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for a sustainable future

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Executive Summary

The energy transition is a pillar of climate change mitigation efforts around the globe. This includes the decarbonization of energy sources and absolute reduction in energy usage (IPCC, 2022). While different actors have a role to play in the energy transition, from the public to the private sectors and non-governmental organizations, at different scales, how to involve everyday people in the energy transition is a growing field of research and practice. Since the European Commission's 2019 report *Clean Energy for all Europeans*, the need for a *just* energy transition has been made explicit in the policy arena. A fair and just transition usually embodies principles of distributional justice, which seeks to ensure that all people benefit equally from “cleaner and smarter energy”, or conversely, not be “left behind” from such benefits (European Commission & Directorate-General for Energy, 2019). In addition, recognitional and procedural justice, which entails the recognition of injustices and mechanisms for inclusive and active civic participation, are also indispensable for a just transition. In this vein, a just and inclusive transition necessitates citizen participation and public trust, in order to ensure the acceptability and viability of substantive shifts.

Among the different forces that are driving a just transition, energy citizenship initiatives (ECIs) are particularly important. Broadly construed as projects and activities that directly engage with ordinary citizens in the energy transition, ECIs work with citizens in activities that aim at reducing energy use, promoting renewable energy sources (RES), participating in local energy production, among others. ECIs provide crucial pathways for the deepening of ‘energy citizenship’, and have the potential to enable citizens to take a central role in shaping a sustainable future. Against this backdrop, this report explores how and in what ways under-represented groups (by gender, age and socio-economic status) are considered, included and engaged in ECIs in Europe. Specifically, we use the three tenets of energy justice (Jenkins et al. 2016; Walker and Day 2012) – *recognitional, distributional and procedural justice* – to examine how and in what ways ECIs recognize and address the needs of different social groups and the unequal distribution of environmental benefits and disadvantages, and work toward including underrepresented groups in different arrays of activities. Our main aim is to understand the dynamics of inclusion and exclusion in the ECIs, and capture the deterrents and enablers for a more just energy transition.

Through analyses of 375 ECIs and interviews with ‘energy professionals’ (n=81) across eight DIALOGUES countries (Austria, Bulgaria, Greece, Germany, Italy, Norway, Switzerland, and Türkiye), we bring to the fore various forms of exclusion that may exist in activities of ECIs. The importance of citizen engagement is generally acknowledged by professionals and initiatives, with some groups more widely recognized as underrepresented, such as low-income populations and young people; subsequently, many initiatives take measures to include these populations in their activities. We also observe the trend of recognizing gender as an important category for inclusion, with targeted initiatives for women, for instance. Other groups such as ethnic minorities and migrant populations are still under-acknowledged in relation to inclusion in the energy transition, with only a few initiatives actively working toward their inclusion. It is important to note that inclusion rarely accounts for intersectionality – for instance, ECIs may be proactive in including more women, but not consider how gender relates to income or migration status.

Apart from investigating which populations are included and excluded, we also examine the forms of citizen engagement – from energy consumption (e.g., behavioral change campaigns, projects for the uptake of energy efficient technologies etc.), energy production (e.g., energy cooperatives) to direct political actions (e.g., lobbying through citizen collectives, social movements). While all forms of engagements are instrumental, the latter two attach greater importance to collective actions and the political agency of individuals. These two forms of engagements also tend to include high-income, male, non-migrant, and often technocratic individuals – who have the knowledge and resources (allegedly) to participate this way. For instance, ECIs that involve citizens in energy production through energy cooperatives usually come with a membership fee, which becomes a first barrier that prevents low-income populations from participating. Young people, students, migrants and female-headed households, who are more likely to be in precarious situations, also tend to be excluded. Language and assimilation into the host country become an additional barrier for migrants' participation as well. Thus, the distributional and procedural justice outcomes become limited, due to the non-inclusion of underrepresented groups. Underrepresented groups are mostly included through the form of energy consumption, such as informational and awareness campaigns and energy saving initiatives. Admittedly, activities as such can deliver energy and cost-saving benefits, but these groups are only considered for their capacity to act as consumers with limited political agency, and their role in shaping a just energy transition becomes highly constrained.

Based on the results above, we outline some factors that might *deter or enable* a more just energy transition, with policy recommendations:

1) Reinforcing political rather than consumerist action is central for the deepening of energy citizenship:

Building on past literature that critiques engagement of people as economic actors rather than political ones, we find that recognizing people as consumers gives more agency to citizens who have the purchasing power (or time, another precious resource) to act upon their energy provisioning and usage. While some energy professionals believe that those with more resources should bear the initial costs of the transitions and try out new technologies, others critique this by arguing that this excludes energy-poor populations. Thus, a more just energy transition that engages with citizens-as-consumers could envision forms of redistribution, whereby wealthier households contribute to subsidizing the involvement of underprivileged households in the energy transition. Such a form of redistribution can also happen through State taxation. Moreover, there is a need to enhance political forms of engagement, which calls for the cultivation and building of new skills and competencies (or capabilities, the freedom to achieve their potential) for political actions at the local level and beyond.

2) Distributional justice is facilitated through recognitional and procedural justice:

Recognition does not de-facto produce just outcomes, and needs to be paired with participatory mechanisms to ensure broad-based, inclusive participation, which can help deliver procedural and distributional justice outcomes. Some initiatives that promote citizens' direct participation in shaping energy policies can exclude non-male, non-white, lower-income populations; it becomes central to ensure the right mechanisms are put into place for fairer representation. Further, procedural and recognition in justice can lead to or at least enhance the likelihood of distributional justice.

3) The inclusivity in energy communities should be further enhanced:

Energy communities are, in principle, about engaging citizens in a collective. Energy professionals agree that such communities could foster greater citizen engagement in the energy transition. Yet, energy communities do not necessarily embody principles of collective political action, and might be unduly focused on coming together for investment in renewable energies or renovations *only*. Further, costs, rules and norms associated with participation in energy communities may exclude women, migrant populations, low-income groups, and so on. Finding strategies to make such communities more inclusive is a central concern.

4) Gender mainstreaming in the energy sector should be prioritized:

The energy sector is currently male-dominated - as our professionals all testify, across the eight countries involved in this study. While there is no guarantee that gender mainstreaming in a professional capacity would result in an energy transition that is more gender-neutral, a more diverse workplace – in the energy sector and beyond – is certainly a worthy aim in itself.

5) Highlighting best practices is conducive for a just energy transition:

A way of enabling inclusive and just energy citizenship might be to render more visible the initiatives that “walk the talk”, moving beyond the accepted discourse on a just energy transition to implementing initiatives that tackle different forms of justice and inclusivity.

1. Introduction

There is increasing consensus on the need to reach carbon neutrality by the second half of this century, and that such a socio-technical transformation towards mitigating climate change will require an ‘energy transition’. The decarbonization of energy sources and absolute reductions in energy usage, as stipulated in the IPCC 6th assessment report of working group III (2022) will require a ‘whole-systems’ approach to changing systems of production and consumption, while recognizing system interconnections, interdependencies, and functions (Goldthau & Sovacool, 2012; Jenkins et al., 2016). The social implications of such a transition require special attention as it will engender a variety of complex and mixed consequences (Axon & Morrissey, 2020; Johnson et al., 2020), related to employment, education, poverty, land ownership and displacement, health, and food security, to name but a few. Since the European Commission’s 2019 report *Clean Energy for all Europeans*, the need for a *just* energy transition has been made explicit in the policy arena. The *European Green Deal* (2019) also outlines the need for a ‘just and inclusive’ transition. Forms of energy justice relate to questions of recognition, towards acknowledging how diverse groups of people use energy services to satisfy needs in a variety of ways, questions of distribution, about unequal access to environmental ills and benefits, and questions of procedure, about representation and inclusion in decision making processes to influence energy policy, laws and regulation that govern distribution outcomes.

While different actors have a role to play in a just energy transition, from the public to the private sectors and non-governmental organizations, at different scales, how to involve everyday people is a growing field of research and practice. The role of people is often captured under the notion of ‘energy citizenship’ (Biresseolioglu et al., 2021; Campos & Marín-González, 2020; Devine-Wright, 2006), which implies the engagement and participation of people, as individuals and as collectives, across systems. Among the different forces that are channel energy citizenship, energy initiatives are particularly important. Broadly construed as projects and activities that directly engage with ordinary citizens in the energy transition, energy initiatives work with citizens in activities that aim at reducing energy use, promoting renewable energy sources (RES), participating in local energy production, among others. Energy initiatives provide crucial pathways for the deepening of energy citizenship, and have the potential to enable citizens to take a central role in shaping a ‘just and inclusive’ energy transition. In recent years, energy initiatives have proliferated across Europe (e.g., Jensen et al., 2019). But how and in what way the forms of energy citizenship embodied in various energy initiatives might help achieve a just energy transition, as a normative aim, is understudied.

As such and for this paper, we consider how energy initiatives across eight European countries (Austria, Bulgaria, Greece, Germany, Italy, Norway, Switzerland, and Türkiye) account for a just energy transition, and in what ways under-represented groups (by gender, age and socio-economic status) are considered, included and engaged. Specifically, we use the three tenets of energy justice (Jenkins et al. 2016; Walker and Day 2012) – recognitional, distributional and procedural justice – to examine how and in

what ways ECIs recognize and address the needs of different social groups and the unequal distribution of environmental benefits and disadvantages, and work toward including underrepresented groups in different arrays of activities. Our main aim is to understand the dynamics of inclusion and exclusion in the energy initiatives, and capture the deterrents and enablers for a more just energy transition. To answer these questions, we examine the aims and activities of initiatives in a database of energy citizenship initiatives (ECIs, n=375), as well as 81 in-depth interviews with energy professionals in these eight countries to understand the notion of energy justice in designing and implementing such initiatives.

In the second chapter that follows, we provide an introduction to energy justice based on a literature review, on how we understand energy citizenship in relation to distributional and procedural justice, as well as justice in terms of recognition. Chapter 3 details our methodology, which involved in-depth interviews across eight countries on the question of energy citizenship, as well as a review of 375 initiatives. In Chapter 4, we present our analysis, detailing how a just energy transition has consensus in theory, but plays out in practice in at least three different ways in the energy initiatives that we examine. In Chapter 5, we discuss the implications for supporting a more just transition, before concluding with further research needs.

2. Apprehending energy justice

The term 'energy citizenship' is a contested concept, one that escapes a single definition, and can be seen as a social construct that is part of an imaginary of how the energy transition might play out (Pel et al., 2021). In an early definition, Devine-Wright (2006) considers energy citizenship as the social necessity of public engagement and participation, with a public that is seen as active rather than passive stakeholders in the energy system, defined by notions of equitable rights and responsibilities. Ideally, energy citizens would be enthused about new technologies, aware of their potential social and political impact, and engaged as individuals and collectives to shape local, regional, and national energy landscapes. Campos & Marín-González (2020) consider energy citizenship through prosumerism, or how energy production by 'consumers' might engender energy literacy, participatory action, and grassroots innovation at different scales. A broader definition considers "the degree to which, and the ways in which, the goals of a sustainable energy transition enter into the everyday practices of an individual" (Bireselioglu et al., 2021), working collectively to change systems or production and reduce demand, or as individual households or consumers. A fair and just transition seeks to guarantee that all people benefit equally from "cleaner and smarter energy", or conversely, not be "left behind" from such benefits (European Commission & Directorate-General for Energy, 2019). To ensure the outcomes of this fair distribution, mechanisms for inclusive and active civic participation are indispensable. One of these mechanisms is energy initiatives, which channels the activation of energy citizenship, toward the normative aim of energy justice. In the following sections, we outline our conceptual understandings of energy justice based on a literature review of both empirical and theoretical work on this subject.

Energy justice falls under the umbrella literature on environmental justice as well as social justice more broadly (Agyeman et al., 2002; Bullard, 1993; Čapek, 1993; Schlosberg, 2007, 2013) and is generally understood in terms of inequality of access and distribution of consumption and/or production of energy. Sovacool & Dworkin (2015) discuss how energy justice can serve as a conceptual, analytical, and decision-making tool to understand how values get in-built into energy systems as well as a way to resolve energy issues. A useful typology to further operationalize energy justice is proposed by Walker & Day (2012), based on empirical investigations into energy justice in relation to fuel poverty in the UK. The authors start with a Rawlsian understanding of social justice, which calls for the distribution of primary goods (rights, liberties, powers, opportunities, income, and so on) in a manner that a hypothetical person unaware of their social location and privilege (or lack thereof) would readily accept as fair (Rawls, 1999). Expanding this concept, access to energy – such as local renewable energy production, for example – can be seen as a primary good or even as capabilities in terms of pursuing a good life (Levenda et al., 2021; Sen, 1999; Walker & Day, 2012). Here, energy is understood in terms of what it does, as a service – such as providing warmth, access to clean clothes, hot food, and so on – as capabilities, satisfiers of basic needs and the enablers of well-being (Bartiaux et al., 2018; Brand-Correa et al., 2018; Gough, 2017; Walker et al., 2016). Conversely, ‘uncapabilities’ are also essential (Bartiaux et al., 2018), or negative externalities associated with energy systems and services (such as land dispossession and displacement for large energy projects, pollution, and so on), the burden of which tends to be borne by the poor and less privileged (Johnson et al., 2020). The conceptualization of energy justice is expanded further in terms of distributional, recognitional, and procedural justice (Jenkins et al., 2016; Sovacool & Dworkin, 2015; Walker & Day, 2012), as we will now detail.

Distributional justice calls for equitable allocation of environmental ills and benefits due to the energy transition process (Jenkins et al., 2016). It sheds light on injustice issues that emerge, such as unemployment due to the transition from legacy industries such as coal to RES, which disproportionately affects low-income and indigenous communities. Studies have also found that low-income households and households of color are more likely to face energy insecurity and energy poverty - living in energy-inefficient houses and poorer structural building conditions, facing rising energy costs and the threat of utility disconnection (Carley & Konisky, 2020). This also makes these communities more vulnerable to climate risks. Furthermore, the unequal distribution of benefits of the energy transition has also been observed: new employment in the renewable energy sector is limited for marginalized communities due to a lack of technical know-how and information asymmetry. There are cases of access to low-carbon and energy-efficient technologies being seized by higher-income households (Carley & Konisky, 2020). In another example, gender and social norms limit women’s abilities to participate in the decision-making of energy systems and processes at every level (Gram-Hanssen et al., 2017; O’Dell et al., 2014; Tjørring, 2016). Studies have shown that more efficient energy sources could reduce women’s gendered household work, increased opportunities for more salaried employment, and generally improve health and wellbeing; however, this is dependent on sociocultural contexts, household power dynamics, income, social

location, and so on (Cowan, 1976; Johnson et al., 2020; O'Dell et al., 2014; Wilhite, 2017). Energy transitions can also merely shift inequalities rather than eliminate them, as social norms and gendered divisions of labor remain entrenched despite the introduction of new energy systems (Carlsson-Kanyama et al., 2010; Lieu et al., 2020).

Recognitional justice concerns the identification of individuals and groups that have historically experienced denial of equal respect, rights, and opportunities, leading to marginalization, exclusion, and stigma. It identifies sections of society/social groups that have been and continue to be sidelined or misrepresented during energy transitions. An example here is the inequitable geographical distribution of imposing renewable energy infrastructure, where large power plants and wind turbines are installed in the vicinity of ethnic minorities or indigenous people, who are more likely to reside in lower-income, deprived communities (Jenkins et al., 2016). These populations are not represented or involved in decision-making processes, and their needs thus get disregarded - bringing in elements of distributional and procedural injustice. Jenkins et al. (2016) identify two strands of recognitional injustice:

i) injustice *as non-recognitional*, where the specific needs of the elderly, chronically ill, ethnic minorities, women and gendered minorities, and so on are not accounted for or recognized. Taking the example of gender in energy justice, we find that a majority of the literature on energy justice takes a 'gender-blind' approach (Cannon & Chu, 2021). While authors do acknowledge the multiplicity of actors and the need to acknowledge and empower vulnerable groups, there is no explicit mention of women or gendered categories - showcasing a lacuna in such theory. Moreover, most energy research tends to have a quantitative and technocratic bias, with superficial engagement with gender, which is limited to sex-disaggregated data collection, or the creation of gender myths and essentialisms without interrogating the cause of said inequity (Cannon & Chu 2021). In such gender-blind approaches, even if women are included, they mimic and reproduce the patriarchal practices of a male-dominated industry (Lieu et al., 2020; Carlsson-Kanyama et al., 2010).

ii) injustice *as misrecognition* and disrespect is also a question of recognition. An example here is concerns from low-income, marginalized communities about large-scale infrastructural deployment, such as wind farms getting brushed aside as NIMBYism and ignored (Carley & Konisky, 2020; Jenkins et al., 2016; Lacey-Barnacle, 2020; Lennon et al., 2019)

Procedural justice concerns the participative processes through which distributional outcomes are created or reinforced - in terms of policies, laws, norms, and so on. Procedural justice therefore accounts for the mechanism of inclusion, identifying the ways in which decision-makers have (or have not) tried to engage with communities and all affected stakeholders. According to Jenkins et al. (2016), such mechanisms of inclusion include i) the mobilization of local knowledge, which is most associated with indigenous communities and local knowledge systems, ii) disclosure of information, which involves meaningful participation, impartiality, and full information disclosure by government and industry - an example here is information dissemination for household

energy consumption in low-income areas - and iii) representation in institutions, which includes businesses, local, national, and international government bodies, and non-state actors - this is mostly linked to the inclusion of gender and ethnic minorities. For instance, women's representation is often limited to a local or community level, not in global or national contexts where significant decision-making and power dynamics play out (Gender CC, 2022). Also, women are not merely consumers of energy, but also active co-creators and producers. Thus, there is a need to view them as transformative, active agents rather than vulnerable, passive subjects of energy and energy policy, as is often the case (Lieu et al., 2020).

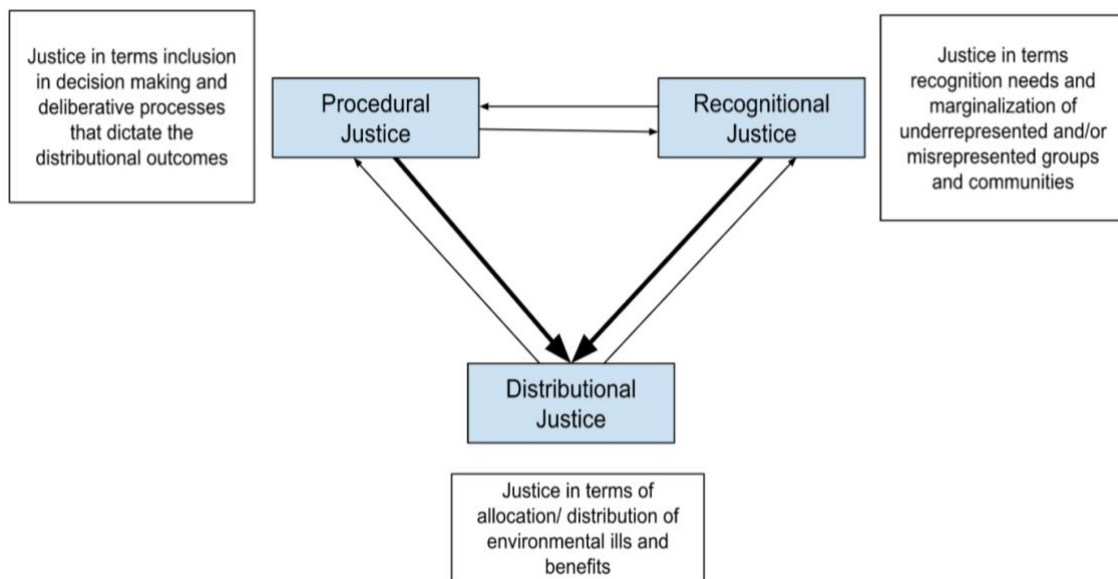


Figure 1: The three tenets of energy justice, content based on Jenkins et al. (2016). Authors' analysis indicates that while all three tenets interrelate, procedural and recognitional justice becomes necessary for distributional justice. This relationship is indicated by the thicker arrows in the above diagram.

All three forms of energy justice are interlinked, as historically marginalized individuals and groups are the least represented in places of power, influence, decision-making, and knowledge creation (recognitional and procedural injustice), which ultimately lead to distributional injustice (Walker & Day, 2012). For example, when renewable energy policies are deliberated and decided upon in government and industry circles, their ramifications are embedded in the everyday: those who were excluded from traditional fossil fuel networks may not necessarily benefit from renewable energy production (Buechler et al., 2020). Lacey-Barnacle (2020) argues that recognitional justice is the foundation for distributional and procedural justice, as the non-recognition of injustices and marginalization invites the potential for procedural and distributional injustice. He also suggests the need for restorative justice in the energy transition, which calls upon the remediation of past claims of injustice and seeks more active participation and opportunities for deprived communities in energy transition processes and projects.

To summarize our conceptual framework, a just energy transition must engage people in some capacity, in their roles of citizens, consumers and producers. By citizens, we do

not suggest legal citizenship in a state, but rather some form of political engagement in different spaces, from communities and workplaces to cities and regions. Initiatives are the activities where energy citizenship plays out: in some instances, they can be self-organized by people or citizen collectives; in other instances, they can be designed, funded or implemented by people who might involve citizens in different degrees of participation. Understanding how such ‘professionals’ understand what is a just energy transition, and how energy initiatives put forward notions of a just energy transition in their scope and aims, become a central line of inquiry. To uncover energy justice in relation to three forms – distributional, recognitional and procedural – we examine how various underrepresented groups in energy initiatives are considered.

3. Methodology

Our analyses draw from three sources of data: first, semi-structured in-depth interviews were conducted with people working in a professional capacity on the energy transition in eight DIALOGUES countries; second, country reports by research members in the same countries; and third, the analysis of a database of ECIs in the same countries.

The ‘professional’ interviews (n=81) were conducted by members of the DIALOGUES consortium, part of a European project focused on supporting energy citizenship in Europe. The interviewees include those who engage with the energy sector or the energy transition in their respective countries in a professional capacity, including local and national elected officials, representatives from environmental NGOs and energy cooperatives, researchers and professors, representatives from utility and other energy companies, among others. While the team recognizes the role of non-experts or lay knowledge, the aim of the interviews was to apprehend how energy citizenship is imagined and practiced by people working directly on the energy transition, in roles other than citizens. We have also attempted to achieve a fair gender representation in the interviewees, with an equal number of male and female professionals interviewed.

All interviews followed a common methodology and operational protocol, starting with questions about the professional’s occupation, and moving towards more reflexive comments on energy justice – which were analyzed for this study. For example, the interviewees were asked to reflect on questions of inclusivity in their own organizations, in the energy sector, and in how they understand the energy transition. Each interview complied with the EU’s General Data Protection Regulation (GDPR, 2016/679), as well as national legislations; when necessary, research teams also obtained approvals from ethical committees within their respective organizations. All ‘professional’ interviews were conducted in the language(s) of the country, then fully transcribed and translated into English based on recordings that were gained through informed consent. The collected data have been anonymized and de-identified.

Each research team also delivered a *Country Analysis Report* (n=8) following a unified reporting template. These reports summarize the background, aims and objectives of all the ‘professionals’ interviews conducted in the country, and detail the recruitment

process and the professional profiles. They also provided a rich landscape level analysis of the country's engagement in the energy transition, in terms of changes and stabilities in the energy system and energy-related policies. Most importantly, the reports provide testimonies from the energy professionals (based on original quotes) on a range of important questions: how their organizations support the energy transition, how they engage with citizens and communities and take into account under-represented and under-privileged groups in their work, and how their own organization fare in terms of representation of diverse populations. Our analyses of how energy justice is represented relied on both the country analysis reports and interview transcripts, following a codebook developed from our analytical framework. In brief, we identified texts where discussions on the three different tenets of justice took place – procedural, distributional and recognitional justice. We also examined whether specific under-privileged groups were mentioned, such as women and gendered minorities, low-income and migrant populations. For distributional justice, we move beyond inclusion to look at whether and how energy professionals show an understanding of the different forms of citizen participation (also correlated with degrees of participation) that are crucial for a just transition – such as participation through energy consumption, production or energy policies. We also coded for any mention of deterrents and enablers for a more just energy transition, where citizen engagement was concerned.

Turning now to the database of ECIs, the DIALOGUES consortium was given permission to use a database created by the European research project ENERGISE between 2016 and 2019, which includes more than 1,000 examples of what are termed 'sustainable energy consumption initiatives' across 30 European countries (EU27, Norway, Switzerland and the United Kingdom). As such, the database covered all countries involved in the DIALOGUES project except for Türkiye. In 2021 to 2022, the DIALOGUES research team was invited to augment the existing database with at least ten more initiatives per country involved, with additional ones for Türkiye. A total of 375 ECIs were identified and analyzed for the purpose of this paper.

The initiatives were sampled as follows: they must encompass existing or recent activities, initiated by different types of actors (e.g., individuals and communities, NGOs, research teams, public or private sector actors) that aim to lower energy-related carbon emissions where individuals and households are concerned, building on the ENERGISE sampling strategy (Jensen et al., 2018). These initiatives might aim at reducing domestic energy use, installing efficient technologies, or substituting fossil fuels with renewable energy sources. For example, when a utility company, community association and research team come together to launch a challenge to reduce energy usage in the home, this is an initiative; so too are self-organized energy communities, where citizens come together to produce their own renewable energy. To capture initiatives that would go beyond purely technology- or supply-oriented measures, active involvement of households was set as a requirement for inclusion in the ENERGISE database (Jensen et al., 2018). This database does not presume to be a comprehensive list of initiatives that aim at engaging citizens in the energy transition in Europe; however, it does include a great variety of initiatives with diverse scopes, scales and objectives, types of interventions, and outputs. Each initiative in the original ENERGISE database is detailed

along thirty categories (see Jensen et al. 2018 for a description). To investigate whether and how different social groups are represented in these initiatives and for the purpose of this article, we primarily focused on the following categories: ‘short description’, ‘objectives’, ‘target groups’, ‘target areas’, ‘scale of the initiative’, ‘type of participation’ and ‘outputs’, which speak to the scope and intended participants. Similar to the analysis of professional interviews, we coded for the three tenets of energy justice, and the inclusion and participation of different social groups. For both sources of data, researcher triangulation was used: the first two authors participated in the coding of the data, to enhance the validity of the analyses.

We acknowledge that the database has several limitations. First, information in the database cannot help researchers to ascertain what actually happens on the ground; second, as a researcher-generated database, bias was introduced based on the researcher’s own knowledge domain, social network, among others – albeit following the same sampling strategy, and many ECIs remain unknown to the research community in general. Furthermore, citizen initiatives against large-scale RES projects are also in principle energy initiatives, but they are not explicitly included in the database – which reflects the researchers’ bias against these types of initiatives, albeit their significance. Third, much of the database was populated between 2016-2019, many newer initiatives might have been left out even with the latest update by DIALOGUE members in 2022. Future efforts to update this database should aim to address these limitations by introducing various methods to minimize sampling bias. In terms of better understanding how the ECIs were implemented, interviews with all initiators is beyond the scope of this report. In some instances, the ‘professional’ interviews gave us additional insights on the actualities of ECIs.

4. Results

An analysis of 81 in-depth interviews with ‘professionals’ engaged in the energy transition in Europe, 10 country reports, and the 375 energy initiatives aimed at engaging people in Austria, Bulgaria, Germany, Greece, Italy, Norway, Switzerland and Türkiye, shows the myriad ways in which energy citizenship is currently being taken up, when it comes to how the energy transition is playing out in these countries. We examine how professionals, in their discourses and practices, and how initiatives, in their scope, engage with questions of inclusivity. We tease out how differences between citizens are grappled with, and how certain groups might be excluded from the energy transition - with a focus on gender and minority groups.

4.1 Consensus on the need for citizen engagement

An overwhelming trend across professionals in different countries is the recognition of the importance of citizen engagement and participation in the energy transition: there is consensus around the need to engage people as citizens, and that this should aim towards inclusivity of diverse people. More specifically, local community participation in energy initiatives is identified as critical to implementing the energy transition. Citizen participation here is seen as having an influence on how local plans and/or policies might

be developed, or how such municipal, regional, or national plans might be interpreted into local contexts and in relation to community needs. As an energy professional from Italy puts it,

“The right energy transition for me is one that starts from the bottom up, the energy community must respond to local needs and must be tailor-made, a whole network of local stakeholders must be involved during the feasibility phase, which must not only be technical but also and above all social. You are not just putting up panels or wind turbines, you are building a type of community that could then carry out many other initiatives.” (female, high level representative from an energy cooperative, Italy)

For many professionals working in the energy transition, citizen inclusion itself thus becomes a key indicator of the possible success of the energy transition at the community level. Another type of recognition was also observed among energy professionals, a recognition of justice issues - unequal capabilities and distribution of resources, or the non-inclusion of underrepresented groups in initiatives. This type of recognition is exemplified by this energy professional from Switzerland,

“I would say a transition in which... everyone can... could participate to the extent... of the possible... well to the extent of their means... And who could benefit from the fruits of this transition [...] And not waiting for everyone to be engaged because I don't think that's possible. [...] So I think we have to find ways to include everyone” (female, head of an energy community network, Switzerland)

On the other hand, interviewees also identify specific groups, such as women or low-income populations, who invariably get overlooked or left out of initiatives. The inclusion of these groups is also brought up as necessary for a ‘just’ and successful transition. For instance, a representative working in an NGO in Bulgaria, mentions how the Roma minority faces obstacles, such as economic deprivation, marginalization, low level of education, and legal barriers, to participate as energy citizens. An interviewee from Austria identifies age, geography, and gender as important factors to focus on to ensure diversity. These energy professionals also acknowledge the challenges of including underrepresented groups. Speaking about women’s inclusion and representation, an interviewee from Türkiye confesses,

“When we look at sustainability or transformation, I observe that it is especially male-oriented. They do not accept this; whether it is negative discrimination, it will be discrimination against young people or women [...]” (female, representative from a National Committee of Women in Energy Sector, Türkiye)

We observe, however, that while such recognition is explicitly mentioned in discourse – recognition both in terms of needed citizen engagement, but also diverse citizen engagement – actual initiatives and practices may not always translate these values into action. As justice in terms of recognition is essential to procedural and distributional justice, this possible gap between values and action would need to be bridged in practice. In the database, only 12% (44 out of 375) of initiatives across eight countries recognize the specific needs of underrepresented groups, and act on this in terms of direct inclusion

or targeted group. An example of such an initiative is EnergyMeasures - Tailored measures supporting energy vulnerable households, a cross-national initiative in Bulgaria, which aims to reduce energy poverty among at-risk households. The initiative also follows a rigorous gender inclusivity guideline and also recognizes the intersectionality of energy poor households with vulnerable groups and carries out targeted activities for inclusion of these groups. In another example, the national initiative Klimaschutz In unserer Hand in Germany recognizes that people with a migrant background get left out of energy citizenship efforts, and aims to include these groups through awareness raising, discussions, networking between migrants and environmental organizations, and trying to combine religious activities with climate protection. Interestingly, in the interviews, links are made between diversity in the energy sector and how this might affect a more just energy transition. In Türkiye, a journalist reporting on the energy transition describes the push for women's associations in the energy sector in these terms:

"[...] There are even women's associations in the energy sector [...] For instance, female employees are still relatively low in Türkiye's energy sector compared to the energy sector abroad [...] I believe that as these examples increase, more women will start to study electrical and energy engineering, electrical and electronics [...]" (male, journalist and activist, Türkiye)

Some more examples of gender inclusion are: the C3E International Initiative, a cross national initiative in Austria, aims to increase the advancement of women in the energy industry and energy research, through policies, institutional support and networks and informational exchange. Another example is WenCoop in Greece, which is a grassroots energy community for the Hellenci Women Entrepreneurs Association that aims to develop and promote women's entrepreneurship in the energy sector. Turkish Women in Renewable Energy and Energy Sector (TWRE) is another similar organization in Türkiye. The assumption here is that if more energy professionals are women, for example, then a more gender sensitive approach to the energy transition might be imagined – although this would need to be substantiated in practice. However, it is important to note that these examples are from the ECI database, which does not document the success of these initiatives in terms of implementing their respective goals. Based on the professional interviews, we discuss the enablers and deterrents for 'successful' inclusive ECIs in later sections.

4.2 Three forms of energy citizenship co-exist

In studying different forms of energy justice, we differentiate between three forms of energy citizenship: first, the involvement of people in energy communities; second, citizen engagement in the political arena; and finally, the most dominant form of citizen engagement based on consumption. These different forms of engagement are presented in figure 2:

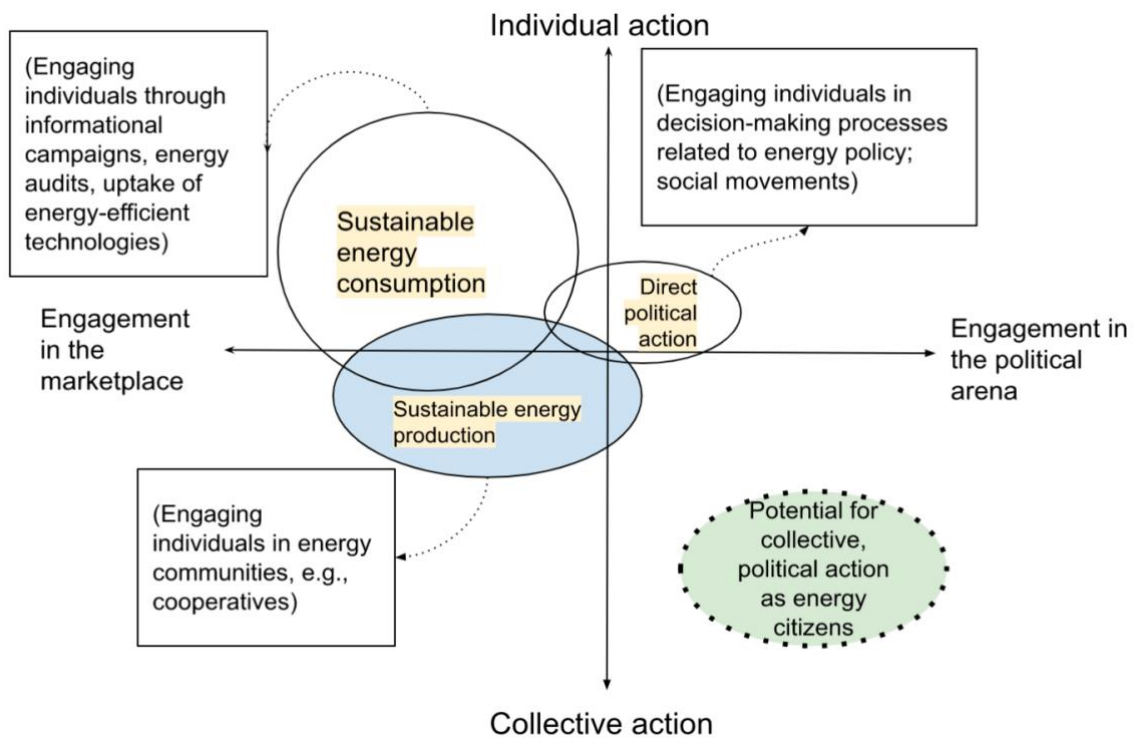


Figure 2: Current paradigm of citizen engagement, based predominantly in the marketplace and emphasizing individual action. There is much scope for energy citizenship initiatives to move toward more political and collective action to bring about systemic change.

4.2.1 Energy communities: an ambiguous venue for a just and inclusive transition

We now focus on the case of energy communities, as a subset of energy citizenship initiatives. A total of 56 initiatives (15% of the total) fall under this category. Following the European Commission, we define energy communities as “collective and citizen-driven energy actions that help pave the way for a clean energy transition, while moving citizens to the fore” (European Commission, 2022). These energy communities might engage citizens in investing in clean energy (for example, in the form of energy cooperatives), or towards increasing energy efficiency, among other activities. Members of such communities have a direct stake in the initiative, and might also have the ability to influence energy policy and regulation, depending on the scale of the community. The general consensus among professionals is that the energy communities foster participation and allow for direct interaction and commitment to the energy transition, as a stronger form of energy citizenship. As an executive of an energy cooperative in Italy puts it, energy cooperatives allow citizens to “become protagonists in the energy transition”.

It is important to note, however, that energy communities are more prominent or popular in some countries than others. We find this to be the case in Germany, Norway and Switzerland, where professionals from these countries mention energy communities as critical to the energy transitions. For example, in Germany, an interviewee describes EWS Schönau as ‘electricity rebels’, an energy community started in the 1990s to buy

back their local electricity grid. In recent years, they have also repurchased their gas grid and offered sustainable and local green energy sources to the local population. Energy professionals in countries like Bulgaria and Türkiye, for instance, observe that energy communities are still in an embryonic stage in their respective countries. This does not imply that energy communities do not exist or are not important in these countries, but that they do not occupy a prominent position in terms of how energy citizenship is represented. In some instances, the future potential of energy communities is giving prominence in discourse, for example in this direct citation from an interviewee in Italy,

“The most useful tool will be the energy communities, and we need to understand how to integrate them effectively into the territory, but they would certainly give concrete and immediate benefits. We need to create a balanced system...this has a cost, part of which can be absorbed by the structural funds that relieve citizens of a direct investment, but it must be done proportionally, i.e., so that the lowest strata do not pay the cost of the transition. The poorest should be the first to have access to renewables, spreading the costs to the better-off.” (male, SME energy efficiency, Italy)

The interviewee’s point about the distribution of the costs of the transition is relevant. Casting a light on the demographic makeup of such energy communities, professionals working in energy communities in countries such as Germany, Norway and Italy, reveal that members are often higher income, often older, men, not belonging to ethnic or migrant communities. The membership fees become the first barrier to participation - which may amount up to €1000 in the German case, for example. Thus, interviewees explain that low-income populations are thus unable to participate. Young people, students, migrants and female-headed households, who are more likely to be in precarious situations, tend to be excluded. Language and assimilation into the host country become an additional barrier for migrants’ participation. A professional from Germany, who works with Turkish migrants, explains that while there is a focus on prosumerism and energy communities in the country, these concepts are unfamiliar to many people in the Turkish community. A professional working with energy communities in Austria explains the challenges in engaging with migrants this way:

“In many cases, the groups you mentioned [migrants] do not feel addressed by the energy transition...There is often a communication deficit. And these groups often don’t feel they belong in general.” (Male, government official and expert of energy communities, Austria)

Further, in the database, only 4 out of 375 of ECIs actively include migrants in the scope of their activities. This is apparent in most of the interviews as well. For instance, several professionals admit that they do not have any migrant groups in the energy community they are involved in. In some cases, the emphasis of energy communities as ‘local’, often construed narrowly in terms of county/place of origins (and implicitly language and cultural background), justifies the homogeneity of energy communities and to a certain degree, legitimizes the exclusion of migrants and ethnic minorities. A board member of a renewable energy cooperative from Germany contends the following:

“It takes extra effort, it takes extra energy to break up homogeneity. And I have the thesis. So that's a big advantage, I also have the thesis. If you actively strive for good social togetherness, for example by sitting around the campfire or something. They forget that there are no women.” (male, board of a renewable energy cooperative and political activist, Germany)

Thus, a homogenous group may lead to this feeling of ‘togetherness’, causing less friction. Women’s participation in energy communities is also noted to be low. The use of technical language in recruitment, the requirement of an advanced degree and prior knowledge of energy systems for membership in energy communities are identified as barriers to female participation. The lack of gender parity in STEM (science, technology, engineering and math) fields in general, and the energy sector specifically feeds into fewer women’s participation in energy communities (Drewing & Glanz, 2020; Fraune, 2015; Łapniewska, 2019; Lazoroska et al., 2021; Mort, 2019). A good example of an effort to promote inclusivity in energy communities is explained by an interviewee in Italy, where several steps were taken by the energy community to increase women’s participation. The first step was to adjust the timings of the meetings so that it’s more convenient for women to attend. Furthermore, earlier, only holders of electricity bills (generally a man who acts as head of the household) were given membership to the energy community. They changed the regulation so that cohabiting members of the family (women, young family members, including children) were also considered as part of the energy community, and thus they could participate more actively in their initiatives. In Germany, after observing the lack of gender parity in their energy community, a professional described programs that directly approach women in training them to install solar panels in the community. In another example, a professional describes their efforts towards improving the gender parity,

“We have been training female technicians (on wind turbines) at a wind turbine manufacturer company for three years. We will make separate programs with Energy Institutes and private universities [...] In the last two years, I organized nearly 80 training and webinars about the circular economy, energy finance, wind energy technical issues, and solar systems [...]” (female, Representative of a professional network of the energy sector with gender expertise, Türkiye)

Furthermore, based on interviews with professionals, the members of energy communities tend to be already ‘green’ and ‘engaged’ citizens, or higher-income individuals with vested interests, like building and company owners. In the words of a board member in a German renewable energy cooperative – “predominantly green-oriented academics who are motivated by cultivated idealism.” These are also individuals who are targeted as ‘early adopters’ of energy efficient and/or new renewable technologies. In Norway, for instance, an organization funded 500-600 ‘early adopter’ households in implementing (often pricey) projects such as home energy upgrades. This initiative has been criticized in the media for mainly supporting already wealthy people and technology enthusiasts who were mostly men. A blind approach to inclusion, such as having an open-door policy and making information publicly available, does not necessarily translate to actual inclusion. As a professional from Austria explains,

“There are still prejudices and discrimination, maybe not openly and obviously, but implicitly towards people with a low socio-economic background or a migration background or even gender, depending on the discipline.” (female, Representative of a professional network of the energy sector with gender expertise, Austria)

Thus, inclusion in energy communities becomes critical, especially for underrepresented groups, as a pathway to achieving procedural justice. Consequently, energy communities that do not make a concerted effort to include these groups in their activities would invariably reproduce the same injustices in the fossil fuel industries, such as lack of gender parity and unequal distribution of environmental ills (Johnson et al., 2020).

4.2.2 Citizen engagement in direct political action: a promising and under explored terrain

Another channel identified for substantive energy citizenship is through the involvement of everyday people in decision-making processes of energy-related policies. This can take many forms, such as providing direct feedback to and co-creating solutions with government authorities through deliberative processes (Chilvers & Longhurst, 2016; Fraune, 2022; Pidgeon et al., 2014; Radtke et al., 2020). One channel for this is through energy communities through which citizens participate as a collective, although such communities can also be a-political and more oriented towards prosumption. One point of disagreement between energy professionals is the approach to energy policy in relation to citizenship. While some advocate for decentralization and bottom-up approaches based on energy communities and the active engagement of citizens, others argue for a top-down, regulation-heavy approach as necessary to bring citizens on board. For the latter, citizens vote for elected officials that implement policies. Differences between countries may relate to socio-historical factors in how citizenship plays out, as well as different energy provisioning systems, for example, the more decentralized provisioning of energy in Switzerland compared to some other countries.

Civic participation in policy processes in the energy transition is spoken about extensively by professionals as a desirable way forward, but we find little evidence of initiatives that would engage people in this capacity when interviewees are solicited to give examples. In the database as well, only 15 out of 375 all initiatives involve citizens in institutionalized energy policy or politics related to energy issues. One example of such an initiative is the "Genève en transition" program in Switzerland to engage with citizens in the ecological transition of the Canton of Geneva. The program initiates, plans, supports, and coordinates numerous participatory initiatives and events aimed at providing opportunities for citizens to regularly debate, exchange and come up with constructive proposals that could contribute to the ecological transition in Geneva. These Citizen Forums are in their infancy and in some instances seek to represent the population of the Canton, through lot-by-lot sampling based on attributes of age, education and gender (*Demoscan*, 2022). Whether such forms engage solely in consultation and deliberation, or whether their outcomes actually influence policies, remains to be ascertained.

In Germany, an energy professional describes co-founding an overarching network for energy citizenship in the country, to promote a framework of conditions for renewable

energies, facilitate information dissemination and knowledge development, and collectivize the voices of the network members. While such initiatives no doubt facilitate participation in policy processes, we observe a similar problem as that in energy communities – of a blind approach to inclusion, which inadvertently resulted in the amplification of voices of citizens who are already well versed in energy policy and regulation. The inclusion of these citizens only does not take into account the unique experiences and needs of various underrepresented groups, which might run the risk of delivering the benefits of the energy transition to an already privileged group. How to further engage citizens in political processes is a growing field of research and practice, moving beyond the capacity to vote or not. Smith (2021) explores different types of avenues, such as representative citizen forums or assemblies, and how these might be applied to the energy transition merits further study.

In order to enable direct citizen participation, it is necessary to have the “right” rules, policies and regulations in place. For example, bureaucratic hurdles created by current legislations, often due to the lack of commitment to the energy transition at the national level and the influence of lobbyism of the fossil fuel industry, among other reasons, hamper citizen participation in energy communities. In Bulgaria, for instance, inadequate legislative frameworks and complex administrative procedures for setting up energy communities and RES initiatives, and low level of trust in public institutions and collective endeavors hinder energy citizenship efforts. Similarly in Austria, a professional explains,

“...there are so many bureaucratic hurdles that many people don't even want to do it [engage with energy citizenship efforts]. I think it needs to be simplified and you need the staff to do the whole thing.” (female, Representative from an NGO with expertise in gender/inclusivity, Austria)

Therefore, a conducive regulatory framework, including clear goals and objectives for citizen participation, incentives and subsidies for energy communities, as well as transparency in policy processes, are recognized as necessary to broad-based citizen participation. In some instances, local governments' own capacity may also prove to be a barrier for them to partner with ECIs; and according to the energy professionals, there needs to be policy frameworks that allocate resources for technical and financial support to local authorities. In the analysis of the interviews and the database, we have identified ‘good practices’ where local government initiatives enable energy citizenship from the get-go. A good example of the recognition, as well as the inclusion of multiple axes of intersectionality, is a local government in Norway, where different groups were targeted and involved in a sustainable urban development project, with energy being one of the focus areas. Different groups set their own parameters for how and in what way to be involved, workshops were organized by putting citizen participation at the forefront. Lectures, exhibitions, events for families with small children, immigrants, businesses, and so on were conducted.

4.2.3 Citizen engagement as consumers: the most dominant understanding of energy citizenship

Apart from energy communities and direct policy-based involvement, a third way of understanding energy citizenship is through promoting consumption-based activities or participation in a marketplace. The majority of initiatives in the database engage citizens primarily through consumption. As discussed in the method section, there may be a bias in the sampling of the database. But such an understanding was also a common understanding of energy citizenship in the professionals' interviews, especially for countries such as Türkiye and Bulgaria. This understanding involves a range of initiatives that seek to influence energy consumption in some way, either through information campaigns and behavioral nudges to render usage more efficient, or efforts to incite the uptake of more energy-efficient technologies and retrofits, for example. For the latter, such forms of energy citizenship are often predicated on the assumption of ownership – of buildings, houses, and cars – leaving out lower-income households. Overtly technical communications might also exclude people who are not well versed in energy issues. For example, the TOPTEN ACT, founded in 2015, which is a cross-national initiative that develops a market strategy for consumers, manufacturers, and retailers to promote energy-efficient household products, may not be reaching people who have neither financial nor cultural capital to invest in technological efficiency. Another example is the Bike4Cars campaign in Switzerland, where car owners in Switzerland were invited to a free electric bike (e-bike) trial for a period of two weeks in exchange for their car keys. This was followed by a university-based research team, to identify whether such a free e-bike trial impacts on habits related to car use and other means of transport.

It is in this understanding of energy citizenship as involving forms of consumerism that underrepresented groups are most considered. From the database, 124 initiatives (33% of the total) actively include at least one underrepresented group (migrants, women, low income populations, youth, and other hard to reach groups) in their activities, and of those 124, 86% are consumption-based. In the interviews, when asked about the inclusion of underrepresented groups, interviewees usually gave examples of consumption-based initiatives. For instance, a professional in Germany is working with energy-poor groups on initiatives to enable them to become active citizens in the energy transition. This is done by offering free energy advice for people who cannot pay their energy bills, or providing guidance on proper energy consumption behavior through unemployment programs. From the interviews, energy professionals also highlight that citizens are more likely to participate in the transition if financial benefits are highlighted, rather than environmental ones.

Because information campaigns tend to be top-down, towards informing rather than engaging in dialogue, any attempt towards inclusivity can be somewhat reductionist. For example, in Norway, energy-related communications “focus on comfort instead of more aspects to engage with more women” (Male, representative from a governmental energy enterprise, Norway). To reach more diverse or marginalized groups, efforts can also be made to translate content or identify community members that act as gatekeepers towards accessing such groups. The Solutions to Tackle Energy Poverty (STEP) initiative in Bulgaria provides energy consultations to energy-poor households by energy experts, which include representatives of the Roma community in order to enhance the

chances of reaching the marginalized, hard-to-reach vulnerable groups. Additionally, a professional working with the Turkish community in Germany describes select initiatives taken to promote energy citizenship, including the translation of information into Turkish and Arabic, as well as the hosting of informational events about the value of choosing green tariffs or on sustainability topics more generally. She discusses efforts to train Turkish women to act as ambassadors in the community, as follows:

“...If you organize a workshop, then I would say, so we invite somehow 15 to 20 people who are really interested, motivated and have a little bit of time. How would I train them as multipliers? Make them ambassadors of energy citizenship...We have trained in the four months 30 migrant women, so Arabic-speaking and Turkish-speaking...And that we do this and that the women then carry this indignantly into their own community. So if you have multipliers, they teach their community, friends and family about actions and possibilities to participate in the energy transition. This multiplication, this snowball effect, becomes super in the Turkish community. And now I would recommend that we should do this promptly.”
(female, CEO of a NGO supporting intercultural ecological work, Germany)

Young people are among the underrepresented groups that figure prominently in the database of initiatives: 38% of initiatives focus on engaging young people in some form. Youth and students are seen as critical actors in the energy transition as future citizens, but also as mediators in communicating with their parents and their peers. In our professionals' interviews, initiatives that are carried out in school settings were seen as particularly effective, as students are then expected to have an impact on their parents' energy usage, creating a positive spillover effect from school to home. Some examples of initiatives that focus on young people are BAMBINI, a cross-national initiative in Bulgaria and Greece that targets children aged 0-6 and their parents to change their mobility behavior (car-use). Another example is ACTIVE LEARNING, a cross-national initiative in Bulgaria, Greece, Italy and Norway that promotes energy monitoring as a tool for energy education for children aged 6-12, to change attitudes of energy use for the future generation and help in energy savings in schools and private households. The ECI, Pattern of Energy Efficiency in the Schools (PEES) in Greece and Bulgaria that targets secondary school children to raise awareness and promote behavioral changes to encourage energy savings. Thus, children across ages are identified as important energy citizens in such ECIs.

In Switzerland, underprivileged groups were the focus of a utility company campaign to help reduce energy usage in the home, involving home visits to low-income households and the provisioning of energy saving devices, such as electric water boilers. The program originally involved the recruitment of energy ambassadors in these same communities, who were then given training in energy efficiency measures and encouraged to sign up neighbors by going door to door. The initiative was critiqued for reinforcing social differentiation by solely focusing on low-income households as 'in need' and by over-individualizing responsibility (Bertho et al., 2021). The program has since been expanded to include middle- and higher-income households. This raises the question of why more affluent households are not equally seen as 'hard to reach', when the higher environmental impact of their lifestyles are well documented (Wiedmann et al., 2020).

Thus, consumption-based initiatives are the dominant way in which energy citizenship is understood, and is also the arena in which under-represented or hard to reach groups are most considered. And yet, investing in technological efficiency or renewable energy at an individual level fails to consider different forms of purchasing power, and designing strategies to reach low-income groups or minorities, by ethnicity, age, or gender, can lead to further reinforcing such forms of social differentiation. A more collective and intersectional approach seems to be lacking.

5. Discussion: enablers and deterrents for energy citizenship in a just transition

Energy citizenship is often identified as crucial to a successful energy transition, but in this process, inclusive and just outcomes are often contingent and varied. Analyzing the inclusion of various underrepresented groups in the energy transition allows us to examine various forms of energy justice in the DIALOGUES countries. The importance of citizen engagement is generally acknowledged by professionals and initiatives, with some groups more widely recognized as underrepresented, such as low-income populations and young people; subsequently, many initiatives take measures to include these populations in their activities. We also observe the trend of recognizing gender as an important category for inclusion, with targeted initiatives for women, for instance. Other groups such as ethnic minorities and migrant populations are still under-acknowledged in relation to inclusion in the energy transition, with only a few initiatives actively working toward their inclusion. It is important to note that inclusion rarely accounts for intersectionality – for instance, ECIs may be proactive in including more women, but not consider how gender relates to income or migration status.

Apart from investigating which populations are included and excluded, we also examine the forms of citizen engagement – from energy consumption (e.g., behavioral change campaigns, projects for the uptake of energy efficient technologies etc.), energy production (e.g., energy cooperatives) to direct political actions (e.g., lobbying through citizen collectives, social movements). While all forms of engagements are instrumental, the latter two attach greater importance to collective actions and the political agency of individuals. These two forms of engagements also tend to include high-income, male, non-migrant, and often technocratic individuals – who have the knowledge and resources (allegedly) to participate this way. For instance, ECIs that involve citizens in energy production through energy cooperatives usually come with a membership fee, which becomes a first barrier that prevents low-income populations from participating. Young people, students, migrants and female-headed households, who are more likely to be in precarious situations, also tend to be excluded. Language and assimilation into the host country become an additional barrier for migrants' participation as well. Thus, the distributional and procedural justice outcomes become limited, due to the non-inclusion of underrepresented groups. Underrepresented groups are mostly included through the form of energy consumption, such as informational and awareness campaigns and

energy saving initiatives. Admittedly, activities as such can deliver energy and cost-saving benefits, but these groups are only considered for their capacity to act as consumers with limited political agency, and their role in shaping a just energy transition becomes highly constrained.

Based on the results above, we detail here some factors that ***might deter or enable a more just energy transition***, based on different themes that have been discussed above.

First, the role of people as consumers rather than citizens has been amply criticized in the sustainable consumption literature, in the shifting of responsibility to individual decision-makers rather than addressing broader power dynamics and responsibilities at a systemic level (Fuchs et al., 2021). More specifically in relation to energy, Lennon et al. (2020), in their overview of energy citizenship engagements in Europe, also find that citizens are co-opted as ‘citizens-as-consumers’ in the energy transition in official discourses, where they are reduced to mere economic actors subject to top-down directives, only having agency in the privacy of their homes through individual action. Recognizing people as consumers also gives more agency to citizens who have the purchasing power (or time, another precious resource) to act upon their energy provisioning and usage. While some energy professionals believe that those with more resources should bear the initial costs of the transitions and try out new technologies, others critique this by arguing that this excludes energy-poor populations. Thus, a more just energy transition that engages with citizens-as-consumers could envision forms of redistribution, whereby wealthier households contribute to subsidizing the involvement of underprivileged households in the energy transition. This can also be done effectively through the Stats. Furthermore, as there is a dominance of more consumerist understandings of energy citizenship, the need to enhance political forms of engagement means that new skills and competencies for political action must be developed at the local level. Whether through training in school programs, or the engagement of citizens in diverse forms of association (sports, arts, etc.), developing organizational skills, as well as a better understanding of political systems, seems necessary. This relates to the capabilities approach, whereby participating in society is a human need.

Second, a mere recognition of injustices and inequitable distribution of resources, which professionals across countries acknowledge, does not *de facto* produce just outcomes. Recognitional justice and procedural justice are both necessary and go hand-in-hand towards ensuring distributional justice outcomes. Direct participation in shaping energy policies is a form of procedural justice for energy citizenship, and yet it can also exclude non-male, non-white, lower-income populations, unless processes are put into place for fairer representation. For example, the use of arbitrage in selecting participants for Citizen Forums is a promising way forward, towards involving a representative group of people in discussions and debates on energy issues. This relates to policy frameworks that create an institutional basis for citizen participation in political decision-making processes or energy communities, but also attention paid to policies that are not

directly related to energy but nonetheless relevant (Greene & Fahy, 2020). For example, work-time reduction policies that encourage part-time work might allow people to engage in community-level work, as energy citizens; the allocation of paid time for such activities is also a promising proposal.

Third, energy communities are, in principle, about engaging citizens in a collective. From the interviews, energy professionals agree that such communities should foster greater engagement in the energy transition. Yet, energy communities do not necessarily embody principles of collective *political* action, and might be unduly focused on consumerist principles such as coming together, in a group, to invest in renewable energies or renovations. While these are laudable missions, such communities do not necessarily seek to affect broader systems that underpin current patterns of energy consumption and production. As discussed above, there are positive and negative sides to having homogenous groups as energy communities: on the one hand, bonding with similar people may create relations of trust towards supporting energy initiatives; on the other hand, leaving energy communities to people with more available resources – including financial and time – means less justice in terms of recognition in the energy transition. Thus, the engagement offered by energy communities is also varied for different populations. Emphasis on ‘local’ community and group homogeneity may exclude women, migrant populations, low-income groups, and so on. Finding strategies to make such communities more inclusive is a central concern. In an example of inclusion of low-income populations, a professional from Germany describes a project she worked on where the energy poor could successfully participate via micro-credits. In another example, the elderly are identified as a vulnerable group due to their limited mobility, lack of technological awareness, and financial stability. Thus, in Germany, energy community meetings were also announced in the newspapers to engage the elderly and make information more accessible for them.

Fourth, there is no contesting that the energy sector is currently male dominated - as our professionals all testify, across the eight countries involved in this study. There is no guarantee that a gender mainstreaming a professional capacity would result in an energy transition that is more gender neutral. Besides, as stated above, the energy transition relies on a host of non-energy related sectors and policies such as urban development or mobility, which would also need to be more representative of gender differences. And yet, a more diverse workplace – in the energy sector and beyond – is certainly a worthy aim in itself.

Lastly, a way of enabling energy citizenship might be to render more visible the initiatives that “walk the talk”, moving beyond the accepted discourse on a just energy transition to implementing initiatives that tackle different forms of justice and inclusivity. In an example of redistribution of the benefits of the energy transition, in the German state of Mecklenburg-Vorpommern municipalities profit from any new renewable energy projects implemented. And with the taxes they take from these projects, the municipality can develop regional projects like

kindergarten or other things that all citizens profit from. Some other good examples of initiatives include: the Strengthening Energy Efficiency Awareness Among Residential Homes for Elderly People (SAVE AGE) in Greece, which aims to raise awareness, encourage measures in energy efficiency, and monitor and assess energy use in residential homes for the elderly. Best practices (technical, behavioral, and financial) are tested and then promoted in 24,000 residential care homes across Europe. The TOGETHER initiative, a cross-national initiative, targets new immigrants in Austria and Norway advises and trains them in energy efficiency, facilitation of social inclusion, and also promotion of energy efficiency and learning. The Energy Poverty Reduction in Eastern Europe (EPORE) tackles fuel poverty by training long term unemployed, less educated people to become 'energy scanners' and evaluate low-income households' energy consumption and come up with strategies and guidelines for energy saving. The best practices are piloted and then forwarded to policy makers as well. eNostra Cooperative is the first energy cooperative in Italy that produces and supplies 100% renewable, ethical and sustainable energy to its members through a model of participation and sharing. This was started in 2014, and there were more than 7500 members in 2020, with 50% of them women.

6. Conclusion

The engagement of citizens in the energy transition is seen as essential to how any change might play out, towards reducing carbon emissions and increasing clean energy sources. In addition, initiatives that seek to engage people in different forms of action abound. These same initiatives are designed, funded or implemented by diverse actors, or professionals working in the energy transition field - from utility companies and national funding schemes to local governments and associations. By studying the scope and intended participants of 375 energy initiatives and by documenting the discourses of professionals working in this sector, we are able to uncover how energy citizenship is represented across 8 European countries.

We find that distributional justice must be preceded by both justice in terms of recognition and procedural justice. We also find that citizens-as-consumers remains the dominant way of understanding how citizen engagement might play out, and that this type of engagement is also prominent in energy communities. We suggest enablers and deterrents for a more just energy transition, including, among other proposals, the need to build skills and competencies in political organization at the community level. Conducive legal frameworks, bureaucratic support, and policy incentives have also been brought up as necessary for inclusive energy citizenship by professionals across countries.

In terms of further research, our study stops short of assessing how energy initiatives play out in practice, beyond their scope and intended aims. Assessing initiatives that actively engage citizens in energy deliberations and decisions is essential, as will be the case with the DIALOGUES Citizen Action Labs.

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8. Appendices

8.1 List of professionals interviewed

List of Professionals Interviewed		
COUNTRY	ROLE	GENDER
Austria	Head of department of an energy utility company	Male
Austria	Representative from an energy regulation entity	Male
Austria	Representative from an energy consulting firm	Female
Austria	Expert on energy communities in the federal government	Male
Austria	Representative of an energy cooperative start-up	Male
Austria	Representative from an NGO with expertise in gender/inclusivity	Female
Austria	Expert on technology uptake from an Austrian University	Female
Austria	Expert at an Austrian research center for energy efficient construction	Female
Austria	Expert of energy communities in the government	Female
Austria	University Professor	Female
Bulgaria	Expert at a local municipality	Male
Bulgaria	University Lecturer	Female
Bulgaria	Expert at the local municipality	Female
Bulgaria	Expert at a national CSO for sustainable energy	Male
Bulgaria	Expert at an energy firm providing RE solutions	Female
Bulgaria	Two experts a national NGO campaigning for environmental and energy sustainability	Female and Male
Bulgaria	Expert on energy innovations at a national utility company	Female
Bulgaria	Expert/member of a business association interested in RES	Female
Bulgaria	Expert at a local municipality	Male
Bulgaria	Expert at a local municipality	Male
Germany	Project manager of a German sustainability consulting firm	Male
Germany	CEO of an enterprise supporting energy citizenship projects	Female
Germany	CEO of an association supporting energy citizenship	Female
Germany	Board member of a renewable energy cooperative and activist	Male
Germany	Head of the political representation of an energy enterprise	Male
Germany	Member of the German parliament (Green party)	Male
Germany	Former member of the German parliament (Social party)	Male
Germany	Board member of a renewable energy cooperative and activist	Male

Germany	Leader at a NGO supporting national and international sustainability projects	Female
Germany	Project leader of an energy citizenship initiative	Female
Germany	Board member of a renewable energy cooperative	Female
Greece	University Professor	Male
Greece	University Professor	Male
Greece	Energy consultant in Ministry of Environment and Energy	Male
Greece	Representative in an RES association	Female
Greece	Founder of an energy cooperative	Male
Greece	Expert at the Ministry of Environment and Energy	Female
Greece	Expert at a local distribution network operator	Female
Greece	Expert at the Energy Communities Federation	Female
Greece	Government official at a small island municipality	Male
Greece	Government official at a big island municipality	Female
Italy	Representative from an environmental NGO	Male
Italy	Representative of a SME on energy efficiency	Male
Italy	Representative of energy cooperative	Female
Italy	Representative of environmental NGO	Male
Italy	Representative of an energy agency	Female
Italy	President of an energy cooperative	Male
Italy	Architect with expertise in energy efficiency, consultant for regional energy plan in Italy	Female
Italy	Representative of energy cooperative	Female
Italy	Representative of a foundation	Male
Italy	Environmental Engineer	Female
Norway	Representative of governmental energy enterprise	Male
Norway	Manager at an organization for energy efficient buildings	Male
Norway	University professor with gender expertise	Male
Norway	Representative of an environmental organization	Male
Norway	Expert of participatory methods	Female
Norway	Government official in regional government	Female
Norway	Project leader of an energy initiative	Male
Norway	Leader of an environmental organization	Male
Norway	Representative of a power supply company	Male
Norway	Representative of an energy company	Male

Norway	Representative of an energy company	Female
Switzerland	Consultant in an environmental NGO	Male
Switzerland	Elected representative (Green party)	Male
Switzerland	Two representatives a private utility company	Male and female
Switzerland	Representative of a private utility company	Female
Switzerland	Representative of an energy community network	Female
Switzerland	Government official at the cantonal energy department	Male
Switzerland	Researcher in sustainability issues	Female
Switzerland	Energy consultant for public authorities	Female
Switzerland	Government official at the federal energy department	Female
Switzerland	Climate activist	Male
Türkiye	Representative from Ministry of Energy and Natural Resources	Male
Türkiye	Representative from Metropolitan Municipality	Male
Türkiye	Director of research oriented environmental NGO	Female
Türkiye	Journalist/Activist	Male
Türkiye	Representative from a private utility company	Female
Türkiye	Consultant to local governments on climate change issues	Male
Türkiye	Representative from state-owned electricity company	Female
Türkiye	Representative from a national committee on the energy sector with gender expertise	Female
Türkiye	Representative of a professional network of the energy sector with gender expertise	Female
Türkiye	Coordinator of the Turkish section of an NGO coalition Network	Female

Note: The codebook and interview guidebook are available upon request.



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