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A Critical Review of Energy Democracy: A Failure to Deliver Justice?

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Abstract

The concept of energy democracy has seen a moderate rise in scholarship over the last decade. This article is the first to examine the concept of energy democracy from a critical perspective, and it is advanced here that the concept is limited and narrow. Further, through analysing it through the JUST Framework it is clear that energy democracy fails to deliver real justice. The JUST Framework takes us through core justice issues, such as distributive, procedural, restorative, recognition and cosmopolitanism. Further, it explores the space and time dimensions which bring a more practical perspective on the concept. Energy democracy scholars in the recent past (in 2019 and 2020) have sought to broaden the concept. However, as this article shows, these debates exist in the literature already, and energy justice and just transition issues go much further and are already more developed and utilised by researchers. In addition, the energy democracy concept is limited in the main part to local communities and ignores key issues such as energy extraction activities and indigenous communities. To conclude, and to achieve action, we call on energy democracy scholars to engage in the just energy transition literature and to contribute to the decrease of the language war that is progressively affecting the field of energy studies addressing the challenges of an accelerated transition to a lower-carbon economy.

Keywords: energy democracy; JUST Framework; energy justice; just transition

“What was supposed to be a campaign for energy democracy rooted in principles of racial and economic justice appeared to be morphing into a market-based effort to secure competitive prices for consumers.” [1, p. 6]

1. Introduction

The call for energy democracy has emerged in the social movements in North America and Europe in the 1970s and 1980s [2–5], with different objectives [6,7]. On the streets, in the hands of non-governmental organisations (NGOs) and activists, the idea of energy democracy plays two very important roles: a teleological one – as it is used to promote participation in decision-making and decision-implementing processes; and a deontological one – as it is used as a reason for demanding more participation. Within these movements, although – or precisely because – it is vague, the concept of energy democracy is strong, as it draws from and resonates with the struggle for democracy and justice [8], it is easily accommodated in different discourses and narratives [9], and – due to its teleological and deontological roles – it can effortlessly ground the struggle for more participation [10].

Recently the concept of energy democracy has emerged in academic literature – making the same crossing as others before it [11,12]. But this crossing is problematic, as several authors explain [13–16]: in a nutshell, it is vague, uncritical and fragmented (between the North American and the European literatures). These three issues are in sharp display in the way that the concept of energy democracy incorporates justice, the latter understood in its “external” (energy, environmental, social justice, among others) but also in its “internal” (distributive, procedural, restorative, cosmopolitan and recognition) dimensions.

We articulate a concept of energy democracy in section 3, drawing on the aspects that are most often found in the academic literature, and especially in the literature that deals with the concept at a conceptual or theoretical basis (for instance [2,4,15–22]). For now, it is enough to say that energy democracy is an ideal and a process [16]: it is both an abstract vision of a *just and low-carbon* world, and the process that should progressively lead to such a world [14,16,17]. *On the one hand*, our contribution aims at laying bare that *justice* is one of the original objectives of the energy democracy movement [8,20,22,23]. In 2016, Angel reported that activists were using the concepts of energy justice and energy democracy indistinctively to refer to “governance principles of a just, progressive and sustainable energy system” (citing Victor Menotti, [7], p. 12). Part of the academic literature also supports the argument: Jenkins goes as far as saying that energy democracy is “one of the means through which energy justice can be achieved” [20, p. 84], Burke and Stephens state that social justice is one of the goals of energy democracy [22], and Thombs states that democracy is a necessary, though not sufficient, “condition for a just transition” [21, p. 163, 166]. Having demonstrated that the attainment of justice is one of the objectives of energy democracy, *on the other hand*, our contribution aims

at testing the relevance of the *concept* of energy democracy as it emerges in the *academic* literature, to promote knowledge about justice and to translate into policies that promote justice – in short, to promote energy justice. In both respects, it is crucial to bring all dimensions of justice to the debate, because these dimensions are interrelated [24]. As we explain below, only an integrated vision of the different dimensions of justice can clarify how far the concept of energy democracy, which views justice only in its distributive and participatory dimensions, is from promoting knowledge about, and translating into policies that promote, energy justice.

Our original critique starts by pointing out the indecisiveness of part of the literature, especially that part looking at energy democracy through conceptual or theoretical lenses, in *critically* addressing the relationship between energy justice and energy democracy – for instance, the excellent piece by Szulecki and Overland raises the topic but fails to investigate it in detail [16]. We question the unproblematised assumption, present in another part of the literature – of which Jenkins [20] is probably the best but far from the only example – that energy democracy contributes to justice. As Lennon explains in a recent paper, energy democratisation in one community may generate injustices in another [1]. It is from the intersection of energy, democracy and justice that we raise our research question. How relevant is the concept of energy democracy for promoting justice, a clear objective of the energy democracy movement? To clarify: our critique is not levelled against principles of energy democracy, and even less against energy community initiatives – it is levelled against a *concept* of energy democracy as it slowly materialises in the academic commentary, because the concept fails to acknowledge that democratic principles alone are insufficient to deliver the ideal world that the concept promotes.

A concept is more relevant the more it contributes to the development of the field, the more it may be translated into policies, and the more interdisciplinary collaboration it promotes [25]. Our analysis strongly suggests that the concept of energy democracy fails on the first count and risks failing on the second and third. As to the first, the concept of energy democracy has not freed itself from the initial confusion with energy justice. This has led to a situation that we describe, borrowing Kuhn's terminology [26], as a *language war*: whereby, as the energy democracy literature attempts to address issues which have been addressed by the energy justice literature, and which are better addressed within a justice, rather than democracy, framework, it inadvertently engages in a language war with energy justice.

Still on the first count, the concept of energy democracy continues to rest on the assumption that democracy is intrinsically just – an assumption that has been debunked [27]. Our argument is that democracy does not necessarily deliver justice. Existing democratic processes have brought the Western countries, and countries that adopt the Western model of democracy, to the situation of *inequality* and *injustice* that they experience [28–30]. How exactly could further reproduction of these processes on smaller scale (energy) deliver more justice? Without answering this question, the concept of energy democracy risks translating into policies that only nominally promote justice. In attempting to address issues of *injustice* through a narrow

and non-systematic “democracy” framework, and inadvertently engaging in a language war with energy justice, the concept of energy democracy blurs the waters of policymaking and may lead to the adoption of policies that jeopardise, rather than promote, energy justice. In other words, the concept of energy democracy fails on the second count. On the third count, the concept clearly requires interdisciplinary research that is also cognisant of different democracies across the globe. In addition to the well-known fragmentation between North American and European scholarships [16], the data reviewed in section 2 suggests that there continues to be a more serious fragmentation, as reported by Angel back in 2016, with the Global South, “where ideas of energy sovereignty and energy justice have been more prevalent” [7, p. 4]. In contrast, the energy democracy concept is not only locked in the North American–European vision of democracy, but it also fails to *critically* dialogue with relevant literature, the most salient case being that of energy justice.

In this study, we contribute a first comprehensive justice critique of the *concept* of energy democracy in the academic literature. We show that energy democracy does not have an appropriate theoretical framework to respond to the *injustices* associated with energy systems and transitions [31]. We challenge the energy democracy literature to stop the language war and to acknowledge openly that democracy and justice are not synonyms and that the liberal concept of democracy that the energy democracy literature adopts, centred on the right of participation in decision-making about energy systems for individual and local communities in Western countries, may increase injustices, notably elsewhere, and may delay the transition to a more just and lower-carbon economy. We urge the energy democracy literature to critically engage with the energy justice literature to avoid describing issues of injustice as issues of democracy.

We use the JUST Framework because this is a relatively well-tested framework that helps bring this shortcoming to light in a systematic and rigorous manner [24,32]. The JUST Framework draws on energy, environmental and climate justice and systematically deals with different dimensions of justice (distributive, procedural, restorative, cosmopolitan and recognition), and by doing so it makes it clear that energy democracy may have the potential to contribute to procedural and distributive justice at the local level – but ignores the other dimensions and, a fortiori, ignores the tensions between democracy and justice. The JUST Framework shows that all dimensions of justice are equally important, that they are interrelated and that they not only complement but also strengthen each other. Our message is simple – the concept of energy democracy fails in contributing to the field, translating into appropriate policies, and promoting interdisciplinarity.

We proceed as follows. We first clarify our methodology and research design and proceed to provide a brief review of the literature on energy democracy with respect to the relationship with justice, deploying systematic quantitative analysis with coding (using the NVivo software). We present our original approach to reviewing the energy democracy concept and we utilise the JUST Framework (**Figure 1**). In utilising the JUST Framework, we follow the

approach of Sovacool et al. (2018) in ensuring we examine an interesting issue with novelty, rigour and style [33]. In section 4 the four elements of the JUST Framework are analysed: justice, universal, space and time. The final section brings us to the conclusion.

Figure 1: the JUST Framework, Summarised

J	T R A N S I T I O N	Justice	Justice takes the form of 3 forms of justice
			Distributive
			Procedural
			Restorative
U	U N I V E R S A L	Universal	Universal takes the form of two universal forms of justice
			Recognition
			Cosmopolitanism
S	S P A C E	Space	Space brings in location, where are ‘events’ happening ? (in principle, at local, national and international levels)
T	T I M E	Time	Time brings us into transition timelines such 2030, 2050, 2080 etc. and also ‘speed’ of the energy transition (i.e. is it happening fast enough?).

Source: [24, p. 77]

2. Method, Approach, and Research Design

This is a conceptual review paper: we proceed with a *narrative* review of the literature [33, p. 23] having in mind that the concept of energy democracy – which is the subject of our investigation – is vague and unsystematic. Moreover, our analysis is multidimensional (we address interrelated but different dimensions of justice), and our research question is not so narrow as to justify – or even enable – the articulation of a systematic (and, even less, a meta-analysis) review. Because narrative reviews tend to lack the same level of transparency and replicability as other reviews [33, p. 23], we clearly define the viewpoint and the theoretical framework from which our critique is articulated. Therefore, our viewpoint is that of energy justice, and our theoretical framework is provided by the JUST Framework. So our conclusions may only hold insofar as the viewpoint and framework are respected and followed by other researchers.

To enhance rigour, we deploy a quantitative analysis that aims solely at identifying the main titles in the energy democracy literature that address energy democracy from a conceptual or conceptual relevant manner. We also deploy this quantitative analysis to map the literature for the aspects of relevance under the JUST Framework. Because the concept of energy democracy is vague, and because the aspects of relevance respect different dimensions of justice, there is only so much that a quantitative analysis can contribute without becoming overcomplex. Its

objective is to assist in the articulation of a concept of energy democracy (section 3) and the identification of relevant titles dealing with issues that are relevant under one of the justice dimensions of the JUST Framework.

We mapped titles that take “energy democracy” (or “democratisation”) as their topic in Scopus and Web Science, obtaining 133 results (May 2021), and utilised the NVivo software for coding the results. Having in mind the external and internal dimensions of justice, and also having in mind the JUST Framework, we coded this literature for “energy justice” (50 results), “social justice” (18 results), “climate justice” (29 results), “environmental justice” (32 results), “procedural justice” (9 results), “distributive justice” (3 results), “restorative justice” (no results), “recognition” (3 results, but only 2 relevant) and “cosmopolitanism” (no relevant return). We then coded the literature for “inclusivity” (4 results, with a clear leading paper) and for “accountability” (12 results), which are topics of relevance for restorative justice. We arrived at 53 titles dealing with, but most often just mentioning, these dimensions of justice. It is worth highlighting how this is reflected in our analysis: while energy democracy offers arguments for a more substantial dialogue with energy justice respecting procedural and distributive justice, it does not do so as regards restorative justice, but it attempts to deal with issues of restorative justice – which increases the importance of section 4.2.3 below.

The review of the literature suggested that titles that address the interplay between energy democracy and justice can be roughly organised into three trends: conceptual papers (for instance, [4,16,20,22]), critical papers (for instance, [15,34]) or, more often, empirical studies (for instance, [1,9,23,35–40]). With some exceptions, authors are from North America and Europe and most of the empirical analysis concerns case studies focused on these two regions, confirming the fragmentation between the Global North and the Global South. Interesting exceptions, that confirm the trend, are [41,42], which look into indigenous communities in Mexico (a Latin, North American country), [43], which looks into communities in South Africa, [44], which addresses cases in the developing world, and [45], addressing cases in South America. On this note, we clarify that our critique takes the perspective of the Global South.

We also studied the literature having in mind the main problems that the dimensions of “cosmopolitanism” and “time” in the JUST Framework tackle, respectively the impact that actions in one region may have in terms of justice in other regions, and the lack of attention that the energy democracy literature generally displays about time. As expected, the energy democracy literature has very little to offer about the former – Lennon’s paper remaining the only one to deal with the question more thoroughly [1] – and nothing about the second. As for the internal dimensions of justice, papers deal more often with procedural justice and, to a lesser but still significant extent, distributive justice. The review of the literature showed that papers do not carefully differentiate between these dimensions of justice and energy democracy, and that they do not address the interplay between energy democracy and justice in a systematic manner.

This is where the present article contributes. We use the JUST Framework because it addresses the different internal dimensions of justice with due cognisance to space and time (as we explain in section 4 below), allowing our critique to move beyond the procedural and distributive dimensions that permeate the mapped literature. To apply the JUST Framework to the present analysis, we first review the literature on energy democracy to articulate a concept of energy democracy (section 3), which is close to the concept that emerges in titles that have looked at this concept more thoroughly [2–4,15–19]. Also in section 3, we turn to the analysis of how the key articles address the interplay between energy democracy and justice. In section 4, which constitutes the heart of our critique, we bring to light the *injustices* that affect the transition to a lower-carbon economy, with which energy democracy fails to engage. These can be broadly classified along the following lines: unjust distribution of costs and benefits, notably in terms of taxation, revenue management and lack of transparency (section 4.2.1. on distributive justice); procedural injustices affecting vulnerable peoples, and the lack of attention to the rule of law at different levels of governance (4.2.2 on procedural justice); restorative injustices arising from democratic decision-making processes that lack representation, effective participation, and accountability (4.2.3); historical injustices that prevent indigenous and other vulnerable populations from being recognised on their own terms in democracies (4.3.1 on recognition); injustices affecting parts of the globe that are caused or accentuated by decision-making in other parts of the globe that focus on the local but fail to take cognisance of the global citizen (4.3.2 on cosmopolitan justice), which link to the injustices created by the passing of burdens from one location to another (4.4 on space), and finally the problems related to the need for speed in the transition to a lower-carbon world (4.5 on time).

Having the JUST Framework in mind in reviewing the energy democracy literature allows us to assert that the aspects of justice that emerge in this literature fall within the procedural and distributive dimensions of justice – and, even so, they are not addressed in a methodologically strong manner, as democracy is blurred with justice. The other dimensions – restorative, recognition and cosmopolitanism – as well as the reverberations of all dimensions in space and time – are ignored or addressed marginally.

3. Energy Democracy and Energy Justice

In the fog of the literature on energy democracy, a concept can be distinguished. Energy democracy is both an ideal and a process [3,5–7,10,16,17,46]. As an ideal, it is a vision of a future low-carbon and sustainably growing world in which individuals and communities have participation in and ownership of energy systems. As a *process*, it consists of the strengthening and realisation of the right of participation of the individual and of the collective in decision-making on energy policies, in pursuit of more equitable and sustainable energy outcomes, including enhanced ownership of energy systems [3,6,10,17,21,47]. Importantly, the ideal

world is one that sharply contrasts with the capitalist neoliberal model, and the process is one of resistance against the same economic models [22].

In essence, energy democracy is – as democracy is – about (the right to) participation [48]. But the democracy in ‘energy democracy’ has specific characteristics that result from energy democracy originating in social movements in reaction to the perceived disempowerment of the individual and the collective caused by Western energy policies [5,46,49]. This movement originally drew from, *inter alia*, the struggle for energy justice, and in several titles – notably non-academic and academic titles that are less concerned with the concepts and more concerned about applying the principles of energy justice and energy democracy to the study of cases – it is almost impossible to disentangle the concepts of energy democracy and energy justice [for instance, 8,20,23,35,37,38,40,41,44,50]. Energy democracy is grounded on particular re-readings or reaffirmations of the rights to participation – and two important reaffirmations are, on the one hand, the assertion of the individual as an energy citizen or prosumer [6,10,47] and, on the other, the reassertion of the local community as an important actor that had been eclipsed by neoliberal policies, including privatisation [5,6,17,47]. Some titles, such as Thombs, clearly affirm the “one-person-one-vote” principle as fundamental in democratisation of energy systems [21]. Important papers clearly propose the pursuit of an ideal state of affairs in which both the individual and the community are empowered [5,14,51]. We note that this framework alone tends to be exclusive and restricted – incognisant of both the peripheries as defined in [52], who need to be recognised not as prosumers but in their own terms, and global cross-border problems as reflected in [53].

The review shows that energy democracy is often aligned with procedural and distributive justice. However, this relationship is not problematised. The literature fails to critically engage with these and other dimensions of justice. There is an underlying assumption that democracy leads to justice. An explanation for this assumption may be found in the account provided by Fairchild: energy democracy emerged from within the environmental justice movements, who demanded more participation in the relevant decision-making [8]. Energy democracy being about participation, most often the procedural aspects of justice are discussed but, again, with the assertion that more participation leads to more justice [2,54]. There are also titles engaging with aspects of distributive justice [55]. In some papers, justice emerges also in a subtler form, as a necessary requirement in the energy democracy process that should lead to the energy democracy ideal. Lennon, for instance, points out that activists do not embrace renewables uncritically but call for a transition to renewables with an explicit equity agenda [1, p. 4].

The review of the literature, from the critical viewpoint framework that we are adopting, also shows that the concept of energy democracy misses an opportunity to contribute to the debate by relinquishing dialogue with other regions and other fields. Almost all the case studies address situations in North America and Europe. Considering that the discussion in these case studies feeds into the more conceptual discussions about energy democracy, these papers are very relevant for the present analysis. By combining the principles of energy democracy and

energy justice to the study of cases, these papers also promote the development of the understanding of energy democracy at a conceptual level.

What emerges from the review is a concept of energy democracy that is shallow in interregional and interdisciplinary terms. On the one hand, the concept shows the old Eurocentrism in all its manifestations. In avoiding a dialogue with other regions, the concept circumvents the debates with which the concept should engage. Crucially, it ignores the debate about democracy in the developing world, where the Western neoliberal model of democracy was replicated at the same time as high levels of income, and wealth inequality persisted – affecting the indigenous peoples and those communities on the peripheries – and in some cases even rose [56] – again, evidence that democratic processes are not intrinsically just. Illustrating all this, the literature on energy democracy fails to acknowledge the shortcomings of democratic models in giving visibility and ensuring equality to vulnerable communities such as indigenous peoples in the developing and the least developed worlds [56], a topic to which we return when dealing with recognition (section 4.3.1). Not many energy democracy papers deal with indigenous peoples – some look into these peoples in the US [23], Canada [57] and Mexico [41,58].

On the other hand, the literature on energy democracy fails to engage with fields such as law, economics and political sciences, in which the debate on the clash of democracy and justice is established [27,28]. Let us emphasise the call for resistance, which we see as crucial in energy democracy given the objective of strengthening individuals and communities. Burke and Stephens [22] attempt to capture the meaning of energy democracy in terms of ‘resist, reclaim, restructure’. However, their lack of engagement with the well-established literature on civil resistance and their lack of concern for the geography of populations that are most affected by lack of ownership jeopardise the potential of their research. On the first point, there is no serious discussion about the meaning of resistance or about its immediate and long-term goals. For instance, the progressive building of alternative institutions and procedures is a well-tested strategy in civil resistance that increases the potential for structural change [59]. But goals and strategies need to be set clearly. In colonial India, Gandhi promoted the building of alternative institutions as a means to weaken the existing institutions that were *unfair* to the majority of the population [60]. Progressively established, alternative institutions delivered in fairness what the existing ones could not. Within the energy democracy framework, what exactly is the goal of building alternative institutions? Without a clear statement of the goal, one is left with the impression that the main goal is more participation – but more participation may lead to more inequality (see the conundrum of democratic governance in section 4.2.3). If this is so – if the concept defends resistance as a form of promoting the participation of individuals (prosumers) and local communities, rather than as an instrument for attaining more justice – this may be dangerous, as individuals and local communities in developed countries may become more adamant in the defence of their own world views without regard to the impact of these world views on vulnerable communities in developed and developing and less developed countries. The literature on energy democracy fails to deal with this counterfactual in appropriate terms. This is yet another reason why the discussions about recognition justice

(section 4.3.1), cosmopolitan justice (4.3.2) and space (4.4) are so important. Besides, this justifies a discussion about restorative justice, which calls for changing lenses and adopting a forward-looking, problem-solving approach to prevent injustice from happening (4.2.3).

Burke and Stephens, whose work on the need for alternative institutions and processes is perhaps the most developed in the literature, argue for an agenda of “creative destruction or disruptive innovation” so as to combine “policy instruments that simultaneously seek[s] to resist dominant energy systems and support their replacement” [3, p. 36]. The goal is restructuring of the sector – and the sector does need urgent restructuring. The questions are: why it needs restructuring; what type of restructuring energy democracy can contribute within the confines of existing democratic models; and how much time energy democracy requires to deliver its project. For instance, a well-known problem consists in not everyone who is entitled to participate in democratic decision-making being capable of doing so, or not every participant having the opportunity to be heard (section 4.2.3). This is not new to the energy democracy literature [9,15], which often suggests energy democracy initiatives as a way forward. However, reproduction of democratic models at a smaller scale in more *informal* institutions may in fact aggravate this problem, as the literature on restorative justice and democracy shows (section 4.2.3). The answer, in this case, is to ensure that human rights be respected within the smaller, informal institutions, to foster actual participation [61], but to ensure also that accountability mechanisms exist and are effective. A further question that requires an answer concerns the legitimacy of the intended objective (restructuring of the sector) and of the postulated strategy (creative destruction of existing institutions and procedures), from the perspective of the existing democratic principles in countries that are democracies. If the attainment of the intended objective through the postulated strategy is opposed – either by the local population (the main actor that emerges in the energy democracy literature) or by the whole of the population of the country in question – how should the energy democracy movement react considering the urgency of the transition to a lower-carbon economy? We address this when discussing time (section 4.5). Is it democratic to impose this agenda, if it ultimately came to this, on unwilling populations? But would it be *just* to do so? We come back to this point in section 4.2.2 on procedural justice, when we discuss the importance of complying with rules, and on section 4.2.3 on restorative justice, when we discuss the need to change lenses and adopt a forward-looking, problem-solving approach.

These questions cannot be addressed without a serious discussion of the institutions themselves and the democracy models that sustain these institutions. This debate needs to be articulated as a critique of democracy – lest the same injustices be replicated in the energy democracy alternative models. Indeed, if the objective is, as it seems to be, the reclaiming of ownership over resources and procedures, the real issue is lack of fairness, not lack of democracy – because the postulated lack of ownership occurs within democracies. In this regard, a strategy of building alternative institutions would work better if freed from the constraints that the concept of democracy, which emphasises individual participation in decision-making, creates. In fact, energy justice would provide a much better framework, as we show in the next section.

4. The ‘JUST’ Theoretical Framework

The theoretical framework utilised here is the ‘JUST Framework’, explained in section 4.1 and demonstrated further below in **Figure 2**. It was first proposed by scholars back in 2018 [24,62] working in the area of interdisciplinary legal geography perspective.

4.1 Applying the ‘*JUST Framework*’ for Critiquing Energy Democracy

The JUST Framework is methodologically sound, dealing with the different dimensions of justice in a systematic but also, importantly, a coherent manner. We need to emphasise that all these justice dimensions are interconnected, and they mutually complement and strengthen each other. Moreover, the JUST Framework is inherently interdisciplinary by bringing together energy justice, climate justice and environmental justice, and is translatable into policies by providing clear road maps [24]. Although we acknowledge the differences between energy justice on the one hand and climate and environmental justice on the other [63], this is not a main concern of our analysis – but we do highlight that the JUST Framework remains true to the methodological rigour of energy justice at the same time as it incorporates the concerns of climate and environmental justice. Furthermore, the JUST Framework combines the concern for the local with the concern for the universal and with the concern with time. Scholars have utilised the JUST Framework more recently as a practical framework in exploring justice in the development of critical minerals [32,64].

The JUST Framework has several key features that demonstrate its value. The first is that it aims to provide a practical research perspective to a research issue and/or problem, and thus provide a real-world view. This is vital to climate, environmental and energy (CEE) issues, where timelines are so important. For example, to meet 2030, 2040 and 2050 targets or goals, decisions need to be made now, and this is what the JUST Framework clarifies. A second key feature is that the JUST Framework unites CEE and other scholarship across the area of developing a low-carbon economy. Through this united perspective the aim is to reduce inequality and injustice within society. In this context, at its heart the JUST Framework has five elements of justice that aim to ensure that human rights are applied across each stage of the energy life cycle (from extraction to production to operation/supply to consumption to waste management). These five forms of justice are discussed extensively in the literature, and include:

- “*Distributive justice*: this concerns the distribution of benefits from the energy sector and also the negatives (i.e. are oil and gas revenues shared sufficiently?; who suffers the environmental damage?);
- “*Procedural justice*: the focus here is on legal process and the necessary full legal steps (i.e. are all the steps for an environmental impact statement observed?);

- “*Recognition justice*: are rights recognized for different groups in society? (i.e. in particular are we recognizing the rights of indigenous communities?);
- “*Cosmopolitanism justice*: this stems from the belief we are all citizens of the world and so have we considered the effects beyond our borders and from a global context?;
- “*Restorative justice*: any injustice caused by the energy sector should be rectified and it focuses on the need for enforcement of particular laws (i.e. energy sites should be returned to former use, hence waste management policy and decommissioning should be properly done).” [32, p. 858].

Figure 2 below explains the JUST Framework through an infographic, and there are four clear elements: justice, universal, space and time. These four elements are discussed separately in the next sections of the paper. The first element is *Justice* – this explores issues of distributive, procedural and restorative justice (section 4.2 below). The second element is *Universal* – this examines two holistic justice forms in recognition and cosmopolitan justice (section 4.3). The third element is *Space* – this refers to where events happen and at what level, for example local, national and international (section 4.4). Finally there is *Time* (section 4.5) – this is the value of the JUST Framework which connects it to the real world, and here transition timelines are central to the analysis, i.e. timelines such as 2030, 2050, 2080, etc. Further, in terms of *Time*, a key issue analysed is the issue of the speed of the energy transition and how slow, fast, etc. this transition is happening. It should be noted also that the JUST Framework provides a clear, impactful and original framework for analysing a concept such as energy democracy, and it follows the call in energy social science literature to be more innovative in research design as well as looking for systematic approaches [33].

Figure 2: The JUST Framework



Source: [64, p. 357]

Sections 4.2-4.5 examine the four core parts of the JUST Framework introduced above – justice, universal, space and time. Our objective is not to be exhaustive but rather to zero in on

one or several crucial problems under each of these core parts of the JUST Framework. Finally, the contribution here is twofold: first, it uses the JUST Framework; and second, it aims to move from academic debates to practice in terms of realising and achieving justice in the energy sector over what energy democracy delivers.

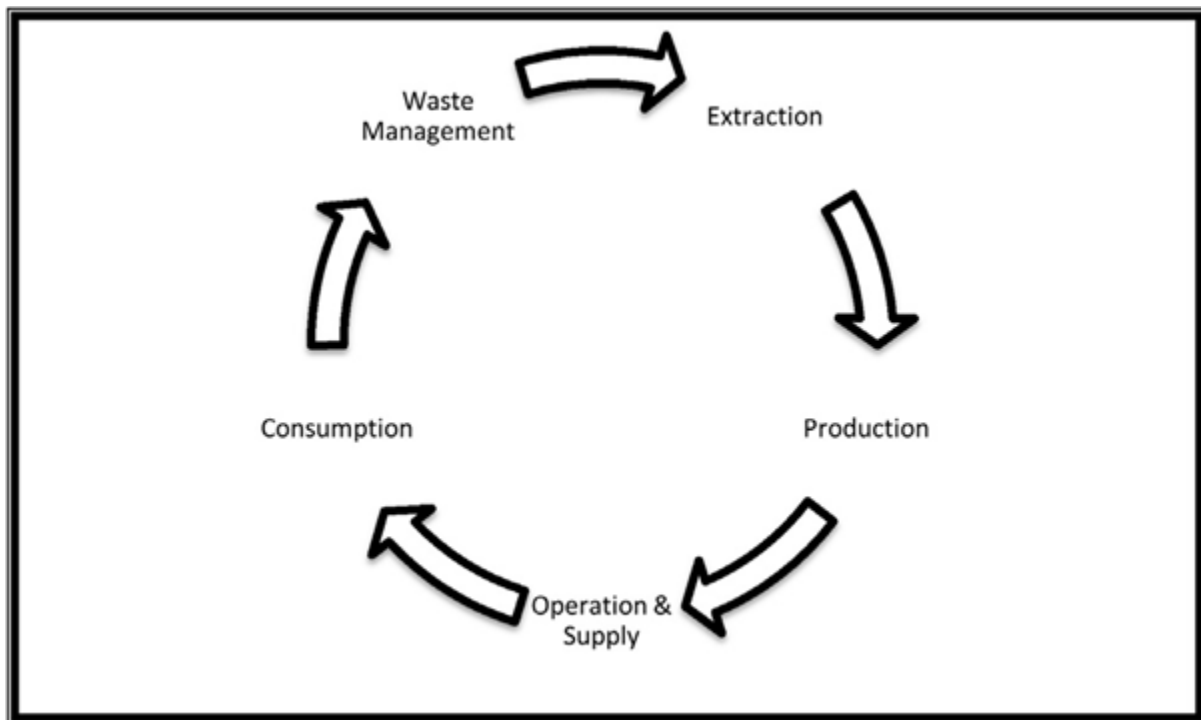
4.2 Justice and its Elements – Distributive, Procedural and Restorative Justice

4.2.1 Distributive Justice

Distributive justice is among the three pillars sustaining the research and the practical realisation of justice. In examining distributive justice from a JUST Framework perspective (following [32,62,64]) there is a need to look at a number of core issues, for example taxation, revenue management and transparency issues. In terms of energy democracy, the essential argument has been that small-scale energy projects increase distribution in terms of providing energy access and, generally, the sharing of income from the project. This is a correct assumption but is rather limited, and the term ‘energy democracy’ really only appears where the individual engages with the energy sector.

In reading the literature [16], the majority of energy democracy research focuses on issues around electricity, with some exceptions [3,51]). This ignores the rest of the energy sector. In thinking of the energy sector in terms of its life cycle [65] – below in **Figure 3** – there are many other parts to the energy sector that need to be addressed. Simply discussing the literature issues around Operation & Supply and then Consumption is not sufficient. In many ways this lack of a vision of energy as a system has given rise to research scholarship in energy justice [66]. Energy democracy may be of value, but its limitations are clear: democracy will be a process that will already have predetermined outcomes, given the earlier stages of the energy life cycle.

Figure 3: The Energy Life Cycle



Source: [65]

The previous statement on predetermined outcomes really underpins why energy democracy is a construct of high-income nations. It mirrors discussion by the eminent philosopher Thomas Kuhn and his views of language wars [26]. Indeed, is the term ‘energy democracy’ needed? For example, it can be inferred from [54] that the value of energy democracy will contribute to a deeper understanding of participatory democracy. However, the majority of issues covered by energy democracy are already contained in procedural justice (as will be discussed later). It is just repetition, to a degree. In the context of distributive justice, and as a key feature of energy democracy, with its focus on community energy projects, it is a concept that is severely weak in its application.

Energy democracy does not engage with the key issues that have caused us to have an unjust energy system, particularly in terms of distributive justice. No real solutions are provided to the taxation, revenue management and transparency issues. Indeed, energy democracy as it is purported in the literature seems to ignore the dominant role of multinational energy companies which extract all the resources and build the projects. Yet Szulecki and Overland [16] state that a key goal of energy democracy is a “just and democratic energy system”. It seems there is no escape for these scholars from the issue of justice. However, the lack of discussion around profits, taxation and revenue ignores the real issues.

For many, multinational companies (MNCs) (i.e. energy MNCs, and MNCs more generally) have eroded democracy [67]. Further, many countries worldwide practice ‘democracy’ in various forms. And, in terms of distributive justice, democracy has led the majority of developed nations to a point of great income inequality, according to the leading economist Piketty [68,30]. For these energy democracy scholars, will their democratic ambition lead us to similar outcomes? Is that why the aforementioned scholars Szulecki and Overland [16] slipped in the word ‘just’ to the goal of energy democracy? The answer is simple: these scholars should engage in energy justice and just transition scholarship. The tools are already there. There is no need to invent a ‘new language’, as Kuhn would state it.

4.2.2 Procedural Justice

The concern with decision-making processes is one of the hallmarks of the energy democracy literature, which argues for a wider, enhanced participation of individuals and communities, notably at the local level [3,4,16,19,51]. The framework of this call for more democracy is not always clear – but it is noticeable that it comes either grounded on the assumption that more democracy would automatically lead to a move away from fossil fuels, or embedded in a weak resistance, reclaiming and restructuring strategy that seems itself grounded on the same assumption. Our critique concerns the feasibility and fairness of the project from the perspectives of society in general and the peripheries in particular. Energy justice offers a framework for the critique, because energy justice is also concerned with decision-making processes. However, in contrast with energy democracy, energy justice acknowledges that injustices at different levels will likely interfere with the move towards a low-carbon economy [62,69] no matter how democratic the processes are, especially at the local level. In the JUST Framework, procedural justice reaffirms equality and non-discrimination [70] and the need for compliance with legal processes at different levels (locally, nationally, internationally).

Three situations are particularly relevant, as they lead to points of friction between democracy and justice: when the majority decide in regular democratic processes against the abandonment of fossil fuels, as happened in the “climate election” in Australia [71]; when minorities such as indigenous peoples are unable to participate in the regular democratic practices of the majority – the case of Native Americans being a well-known example [72,73], but far from the only one (for instance, [74]; for a summary discussion, see [75, p. 139]) (this is also an issue with recognition justice – see below); and when the local majorities decide to implement measures that clash with supranational legal rules which came about after intense negotiations among countries – notably, for the present purposes, among democracies – and which prevail over their domestic laws and decision-making ([76], art. 27 for example).

The underlying factors that lead to these situations are numerous. One of these factors is with regard to the different levels of information that participants in the processes have. Both

literatures affirm the importance of informed participation [3,70]. But there is a difference in the approach. Burke and Stephens argue that “participation also includes education and technical assistance” [3, p. 39] and that deliberative democratic processes could be used for informing participants. However, this does not take into consideration the fact that participants may reject the information to which they are exposed if that information contradicts their beliefs, cosmologies and life experiences – as seems to have happened in the “climate election” mentioned above. Even participants who accept the new information may simply decide against it because they are pursuing more urgent interests. For a major part of the population of a city that depends on fossil fuels, what may be important is to ensure that jobs are not lost, with present interests prevailing over the knowledge of what should be done for future generations. Also, the assumption that more democracy would lead to a move away from fossil fuels does not take into consideration that information asymmetry will invariably be a reality that affects the outcomes of participatory processes; it is simply unfeasible to expect all participants to be equally informed about all the factors which are relevant to decision-making – especially if these factors are complex. Finally, local constituencies may be affected by forces, such as far right (or, to the same effect, far left) authoritarian populism, that may be able to capture the debate for their own benefit – for instance, for the promotion of an agenda against international institutions, to escape international accountability [77]. Energy justice – but not energy democracy – clearly identifies ingrained historical injustices, as well as new injustices generated by low-carbon transitions [78–80], as important triggers of these behaviours, enabling the articulation of policies that take these into consideration, and at the same time demanding respect for internationally agreed norms aimed at curbing fossil fuels.

As to the second example, for indigenous peoples what may be important – more important than the move towards renewables – is the ability to make themselves present with respect to their identity, which means to be present on their own terms (to be visible as they see themselves and not as outsiders see them, for instance, as prosumers) in national democratic processes affecting their lives – it is not only a question of being involved in the decision-making, it is a question of how and when to be involved [56]. Further, this is about their ability to make their decision within their own processes and institutions and pursuant to their own cultures and knowledge [56]. This form of participation is the opposite of “inclusion”, at least in the Western view of inclusion, because the latter aims at integrating indigenous peoples to a category of national as outsiders see them – this being the attitude, for instance, of the current Brazilian head of state [77], who revived early exclusionary practices [81] that have historically jeopardised the ability of indigenous people to be seen, to participate and to decide on their own terms.

As to the third example, decision-making at different levels may be informed by very different rationales. For a regional authority such as the European Commission, and similar competition enforcement agencies across the globe (which are national agencies with jurisdiction over the whole country), which are mandated with the responsibility to ensure that workable conditions competition prevail in the market [82, arts. 32, 107 and 108], a decision by local constituencies

to fund renewables with public money may be simply illegal [83–85], for reasons that may be very difficult for local constituencies to fully understand.

Within the JUST Framework, procedural justice offers a way out of situations like these because it acknowledges and tries to address the underlying factors that lead to these situations – for instance, pointing to the need for more than simple inclusion with physical participation in decision-making processes – and arguing for proper mobilisation of local knowledge, for transparency and for real representation [70] and for compliance with rules at different levels of governance. Again, energy democracy struggles to offer answers to the difficult questions that arise in a topic that has been covered by energy justice.

4.2.3 Restorative Justice

Energy democracy is strikingly silent about restorative justice. Yet the restorative justice literature helps to clarify important shortcomings of the concept of energy democracy. We address two of them, namely: the lack of understanding of damaging behaviour and its impact on the social fabric of trust among stakeholders, on which energy democracy processes rely; and the inability to deal with problems respecting representation, actual participation, and accountability respecting energy community groups.

Let us start with an energy democracy account of these problems. In an important paper, Van Veelen begins by questioning the assumption that energy democracy literature makes that “community projects are more democratic or just” [15, p. 645 and see also p. 647]; and, after discussing what can be summarised as the “conundrum of democratic governance” (more participation leading to more inequality) [15, p. 648], she defines three main problems: lack of active participation (arising from *hidden barriers* to participation, including problems with recruitment); lack of *accountability* of decision-makers (caused by lack of effective accountability mechanisms, and by decision-makers often being professionals who assume what we interpret to be a domineering, even paternalistic role); and inability to deal with disagreement (which may be caused by, among other things, social and power struggles in the community at large). On the latter point, this is what Van Veelen notes from one of the cases: “community leaders viewed this detractor’s arguments as simply the latest chapter in the historically antagonistic relationship with the group’s leaders” while “people in the community viewed the community leaders’ reluctance to engage with ... detractors’ arguments as an attempt to silence alternative voices” [15, p. 657]. In another important paper, Lennon introduces the problem of responsibility and accountability of energy community projects for their own decision-making: “the community unwittingly reproduced the logics and practices of the extractive economy in spite of their best efforts to realize a regenerative economy” because “in focusing on reducing prices, they prioritized contractors who use solar panels

manufactured by companies with” a poor record of respect for human rights and environmental law [1, p. 6].

The shortcomings of the energy democracy approach are clear when it comes to *addressing* these problems: there are no clear or underdeveloped proposals – and this, we believe, is because although the literature seems to notice that these problems emerge in clashes between justice and democracy (“conundrum of democratic governance”), it fails to understand that they need to be addressed from a justice perspective. Restorative justice, as we explain, addresses them by imposing limitations on democratic processes – by reaffirming the need for *securing* respect to human rights and environmental law, by articulating clear proposals for internal and external accountability mechanisms, and by redefining the role that professionals or experts should play in community projects. We first review the concept and scope of restorative justice based on the classic [86–90] and the more recent works – the literature on restorative justice and democracy [91–96] and on the specific treatment of restorative justice in the energy justice literature [97]. Then we discuss how this helps to address the problems that Van Veelen and Lennon identify.

The first call for restorative justice was powerfully made in 1977 by, inter alia, Randy Barnett [86], who draws on Kuhn’s work to propose a “shift of world-view” [86, p. 287] in criminal justice, away from the punishment paradigm with the state at the centre and towards a *restitution paradigm* with the victim and the community at the centre. Since then, much has been written [87,98,88,90,89]. The most accepted definition of restorative justice has it as a “process whereby parties with a stake in a specific offence collectively resolve how to deal with the aftermath of the offence and its implications for the future” [89, p. 8]. The main objective of this process is the *restoration of the trust* between victim, offender and community; and, for this to happen, the *dignity* of the victim – who needs to be acknowledged as having been violated and who needs to be restored to her or his full self – and of the offender – who needs to actively participate in his or her own rehabilitation – must be respected and promoted [88]. Zehr asks us to *change lenses* and see crime as an offence to real people who live in real communities, and to understand that crime should be tackled through a *communicative process* that restores dignity to the victim and supports the offender [98]. On the latter point, Braithwaite rejects the stigmatisation of the offender and proposes a process of reintegrative shaming [87,99,92]. We note once more that the purpose is the restoration of the social fabric of trust. The process of restorative justice is directed by some principles: the concerned individuals (offender, victims, their families, their communities) must be involved; crimes must be placed in their social context; there needs to be a preventative, problem-solving orientation; and practice must be flexible [89].

It did not take long for scholars to note that this “shift of world-view” or “changing lenses” has a higher potential to promote justice in democratic processes than early writers may have entertained. Braithwaite notes that “restorative justice is a wider strategy of confronting injustice in any arena where injustice occurs” [92, p. 34], that is, beyond criminal law. He

explains that the old state-centred paradigm, because it disempowers victims “first at the hands of offenders and then at the hands of a *professional, remote* justice system that eschews their participation” [100, p. 16, emphasis added], is “*corrosive*” to democracy [100, p. 16, emphasis added] In contrast, restorative justice enables *deliberation* about the crime among ordinary citizens, who often engage in discussions about the root causes of the crime, such as racism, unemployment, and culture – which allows restorative justice to be an element in *deliberative democracy*. Likewise, Dzur sees a “*democratic logic* involved in this process [restorative justice], one that disperses rather than centralises authority, responsibility, and accountability for decisions” [91, p. 369]; this is important to address “social distances between people, limited understanding of the others, and sparse opportunities for meaningful collaboration”, which Dzur correctly defines as “modern problems of crime” [91, p. 370]. We believe that energy community initiatives have the same potential to deepen deliberative democracy (incidentally, this shows that our critique is not levelled against these initiatives but against the energy democracy literature).

Nevertheless, it soon becomes clear that restorative justice circles might fail to secure representation, actual participation [96, p. 71-4] and accountability – the same problems that Van Veelen and Lennon define in their investigations. Restorative justice literature addresses these problems from different angles. For the present purposes, we note the new role that professionals (for instance lawyers, social workers) may play in these respects. Early restorative justice writers do not see much need for professional involvement in restorative justice procedures (restorative justice is also a call to move away from the professional and remote delivery of justice by the state) – but one of these writers, Christie, redefines the role of professionals as “*resource-persons*, answering when asked, *but not domineering*, not in the centre” [101, p. 12]. This is a fundamental principle that energy democracy seems to miss: while professionals (for instance, Van Veelen mentions businessmen) may assume the role of managers of energy community projects, they should *never* have a domineering role, and accountability mechanisms should be in place to ensure this is the case.

However, more recently, Olson and Dzur go further and identify different roles that professionals may play in restorative justice circles, including the recruitment of volunteers to ensure representation and to screen out those with inappropriate attitudes, the training of community members to better participate in decision-making and the generation of citizen engagement in the long-term [93]. Braithwaite deals with the accountability problem in a convincing manner by defining the infinite regression in hierarchical accountability (‘who guards the guardian?’) as a problem, and addressing it with a *republican* conception of accountability (guardians organised in circles that are expandable ensure mutual guardianship) [92]. This author also clarifies that the state and non-state actors have a role to play in securing accountability in restorative justice processes and in ensuring that human rights, as set forth in international conventions, are protected in these processes [102]. Importantly, when it becomes clear that restorative justice does not work well (for instance, corporate crime), the strategy must change back to the state adopting a deterrence approach ([103, esp. p. 29] contrast with

[15, p. 657 on the importance of judicial intervention]) which may involve judicial adjudication and punishment of the offender – *but* in a manner that continues to prompt the community to work on *restoring* justice [92].

We complete our theoretical framework with the growing literature on restorative justice within energy justice. Hazrati and Heffron relate restorative justice to distributive justice (“where RJ is applied to restore distributive injustice”), recognition justice (“greater consideration for marginalised and vulnerable people” with special consideration to future generations who should be represented “by proxy”, for instance NGOs), and procedural justice (the need for law and policy regulating the restoration of “the environment to its original state after energy activities”) [97, p. 4]. To this we now add a clarification about the type of rights that must be respected and about the links between restorative and cosmopolitan justice. Above all, procedural justice requires observance of human rights and environmental law, including the emerging rights of nature, as clearly affirmed in parts of the Global South, for example Ecuador [104, articles 10 and 71-4]. Cosmopolitan justice is, before anything, awareness about us all living in one world and about the implications of the damaging behaviour across borders (see discussion in section 4.3.2 below). Understanding the links between the restorative and cosmopolitan dimensions of justice requires a new changing of lenses, to define community as a global community and to recontextualise the victim as any victim in any part of this world.

In essence, therefore, we can determine that deliberation is no longer deliberation only about the implications of the damaging behaviour to the local, but also to its implications for the global community. So the preventative, problem-solving principle that directs restorative justice *creates a burden* on actors, *any actors*, involved in energy projects, *including* energy community groups, who must understand the impact of their own decisions on vulnerable communities in the Global South but also in the Global North. With this in mind, we return to Hazrati and Heffron to recall the three applications of restorative justice in energy justice, two of which are: (i) before an injustice occurs, which requires decision-makers to deliberate about the potential harms of their decision; and (ii) after the injustice occurs, which requires restoration of the victim and environment to their former state. The third application, which the authors mention but do not develop, respects the transition to a lower-carbon economy – now restorative justice is concerned with loss of jobs and damages that have occurred [97, p. 5]. This is an important aspect because it *clearly* imposes on energy community enterprises the burden to assume responsibility over, and account for the implications of, their own decisions on vulnerable communities in the local community and elsewhere in the world, as well as on the environment.

The contrast between the manner in which the same problems are addressed in the energy democracy and in the restorative justice literatures shows the limitations of democracy studies that attempt to solve justice issues without a proper incorporation of justice into their theoretical framework. Restorative justice has much to offer, as it requires a forward-looking, problem-solving approach to the harmful behaviour, one that restores trust to the social fabric. Evidently,

energy democracy groups are not expected to address harmful behaviour in the community that affects the decision-making within the group – but they need instruments to deal with this. The energy democracy literature fails to tackle this properly. Restorative justice also provides clear guidelines for addressing issues of representation, actual participation, and accountability: respect for human rights and environmental law, including the emerging rights of nature, redefinition of the role of professionals – who must be resources but not domineering actors – and the republican conception of accountability. Finally, there is the problem that Lennon identifies [1, p. 6] of how to deal with the decisions of energy democracy groups that negatively affect vulnerable communities elsewhere. To this, we add community decisions that jeopardise the move away from fossil fuels. What the conflation of restorative, procedural and cosmopolitan justice shows is a burden on energy community groups to change their lenses and understand that they need to ensure that their decisions do not show a disrespect of human rights and environmental law on a global scale, and be aware that, irrespective of their good intentions and immediate interests, their decisions may harm people and environment in and beyond the local community: this creates a burden for the groups to adopt a forward-looking and problem-solving approach, to deliberate about the potential negative aspects of their decisions, and to act to prevent them from emerging. Again, it is the energy justice – and not the energy democracy – literature that has the proper framework to articulate these proposals in full.

4.3 Universal

4.3.1 Recognition Justice

Recognition justice is concerned with the recognition of rights of different groups as both national development and individual energy projects happen. It is an important issue across the energy sector, and often in the literature the focus is on recognising the rights of indigenous communities [69]. Not every country has indigenous peoples, but for some countries they are very important and may represent a significant minority who are historically affected by invisibility in decision-making processes affecting their lives [56,105,106] and high levels of inequality in comparison to the rest of the population [107]. Nevertheless, the assessments carried out, and conclusions that are drawn in respect to indigenous peoples, are applicable to other vulnerable communities as we now explain.

In fact, we should attend to the *peripheries* of the Western world and, even more so, the *peripheries* of the world (from the Western perspective!) – notably, vulnerable communities in the developing and least-developed countries – which have been historically affected by invisibility and inequality. The peripheries constitute a complex reality in space but also in time.

In terms of space, the periphery is a geographical space occupied by vulnerable communities (indigenous peoples, as we mentioned, but also fishermen communities, communities formed by descendants of run-away slaves, traditional rural communities, and in urban areas, *favelas* and slums, ghettos, among others). Democratic processes can only go so far in delivering justice to the peripheries [52] because the peripheries have been historically invisible in political democratic decision-making processes [105], and affected by increasing levels of inequality caused by the neoliberal model of democracy [28]. A wide range of issues at the local level – from the challenges involved with an individual’s self-identification as a member of a vulnerable population to invisibility in statistical data and lack of instruments for effective participation in decision-making – affect the democratic processes at the local level (for instance, [108,109]). In contrast with the energy democracy literature, recognition justice, notably when combined with restorative justice (4.2.3) and cosmopolitanism (4.3.2), can tackle these issues. Globally, the issues are no less complex – starting with the ways in which decision-making at the global centres of power affect the peripheries [110] (see our discussion on space in section 4.4. and cosmopolitanism, 4.3.2).

Energy justice calls for proper recognition of the different social actors with respect to their right to fair and free representation. It calls for the attention of those actors who are marginalised and who are often invisible in decision-making processes that affect their lives – and also for their “arguments, feelings and values” [69]. Further, energy justice calls for recognition of the peripheries on their own terms rather than in the terms of the majority. So two main concerns emerge – it is not only a question of recognising those who are often ignored in decision-making processes (evaluative dimension), but it is equally a question of understanding how they should be recognised (normative dimension) [70]. The case of indigenous peoples illustrates both points: first, self-identification as indigenous is the fundamental criterion for their identification; second, the social, cultural, religious and spiritual values and practices of these peoples must be protected and the integrity of their values, practices and institutions must be respected [111] in national development and individual projects.

Drawing on this, we argue that recognition justice requires the *continuous affirmation* of, and the *continuous respect* to, the rights and all the values, practices and institutions of the peripheries as development occurs and as individual projects are implemented. A crucial manifestation of all this is the affirmation of these people’s right to say “no” to whatever development project or individual project is offered to them – which creates, for the academic and policymaker, the responsibility to understand the reasons without imposing solutions that are extraneous to the people in question. But this also results in a series of obligations for the governments (for example the establishment of procedures and institutions that enable these people to be consulted and to give their free and informed consent in decision-making processes [111]) under domestic and international law, and also in obligations and responsibilities for investors, at least in terms of carrying out the necessary environmental and social impact

assessment for their projects, submitting the reports to proper consultation and obtaining a proper social licence to operate [32].

In sharp contrast, energy democracy proposes that activists “draw in [sic] historically marginalized groups” who bring “a fresh set of priorities and values to the debate over energy futures” and suggests that activists “*target* marginalized low-income communities and communities of colour for renewable energy projects” [3, p. 42, emphasis added]. So, energy democracy, in contrast with energy justice, plays a cavalier attitude to the possibility that “marginalised groups” may not *want* to be so targeted for renewable (or any other, for that matter) energy projects – that marginalised groups may not *want* renewable energy (or any other) projects in their lands. In short, the political agenda in the energy democracy project distorts the meaning of real recognition.

But the periphery is a complex reality in terms of time, a reality that encompasses future generations. Now the limitations of democracy come to light in full. But nothing in this debate is new [112]. The interest of future generations – who are unable to participate in today’s democratic processes – has been a concern of the energy justice literature, which proposes representation by proxies, for instance, NGOs [97]. Energy democracy fails to seriously engage with all these literatures, and this failure rebounds on the definition of problems within the energy democracy debate. The experience from other fields (resistance studies, sustainable development) and from certain regions (the peripheries), which are crucial to bring recognition justice to realisation, is lost.

4.3.2 Cosmopolitanism Justice

Lennon’s 2021 article is the only one in the energy democracy literature to address, at a deeper level of detail, how local democratic processes in the developed world may create injustices in other parts of the world [1, esp. p. 6]. Here we notice the language war mentioned before – with energy democracy attempting to discuss a topic, in terms of democracy, that energy justice has been discussing, at a deeper and more systematic level, in terms of justice. We notice the weakness of the energy democracy approach to tackling this problem when it is contrasted with the JUST Framework, which deals with cosmopolitan justice as a dimension of justice.

Cosmopolitan justice is based on the principle that everyone is a citizen of the world. In this context we think of the world as one global industry and therefore there will be cross-border effects from our activities. In terms of the energy sector this means that there will be impacts from their use in global business supply chains across the world. A classic example of this is related to the extractives industry and concerns coal mining. In 2019 in New South Wales, Australia, a court upheld the Minister of Planning’s prior denial of an application to construct an open cut coal mine, in part because of the effects of the carbon dioxide that would be

produced in other places in the world once that coal was transported and burnt outside of Australia [53]. This section identifies the issues in this context for energy democracy.

One issue which is off the radar for energy democracy is maritime global shipping. A cosmopolitan mindset offers the possibility to reflect upon the impact of systems that are not restricted to one location, yet have a significant impact on all global citizens [113]. For example, a key target area for climate change actions over the next decade is shipping emissions [114]. A second key concern in this area is the transportation of essential energy materials, from renewable components to oil and gas. An energy democracy analysis provides little on this issue. The JUST Framework allows us to shed light on the significant impact of the pandemic on nascent renewable energy supply chains. Little governmental action has targeted supply chain issues for renewables, and yet fossil fuel systems continue to benefit from state subsidies. A third dimension of shipping concerns the fuel used itself [115]. A cosmopolitan perspective reinforces the global importance of shifting to alternative fuels other than marine oil. A fourth dimension of international shipping to be taken into consideration is that of shipbreaking. Energy companies have partaken in major shipbreaking or ship waste activities in the lowest-income countries, with little regard to the hazardous impacts on communities at these sites [116]. A cosmopolitan perspective in the JUST Framework sheds light on globally shared benefits and ills such as international shipping in ways that energy democracy is incapable of.

A third example of cosmopolitanism in action that we raise here is our global response to the Arctic and the impacts of climate change. The energy democracy framework is limited, in this region, to identifying small community engagements with local government [117]. Connecting back to our previous example, the international code for ships operating in polar waters – the so-called Polar Code, adopted by the International Maritime Organisation – is one of the great success stories of a cosmopolitan mindset with regard to both the Arctic and shipping [118]. Arctic nation states, alongside non-Arctic nation states, agreed upon a wide range of regulations that relate to design, construction and environmental protection matters relevant to ships. The Arctic is a region that hosts 4 million people and several indigenous peoples [119]. And yet the region is of global importance with regard to climatic and environmental ecosystem processes, as well as the home to future, much disputed, resources. This means that it is an area which deserves our attention. It demands our critical insights into the actions of the Arctic states such as Russia and the United States, while understanding why non-Arctic states such as China, Japan, India and Singapore have become active in the region [120]. More work is needed to agree upon international codes such as the Polar Code to regulate the actions of governments, business and civil society in the region, in a way which respects indigenous peoples [121]. The JUST Framework moves our attention directly on this understudied energy issue.

4.4 Space

The third part of the JUST Framework is ‘Space’, which is a core area of research within geography [122], the literature of which identifies several areas of examination which are analysed in turn here (and also identified in [32]). We argue that the conceptual and empirical power of energy democracy is constrained by its unitary focus on local dimensions of energy activism, systems and public engagement processes. The literature has oscillated between exposing individual cases of positive or negative local activism [15,19,51], town or urban planning successes or failures [21,47], and transition; nationalism, populism and the fall of Western democracies [123].

Feldpausch-Parker et al. argue that “energy democracy is fundamentally rooted in localised struggles and activism” [54, p. 2]. The authors continue to reflect broadly on the development of this concept as an attempt to move beyond energy justice and participation and reflect on notions of power more explicitly. In this context, a recurring issue is the importance of local resistance. The empowerment of local people is the ultimate end goal of the concept. It is a rallying call for local activists to come together to resist the imposition of a perceived undemocratic energy decision [3,10]. Scholars are drawn to the most controversial high-profile individual cases of undemocratic policy implementation. This risks an ignorance of the needs of others beyond this locality. The wishes of those in less well-known cases go under-recognised. Even worse, the burdens of one location are simply passed to another.

Energy democracy is too focused on villages, towns, or cities. It continues to ignore the importance of national, transnational, supranational and international dynamics. This means that the core arguments remain limited. In contrast to [124], opening the black box of “publics” is not only possible but necessary if energy democracy is ever to break from its local confines. As a rare, non-Western example, Delina [6] focuses on one village, one town and one small district of Thailand (the Pa Deng case). The focus is to demonstrate how public engagement took place and the ways in which it empowered local people. The study aims to demonstrate how the evolution of public engagement meanings as “co-existent, collective, cultural, contingent, co-produced, critical, consequential, and connected” [6, p. 56]. But, as the author concludes, “the Pa Deng case could never be generalized” [6, p. 59]. Therefore, the Pa Deng case is important as it is a non-Western experience with energy democracy: but the energy democracy framework is insufficient to grasp some important nuances. Thailand remains the second largest importer of oil in Southeast Asia [125] and the case study does not indicate any possibility of being replicable in the country so as to change this basic fact; and nor does it aim too. Further, while the focus on the local may generate important studies on local deliberative processes in the developing and developed world, most of the energy democracy studies are concerned with the local (in fact, the city) in Western countries. The minority of studies of local experiences outside the Western world may serve to legitimise the continued focus on the *local* in the Western world and the continued disregard of national, transnational, supranational and international dynamics; and all of which energy justice factors into its framework.

The dominant preferred local context of energy democracy scholars is the Western city. It is viewed as the next frontier for the concept, moving beyond rural locations. In an analysis of Washington DC's sustainable energy utility, Teron and Ekoh argue that "perhaps the most significant indication for its development [energy democracy as a concept] is the potential for its implementation at the local governance scale" [47, p. 1]. Yet they go on to argue that "energy policy must be accessible and responsive to the needs of all communities" [47, p. 1]. These "needs" are limited to city boundaries. In discussing a localised energy system in a city in Sweden, Ferrari and Chartier conclude that degrowth potentially holds the key to sustainable energy futures [46]. This may be a credible recommendation for this specific case in Sweden. Again, the promotion of energy democracy risks the development of arguments that ignore the requirements of a globalised energy system and, above all, the needs of others elsewhere in the world.

Literature on energy democracy has moved from activism and its trade union movement origins into urban planning, from villages into cities. In the early development of this concept, it still fails to move beyond the local. To add to this picture, its empirical studies remain equally embedded in Western examples. The Delina [6] paper noted above is a rare exception. Energy democracy is primarily analysed in European countries, and above all the US [2,3,5,10,19,21,46,47,126–128]. As Barnett comments, we should start "from more worldly, intuitive understandings of injustice, indignation, and harm" [129, p. 252]. We need to be careful in limiting our awareness of meaningful participation to a physical locality. Energy systems are rarely local or even regional in nature. If energy democracy as a concept is to survive, it needs to embrace the democratic rights of others affected throughout the system. It must move beyond the local, especially when it is dominated by Western-only accounts of energy democracy.

4.5 Time

Time is a key consideration in the world today, and this is clearly the case in terms of energy and climate change issues. Every country which has signed the Paris COP21 Agreement has committed to developing energy and climate change plans in the context of transition timelines for 2030. Many countries have gone far further and have integrated these 2030 plans into later 2040, 2050, 2060 and 2080 objectives. A recent and potentially influential issue is the recent announcement by China of its aim for carbon neutrality by 2060 [130]. A second issue explored here is whether the transition is happening fast enough, as many state that it is not, and the speed of the transition is critical [131]. The need for speed in the transition is widely accepted by the vast majority of the research community. We need action quickly on the energy transition [131].

The emphasis on time is to consider the ‘real world’ connection. Businesses focus on time, as they operate under a central premise of ‘time is money’, while climate issues are very sensitive to time, as stated earlier. Energy democracy is not a concept that engages fully with the real world and with what happens in practice: climate change is happening *now*, and local communities in the Western world, despite some few energy community initiatives, continue to be a force that delays the transition to a lower-carbon economy. The lack of properly studied counterfactuals in the energy democracy literature, cases in which the community decides to reject renewables, and the insistence on cases that prove the argument that energy democracy is good, is concerning given the importance of an accelerated just energy transition today.

The two schools of thought on energy democracy, the North American and European (as identified by [16]), ignore the reality of the energy and climate goals – they ignore the aspect of time that the JUST Framework makes so clear. Only by bringing time to a systematic framework of analysis can we entertain certain important questions. Can society afford to wait while we seek out more so-called democracy in electricity projects? For most of the world old, conventional energy needs to be replaced by low-carbon energy as quickly as possible, and there is the need for energy infrastructure due to rising populations (in particular, for example, in Nigeria and Indonesia). Given the growing awareness of the shortcomings of participatory models, for example in the form of participation “tyranny” that only perpetuates entrenched injustices [132], or as described in section 4.2.3 (conundrum of democratic governance), top-down decision-making and action in the energy sector may be needed to achieve the bold low-carbon energy ambitions that are needed to ensure that the world meets the Paris Agreement objectives (i.e. keeping the world within a 1.5 to 2 degree temperature rise). It is important to note, however, that the JUST Framework continues to require respect to all other dimensions of justice.

Only cognisance of, and a firm commitment to deliver on, the different dimensions of justice would have ensured that developed countries, which are democracies, would have achieved their target of contributing to developing countries in terms of low-carbon energy support: as of 2020, the annual target of \$100 billion had not been reached. Only with a clear commitment to justice could democracy ensure that it is not banks from the developed world who are providing finance to build polluting and unhealthy fossil fuel infrastructure across the world; for example, 35 private sector banks from Canada, China, the EU, Japan, and the US have financed fossil fuels with USD 2.7 trillion since the Paris Agreement was adopted (2016–2019), with financing on the rise each year [133]. These issues are what justice and the just transition aim to explore.

Energy democracy in many ways creates a distraction to the injustices suffered across the world in the energy sector. Time is of the essence in ensuring that society has a just transition to a low-carbon economy. Energy democracy creates a debate for rich developed countries to give a voice to some energy consumers. Meanwhile, companies coming from these rich developed

world countries capture the voices of others all over the world in an undemocratic way. A focus on justice can ensure change and within the timelines, which change is needed.

5. Conclusion

We began this analysis by recalling the relevance of concepts and zeroing in on their contribution to the development of the energy field and to interdisciplinary collaboration. We argued that the concept of energy democracy fails on these counts because it circumvents the difficult questions, most prominent among them the question of how to address clashes between democracy and justice. We rejected the naïve approach to democracy that assumes that democracy is inherently just and that more democracy automatically leads to some expected just outcomes for a low-carbon world. We noted that injustices interfere in democratic processes, jeopardising the move towards a low-carbon economy. We discussed how energy democracy adopts a strategy – resist, reclaim, restructure – without demonstrating how the strategy avoids replicating the same injustices in delivering new, alternative institutions and models.

Our critique of the concept of energy democracy is articulated from the viewpoint of energy justice, and within the original and impactful JUST Framework, which brings to light five dimensions of justice – distributive, procedural, recognition, cosmopolitan, restorative – and places these dimensions in space and time; these two latter issues being very important in thinking about the divergent geographies of the Global North and South, and also timelines of 2030 and 2050 for example. In terms of distributive justice, the main conclusion is that energy democracy fails to address the key issues (for example the role and effect of multinational companies in and across democracies) that have led and that sustain the unjust energy system that we have today, which suggests that the energy democracy project may lead to similar outcomes. Procedural justice questions the naïve approach to democracy that assumes it is inherently just, and clarifies the weakness of the ‘resist, reclaim, restructure’ strategy – since it fails to deal with the simple facts that democratic processes may lead to outcomes that are contrary to the intended one and that local processes may be captured by actors pursuing their own objectives. Energy democracy fails to address the problems and issues that energy justice addresses under the restorative justice dimension. Restorative justice’s main proposal is for actors, any actors including energy community initiatives, to change lenses and adopt a forward-looking, problem-solving approach that prevents injustice from arising. Besides, while lack of repair of injustices is largely accepted as disruptive of democratic processes, and while it hurts the social fabric of trust on which energy democracy processes depend, the energy democracy literature does not seem interested in the topic.

Recognition justice requires continuous affirmation of, and the continuous respect to the rights but also to all the values, practices and institutions of, indigenous and other vulnerable

communities as development occurs and as individual projects are implemented. Only with the recognition that these communities have the right to participate, and the right to do so on their own terms, pursuant to their own institutions and procedures, will it be possible to address historical injustices, many of which caused the energy system to be so unjust. Energy democracy looks at these communities in a utilitarian manner – as targets for a political project – which the literature presents without asking whether it is accepted by such communities. Here the risk of replicating injustices is even higher. Energy democracy seems to be unaware of the issues discussed under cosmopolitan justice, which contributes to a more just energy sector by looking at the world as one global industry and by attending to cross-border effects from energy activities and thinking of the increased importance of global supply chains that dominate commerce in our modern world.

Similarly, when space is brought to the analysis, it becomes clear that the excessive focus that energy democracy places on the local makes it blind to the global effects of local decision-making on energy policies. Finally, time lays bare what is perhaps one of the major limitations of the energy democracy project: its reliance on alternative models that do not exist, that require time for implementation, while the need for real moves towards a low-carbon economy, on global and by no means only local terms, is urgent.

All in all, our main contention can be summarised as such: energy democracy, notably in the form of energy community projects, plays a role on the ‘streets’ of the developed world, giving focus to discourses and narratives aimed at creating social pressure on actors and authorities so as to move them to act on the need for a more sustainable energy sector. Insofar as these projects are able to tackle the injustices that affect them and avoid aggravating other injustices, they may promote deliberative democracy. However, academically the concept of energy democracy offers little for the development of the field for promoting the necessary interdisciplinarity in the field. Because the literature around this concept attempts to tackle injustices through an inappropriate framework that is centred on democracy, this literature inadvertently engages in a language war with energy justice.

Hence, from the viewpoint of our analysis, the concept of energy democracy fails to contribute to the field because it has not freed itself from the original confusion with energy justice; it fails to translate into effective policies because it does not have the necessary framework to address injustices; and it fails in terms of interdisciplinarity as it does not really engage with democracy and democracy relevant studies, notably critical studies, or with energy justice literature. The concept as it stands now is academically unnecessary. This is because its proponents preferred to build an alternative concept for the articulation of ideas that have been better articulated under the concept of energy justice and the general just transition to a low-carbon economy policy movement.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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