p. 2). Environmental racism, as a broad set of concerns, has focused on the relationship between marginalised groups and environmental issues, including the elitism of mainstream environmentalism (Jordan and Snow, 1992; Peija 1992), the biased nature of environmental policy (Pulido 1993), the limited participation of marginalised groups in environmental affairs (Taylor 1992), and, the disproportionate exposure of marginalised groups to pollution (Pulido 1996). Racial segregation elements are more focused on the persistent historical processes perpetuated through differential opportunities for housing, occupation, and education (Pulido 2000, pp. 12-40). These disparities contribute to the unfair allocations of environmental hazards, which often materialise based on class and race aspects (Nelson and Grubesic 2018, p. 8).

This concern about discrimination because of “race or class” entered the US civil rights movement and gained considerable political influence (Krämer, 2020, p. 1; see also Petrić 2019, p. 246) in the early 1980s, when people from low socioeconomic backgrounds, mostly African-Americans, mobilised against a hazardous waste dump being built near their homes in North Carolina, USA (Menton, Larrea, and Latorre 2020, 1623, see also Ryder and Devine-Wright 2021, 3; Bullard 1983). This struggle marked the emergence of a new type of movement where environment, anti-racism, and civil rights concerns were brought to the fore. In 1991, the First National People of Colour Environmental Leadership Summit held in Washington DC issued the document “Principles of Environmental Justice” (Menton, Larrea, and Latorre 2020, p. 1623). Later, the quest for environmental justice was expanded and was combined with worries about the Global North-South divide, the question of how it could be possible to reconcile continuous economic growth and the limited resources of planet Earth, as well as the general 'degrowth' movement (Krämer 2020, p. 1).

3.7.3. European Context

In Europe, environmental justice is more an element of public administration and emphasises socio-economic factors and less so racial factors (or environmental racism) as in the US (Petrić 2019, p. 246). The European focus is placed on the fact that there should be an equitable distribution of access to regulations, equal application of rules, equal protection of the law and an unbiased representation of all groups, and classes that may be impacted by specific environmental or human health risks (Emmel et al. 2007; Manstead 2018, Ross, Van Alsine et al. 2021, p. 1524). Power inequalities and social differences are targeted as the main aspects to redress throughout environmental justice (Orchard-Webb, Kenter, et al 2016, p. 315).

One general difference between the European and US approach is that the US approach traditionally recognises the universality of natural rights granted to individuals and aims at curbing discrimination faced by them in exercising those rights, while continental European countries usually focus on correcting the social processes that produce situations of inequalities (Laurent 2011, p. 70). Following this distinction, environmental justice in a European context is conceived as a fair distribution of charges and benefits derived from using natural resources, to provide minimal welfare standards to all human beings, including future generations. (Jaria, Cardesa et. al 2016, p. 380).

The traditional European approach additionally has involved judicial enforcement of procedural rights as a principle of public administration independent of representation functions. That is, the European approach places more emphasis on the improvement of public administration for its own sake, which would lead to incidental benefits across a range of problems. In the area of environment, this principle involves the judicial enforcement of procedural environmental rights (PER), those constitutional and legislative provisions relating to access to information, access to justice, and participation in environmental matters (May and Daly 2014, p. 44). The PERs may constitute the most important environmental addition to human rights law since the 1992 Rio Declaration on Environment and Development and the Aarhus Convention (Boyle 2012, p. 616). They offer a means of empowering individuals and groups that have been historically disadvantaged in environmental governance. In this way, the European approach – despite its focus on public administration – resembles the US approach to environmental justice in that it has representational effects, such as ensuring that minority and traditionally underrepresented groups have a chance at participating.

The European approach also follows more closely the sustainable development narrative rooted in international policy development from the 1980s and 1990s. The conceptualisation of the principle of environmental justice has experienced a sort of *epistemological momentum* since the adoption of the Rio Declaration on Environment and Development of 1992 (Principle 10) which establishes the basis of the current understanding of citizen participation in environmental matters and intertwines, for the first time, three pillars of access to information, public participation, and access to justice (Soto Barrientos and Costa Cordella 2019, 229).

While such rights find explicit recognition in more than thirty national constitutions (May and Daly 2015, p. 77), many environmental laws throughout the world serve similar purposes, especially regarding participation in environmental decision-making (May and Daly 2014, p. 37). Furthermore, PERs have acquired a considerable transcendence in the enforcement of environmental rights due to the lack of explicit constitutional recognition of PERs.

PERs can aid in realising both outcome and process goals enabling members of civil society to provide inputs into local, national, and international action. Their most frequent application is in specific decision-making, such as environmental impact assessment and integrated permitting. But they can also be applied at more strategic levels of decision-making, such as strategic environmental assessment in the development of plans, programmes, and policies.

These three pillars were consolidated by the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (The Aarhus Convention of 1998). While environmental justice concepts in the US context developed independently of this international norm-making process, in Europe access to environmental justice is predominantly founded on Rio Principle 10 and the Aarhus Convention (Petrić 2019, p. 215).

3.7.4. The Aarhus Convention

The Aarhus Convention and EU environmental laws impose on the Parties and the Member States[5] a binding obligation to ensure effective judicial protection of the rights conferred by law, in particular the relevant provisions of environmental law. The Convention has been considered the most ambitious initiative in the field of environmental justice ever undertaken under the auspices of the United Nations. The Aarhus Convention tries to accommodate and balance manifold interests, including democratisation, openness, and transparency on the one hand, and the model of economic development with the protection of private and commercial interests (Petrić 2019, p. 24). While scholars have stated that no other region has advanced

[5] All EU Member States and the European Union itself are Parties to the Convention. The Convention also has additional Parties from non-EU countries, including the three non-EU countries covered by the REAL DEAL Project (North Macedonia, Serbia, and Ukraine).

in the development of a binding legal instrument like the Aarhus Convention (Soto and Costa 2019, p. 239), recently in the Latin American and Caribbean region, several states have adopted another instrument based on Rio Principle 10 – the Escazú Agreement, which shares many characteristics with the Aarhus Convention.

The Aarhus Convention was ratified by the EU and all its Member States and is part of EU law. A directive on access to environmental information imposed the Convention's information obligations on the Member States and went partly beyond the Convention's requirements (Krämer 2020, p. 15). The Convention also resulted in changes to EU law in the fields of environmental impact assessment, integrated permitting, biodiversity protection and water, among others.

The first of the rights elaborated by the Aarhus Convention is the right of access to information. Each Party assumes the obligation to ensure that public authorities make environmental information available to the public as soon as possible, within the framework of national legislation. From the environmental justice perspective, the right to access information is essential because it is a prerequisite for any potential public participation and decision-making in environmental matters. Systems to speed up the supply of environmental information to all users are also relevant to provide accountability (which includes petitions, demands, and queries of civil society linked to the monitoring of the results and effects of public decision-making) and transparency of public decisions.

The right of access to environmental information has a strong impact on the question of environmental justice. Transparency of data and information can reveal where individuals or groups of disadvantaged or marginalised people are treated worse than other groups of the population, where pollution is greater in some parts of a community than in others, where the measures taken are ineffective, or where otherwise cases of environmental injustice occur (Krämer 2020, p. 16).

The second area of rights elaborated by the Aarhus Convention places participation and deliberation at the core of environmental justice and law. Meaningful participation, in terms of the quality of the participation and whether it is timely, among other considerations, is fundamental to exercising a participatory democracy at all levels of government, including the international level (Bastidas 2004, p. 6).

The Convention emphasises the need to: implement participation programmes to achieve ‘early’ participation; provide the public with access to all documentation relevant to the decision-making process; enter into discussions with the public concerned; allow the public to submit their opinions at public inquiries; consider the outcome of public participation in the decision-making process, and achieve 'effective' participation. Each of these key principles can act as evaluation criteria for the implementation of environmental law (Hartley and Wood 2005, p. 319).

Article 6 provides for the most closely specified form of participation in the Convention. The details on timing, provision of information, taking due account of comments, and an obligation to give reasons for a decision, although they leave a great deal in the hands of the decision-makers, suggest that the Convention envisages 'real' participation, with the potential to exert a genuine influence on decisions (Lee and Abbot 2003, p. 67).

In this sense, the national implementation reports submitted to the Convention Secretariat by the Parties to the Convention explain their domestic legal accommodations and the practical implementation of treaty obligations. The multiple forms that Parties have introduced to engage the public have been described including e-portals, opening the consulting process to the public authorities involved where citizens may participate, sending proposals and comments, questionnaires, meetings, and surveys.

The third pillar elaborated by the Aarhus Convention, the right of access to justice, provides for the possibility of access to justice for members of the public and certain NGOs with regard to decisions affecting the rights elaborated under the Convention or other environmental matters. The right to access not only gives the possibility of filing appeals against the violation of the information or participation rights, but also the possibility of filing a claim or appeal for breach of environmental obligations. The Convention, however, refers to the internal law of each State, although it requires governments to guarantee access to administrative and judicial procedures to challenge acts or omissions contrary to the law by both persons or private entities and the public administration (Ruiz de Apodaca 2018, p. 5). Accordingly, the State Parties refer to the internal legislation related to access to justice in environmental matters, either for infringement of the rights of information and participation or for violations of general environmental law.

The Aarhus Convention obliges the Parties to promote public participation in international processes as well. In practice, this often enables members of civil society to influence government positions on relevant issues, to be members of international delegations, and to provide input into national reports. For example, participation in the UN Framework Convention on Climate Change processes may strengthen the accuracy and transparency of efforts to limit greenhouse gas emissions, while participation of a wide range of stakeholders during international climate change negotiations can improve the likelihood that resulting adaptation and mitigation policies incorporate the perspectives of those most vulnerable to the harmful effects of climate change (Kravchenko 2010, p. 648). The public also has the opportunity to provide inputs into the national implementation reports submitted by the States Parties in compliance with article 10, paragraph 2 of the Aarhus Convention.

3.7.5. Neighbouring Concepts

Neighbouring concepts such as climate justice, energy justice and others have been used by academic sectors as synonyms, despite the divergent semantic terminology and the response to the conceptual expansion that environmental justice has experienced (Taylor (2000); Agyeman et al. (2002); Schlosberg (2004, 2013); Adger (2001); Okereke (2006); Newell (2005); and Roberts and Parks (2007).

The term “climate justice” refers to statements, declarations, and agreements by both states and civil society organizations that share conceptual elements with the definition of the environmental justice, regulations (including gender equality and indigenous rights), a mechanism for loss and damage, and the first-ever explicit mentions of climate justice and human rights in a multilateral environmental treaty. In addition to language emphasizing justice, the framing of climate change has also increasingly incorporated the disparities in vulnerability to climate change (loss and damage), its human rights impacts, and its exacerbation of existing social inequalities (Gach 2019, p. 2). Another neighbouring concept of environmental justice is “energy justice”, a concept that concentrates on “the moral implications of our collective energy decisions” (Sovacool and Dworkin 2015, 435) and energy democracy, which appeared in earlier debates on ‘environmental democracy’ and ‘climate justice’ in social movements and radical intellectual circles in Europe (Szulecki 2018, p. 23). While many of the ethical considerations of energy externalities, across space and time, are shared with the closely related idea of climate justice (e.g., Harris and Symons 2010; Posner and Weisbach 2010; Schuppert 2011; Bickerstaff et al. 2013), the insistence on procedural elements is borrowed from the neighbouring concept of environmental justice (on which energy justice builds, according to Sovacool and Dworkin (2015). In parallel, Szwed and Maciejewska of Warsaw’s Green Institute issued a manifesto of “Energy Democracy”, but with a different emphasis. Playing on words, they summarized the idea as 'power to the people, building on the technological possibilities of creating a 'civic energy sector' and 'gaining societal control over energy sources (2014, p. 3). Focusing mostly on ownership and environmental impact, the report importantly notes that “democracy” in “energy democracy”

means a strong public component influencing legitimacy: "Energy democracy" is about workers' and communities' ability to decide who owns and operates our energy systems, how energy is produced, and for what purpose' (Sweeney et al. 2015, p. 23). Participation in decision-making is also key thus energy democracy can be understood as "the prevailing of the Aarhus (Convention) pillars in the field of energy policy" and this, in turn, has a great impact on environmental democracy (Szulecki 2018, p. 27).

3.7.6. Criteria for Meaningful Citizen Participation and Deliberation

As a result of the systematic literature research conducted on environmental justice, we specified criteria that from this perspective should be considered to ensure meaningful citizen participation and deliberation in environmental policy. These can be seen in Appendix 8.

3.8. Environmental rights

The SCOPUS search brought back 383 results and the Web of Science brought back 179 results. To produce an accurate and accessible number of results, several screening stages were employed using the PRISMA 2020 Flow Diagram for new Systematic Reviews.

After these 73 articles were retrieved,[6] there was a rich analysis of environmental rights and its focus on deliberation and participation, in particular its connection to procedural environmental rights established under the Arhus Convention. We included these studies to ensure that different narratives are represented, acknowledging the contribution of indigenous people to the materialisation of environmental rights as human rights. We first present the overview of the environmental rights framework, then we move to three core elements of deliberation and participation under the environmental rights framework. These findings lead us to define three criteria for meaningful participation and deliberation.

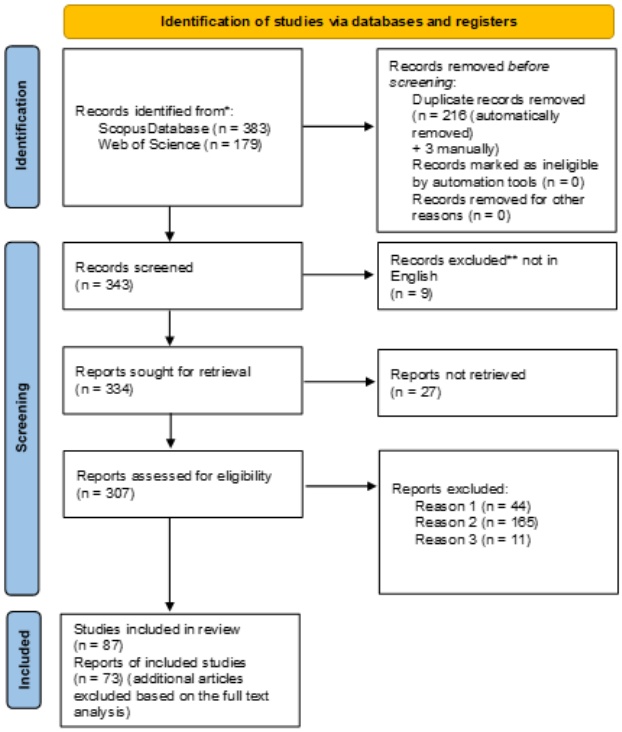

Figure 16 PRISMA 202 Flow Diagram Environmental Rights

[6] These 73 articles are included in the references section of this paper.

3.8.1 Environmental rights overview

Environmental rights refer to any proclamation of a right to environmental conditions of a specified quality (right to a clean or healthy environment) (UNEP).

In the literature, environmental rights have been discussed within three distinct frameworks of rights theory, namely (1) a human rights approach; (2) a rights-to-environment approach; and (3) a rights-of-environment approach (Waks, 1996).

First, a **human rights approach** subsumes environmental claims under existing human rights, specifically first generation of human rights (civil and political rights) and second generation of human rights (economic, social and cultural rights)[7] (Baber & Bartlett, 2020; Giupponi, 2019; Bacher, 2017; Christel & Gutiérrez, 2017; Soveroski, 2007; Wisner, 1995). Under this framework, environmental rights constitute a subset of human rights, which must be understood as different from what is often conceived or imagined by nature writers and moral philosophers as the intrinsic rights of nature, animals, ecosystems, and landscape features (Baber & Bartlett, 2020). Environmental rights may be seen as prerequisites to established rights, and hence as covered by existing legal protections in constitutions and other human rights instruments (Soveroski, 2007; Waks, 1996). This approach implies that environmental protection is essential for the enjoyment of basic human rights such as life and health and rejects the possibility that those rights can be enjoyed in a degraded environment (Christel & Gutiérrez, 2017). For example, environmental pollution would be conceived as a threat to a secure food supply, and thus as a threat to an established social right, such as the right to food (Waks, 1996).

A second **rights-to-environment approach** presents environmental rights as independent of, but parallel to, first and second generations of human rights, thus calling for independent recognition (Peters, 2018; Santo, 2011; Rodenhoff, 2002). As argued by Waks (1996), this approach encompasses both rights subsumed under existing rights (e.g., rights to clean water and air), and those that cannot be (e.g., access to wilderness and a balanced ecology). This approach focuses on the protection of environmental rights through the amplification of existing political rights; for example claiming stronger political rights of public access to information and broader participation in decision-making processes (Barral, 2018). The nature of environmental rights in this approach is two-sided. It refers to environmental rights' origins and their enforcement because rights are empty promises unless they are given administrative policies and practices (Christel & Gutiérrez, 2017). Therefore, the approach has been marked by participatory, antibureaucratic sentiments and appeals to citizen virtue (Waks, 1996).

A third, a **rights-of-environment approach** argues that the rights of animal and plant species and wilderness areas to exist and flourish are independent of any human benefits (Valladares & Boelens, 2019; Peters, 2018; Jelin, 2000). Associated with the "land ethic", the "deep ecology" philosophy, the animal rights movement, "environmental philosophy," or Gaia as a symbol, this approach is a radical departure from the development of human rights in the modern era (Waks, 1996). The rights-of-environment approach represents a new direction in rights theory focused on natural rights of nonhuman members of the "natural community" against humanity (Waks, 1996). It emphasises the social meaning of nature, that is, the relationship between people and their environment (Jelin, 2000), where the good of nature

[7] The division of human rights into three generations was initially proposed by Karel Vasak (1979). First generation rights include civil and political rights defined as a sphere of activity which government may not enter. First generation rights include, among other, the right to life, equality before the law, freedom of speech, freedom of religion, property rights, the right to a fair trial, and voting rights. Second generation rights include economic and social rights requiring direct governmental action. Some examples of second generation rights include rights to food, housing, health care, and social security. Environmental rights are considered as belonging to a "third generation" of rights, including such rights as right to self-determination, right to development, right to natural resources and right to satisfactory environment. Note: Vasak's theories have primarily taken root in European law.

should be considered as independent of humanity and as a living being in its own right (Waks, 1996).

The first two approaches, which focused on rights reserved for humans, are the most mainstream in the environmental rights literature. While taking different perspectives, both approaches are rooted in the relationship between the environment and human rights. The link between the environment and human rights was first established under the UN auspices in the Stockholm Declaration (1972). The Declaration highlighted that the environment is indispensable to the enjoyment of human rights (Gönenç, 2021; Peters, 2018). The third approach, less represented in the literature, takes an ecocentric perspective and considers rights as rights enjoyed by, or on behalf of the environment itself (further discussed in the section on Ecocentrism of this report). It should be also noted that the conceptualisation of rights and rights theory to a certain degree has Western origins and has been broadly studied in the English context (Wu, 2017).

In this report, we will first focus on the connection between the environmental rights framework and citizen participation and deliberation in the context of human rights and the rights-based approach as the dominant approach in the literature. Afterwards, we will formulate criteria for meaningful citizen participation or deliberation from the environmental rights perspective.

3.8.2 Deliberation and participation

Deliberation and participation in the environmental rights framework are rooted in the development of the international legal framework and the rights-based approach to environmental protection. The Stockholm Declaration (1972), followed by the Rio Declaration (1992) and the Arhus Convention (1998) were the milestones of deliberation and participation of citizens in decision-making processes on matters concerning the local, national and transboundary environment (Suman, 2021; Giupponi, 2019; Soveroski, 2007; Rodenhoff, 2002). Deliberation and participation originate in the division between two forms of environmental rights: (1) substantive rights and (2) procedural rights (Ako, 2011). Substantive rights are those in which 'the environment has a direct effect on the existence or the enjoyment of the right itself' (UNEP), including first and second generations of human rights as well as *collective rights* affected by environmental degradation, such as the rights of indigenous peoples (UNEP). Procedural environmental rights (PER), as discussed in the section on Environmental Justice of this report, prescribe formal steps to be taken in enforcing legal rights. It is argued that PERs enable access to substantive rights (Dodsworth, 2021). PERs include access to information regarding environmental quality, public participation in decision-making in environmental matters, and access to justice. PERs have often been named as key to improving national and international environmental decision-making (Peters, 2018). Deliberation and participation under the environmental rights framework is therefore defined as a 'right' to public participation in decision-making in environmental matters.

The environmental rights literature discusses conceptions, scope and modes of public participation and deliberation, highlighting a *geographical context.* For instance, as discussed by Barral (2018), the European human rights regime (based on the Aarhus Convention) affords equivalent importance to all three aspects of PECs, it is mainly concerned with the procedural rights of individuals and is strongly focused on civil and political rights. At the same time, the inter-American and African systems place particular emphasis on the participatory rights of indigenous communities and participation as a collective dimension (Barral, 2018). This regime of effective participation goes further than even the Aarhus Convention's requirements, it effectively requires the prior informed consent of indigenous communities regarding development activities occurring within their ancestral lands in cases where such activities have the potential to threaten their survival (Barral, 2018).

3.8.3 Environmental rights as the means to participate in environmental governance

Public participation and deliberation in the context of environmental rights is about linking the citizen to environmental governance and provides the means through which environmental governance is exercised (King & Reddell, 2015). Environmental governance led by the principle of rule of law (RoL)[8] ensures environmental rights and equitable distribution among all members of society and also stresses the effectiveness, enforcement and compliance of environmental legislation (Yang, 2017). The right to participate in environmental policy making has been described by UNEP as 'citizen's environmental rights (Morrow, 2015), and relates to environmental citizenship. The notion of environmental citizenship can be seen as the claiming of another category of human rights, namely environmental rights, and the recognition that others too should be able to enjoy these rights (Humphreys, 2009). As discussed in the environmental citizenship section, it is defined concerning the relationship between the state and the citizen, between ruler and ruled. It focuses on contractual rights and entitlements within the public sphere and entails the extension of rights-based discourse to cover environmental rights (Humphreys, 2009).

The rights-based approach to environmental rights is advocated by local communities and indigenous peoples, and it belongs firmly within the realm of environmental governance and environmental citizenship. Asserting the rights-based approach is one of the tactics used by indigenous peoples and local communities to resist the ecological footprints caused by powerful corporations (Humphreys, 2009). They claim rights as environmental citizens; these rights are reciprocal, as the communities concerned recognise that others share an equal moral claim to these rights. In claiming their rights, they assert that those imposing an ecological footprint should recognise that they also have obligations as citizens; these obligations are non-reciprocal and apply only to those whose activities generate an ecological footprint (Humphreys, 2009). This approach is closely related to the argument that the right to public participation is a prerequisite for justice and balancing power relations, discussed in the next section. The new paradigm for decision-making extends to the implementation of new and improved environmental governance and management processes based on a partnership between Government, business and individuals (Haydon & Kuang, 2013) and a balance between their powers.

3.8.4 Environmental rights, justice, equity & power relations

The emphasis on the role of the right to participation in reaching decisions in environmental governance is part of the environmental justice discourse (Gellers & Jeffords, 2018). Justice in the context of environmental rights includes the intersection of social and climate justice, further analysed in the environmental justice section of this report. The environmental rights literature discusses the right to participation in environmental decision-making as valuable for justice. In this context, justice requires us to differentiate between the process and outcomes of participation. The right to participation entails a meaningful participatory process that should have an inclusive character (Barral, 2018). The privileged should not dominate participatory processes and States must reach out to the disadvantaged and people in marginalised positions to encourage their involvement (Barral, 2018). Access to decision-making procedures through the right to participation does not imply the realisation of environmental justice, because one may ask whether the process is designed in a way to lead to a fair outcome (Gellers & Jeffords, 2018).

The literature discusses environmental rights through the lens of a rights-based approach, justice and equity in relation to power relations. Specifically, we have identified the following contexts:

[8] The political philosophy that all citizens and institutions within a country, state, or community are accountable to the same laws.

1. **Global West – Global South divide:** There are big imbalances in terms of enjoyment of environmental rights between industrialised and lower-income countries (Ahmed, 2013). In the Global South, unequal environmental burdens directly correlate with stratified social classes and unequal political relationships (Ahmed, 2013). The issue is not with the core principles of environmental rights and the right to participation; it is rather more about how they are perceived and translated into local contexts (Ahmed, 2013). Traditionally in the Global South within the realm of post-colonial urban development initiatives, planners and policymakers often neglect the voice of marginalised and/or under- and unrepresented citizens (Ahmed, 2013).

2. **People and groups in vulnerable, disadvantaged and marginalised positions (indigenous people, women):** Members of the same society do not have equal access and use of ecological resources or the enjoyment of ecological benefits, and they do not bear equal ecological risks. Impoverished citizens and/or minorities are the major victims of unequal environmental burdens, and in most cases, they have fewer economic opportunities as well as less political voice or participation in the decision-making process (Ahmed, 2013 & 2014). This unequal access to power and distribution of resources causes unequal political representation (Ahmed, 2013). We observe new forms of civic innovations, where people organise themselves, opt for common goals, demand their rights, and oppose environmental injustice collectively (Luthfa, 2017; Ahmed, 2013 & 2014). The case of indigenous peoples is one where the recognition of environmental rights, at least on paper, is particularly advanced emphasising a powerful discourse of Indigenous environmental knowledge (Hemming et al., 2019; Denedo, Thomson & Yonekura, 2019; Hemming et. al, 2019; Soveroski, 2007). However, this process of civic innovation and community building tends to overlook existing inequalities by not openly addressing gender, age, class and power differentials because of using the traditional conceptions and roles, e.g. gender roles (Park, 2021).

3. **Local versus global justice**: Scholars of climate justice argue that an attempt exists to redefine environmental issues as a question of local and global justice (Dias et. al, 2021). Accordingly, it is important to discuss participation locally while considering the global aspects of entwining social and environmental rights for those who suffer first and worst from climate change.

4. **The relationship between large corporations, state and people**: The power of corporations, who are often more powerful than states, may undermine the realisation of environmental rights, specifically the right to participation. The governmental turn to resource extraction and prioritising relationships with corporations (e.g. extractive or constructive industries). This shift raises accusations of neglecting their host communities, marginalisation in their employment and contracting, and social irresponsibility towards the problems and needs of their citizens (Su, 2021; Ikelegbe, 2001). This situation has intensified the bottom-up quest for participative democracy, equity participation and partnership arrangements grounded in universal as well as particular rights-based struggles (Lalander & Lembke, 2018; Ikelegbe, 2001). Subjecting private providers to participatory rights and procedural safeguards obligations does not only carry the inherent benefit of ensuring that private actors respect good governance principles, but it also legitimises thinking of natural resources in terms of human rights and access, in terms of entitlement rather than need (Barral, 2018).

5. **Inter- and intragenerational imbalances and rights of future generations**: The future we want for present and future generations, recognised by the Rio Declaration together with sustainable development, rules that a healthy environment must be suitable for human development so that productive activities shall meet present needs without endangering those of future generations (Christel & Gutiérrez, 2017). This argument

raises concerns in the form of equity[9] consisting of two major elements: inter-generational equity (which requires that the present generation maintain or enhance the biosphere for the sake of future generations) and intra-generational equity (which holds that past and present injustices among existing communities around the world must be addressed) (Valladares & Boelens, 2019; Gellers & Jeffords, 2018; Haydon, Kuang, 2013).

6. **Distributional imbalances of the use of ecological resources**: In this discussion, justice plays a major role as distributional imbalances of the right to use ecological resources (e.g. water, minerals), the enjoyment of benefits, the suffering of risks, and the demand for behavioural changes. All can be judged on the dimension of justice and relates to all obstacles mentioned above.

All of the above power imbalances are seen as unjust when they are viewed through the lens of the equity principle. Participation is argued as a counterbalance of these power imbalances, striving for justice and equity.

3.8.5 Criteria for meaningful Citizen Participation and Deliberation

As a result of the research conducted on environmental rights, we provide three criteria below to ensure meaningful citizen participation and deliberation in environmental policy, such as the European Green Deal (see Appendix 9).

4. Criteria for meaningful participation and deliberation in the EGD

The partners involved in Task 1.1. were invited to offer 2-6 criteria for meaningful citizen participation and deliberation, from each of the eight approaches reviewed. These parameters were chosen because some of the approaches had very few publications to be reviewed, so it was assumed that these would have fewer criteria, whereas other approaches had much more published on the topic of citizen participation and deliberation. We determined that six criteria should be the upper limit for any single approach to keep the list manageable.

Before drafting the list of criteria for meaningful citizen participation and deliberation, the task leader provided a detailed description of what is required from each partner's criteria list and the overall purpose of this task. For criteria to be communicable and understandable, they need to be succinct, clear, and informative. The partners were required to ensure that their criteria were coherent and understandable, as well as specific enough to be implementable and usable. Ideally, each criterion should not be more than approximately three or four sentences to provide sufficient information without being too long.

The partners provided their criteria in a prescriptive format. However, the criteria are not directed at one single actor, but at many different groups, such as policymakers, the general public, and society as a whole. Meaningful citizen participation and deliberation are not the responsibility of only one actor; thus, our criteria allocate responsibility to several actors.

Partners identified several overlaps and repetitions among the criteria, which were merged for clarity and ease of use, in a workshop. Following the workshop, the task leader incorporated the feedback and insights to comprise a single unifying list of criteria, which went through

[9] Equity can be understand as a principle according to which each individual or group of people is given the same resources or opportunities, however each person has different circumstances and therefore the exact resources and opportunities needed to reach an equal outcome.

further iterations of feedback, edits, changes, and improvements. After several rounds of discussion and revisions, this resulted in a total of 16 criteria, in five categories.

One of the overarching goals for the implementation of the European Green Deal should require laying down specific protocols and methodologies seeking to operationalize an environmental justice perspective through a focus on information, consultation, and active participation, augmented by other mechanisms. These protocols and methodologies will be further developed in D1.2, D1.3, and D1.4 of the REAL_DEAL project, based on this initial draft of high-level criteria for meaningful citizen participation and deliberation.

4.1. Be aware of power imbalances

When forming collaborations and creating spaces for participation or deliberation, it is crucial to be aware of the inherent power imbalances, the history of these imbalances, and the local structures and context. For example, actors from the Global North need to give special attention and existing power balances and corresponding societal structures need to change to reach ecological transformation and therewith a sustainable future. Policy and participatory tools should contribute to this by fostering equal participation and challenging power imbalances.

1. Policymakers should not lose sight of examining who the policy benefits, give attention to historical power asymmetries, and empower the disempowered. Sustainable futures are only possible if social relations and the relations of production are changed. Environmental policies must include the working class, which can bring about new lay-expert knowledge and build new design ecologies and green public goods.

2. Legislators and policymakers need to consider inequalities (based on characteristics such as racialised group, gender, and class) in the design of legal frameworks and the implementation of deliberative and participative tools. The regulatory and institutional frameworks in environmental policy need to address the deep uncertainties and the vested interests at stake in decision-making processes through the participation of all stakeholders. The values and culture of those who will be impacted must be fairly considered and represented.

3. Global North actors should be aware of how they work with those in the Global South and should strive to transform power dynamics in participation and deliberation. Civil society in the Global North must reflect on its relationship with civil society in the Global South and build movements based on solidarity. This activism should strive to challenge existing societal structures and narratives that maintain structures of oppression and environmental degradation. Capacity building and knowledge sharing should be based on principles of empowerment and understood in local contexts.

4. Spaces for participation (e.g., local committees, decision-making bodies, councils) are not neutral and contain inherent power imbalances. Alternative spaces that address such power imbalances should be created to foster equal participation from structurally excluded groups.

4.2. Promoting and ensuring inclusiveness

Participation and deliberation should be inclusive so a wide variety of values, beliefs, and knowledge can be considered, and no groups are left voiceless. To reach this, the perspective of those who are often excluded from current policies have to be included, like marginalised groups, women in all their diversity, civil society from the Global South, the working class, and non-humans. Because some people are systematically excluded from participatory practices

by societal structures, different forms of participation and deliberation need to be offered so they are advantageous to all. Inclusion should avoid tokenism, and an intersectional approach should be taken where intersecting forms of discrimination and exclusion are considered.

1. Public participation and dialogue are important for environmental policy, and a wide plurality of viewpoints should be taken into account through open debate, discussion, and deliberation. Policy often needs to be a compromise about what most citizens deem acceptable. However, policymakers should also be aware that sometimes finding a middle ground and incorporating everyone's perspective is not always expedient, possible, and may even be contradictory to environmental objectives.

2. It is important to ensure that citizens are not left out of the discussion because they are unable to reason and debate as strongly as others. While group deliberation and discussions are an effective form of communication to voice opinions, they should not be the *only* form of participation because this platform is more advantageous to some, while disadvantageous to others.

3. While being pragmatic and future-oriented about participation and deliberation on environmental policy is often effective, it is fundamental that the values of citizens are not lost along the way. It is important to ensure better inclusion of a wide diversity of values and beliefs in environmental deliberative procedures, rather than leaving certain groups alienated and voiceless. Political decision-makers should support inclusive participation and deliberation processes, ensuring to include the voice of marginal groups, and non-humans.

4. The participation of local and indigenous groups - in particular women - should be promoted. Often these groups have valuable knowledge related to the environment, climate, and sustainability, yet their participation is hindered by structural barriers. Similarly, intersectional perspectives should be promoted in environmental policies, to understand multiple and intersecting forms of discrimination. Policymakers should remove structural barriers to participation and deliberation in environmental decision-making.

4.3. Work with and protect nature

While it is people who are engaged in participation and deliberation practices, we should reflect on the needs and importance of other species and the environment. People need to ensure that the interests of non-human species are not always overruled. Nature's intrinsic value must be regarded, and nature should be seen as an active element.

1. We should not view ourselves as being the only thing of moral considerability. The needs and importance of other species and the environment should be recognised within our dialogue on environmental policy. Citizens should ground their views on the premise that human beings are interconnected with nature and we should work with it, rather than against it.

2. Non-human organisms, species, and the environment cannot voice their concerns politically, so human citizens need to represent them within a policy that impacts their flourishing and survival. Citizens need to include these voices in deliberation and ensure that corporate, political, and economic interests do not override the intrinsic value of nature. When governments, international institutions, and private sector companies make decisions around the environment, nature and animals should not be exploited for their gain.

4.4. Collaborating with bottom-up activism and cultivating environmental citizenship

There are several ways citizens can show and express their affection for nature (elections, citizen deliberations, bottom-up organised demonstrations, or grassroots actions). When no attention is given to the voice of local and grassroots groups, both environmental movements, as well as gender equality, will suffer from it.

1. Policymakers should incorporate the views of environmentalists to bring about change in environmental policy. Demonstrations and bottom-up climate activism initiatives contribute to political dialogue and can be seen as triggers of change for transformative learning. These demonstrations are indications that some citizens are unhappy with policy and protest is the only option available to them. Policymakers need to respond to these criticisms and identify how they can do more.

2. International institutions such as the United Nations and the European Union should consult with grassroots groups and promote participation in decisions that affect their environment. When local groups are not consulted, it can hinder both gender equality and the environmental movement. Grassroots actions can be taken by citizens that want to initiate change and do not want to wait on the slow wheels of politics to initiate real change.

3. Citizen deliberations are a powerful instrument to promote environmental citizenship, as deliberation transforms individual preferences in the pursuit of the common good. Decision-makers need to create the conditions to foster environmental citizenship and to improve the environmental awareness of citizens. Citizens can demonstrate their views by electing parties that attest to ecocentric values, adopting green principles, and working within current democratic systems.

4.5. Transitioning the economic model to a green economy

There are different visions of the desirability of a green economy. Some approaches argue that we should not only focus on economic growth but also societal change. While others strive to completely move away from (green) economic growth and instead focus on wellbeing and care for people and the planet. A focus should be given to the participation of women since the unpaid care burden often provides an extra hurdle for them to participate.

1. Transitions are not only driven by politics and governance, markets, and technology: on a larger scale, civic and cultural mobilization become the main advancing agents of change. Societal groups could create new institutional forms, or new lay-expert modes of, engagement to build new design ecologies. The debate on transitions should not be reduced to an opposition between industrial progress and environmental protection.

2. The role of the individual citizen needs to be extended beyond that of a consumer of the environment and involve active participation in a process that is based on collective action. Decision-makers should not simply encourage Green Consumerism as a form of public participation, but also engage people in meaningful political action and be open to radical changes. For example, policymakers should ensure that procedural environmental and human rights are meaningful and executed (e.g., at the national

level), because without meaningful procedural rights, there are no substantive environmental and human rights.

3. Governments should recognise and value the current unpaid care burden that is often borne by women, which hinders their participation in many aspects of decision making, as well as devalues their contribution to sustainable development. A conceptualisation of well-being that moves away from the current economic focus on growth and instead centres care for people and the planet should be promoted.

5. Conclusion

This report started with the aim of evaluating eight diverse environmental approaches that may offer insights into how we can create meaningful citizen participation and deliberation in environmental policies, such as the EGD. The eight approaches, which comprised the main subsections of Section 3 of this report, were: ecocentrism, environmental pragmatism, biocentrism, ecofeminism, environmental justice, ecomodernism, environmental justice, and environmental rights.

The researchers involved in this task initiated a systematic review of these eight approaches to identify what the literature had to say about these approaches. We began by scouring the two most prominent academic journal repositories for relevant articles (Scopus and Web of Science), using similar search queries to ensure consistency among the different teams evaluating each of the eight approaches. This brought back an eclectic mix of articles, which each group had to narrow down to the most relevant articles, using the exclusion criteria outlined at the start of the project.

Following this, each partner conducted a systematic review using ATLAS.ti software and wrote a report on their approach based on these findings. During several brainstorming sessions and a 2-hour workshop afterwards, each partner created 2-6 criteria for meaningful citizen participation and deliberation for the EGD, which was the main focus of Section 4 of this report.

What resulted was 16 criteria, divided into five categories, which should be used by policymakers, researchers, the public, and NGOs to initiate change towards better inclusion, representation, and dialogue with citizens and all relevant stakeholders in the debate. The list is not meant to be a comprehensive account of all factors required for meaningful citizen participation and deliberation but is considered the most important based on the findings from 8 key environmental approaches discussing this topic.

Altogether, this high-level set of criteria is still quite general and needs further extrapolation to identify how it is possible to implement such changes within policy and society as a whole. This task works as a first step in the direction toward better citizen participation and deliberation, which will be further developed throughout the next 3 years of the REAL_DEAL project. Specifically, the criteria will be developed in Tasks 1.2, 1.3, and 1.4, in the first year of the project. The implementation of the criteria drafted in this report will lay the foundations for the rest of the REAL_DEAL project, and specifically, will help lay down specific protocols and methodologies that seek to operationalize the 16 criteria outlined in this report. Task 1.2 will provide a mid-level operationalisation of the high-level criteria found in this document, Task 1.3 will provide tangible policy and legal recommendations and how these criteria can be respected and advanced based on this, and Task 1.4 will take a step further and operationalise the criteria into very tangible recommendations and steps for policy. Thereafter, the CSOs and academic institutions involved in the REAL_DEAL project will further refine and develop these ideas in practice and in the development of recommendations to the European Commission and key stakeholders aiming to promote meaningful citizen participation and

deliberation. With the theoretical framing of WP1 and the empirical implementation of the criteria in WP2 and WP3, Task 4.1 of the REAL_DEAL will evaluate these findings and bring them together to refine the criteria and develop a protocol for implementation.

6. References

Agarwal, B. (1998). *Environmental management, equity and ecofeminism: Debating India's experience*.

Aguilar-Luzón, M. C., Carmona, B., Calvo-Salguero, A., & Castillo Valdivieso, P. A. (2020). Values, Environmental Beliefs, and Connection With Nature as Predictive Factors of the Pro-environmental Vote in Spain. *Frontiers in Psychology*, *11*, 1043. https://doi.org/10.3389/fpsyg.2020.01043

Ahmed, S. (2013). *Civic Environmentalism and the Politics of Marginalized People: A Case Study from Megacity Dhaka, Bangladesh | Environmental Justice*. https://www.liebertpub.com/doi/abs/10.1089/env.2012.0042

Ahmed, S. (2014). Implications of the Environmental Justice Movement on Redistributive Urban Politics: An Example from Megacity Dhaka, Bangladesh. In *Occupy the Earth: Global Environmental Movements* (Vol. 15, pp. 255–274). Emerald Group Publishing Limited. https://doi.org/10.1108/S2051-503020140000015010

Ajibade, I., & Boateng, G. O. (2021). Predicting why people engage in pro-sustainable behaviors in Portland Oregon: The role of environmental self-identity, personal norm, and socio-demographics. *Journal of Environmental Management*, *289*, 112538. https://doi.org/10.1016/j.jenvman.2021.112538

Ako, R. T. (2011). Enforcing environmental rights under Nigeria's 1999 Constitution: The localisation of human rights in the Niger Delta region. *Feyter, K. de, et Al*, 72–104.

Alabaster, T., & Hawthorne, M. (1999). Information for environmental citizenship. *Sustainable Development*, *7*(1), 25–34. https://doi.org/10.1002/(SICI)1099-1719(199902)7:1<25::AID-SD98>3.0.CO;2-O

Al-Azmeh, A. (2021). *UTOPIA AND ISLAMIC POLITICAL THOUGHT*. 12.

Albert, M. J. (2020). The Dangers of Decoupling: Earth System Crisis and the 'Fourth Industrial Revolution'. *Global Policy*, *11*(2), 245–254. https://doi.org/10.1111/1758-5899.12791

Allen, B. L. (2018). Strongly Participatory Science and Knowledge Justice in an Environmentally Contested Region. *Science, Technology, & Human Values*, *43*(6), 947–971. https://doi.org/10.1177/0162243918758380

Amir-Moezzi, M.-A. (2018). Muḥammad the Paraclete and ʿAlī the Messiah: New Remarks on the Origins of Islam and of Shiʿite Imamology. *Der Islam*, *95*(1), 30–64. https://doi.org/10.1515/islam-2018-0002

Anahita, S. (2009). Nestled into niches: Prefigurative communities on lesbian land. *Journal of Homosexuality*, *56*(6), 719–737.

Anker, P., & Witoszek, N. (1998). The Dream of the Biocentric Community and the Structure of Utopias1. *Worldviews: Global Religions, Culture, and Ecology*, *2*(3), 239–256. https://doi.org/10.1163/156853598X00235

Anshelm, J., & Hultman, M. (2014). *Discourses of global climate change: Apocalyptic framing and political antagonisms*. Routledge.

Attardi, R., Bonifazi, A., & Torre, C. (2012). Evaluating Sustainability and Democracy in the Development of Industrial Port Cities: Some Italian Cases. *Sustainability*, *4*(11), 3042–3065. https://doi.org/10.3390/su4113042

Baber, W. F., & Bartlett, R. V. (2020). A rights foundation for ecological democracy. *Journal of Environmental Policy & Planning*, *22*(1), 72–83.

Bacher, S. (2017). Authoritarian Legacies in Guatemala's Democracy Environmental rights defenders: The new threat to national security? *Encuentro Latinoamericano ELA*.

Bäckstrand, K. (2004). Scientisation vs. Civic expertise in environmental governance: Eco-feminist, eco-modern and post-modern responses. *Environmental Politics*, *13*(4), 695–

714.
Baker, S. (2004). The challenge of ecofeminism for European politics. *Europe, Globalization and Sustainable Development*, 15.
Balcarce, G. (2013). De mesianismos impolíticos: Emmanuel Levinas. *Revista de Filosofía (Madrid)*, *38*(2), 99–116. https://doi.org/10.5209/rev_RESF.2013.v38.n2.43390
Barral, V. (2018). Towards Judicial Coordination for Good Water Governance? *International & Comparative Law Quarterly*, *67*(4), 931–959.
Barranquero Carretero, A., & Sáez Baeza, C. (2022). Latin American Critical Epistemologies toward a Biocentric Turn in Communication for Social Change: Communication from a Good Living Perspective. *Latin American Research Review*, *52*(3), 431–445. https://doi.org/10.25222/larr.59
Barry, J. (1994). The limits of the shallow and the deep: Green politics, philosophy, and praxis. *Environmental Politics*, *3*(3), 369–394. https://doi.org/10.1080/09644019408414152
Barshack, L. (2006). Constituent Power as Body: Outline of a Constitutional Theology. *University of Toronto Law Journal*, *56*(3), 185–222. https://doi.org/10.1353/tlj.2006.0008
Batavia, C., Bruskotter, J. T., Jones, J. A., & Nelson, M. P. (2020). Exploring the ins and outs of biodiversity in the moral community. *Biological Conservation*, *245*, 108580. https://doi.org/10.1016/j.biocon.2020.108580
Batterbury, S. (2003). Environmental Activism and Social Networks: Campaigning for Bicycles and Alternative Transport in West London. *The ANNALS of the American Academy of Political and Social Science*, *590*(1), 150–169. https://doi.org/10.1177/0002716203256903
Beckwith, J. A., Hadlock, T., & Suffron, H. (2003). Public perceptions of plant biotechnology—A focus group study. *New Genetics and Society*, *22*(2), 125–141. https://doi.org/10.1080/1463677032000102620
Beechey, V. (1979). On patriarchy. *Feminist Review*, *3*(1), 66–82.
Berglund, E., & Julier, G. (2020). Growth in WEIRD Helsinki: Countering Dominant Urban Politics and its "Green" Pretentions. *Sociální studia/Social Studies*, *17*(1), 13-31.
Bell, D.B. (2005). Liberal Environmental Citizenship, Environmental Politics, 14:2, 179-194, DOI: 10.1080/09644010500054863
Berry, P. M., Fabók, V., Blicharska, M., Bredin, Y. K., Llorente, M. G., Kovács, E., Geamana, N., Stanciu, A., Termansen, M., Jääskeläinen, T., Haslett, J. R., & Harrison, P. A. (2018). Why conserve biodiversity? A multi-national exploration of stakeholders' views on the arguments for biodiversity conservation. *Biodiversity and Conservation*, *27*(7), 1741–1762. https://doi.org/10.1007/s10531-016-1173-z
Biagi, M., & Ferro, M. (2011). Ecological Citizenship and Social Representation of Water: Case Study in Two Argentine Cities. *SAGE Open*, *1*(2), 215824401141789. https://doi.org/10.1177/2158244011417897
Bohn, C. (2019). Preference transformation through 'green political judgement formation'? Rethinking informal deliberative citizen participation processes. *Critical Review of International Social and Political Philosophy*, https://doi.org/10.1080/13698230.2019.1698122
Bonifazi, A., Rega, C., & Gazzola, P. (2011). STRATEGIC ENVIRONMENTAL ASSESSMENT AND THE DEMOCRATISATION OF SPATIAL PLANNING. *Journal of Environmental Assessment Policy and Management*, *13*(01), 9–37. https://doi.org/10.1142/S1464333211003778
Booth, K. J. (2012). Environmental Pragmatism and Bioregionalism. *Contemporary Pragmatism*, *9*(1), 67–84. https://doi.org/10.1163/18758185-90000217
Boxley, S. (2019). Red Biocentrism for the Anthropocene. *Australian Journal of Environmental Education*, *35*(3), 183–197. https://doi.org/10.1017/aee.2019.18
Brush, E. (2020). Inconvenient truths: Pluralism, pragmatism, and the need for civil disagreement. *Journal of Environmental Studies and Sciences*, *10*(2), 160–168. https://doi.org/10.1007/s13412-020-00589-7
Buckingham, S. (2015). *Ecofeminism*.

Buijs, A. E., Elands, B. H. M., & Langers, F. (2009). No wilderness for immigrants: Cultural differences in images of nature and landscape preferences. *Landscape and Urban Planning*, *91*(3), 113–123. https://doi.org/10.1016/j.landurbplan.2008.12.003

Bull, R., Petts, J., & Evans, J. (2008). Social learning from public engagement: Dreaming the impossible? *Journal of Environmental Planning and Management*, *51*(5), 701–716. https://doi.org/10.1080/09640560802208140

Casarejos, F., Rufin, C., & Engel, I. (2021). Regenerative Democracy for Envisioning and Fostering Flourishing Societies. *Sustainability*, *13*(11), 5808. https://doi.org/10.3390/su13115808

Casey, P. J., & Scott, K. (2006). Environmental concern and behaviour in an Australian sample within an ecocentric – anthropocentric framework. *Australian Journal of Psychology*, *58*(2), 57–67. https://doi.org/10.1080/00049530600730419

Christel, Lucas. G., & Gutiérrez, R. A. (2017). *Making Rights Come Alive: Environmental Rights and Modes of Participation in Argentina*. https://journals.sagepub.com/doi/abs/10.1177/1070496517701248

Clark, B. (2021). Neutrality, nature, and intergenerational justice. *Environmental Politics*, *30*(3), 307–325. https://doi.org/10.1080/09644016.2020.1779564

Collard, R. C., Dempsey, J., & Sundberg, J. (2016). The moderns' amnesia in two registers. *Environmental Humanities*, *7*(1), 227-232.

Colfer, C. J. P., Basnett, B. S., & Ihalainen, M. (2018). *Making sense of 'intersectionality': A manual for lovers of people and forests* [Occasional Paper 184]. CIFOR.

Cross, K. W. (2016). *Is this the future we want? An ecofeminist comment on the UN Conference on Sustainable Development Outcome Document*. Cambridge University Press.

Dalby, S. (2016). Framing the Anthropocene: The good, the bad and the ugly. *The Anthropocene Review*, *3*(1), 33-51.

de Groot, M., Drenthen, M., de Groot, W. T., & Center for Environmental Philosophy, The University of North Texas. (2011). Public Visions of the Human/Nature Relationship and their Implications for Environmental Ethics: *Environmental Ethics*, *33*(1), 25–44. https://doi.org/10.5840/enviroethics20113314

De Santo, E. M. (2011). *Environmental justice implications of Maritime Spatial Planning in the European Union*. https://www.sciencedirect.com/science/article/abs/pii/S0308597X10001399

Denedo, M., Thomson, I., & Yonekura, A. (2019). Ecological damage, human rights and oil: Local advocacy NGOs dialogic action and alternative accounting practices. *Accounting Forum*, *43*(1), 85–112.

Desai, B. H., & Sidhu, B. K. (2020). International Courts and Tribunals – the New Environmental Sentinels in International Law. *Environmental Policy and Law*, *50*(1–2), 17–33. https://doi.org/10.3233/EPL-200195

Devika, J. (2010). Caregiver vs. Citizen? Reflections on ecofeminism from Kerala state, India. *Man in India*, *89*(4), 751–769.

Dias, V. M., Soares, P. P. de M. A., Brondizio, E. S., & Cruz, S. H. R. (2021). Grassroots mobilization in Brazil's urban Amazon: Global investments, persistent floods, and local resistance across political and legal arenas. *World Development*, *146*, 105572. https://doi.org/10.1016/j.worlddev.2021.105572

diZerega, G. (1996). Deep Ecology and Liberalism: The Greener Implications of Evolutionary Liberal Theory. *The Review of Politics*, *58*(4), 699–734. https://doi.org/10.1017/S003467050002043X

Dobson, A. (2007). Environmental citizenship: Towards sustainable development. *Sustainable Development*, *15*(5), 276–285. https://doi.org/10.1002/sd.344

Dockstader, S., & Bell, S. E. (2020). Ecomodern Masculinity, Energy Security, and Green Consumerism: The Rise of Biofuels in the United States. *Critical Sociology*, *46*(4–5), 643–660. https://doi.org/10.1177/0896920519885010

Dodge, J. (2009). Environmental justice and deliberative democracy: How social change organizations respond to power in the deliberative system. *Policy and Society*, *28*(3),

225–239. https://doi.org/10.1016/j.polsoc.2009.08.005
Dodsworth, A. (2021). Republican environmental rights. *Critical Review of International Social and Political Philosophy*, *24*(5), 710–724. https://doi.org/10.1080/13698230.2019.1698154
Eckersley, R. (1992). *Environmentalism and political theory: Toward an ecocentric approach*. Suny Press.
Eckersley, R. (1995). Liberal democracy and the rights of nature: The struggle for inclusion. *Environmental Politics*, *4*(4), 169–198. https://doi.org/10.1080/09644019508414232
Eckersley, R. (2002). Environmental pragmatism, ecocentrism and deliberative democracy: Between problem-solving and fundamental critique. *Democracy and the Claims of Nature*, 49–70.
Elliott, J. (2013). An introduction to sustainable development. London: Routledge.
Emmenegger, S., & Tschentscher, A. (1993). Taking nature's rights seriously: The long way to biocentrism in environmental law. *Geo. Int'l Envtl. L. Rev.*, *6*, 545.
Environment, U. N. (2018, March 2). *What are environmental rights?* UNEP - UN Environment Programme. http://www.unep.org/explore-topics/environmental-rights-and-governance/what-we-do/advancing-environmental-rights/what
Erten, S. (2008). Insights to Ecocentric, Anthropocentric and Antipathetic Attitudes towards Environment in Diverse Cultures. *Egitim Arastirmalari - Eurasian Journal of Educational Research*.
Evans, E., & Chamberlain, P. (2015). Critical waves: Exploring feminist identity, discourse and praxis in western feminism. *Social Movement Studies*, *14*(4), 396–409.
Fakier, K. (2018). *Women and renewable energy in a South African community: Exploring energy poverty and environmental racism*.
Fischer, F. (2018). Environmental Democracy: Participation, Deliberation and Citizenship. In M. Boström & D. J. Davidson (Eds.), *Environment and Society* (pp. 257–279). Springer International Publishing. https://doi.org/10.1007/978-3-319-76415-3_12
Foguesatto, C. R., & Machado, J. A. D. (2021). What shapes farmers' perception of climate change? A case study of southern Brazil. *Environment, Development and Sustainability*, *23*(2), 1525–1538. https://doi.org/10.1007/s10668-020-00634-z
Foster, E. (2021). Ecofeminism revisited: Critical insights on contemporary environmental governance. *Feminist Theory*, *22*(2), 190–205.
Gaard, G. (2003). Ecofeminists in the Greens. In H. Eaton & L. A. Lorentzen (Eds.), *Ecofeminism & Globalization: Exploring culture, context, and religion*. Rowman & Littlefield Publishers, Inc.
Gangaas, K. E., Kaltenborn, B. P., & Andreassen, H. P. (2015). Environmental attitudes associated with large-scale cultural differences, not local environmental conflicts. *Environmental Conservation*, *42*(1), 41–50. https://doi.org/10.1017/S0376892914000125
Gellers, J. C., & Jeffords, C. (2018). Toward Environmental Democracy? Procedural Environmental Rights and Environmental Justice. *Global Environmental Politics*, *18*(1), 99–121. https://doi.org/10.1162/GLEP_a_00445
Giacomini, T. (2016). Ecofeminism and system change: Women on the frontlines of struggle against fossil capitalism and for the solar commons. *Canadian Woman Studies*.
Gibbs, N. (2019). Modern Constitutional Legitimacy and Political Theology: Schmitt, Peterson and Blumenberg. *Law and Critique*, *30*(1), 67–89. https://doi.org/10.1007/s10978-018-9228-9
Giupponi, B. O. (2019). *Fostering environmental democracy in Latin America and the Caribbean: An analysis of the Regional Agreement on Environmental Access Rights—Olmos Giupponi—2019—Review of European, Comparative & International Environmental Law—Wiley Online Library*. https://onlinelibrary.wiley.com/doi/abs/10.1111/reel.12274
Gönenç, D. (2020). *Conceptualizing norm fusion through environmental rights: Environmental Politics: Vol 30, No 3*. https://www.tandfonline.com/doi/abs/10.1080/09644016.2020.1743610

Gontier, T. (2013). From “Political Theology” to “Political Religion”: Eric Voegelin and Carl Schmitt1. *The Review of Politics*, *75*(1), 25–43. https://doi.org/10.1017/S0034670512001064

Goodrich, P. (2013). The Political Theology of Private Law. *International Journal of Constitutional Law*, *11*(1), 146–161. https://doi.org/10.1093/icon/mos039

Grendstad, G., & Wollebaek, D. (1998). Greener Still?: An Empirical Examination of Eckersley’s Ecocentric Approach. *Environment and Behavior*, *30*(5), 653–675. https://doi.org/10.1177/001391659803000504

Gustafson, A., Pace, A., Singh, S., & Goldberg, M. H. (2022). What do people say is the most important reason to protect nature? An analysis of pro-environmental motives across 11 countries. *Journal of Environmental Psychology*, *80*, 101762. https://doi.org/10.1016/j.jenvp.2022.101762

Harnois, C. E. (2012). Sociological research on feminism and the women’s movement: Ideology, identity, and practice. *Sociology Compass*, *6*(10), 823–832.

Haydon, J. J., & Kuang, J. (2013). Using environmental conflict resolution and consensus building towards improved sustainability. *The Sustainable City VIII (2 Volume Set): Urban Regeneration and Sustainability*, *179*, 181.

Hayward, B. (2012). Children, Citizenship and Environment. In *Children, Citizenship and Environment* (0 ed.). Routledge. https://doi.org/10.4324/9780203106839

Heiden, G. J. van der (Ed.). (2017). *Saint Paul and philosophy: The consonance of ancient and modern thought* (1 [edition]). Walter de Gruyter.

Hemming, S., Rigney, D., Bignall, S., Berg, S., & Rigney, G. (2019). Indigenous nation building for environmental futures: Murrundi flows through Ngarrindjeri country. *Australasian Journal of Environmental Management*, *26*(3), 216–235. https://doi.org/10.1080/14486563.2019.1651227

Hobson, K. (2013). On the making of the environmental citizen. *Environmental Politics*, *22*(1), 56–72. https://doi.org/10.1080/09644016.2013.755388

Howard, L., Howell, R., & Jamieson, L. (2021). (Re)configuring moral boundaries of intergenerational justice: The UK parent-led climate movement. *Local Environment*, *26*(12), 1429–1444. https://doi.org/10.1080/13549839.2021.1973977

Humphreys, D. (2009). Environmental and Ecological Citizenship in Civil Society. *The International Spectator*, *44*(1), 171–183. https://doi.org/10.1080/03932720802693101

Hunka, A. D., De Groot, W. T., & Biela, A. (2009). Visions of Nature in Eastern Europe: A Polish Example. *Environmental Values*, *18*(4), 429–452. https://doi.org/10.3197/096327109X12532653285777

Hunt, K. P. (2014). “It’s More Than Planting Trees, It’s Planting Ideas”: Ecofeminist Praxis in the Green Belt Movement. *Southern Communication Journal*, *79*(3), 235–249.

Ikelegbe, A. (2001). *Civil society, oil and conflict in the Niger Delta region of Nigeria: Ramifications of civil society for a regional resource struggle | The Journal of Modern African Studies | Cambridge Core*. https://www.cambridge.org/core/journals/journal-of-modern-african-studies/article/abs/civil-society-oil-and-conflict-in-the-niger-delta-region-of-nigeria-ramifications-of-civil-society-for-a-regional-resource-struggle/ED36C344C3DBEA1DA743F51A248AC650

Ilishko, D. (2008). Re-Imagining Ecofeminist Theology for Eastern Europe. *Feminist Theology*, *16*(2), 230–237.

Ingalsbee, T. (1996). Earth First! Activism: Ecological Postmodern Praxis in Radical Environmentalist Identities. *Sociological Perspectives*, *39*(2), 263–276. https://doi.org/10.2307/1389312

Irwin, R. (2007). The neoliberal state, Environmental Pragmatism, and its discontents. *Environmental Politics*, *16*(4), 643–658. https://doi.org/10.1080/09644010701419154

Islam, A. R. Md. T., Hasanuzzaman, Md., Jaman, M., Alam, E., Mallick, J., Alam, G. M. M., Sattar, Md. A., & Techato, K. (2021). Assessing Farmers’ Typologies of Perception for Adopting Sustainable Adaptation Strategies in Bangladesh. *Climate*, *9*(12), 167. https://doi.org/10.3390/cli9120167

Jacobs, F. (2006). The Role of the European Court of Justice in the Protection of the

Environment. *Journal of Environmental Law*, *18*(2), 185–205. https://doi.org/10.1093/jel/eql012

Jelin, E. (2000). Towards a global environmental citizenship? *Citizenship Studies*, *4*(1), 47–63.

Kaida, N., & Kaida, K. (2016). Facilitating Pro-environmental Behavior: The Role of Pessimism and Anthropocentric Environmental Values. *Social Indicators Research*, *126*(3), 1243–1260. https://doi.org/10.1007/s11205-015-0943-4

Kaika, M. (2017). *'Don't call me resilient again!'*: The New Urban Agenda as immunology … or … what happens when communities refuse to be vaccinated with 'smart cities' and indicators. *Environment and Urbanization*, *29*(1), 89–102. https://doi.org/10.1177/0956247816684763

Kallis, G., & Bliss, S. (2019). Post-environmentalism: Origins and evolution of a strange idea. *Journal of Political Ecology*, *26*(1), Article 1. https://doi.org/10.2458/v26i1.23238

Kao, G. Y. (2010). The universal versus the particular in ecofeminist ethics. *Journal of Religious Ethics*, *38*(4), 616–637.

Karlsson, R. (2016). Three metaphors for sustainability in the Anthropocene. *The Anthropocene Review*, *3*(1), 23–32. https://doi.org/10.1177/2053019615599415

Karlsson, R. (2018). The high-energy planet. *Global Change, Peace & Security*, *30*(1), 77–84. https://doi.org/10.1080/14781158.2018.1428946

Kesting, S. (2011). What is 'green'in the green new deal–criteria from ecofeminist and post-Keynesian economics. *International Journal of Green Economics*, *5*(1), 49–64.

Kettunen, M. (2021). "We need to make our voices heard": Claiming space for young people's everyday environmental politics in northern Finland. *Nordia Geographical Publications*, *49*(5), 32–48. https://doi.org/10.30671/nordia.98115

Keulartz, J. (2018). Does Deliberation Promote Ecological Citizenship? The Convergence Hypothesis and the Reality of Polarization. In S. Sarkar & B. A. Minteer (Eds.), *A Sustainable Philosophy—The Work of Bryan Norton* (Vol. 26, pp. 189–212). Springer International Publishing. https://doi.org/10.1007/978-3-319-92597-4_12

King, P., & Reddell, C. (2015). Public participation and water use rights. *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, *18*(4), 944–968.

Klavins, M. (2021). Education for Sustainable Development: A University Perspective. In W. Leal Filho, A. L. Salvia, L. Brandli, U. M. Azeiteiro, & R. Pretorius (Eds.), *Universities, Sustainability and Society: Supporting the Implementation of the Sustainable Development Goals* (pp. 277–284). Springer International Publishing. https://doi.org/10.1007/978-3-030-63399-8_18

Kloek, M. E., Buijs, A. E., Boersema, J. J., & Schouten, M. G. C. (2018). Cultural echoes in Dutch immigrants' and non-immigrants' understandings and values of nature. *Journal of Environmental Planning and Management*, *61*(5–6), 818–840. https://doi.org/10.1080/09640568.2017.1319803

Kopnina, H. (2012). The Lorax complex: Deep ecology, ecocentrism and exclusion. *Journal of Integrative Environmental Sciences*, *9*(4), 235–254. https://doi.org/10.1080/1943815X.2012.742914

Kowasch, M., Cruz, J. P., Reis, P., Gericke, N., & Kicker, K. (2021). Climate Youth Activism Initiatives: Motivations and Aims, and the Potential to Integrate Climate Activism into ESD and Transformative Learning. *Sustainability*, *13*(21), 11581. https://doi.org/10.3390/su132111581

Küçüköner, H. R. (2020). Zamanın Ruhu Bağlamında İslam, Hinduizm ve Hıristiyanlık İçerisinden Mesiyanik Nübüvvet İddiaları. *E-Makalat Mezhep Araştırmaları Dergisi*, 316. https://doi.org/10.18403/emakalat.737717

Kyroglou, G. (2021). An 'inconvenient truth'? The problem of recognition of the political message – commentary to Huttunen and Albrecht. *Fennia - International Journal of Geography*, *199*(1). https://doi.org/10.11143/fennia.108034

Laastad, S. G. (2020). Nature as a Subject of Rights? National Discourses on Ecuador's Constitutional Rights of Nature. *Forum for Development Studies*, *47*(3), 401–425. https://doi.org/10.1080/08039410.2019.1654544

Lalander, R., & Lembke, M. (2018). The Andean Catch-22: Ethnicity, class and resource governance in Bolivia and Ecuador. *Globalizations*, *15*(5), 636–654.

Larsen, S. (n.d.). *Agamben: The Messianic Kingdom*. 23.

Latta, P. A. (2007). Locating democratic politics in ecological citizenship. *Environmental Politics*, *16*(3), 377–393. https://doi.org/10.1080/09644010701251631

Lau, J. D., Gurney, G. G., & Cinner, J. (2021). Environmental justice in coastal systems: Perspectives from communities confronting change. *Global Environmental Change*, *66*, 102208. https://doi.org/10.1016/j.gloenvcha.2020.102208

Lee, J. (2018). Ecofeminism as Responsible Governance: Analyzing the Mercury Regulations as a Case Study. *Harv. Envtl. L. Rev.*, *42*, 519.

Leonard, L. (2005) Politics Inflamed: GSE and the Campaign against Incineration in Galway. Irish Greenhouse Press Ecopolitics Series Vol.1. Drogheda: Choice Publishing & Greenhouse Press

Leonard, L. (2006) Green Nation: The Irish Environmental Movement in Ireland from Carnsore Point to the Rossport Five. Irish Greenhouse Press Ecopolitics Series Vol.2. Drogheda: Choice Publishing & Greenhouse Press

Leonard, L. (2007). Environmentalism in Ireland: Ecological Modernisation versus Populist Rural Sentiment. *Environmental Values*, *16*(4), 463–483. https://doi.org/10.3197/096327107X243240

Levinson, R., Paraskeva-Hadjichambi, D., Bedsted, B., Manov, B., & Hadjichambis, A. (2020). Political Dimensions of Environmental Citizenship. In A. Hadjichambis, P. Reis, D. Paraskeva-Hadjichambi, J. Cincera, J. Boeve-de Pauw, N. Gericke, & M.-C. Knippels (Eds.), *In: Hadjichambis, A and Reis, P and Paraskeva-Hadjichambi, D and Cincera, J and Boeve-de Pauw, J and Gericke, N and Knippels, M-C, (eds.) Conceptualizing Environmental Citizenship for 21st Century Education. (Pp. 17-28). Springer: Cham, Switzerland. (2020)* (Vol. 4, pp. 17–28). Springer. https://doi.org/10.1007/978-3-030-20249-1_2

Li, H. (2007). Ecofeminism as a pedagogical project: Women, nature, and education. *Educational Theory*, *57*(3), 351–368.

Liobikienė, G., Niaura, A., Mandravickaitė, J., & Vabuolas, Ž. (2016). DOES RELIGIOSITY INFLUENCE ENVIRONMENTAL ATTITUDE AND BEHAVIOUR? THE CASE OF YOUNG LITHUANIANS. *European Journal of Science and Theology*, 16.

Loman, O. (2020). A Problem for Environmental Pragmatism: Value Pluralism and the Sustainability Principle. *Contemporary Pragmatism*, *17*(4), 286–310. https://doi.org/10.1163/18758185-17040003

Longdon, J. (2020). Environmental data justice. *The Lancet Planetary Health*, *4*(11), e510–e511. https://doi.org/10.1016/S2542-5196(20)30254-0

Luque, E. (2005). Researching Environmental Citizenship and its Publics. *Environmental Politics*, *14*(2), 211–225. https://doi.org/10.1080/09644010500054947

Luthfa, S. (2017). Transnational ties and reciprocal tenacity: Resisting mining in Bangladesh with transnational coalition. *Sociology*, *51*(1), 127–145.

Maboloc, C. R. (2016). On the Ethical and Democratic Deficits of Environmental Pragmatism. *Journal of Human Values*, *22*(2), 107–114. https://doi.org/10.1177/0971685815627930

MacGregor, S. (2014). Only resist: Feminist ecological citizenship and the post- politics of climate change. *Hypatia*, *29*(3), 617–633.

Maleta, Y. (2018). A sociocultural insight to feminist activist sustainable citizenship. *International Journal of Sustainability in Economic, Social, and Cultural Context*, *14*(2), 31–44.

Mathews, F. (1995). Community and the ecological self. *Environmental Politics*, *4*(4), 66–100. https://doi.org/10.1080/09644019508414229

Matzek, V., & Wilson, K. A. (2021). Public support for restoration: Does including ecosystem services as a goal engage a different set of values and attitudes than biodiversity protection alone? *PLOS ONE*, *16*(1), e0245074. https://doi.org/10.1371/journal.pone.0245074

McDonough, W., & Braungart, M. (2002). Design for the triple top line: new tools for sustainable commerce. *Corporate Environmental Strategy*, *9*(3), 251-258

McGregor, A. (2004). Sustainable development and `warm fuzzy feelings': Discourse and nature within Australian environmental imaginaries. *Geoforum*, *35*(5), 593–606. https://doi.org/10.1016/j.geoforum.2004.02.001

MacGregor, S. 2010. Gender and Climate Change': from Impacts to Discourses. Journal of the Indian Ocean Region 6 (2), 223-238.

McKinney, L. A. (2014). Gender, democracy, development, and overshoot: A cross-national analysis. *Population and Environment*, *36*(2), 193–218.

McKinney, L. A., & Fulkerson, G. M. (2015). Gender equality and climate justice: A cross-national analysis. *Social Justice Research*, *28*(3), 293–317.

McLaren, D., Parkhill, K. A., Corner, A., Vaughan, N. E., & Pidgeon, N. F. (2016). Public conceptions of justice in climate engineering: Evidence from secondary analysis of public deliberation. *Global Environmental Change*, *41*, 64–73. https://doi.org/10.1016/j.gloenvcha.2016.09.002

Mellor, M. (2017). Ecofeminist political economy: A green and feminist agenda. In *Routledge Handbook of Gender and Environment* (pp. 86–100). Routledge.

Menton, M., Larrea, C., Latorre, S., Martinez-Alier, J., Peck, M., Temper, L., & Walter, M. (2020). Environmental justice and the SDGs: From synergies to gaps and contradictions. *Sustainability Science*, *15*(6), 1621–1636. https://doi.org/10.1007/s11625-020-00789-8

Merritt, A., & Stubbs, T. (2012). Incentives to Promote Green Citizenship in UK Transition Towns. *Development*, *55*(1), 96–103. https://doi.org/10.1057/dev.2011.113

Michael, M. (2016). Environmental Pragmatism, Community Values, and the Problem of Reprehensible Implications: *Environmental Ethics*, *38*(3), 347–366. https://doi.org/10.5840/enviroethics201638329

Michael, M. A. (2020). Is Nonanthropocentrism Anti-Democratic? *Environmental Values*, *29*(1), 9–28. https://doi.org/10.3197/096327119X15579936382563

Midttun, A., & Witoszek, N. (Eds.). (2016). *Energy and transport in green transition: Perspectives on ecomodernity*. Routledge, Taylor & Francis Group, Earthscan.

Mies, M., & Shiva, V. (1993). *Ecofeminism*.

Minteer, B. A., & Manning, R. E. (2000). Convergence in environmental values: An empirical and conceptual defense. *Ethics, Place & Environment*, *3*(1), 47–60.

Mintz, J. A. (2004). Some thoughts on the merits of pragmatism as a guide to environmental protection. *BC Envtl. Aff. L. Rev.*, *31*, 1.

Monte, T., & Reis, P. (2021). Design of a Pedagogical Model of Education for Environmental Citizenship in Primary Education. *Sustainability*, *13*(11), 6000. https://doi.org/10.3390/su13116000

Morrow, K. (2011). Perspectives on environmental law and the law relating to sustainability. *Law and Ecology: New Environmental Foundations*, 126–147.

Morrow, K. (2015). *Sustainability, environmental citizenship rights and the ongoing challenges of reshaping supranational environmental governance in: Research Handbook on Human Rights and the Environment*. https://www.elgaronline.com/view/edcoll/9781782544425/9781782544425.00018.xml

Morrow, K. (2017). Ecofeminist Approaches to the Construction of Knowledge and Coalition Building–Offering a way forward for international environmental law and policy. In *Research Methods in Environmental Law*. Edward Elgar Publishing.

Mravcová, A. (2019). Environmental Awareness and Environmental Citizenship Dimension. *Slovak Journal of Political Sciences*, 32–48. https://doi.org/10.34135/sjps.190202

Navarrete Alonso, R. (2018). Salus et fides. Secularización y política mesiánica en La Estrella de la Redención. *Tópicos. Revista de Filosofía de Santa Fe*, *29*, 25–41. https://doi.org/10.14409/topicos.v0i29.7713

Neville, K. J., & Martin, S. J. (2022). Slow justice: A framework for tracing diffusion and legacies of resistance. *Social Movement Studies*, 1–21. https://doi.org/10.1080/14742837.2022.2031955

NIEMEYER, Simon. (2014). A Defence of (Deliberative) Democracy in the Anthropocene. *Ethical Perspectives*, *1*, 15–45. https://doi.org/10.2143/EP.21.1.3017285

Nilsson, A., Hansla, A., Heiling, J. M., Bergstad, C. J., & Martinsson, J. (2016). Public acceptability towards environmental policy measures: Value-matching appeals. *Environmental Science & Policy*, *61*, 176–184. https://doi.org/10.1016/j.envsci.2016.04.013

Ninet, A. A. i. (2019). The Messianic Thought of the Rule of Law. *Philosophia*, *47*(3), 733–755. https://doi.org/10.1007/s11406-018-9994-5

Norton, B. G. (1994). *Toward unity among environmentalists*. Oxford University Press.

Notter, D. A., Meyer, R., & Althaus, H.-J. (2013, April 17). *The Western Lifestyle and Its Long Way to Sustainability* (world) [Research-article]. ACS Publications; American Chemical Society. https://doi.org/10.1021/es3037548

Nugent, C., & Shandra, J. M. (2009). State environmental protection efforts, women's status, and world polity: A cross-national analysis. *Organization & Environment*, *22*(2), 208–229.

Olsson, D. (2022). From Technocracy to Democracy: Ways to Promote Democratic Engagement for Just Climate Change Adaptation and Resilience Building. *Sustainability*, *14*(3), 1433. https://doi.org/10.3390/su14031433

Orduño Torres, M. A., Kallas, Z., & Ornelas Herrera, S. I. (2020). Farmers' environmental perceptions and preferences regarding climate change adaptation and mitigation actions; towards a sustainable agricultural system in México. *Land Use Policy*, *99*, 105031. https://doi.org/10.1016/j.landusepol.2020.105031

Paloniemi, R., Niemelä, J., Soininen, N., Laatikainen, T., Vierikko, K., Rekola, A., Viinikka, A., Yli-Pelkonen, V., Assmuth, T., Kopperoinen, L., Peltonen, L., Kuokkanen, T., & Kyttä, M. (2018). Environmental justice for the governance of aquatic environments. *Local Environment*, *23*(3), 366–377. https://doi.org/10.1080/13549839.2017.1422118

Pandey, A. (2010). Greening Garhwal through stakeholder engagement: The role of ecofeminism, community and the state in sustainable development. *Sustainable Development*, *18*(1), 12–19.

Papadakis, E. (2000). Environmental values and political action. *Journal of Sociology*, *36*(1), 81–97. https://doi.org/10.1177/144078330003600106

Pavalache-Ilie, M., & Unianu, E. M. (2012). Locus of control and the pro-environmental attitudes. *Procedia - Social and Behavioral Sciences*, *33*, 198–202. https://doi.org/10.1016/j.sbspro.2012.01.111

Payne, P. G. (2010). The globally great moral challenge: Ecocentric democracy, values, morals and meaning. *Environmental Education Research*, *16*(1), 153–171. https://doi.org/10.1080/13504620903504115

Perkins, P. E. E. (2019). Climate justice, commons, and degrowth. *Ecological Economics*, *160*, 183–190.

Pesch, U. (2022). The Good Life and Climate Adaptation. *Sustainability*, *14*(1), 456. https://doi.org/10.3390/su14010456

Peters, B. (2018). Unpacking the diversity of procedural environmental rights: The European Convention on Human Rights and the Aarhus Convention. *Journal of Environmental Law*, *30*(1), 1–27.

Phadke, R., Manning, C., & Burlager, S. (2015). Making it personal: Diversity and deliberation in climate adaptation planning. *Climate Risk Management*, *9*, 62–76. https://doi.org/10.1016/j.crm.2015.06.005

Pigrau, A., Cardesa-Salzmann, A., Jaria i Manzano, J., & Borras, S. (2016). Measuring environmental injustice: How ecological debt defines a radical change in the international legal system. *Journal of Political Ecology*, *23*(1), Article 1. https://doi.org/10.2458/v23i1.20225

Pilgrim, K., & Davis, H. L. (2015). 'More Crucial'Matters: Reclaiming 'Sustainability'and Transcending the Rhetoric of 'Choice'through Ecofeminist Pedagogy. *Ethics & the Environment*, *20*(1), 123–139.

Plachciak, A. (2011). ENVIRONMENTAL JUSTICE IN THE LIGHT OF POLITICAL

PHILOSOPHY – CHOSEN ASPECTS. *JOURNAL OF INTERNATIONAL STUDIES*, *4*(1), 134–139. https://doi.org/10.14254/2071-8330.2011/4-1/14

Pocock, M. J. O., Roy, H. E., August, T., Kuria, A., Barasa, F., Bett, J., Githiru, M., Kairo, J., Kimani, J., Kinuthia, W., Kissui, B., Madindou, I., Mbogo, K., Mirembe, J., Mugo, P., Muniale, F. M., Njoroge, P., Njuguna, E. G., Olendo, M. I., … Trevelyan, R. (2019). Developing the global potential of citizen science: Assessing opportunities that benefit people, society and the environment in East Africa. *Journal of Applied Ecology*, *56*(2), 274–281. https://doi.org/10.1111/1365-2664.13279

Prati, G., Albanesi, C., Pietrantoni, L., & Airoldi, L. (2016). Public perceptions of beach nourishment and conflict management strategies: A case study of Portonovo Bay in the Adriatic Italian Coast. *Land Use Policy*, *50*, 422–428. https://doi.org/10.1016/j.landusepol.2015.06.033

Rocheleau, D. E. (1991). Gender, ecology, and the science of survival: Stories and lessons from Kenya. *Agriculture and Human Values*, *8*(1), 156–165.

Rodenhoff, V. (2002). *The Aarhus Convention and its Implications for the Institutions of the European Community 11 Review of European, Comparative & International Environmental Law*. https://heinonline.org/HOL/LandingPage?handle=hein.journals/reel11&div=39&id=&page=

Rodrigues, C., & Lowan-Trudeau, G. (2021). Global politics of the COVID-19 pandemic, and other current issues of environmental justice. *The Journal of Environmental Education*, *52*(5), 293–302. https://doi.org/10.1080/00958964.2021.1983504

Rülke, J., Rieckmann, M., Nzau, J. M., & Teucher, M. (2020). How Ecocentrism and Anthropocentrism Influence Human–Environment Relationships in a Kenyan Biodiversity Hotspot. *Sustainability*, *12*(19), 8213. https://doi.org/10.3390/su12198213

Ryder, S. S., & Devine-Wright, P. (2021). Environmental justice implications and conceptual advancements: Community experiences of proposed shale gas exploration in the UK. *Environmental Politics*, 1–21. https://doi.org/10.1080/09644016.2021.1996728

Salazar, D. J. (2009). Saving Nature and Seeking Justice: Environmental Activists in the Pacific Northwest. *Organization & Environment*, *22*(2), 230–254. https://doi.org/10.1177/1086026608326076

Salazar, D. J., & Alper, D. K. (2002). Reconciling Environmentalism and the Left: Perspectives on Democracy and Social Justice in British Columbia's Environmental Movement. *Canadian Journal of Political Science*, *35*(3), 527–566. https://doi.org/10.1017/S0008423902778347

Salman, A., & Iqbal, N. (2007). Ecofeminist Movements—From the North to the South [with Comments]. *The Pakistan Development Review*, 853–864.

Sandilands, C. (1997). Mother Earth, the cyborg, and the queer: Ecofeminism and (more) questions of identity. *Nwsa Journal*, *9*(3), 18–40.

Sant Agustin. (n.d.). *De Civitate Dei*.

Sarid, A., & Goldman, D. (2021). A Value-Based Framework Connecting Environmental Citizenship and Change Agents for Sustainability—Implications for Education for Environmental Citizenship. *Sustainability*, *13*(8), 4338. https://doi.org/10.3390/su13084338

Sawczyński, P. (2019). Giorgio Agamben—A Modern Sabbatian? Marranic Messianism and the Problem of Law. *Religions*, *10*(1), 24. https://doi.org/10.3390/rel10010024

Schindel Dimick, A. (2015). Supporting youth to develop environmental citizenship within/against a neoliberal context. *Environmental Education Research*, *21*(3), 390–402. https://doi.org/10.1080/13504622.2014.994164

Schlosberg, D., & Rinfret, S. (2008). Ecological modernisation, American style. *Environmental Politics*, *17*(2), 254-275.

Schmitt, C., & Taubes, J. (2014). *Carl Schmitt y Jacob Taubes: Lógica apocalíptica, secularización, política. 4*, 27.

Shen, Q., & Oxtoby, W. G. (Eds.). (2004). *Wisdom in China and the West*. The Council for Research in Values and Philosophy.

Siders, A. R., & Ajibade, I. (2021). Introduction: Managed retreat and environmental justice in a changing climate. *Journal of Environmental Studies and Sciences*, *11*(3), 287–293. https://doi.org/10.1007/s13412-021-00700-6

Simpson, I. R. (2020). Contradictions of citizenship and environmental politics in the Arabian littoral. *Journal of the Indian Ocean Region*, *16*(1), 79–99. https://doi.org/10.1080/19480881.2020.1709374

Skollerhorn, E. (1998). Habermas and Nature: The Theory of Communicative Action for Studying Environmental Policy. *Journal of Environmental Planning and Management*, *41*(5), 555–573. https://doi.org/10.1080/09640569811452

Soliev, I., Janssen, M., Theesfeld, I., Pritchard, C., Pirscher, F., & Lee, A. (2021). Channeling environmentalism into climate policy: An experimental study of Fridays for Future participants from Germany. *Environmental Research Letters*, *16*(11), 114035.

Somek, A. (n.d.). *Redemption, Exodus and the Empty Signifier of European Integration*. 20.

Soveroski, M. (2008). *Environment Rights versus Environmental Wrongs: Forum over Substance? - Soveroski—2007—Review of European Community & International Environmental Law—Wiley Online Library*. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9388.2007.00575.x

Soyez, K. (2012). How national cultural values affect pro- environmental consumer behavior. *International Marketing Review*, *29*(6), 623–646. https://doi.org/10.1108/02651331211277973

Spash, C. L. (2022). Three Decades of Environmental Values: Some Personal Reflections. *Environmental Values*, *31*(1), 1–14. https://doi.org/10.3197/096327122X16386102423930

Squintani, L., & Rakipi, J. (2018). Judicial cooperation in environmental matters: Mapping national courts behaviour in follow-up cases. *Environmental Law Review*, *20*(2), 89–108. https://doi.org/10.1177/1461452918767791

Stephens, A. (2013). Principled success: Eco- feminism and systems thinking come together for better project outcomes. *International Journal of Managing Projects in Business.*

Stevens, L., Tait, P., & Varney, D. (2017). *Feminist ecologies: Changing environments in the Anthropocene*. Springer.

Su, C. (2021). Thoughts on flexible governance in environmental mass incidents. *IOP Conference Series: Earth and Environmental Science*, *632*(5), 052024.

Suman, A. B. (2021). Citizen sensing from a legal standpoint: Legitimizing the practice under the Aarhus framework. *Journal for European Environmental & Planning Law*, *18*(1), 8–38.

Suresh, L. (2021). Understanding the Relationship Between Sustainability and Ecofeminism in an Indian Context. *Journal of Developing Societies*, *37*(1), 116–135.

Taylor, B., Wright, J., & LeVasseur, T. (2020). Dark green humility: Religious, psychological, and affective attributes of proenvironmental behaviors. *Journal of Environmental Studies and Sciences*, *10*(1), 41–56. https://doi.org/10.1007/s13412-019-00578-5

Thate, M. (2016). Messianic Time and Monetary Value1. *Religions*, *7*(9), 112. https://doi.org/10.3390/rel7090112

Timothy, D., & Olsen, D. (Eds.). (2006). *Tourism, Religion and Spiritual Journeys* (0 ed.). Routledge. https://doi.org/10.4324/9780203001073

Topić, M., Lawson, A. D., & Kelsey, S. (2021). Women and the squander cycle in food waste in the United Kingdom: An ecofeminist and feminist economic analysis. *Socijalna Ekologija: Časopis Za Ekološku Misao i Sociologijska Istraživanja Okoline*, *30*(2), 219–253.

Valladares, C., & Boelens, R. (2019). Mining for Mother Earth. Governmentalities, sacred waters and nature's rights in Ecuador. *Geoforum*, *100*, 68–79.

van Norren, D. E. (2020). The Sustainable Development Goals viewed through Gross National Happiness, Ubuntu, and Buen Vivir. *International Environmental Agreements: Politics, Law and Economics*, *20*(3), 431–458. https://doi.org/10.1007/s10784-020-09487-3

Vasiliades, M. A., Hadjichambis, A. Ch., Paraskeva-Hadjichambi, D., Adamou, A., & Georgiou, Y. (2021). A Systematic Literature Review on the Participation Aspects of

Environmental and Nature-Based Citizen Science Initiatives. *Sustainability*, *13*(13), 7457. https://doi.org/10.3390/su13137457

Vila Subirós, J., Rodríguez- Carreras, R., Varga, D., Ribas, A., Úbeda, X., Asperó, F., Llausàs, A., & Outeiro, L. (2016). Stakeholder Perceptions of Landscape Changes in the Mediterranean Mountains of the North- Eastern Iberian Peninsula. *Land Degradation & Development*, *27*(5), 1354–1365. https://doi.org/10.1002/ldr.2337

Villa-Vicencio, C. (1992). *A Theology of Reconstruction: Nation-Building and Human Rights* (1st ed.). Cambridge University Press. https://doi.org/10.1017/CBO9780511607592

Voegelin, E. (1999). *Modernity Without Restraint: The Political Religions, The New Science of Politics, and Science, Politics, and Gnosticism* (M. Henningsen, Ed.; First edition). University of Missouri.

Waks, L. J. (1996). Environmental Claims and Citizen Rights. *Environmental Ethics*. https://www.pdcnet.org/enviroethics/content/enviroethics_1996_0018_0002_0133_0148

Walby, S. (2011). *The future of feminism*. Polity.

Wehrmeyer, W., & McNeil, M. (2000). Activists, pragmatists, technophiles and tree-huggers? Gender differences in employees' environmental attitudes. *Journal of Business Ethics*, *28*(3), 211–222.

White, D. F. (2019). Ecological Democracy, Just Transitions and a Political Ecology of Design. *Environmental Values*, *28*(1), 31–53. https://doi.org/10.3197/096327119X15445433913569

Wiedmann, T., Lenzen, M., Keyßer, L. T., & Steinberger, J. K. (2020). Scientists' warning on affluence. *Nature Communications*, *11*(1), 3107. https://doi.org/10.1038/s41467-020-16941-y

Wienhues, A. (2017). Sharing the Earth: A Biocentric Account of Ecological Justice. *Journal of Agricultural and Environmental Ethics*, *30*(3), 367–385. https://doi.org/10.1007/s10806-017-9672-9

Wilson, K. (2005). Ecofeminism and First Nations Peoples in Canada: Linking culture, gender and nature. *Gender, Place & Culture*, *12*(3), 333–355.

Wisner, B. (1995). The reconstruction of environmental rights in urban South Africa. *Human Ecology*, *23*(2), 259–284.

Wu, P.-H. (2017). Practices and representations of environmental rights in rural China and India. *Asian Journal of Communication*, *27*(3), 250–266.

Xue, W., Marks, A. D. G., Hine, D. W., Phillips, W. J., & Zhao, S. (2018). The new ecological paradigm and responses to climate change in China. *Journal of Risk Research*, *21*(3), 323–339. https://doi.org/10.1080/13669877.2016.1200655

Yang, Y. (2017). How do EU norms diffuse? Rule of law promotion in EU-China cooperation on environmental governance. *Journal of European Integration*, *39*(1), 63–78. https://doi.org/10.1080/07036337.2016.1256396

7. Appendices

7.1. Appendix 1: Code groups

1. Description: this code group is for descriptions of the approach that you are looking at and non-normative descriptions of deliberation and participation (of that approach). These codes will be used at the start of your report to give the reader a general overview of the approach that you are looking at. For example, who are the main proponents of this approach, when did it originate, why did it originate, what are some of the main beliefs and ideals shared among proponents of this approach, and how does it describe participation and deliberation (this is more about positioning the approach within the broader political realm of environmental and political theories).

2. Deliberation and Participation Value (theory): this code group concentrates on what the theoretical literature says about participation and deliberation, why it values/disvalues it, themes that emerge about participation and deliberation (in the context of the approach you are looking at), etc.

3. Deliberation and Participation Value (emp): the same as above, but empirical examples (surveys, interviews, Q methodology, questionnaires, etc.). For example, in a survey conducted among 300 farmers, 90% stated that they wanted greater inclusion in policymaking to ensure the protection of the intrinsic value of nature would fit under the 'It is valuable to protect the intrinsic value of nature' code.

4. Implementing Deliberation and Participation (theory): this coding group is to identify how your approach suggests deliberation and participation should be implemented. It postulates and hypothesises best practices of how deliberation and participation could be realised. It refers to the "*how"* of code groups 2 and 3. For example, 'Ecocentrists believe we should take into account the value of non-human species, which could be achieved by creating advocacy groups to participate in environmental policy, giving a voice to the voiceless and protecting nature'.

5. Deliberation and Participation in Practice (emp): this group is similar to 4, except it is demonstrative of how deliberation and participation are realised in practice. It gives examples of how the approaches' deliberation and participation have already been implemented. For example, 'Because of the lack of inclusion of ecocentric values in the past, several activist groups have taken change into their own hands to protect nature, such as Earth First! and the monkey wrench gang in the American Southwest.

7.2. Appendix 2: Ecocentrism Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. We should not view ourselves as being the sole benefactor of moral concern and the needs and importance of other species and the environment should be recognised within our dialogue on environmental policy (Pesch 2022; Eckersley, 1992). Citizens should ground their debate on the premise that human beings are interconnected with nature and we should work with it, rather than manipulate it (Beckwith et al., 2003a).
2. Non-human organisms, species, and the environment cannot voice their concerns politically, so human citizens need to represent them within a policy that impacts their flourishing and survival (Eckersley, 1995; Kopnina, 2012; Skollerhorn, 1998). Citizens need to include these voices in deliberation and ensure that corporate, political, and economic interests do not override the intrinsic value of nature (Eckersley, 1992; Eckersley, 1995).
3. Liberal democracy should be used as a way to implement ecocentric principles and avoid environmental harm (Mathews, 1995). Citizens can demonstrate their views by electing parties that attest to ecocentric values (Aguilar-Luzón et al., 2020; Papadakis, 2000). There should be an increase in green principles (Barry, 1994), working within current democratic systems (Mathews, 1995), and deliberation to become more respectful citizens in our ecological community (Pavalache-Ilie & Unianu, 2012).
4. There needs to be a greater sense of community and care for others before we can truly realise more meaningful citizen deliberation and participation (diZerega, 1996). It is important to ensure better inclusion of a wide diversity of values and beliefs in environmental deliberative procedures, rather than leaving certain groups alienated and voiceless (Eckersley, 1995; Payne, 2010).

5. Policymakers should incorporate the views of environmentalists and the need to bring about a radical change in environmental policy (Barry, 1994; Eckersley, 1992, 1995, 2002; Kopnina, 2012; Salazar & Alper, 2002). Destruction of property, vandalism, and illegal activities by environmentalists should be avoided and condemned, but should also be viewed as a demonstration that some citizens are unhappy with policy and this is their only option left to express it. Policymakers need to respond to these criticisms and identify if they are doing enough to avoid environmental catastrophe.

Table 6 Criteria for Meaningful Citizen Participation and Deliberation (Ecocentrism)

7.3. Appendix 3: Environmental Pragmatism Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. Public participation and dialogue are important for environmental policy, and a wide plurality of viewpoints should be taken into account through a process of open debate, discussion, and deliberation (Loman, 2020). This should result in a workable policy that incorporates the views of citizens during deliberation (Maboloc, 2016). The policy should be a compromise about what most citizens deem acceptable (Maboloc, 2016).
2. Policymakers should identify that sometimes trying to find a middle ground and incorporate everyone's perspective is not always expedient, possible, and may even be contradictory to environmental objectives (Eckersley, 2002). Thus, policymakers should not play 'compromiser' in all situations, and sometimes action is needed that does not receive widespread endorsement among citizens (Brush, 2020).
3. It is important to ensure that citizens are not left out of the discussion because they are unable to reason and debate as strongly as others. While group deliberation and discussions are an effective form of communication to voice opinions, they should not be the *only* form of participation because this platform is more advantageous to some, while disadvantageous to others (Booth, 2012).
4. While being pragmatic and future-oriented about participation and deliberation on environmental policy is often effective, it is fundamental that the reasons, values, and beliefs of citizens are not lost along the way (Booth, 2012). Participation and deliberation should not lose sight of examining who the policy is beneficial for, historical power asymmetries, and empowering the disempowered (Booth, 2012; Maboloc, 2016).

Table 7 Criteria for Meaningful Citizen Participation and Deliberation (Environmental Pragmatism)

7.4. Appendix 4: Biocentrism Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. There should be legal instruments to protect non-human organisms and species when it is morally appropriate to do so, but when it is not being adhered to in practice (without law). Law may be used to ensure that the views of citizens about the environment are protected and to take the right of nature seriously (Emmenegger & Tschentscher, 1993).
2. Efforts should be made to develop an ecological consciousness among the population through discussion, dialogue, and education (Anker & Witoszek, 1998). Grassroots actions can be taken by citizens that want to initiate change from the bottom-up or do not want to rely on the slow wheels of politics to initiate real change.

Table 8 Criteria for Meaningful Citizen Participation and Deliberation (Biocentrism)

7.5. Appendix 5: Ecofeminism Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. The participation of local and indigenous groups - in particular women in all their diversity - within the scientific community should be promoted. Often these groups have valuable knowledge related to the environment, climate, and sustainability, yet their participation is hindered by structural barriers such as neo-colonial epistemologies. Similarly, intersectional perspectives should be promoted in environmental policies, to understand multiple and intersecting forms of discrimination, and remove structural barriers to participation and deliberation in decision-making around climate, environment and natural disasters.
2. International institutions such as the United Nations and the European Union should consult with grassroots groups and promote their full participation in all decisions that affect their environment. Examples from the literature show that when local groups are not consulted, it can hinder both gender equality and the environmental movement. In particular, Global North actors in these institutions should be aware of how they work with those in the Global South and strive to transform power dynamics in participation and deliberation.
3. Civil society in the Global North must reflect on its relationship with civil society in the Global South and build movements based on solidarity, to diversify the feminist movement and avoid tokenism. This activism should strive to challenge existing societal structures and narratives that maintain structures of oppression and environmental degradation. Capacity building and knowledge sharing should be based on principles of empowerment and understood in local contexts, with credit going to those organisations that develop best practices and tools.
4. Spaces for participation (e.g., local committees, decision-making bodies, councils) are not neutral and contain inherent power imbalances. Alternative spaces that address such power imbalances should be created to foster more equal participation from structurally excluded groups as is shown by, amongst others, the GBM and the landykke movement.
5. Governments should recognise and value the current unpaid care burden that is often borne by women, which hinders their participation in many aspects of decision making, as well as devalues their contribution to sustainable development. A conceptualisation of well-being that moves away from the current economic focus on growth and instead centres care for people and the planet should be promoted.
6. When decisions regarding the environment are made, nature needs to be considered as an active element instead of a passive element that is solely there for human exploitation. When governments, international institutions and private sector companies make decisions around the environment, nature and animals should be valued and not seen as the bottom of a hierarchy to justify their exploitation.

Table 9 Criteria of Ecofeminism

7.6. Appendix 6: Environmental Citizenship Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. It is up to decision-makers to create the enabling conditions to foster environmental citizenship, to improve the environmental awareness of citizens, as it is the precondition to achieve change, which has to start from each individual (Merritt and Stubbs, 2012: 7), (Mravcová, 2029: 1)
2. Citizen deliberations are a powerful instrument to promote environmental citizenship, deliberation formats allow the crucial transformation of individual preferences in the pursuit of the common good (Batterbury, 2015: 15; Luque, 2005: 9), (Bull et al., 2008), (Bohn, 2019:2)

3. The role of the individual citizen needs to be extended beyond that of a consumer of the environment, and involve active participation in a process that is based on collective action (Collins, 2004), (Dobson, 2007)
4. The long-lasting positive effects of deliberative processes based on citizen preferences and securing long-term environmental citizenship have not been demonstrated yet (Bull et al., 2008: 2), (Hobson, 2013)
5. Political decision-makers should support inclusive participation and deliberation processes, by bringing in such processes not only the participant's perspectives but also the one of the absent actors, marginal groups, and non-humans (Latta, 2007), (Bohn, 2019), (Fischer, 2018)
6. Both demonstrations and exhibitions as forms of bottom-up climate activism initiatives contribute to engagement in political dialogue and can be seen as triggers of change for transformative learning (Kyroglou, 2020), (Kowasch and al., 2021)

Table 10 Environmental Citizenship Criteria

7.7. Appendix 7: Ecomodernism Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. It is up to policymakers to create a fair debate on ecology and ease conflicts of interest. Nevertheless, the debate should not be reduced to an opposition between industrial progress and environmental protection. Policymakers should think beyond polarization on environmental issues that can lead to ecopopulism. (Leonard, 2007)
2. The implementation of modern techno-managerial tools such as smart technologies, sustainability indicators, environmental monitoring and reporting, for example in smart cities, are consensual instruments useful to policymakers. But a number of communities across the world are also developing alternative methods for accessing housing, healthcare, sanitation, etc. Smart solutions and social innovations might in fact come from dissensus practices developed by those communities. They may act as living indicators of what needs to be addressed and must be considered equally (Kaika, 2017).
3. Mainstream environmental policies based on decoupling technological advancement (4th industrial revolution) and economic growth (green growth) from environmental impacts should be reconsidered. Those policies should be complemented by other policy trajectories based on participation, fair redistribution and behaviour change (Albert, 2020).
4. Ecological transformation should come along with a fundamental change in societal structures. The priority should not only be given to economic growth, increasing efficiencies, and adaptation of policies. Sustainable futures are only possible if social relations and the relations of production are fundamentally changed (Kirsch, 2020). Environmental modern policies must include the working class, which is essential to enable the necessary changes. The labouring subject can bring multiple modes of redirective practices, new institutional forms or new lay-expert modes of engagement to build entirely new design ecologies and green public goods (White, 2019).
5. Decision makers should not only encourage Green Consumerism as a form of public participation but also engage people in meaningful political action and be open to radical changes. Moreover, they should fight against inequalities embedded in capitalism and based on class, gender and race (Dockstader and Bell, 2020).
6. Policymakers should consider the importance of public support for the implementation of Green Growth. Visionary public engagement based on the use of stories, images and role models may trigger this policy support. Transitions are not only driven by politics and governance, markets and technology: on a larger scale, civic and cultural mobilization become the main advancing agents of change. (Midttun, Witoszek, 2015)

Table 11 Ecomodernism Criteria

7.8. Appendix 8: Environmental Justice Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. Environmental justice deals with a fair allocation of environmental impacts and equitable distribution of the benefits of access to natural resources. The noted singularities of environmental justice (effects of risk management, environmental justice, deliberation, and access to justice) therefore need to be addressed by policymakers when legally accommodating public participation and decision-making processes and mechanisms. That is, environmental justice concerns raise special issues in deliberative processes.
2. Deliberation scholars have examined how inequalities such as race, gender, and class impact deliberative processes. Legislators and policymakers need to consider such inequalities in the design of the legal framework and the implementation of the deliberative and participative tools. With the inclusion of this "correctional" factor, they will avoid the risk of jeopardizing the potential outcomes of democratic participation by failing to consider environmental justice.
3. The regulatory and institutional framework of environmental policy needs to address the deep uncertainties and the vested interests at stake in decision-making processes through the participation of all the legitimate social agents involved. A rights-based approach can only go so far in achieving environmental justice.
4. Implementation of the European Green Deal may require laying down specific protocols and methodologies seeking to operationalize an environmental justice perspective through a focus on information, consultation, and active participation, augmented by other mechanisms.
5 . A crucial aspect of environmental justice is that through decision-making, the values and culture of those who will be impacted must be fairly considered and represented. Policymakers need to address recognition of injustice when enforcing environmental justice's deliberative and participatory means. This will provide paths to ensure some representation and participation related to those views.

Table 12 Environmental Justice Criteria

7.9. Appendix 9: Environmental Rights Criteria

Criteria for Meaningful Citizen Participation and Deliberation
1. Policymakers should ensure that procedural environmental and human rights are meaningful and executed (e.g., at the national level), because, without meaningful procedural rights, there are no substantive human rights. Procedural environmental and human rights give life to substantial environmental and human rights.
2. Policymakers should ensure meaningful participation in decision-making, because it is valuable for democracy, enhancing the viability of policy initiatives and improving their chances of successful implementation, as these solutions benefit from enhanced legitimacy.
3. Policymakers should ensure meaningful participation in the decision-making process to ensure justice and just outcomes of the decision through addressing power imbalance and inclusion.

Table 13 Environmental Rights Criteria