



## Original research article

## Energy justice without democracy? Energy transitions in the era of right-wing authoritarianism in Hungary

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## A B S T R A C T

Contemporary energy justice scholarship almost exclusively focuses on distributional, recognitional, and procedural justice concerns – how the ‘costs’ and ‘benefits’ of energy schemes are distributed, which sections of society are marginalised, and identifying processes for their remediation. However, while an escalating climate crisis spurs on unprecedented investments in green energy, undemocratic political regimes present a deeper challenge to energy transition projects. This article revisits the energy justice debate as a broader question of democracy, engaging purposefully with the democratic deficits in energy transition politics engendered by far-right authoritarian rule in Hungary. It does so through a mixed-methods approach that combines a policy evaluation of key national strategies on the energy transition, interviews with experts and stakeholders in energy poverty, and ethnographic field visits to energy-poor areas. Our results highlight how far-right authoritarian regimes can mobilise energy transition discourses, policies and projects to consolidate power, while simultaneously marginalising communities already at the edge of the society. Under regimes like Orbán’s in Hungary, the prospects of energy democracy understood as participatory, pluralistic, and community-driven is not just hindered, but actively undermined. We suggest future energy justice scholarship to systematically engage with how energy projects intersect with far-right and other political economic forms through which democratic backslide is entrenched.

## 1. Introduction

Energy justice scholarship is burgeoning. Yet its almost universal technocratic articulation of distributional, recognitional and procedural justice concerns – how the ‘costs’ and ‘benefits’ of energy schemes are distributed, which sections of society are marginalised, and identifying processes for their remediation – tends to lock energy justice debates into a liberal rights framework. For instance, such frameworks focus on whether poor communities get access to green<sup>1</sup> energy or whether local people were consulted before implementing an energy transition project. However, in far-right authoritarian contexts, energy projects and policies may be used to reward political allies, punish dissent, and consolidate control, with no room for critical voices. These dynamics are difficult to capture if we remain within the dominant energy justice framework.

This article explores these questions through the case of Hungary, where the intersection of energy poverty and democratic backsliding offers an urgent lens through which to revisit energy justice. Based on fieldwork between 2022 and 2024, we examine how the far-right authoritarian political project of the FIDESZ government<sup>2</sup> has reshaped the energy landscape through centralisation, elite capture, and ambiguous justice narratives. Our empirical focus is on national-level energy and climate policies as well as the village of Tiszabő, one of Hungary’s most disadvantaged communities, where the state has outsourced local governance to a government-aligned charity. Through interviews, field visits and a review of national policy documents such as the National Energy and Climate Plan (NECP) and the National Climate Change Strategy (NCCS), we analyse how energy justice is framed and enacted in the country.

The relevance of Hungary lies both in its self-proclaimed

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<sup>1</sup> We do not equate “greener” with fairer. Rather than assuming that the “green” economy benefits marginalised populations more than the fossil fuel one, our focus is on how the Hungarian regime of Prime Minister Viktor Orbán has misused the green transition by undermining its potential for justice.

<sup>2</sup> We refer to Hungary primarily as right-wing or far-right authoritarian, in line with scholarship that emphasises institutional degradation, concentration of power in the hands of the executive, and the erosion of democratic checks and balances [102]. The ruling party in Hungary is FIDESZ (Hungarian Civic Alliance), which has a supermajority together with the Christian Democratic People’s Party (KDNP). FIDESZ’s ideology is national conservatism and right-wing [103]. Prime Minister Orbán has led the country since 2010 as well as between 2002 and 2006. We do not use the qualifier “populist” to describe the Hungarian regime. While populist elements such as appeals to the “will of the people” or anti-EU rhetoric are present, we see populism as a political logic or discursive strategy rather than a fixed regime type [104]. Here, we focus on the right-wing and authoritarian features of energy governance rather than its populist traits.

commitment towards “illiberal democracy”, and its wider presence in a European context characterised by increasing democratic deficits, both at the EU level, and in multiple member states. While critics of the European Union point to the democratic deficits within its institutional make-up, democratic backsliding and threats to rule of law in various nation states present a challenge that the EU has so far been unable to meaningfully respond to [1]. Hungary and Poland are most often noted as clear cases of democratic backsliding, to which an effective European response is hampered by the unanimity requirement embedded in Article 7 proceedings aimed at suspending EU membership [2]. However, electoral victories by far-right political movements critical to liberal democratic values in countries such as Italy, Austria, the Netherlands, and France present a newfound challenge to European democratic values [3].

Hungary, in many ways, has acted as a torch bearer to these political trends. Since achieving a two-third parliamentary majority in 2010, Prime Minister Orbán’s political project has been centralising power, limiting fundamental freedoms through constitutional reforms, curbing the rule of law, and weakening judicial independence [4]. Orbán’s politics is built on a populist-nationalist narrative regularly portraying immigrants, Brussels, George Soros, the LGBTQ+ community and the global liberal elite as enemies of the state. Hungary, in this narrative is presented as a defender of Christian Europe, an image built on conservative identity politics [5]. Many scholars have outlined how these elements combine into a politics that shares traits with other states experiencing democratic decline, but pursues a distinctly authoritarian approach to governance [6–8]. A feature of Orbán’s regime is the creation of a loyal economic elite of oligarchs through the redistribution of public resources and EU funds, crony capitalism and the nationalisation of strategic sectors [9]. The case of Hungary allows us to ground theoretical concerns about energy justice in the everyday realities of far-right authoritarian governance,<sup>3</sup> and to highlight the disjuncture between energy justice frameworks and actual political practice.

Hence in this article, our objective is to revisit the energy justice debate as part of a broader question of democracy. We engage with the democratic deficits in energy transition politics engendered by right-wing authoritarian rule, rather than seeing the latter merely as a context in which decarbonisation needs to occur. We ask two overarching research questions: how do social inequalities and intersectional struggles enrolled within energy transitions shape democracy outcomes? And what role can democratic practices play in advancing energy justice within right-wing authoritarian political contexts?

To answer these questions, we rely on political ecology understandings of socio-environmental transformations, in particular from feminist [e.g. [11]] and political ecologies of the far-right perspectives [e.g. [12]] to engage with the democratic deficits that can emerge from the energy transition in Hungary. We claim that critical scholarship needs to unite efforts to unmask how energy justice is mobilised in far-right authoritarian state attempts to expand political control through energy infrastructures and electrification, ultimately furthering centralisation, as well as increasing inequalities between population groups. Given that most current frameworks do not systematically engage with how energy projects intersect with democratic backsliding, this is a very much needed endeavour.

In what follows, we first present the state of the art and argue for the usefulness of a framework that builds on the rights-based energy justice

scholarship but that takes it further to combine analytically energy transition, energy justice and democracy (Section 2). Then, we introduce our methodological approach (Section 3), followed by a discussion of our results (Section 4). In Section 5 we present the implications of what happens when energy poverty and intersectional marginalisation become entangled with right-wing authoritarian politics, and whether there is room in such contexts for new relationships to emerge in the form of democratic communities. We conclude by gesturing towards a new energy justice agenda that could promote democratic outcomes (Section 6).

## 2. Energy justice and democracy

The shift towards low-carbon energy systems has emerged as a central political and technological goal of the 21st century. While scholarship has explored the promises and pitfalls of this energy transition [e.g. [13,14–18]], existing frameworks remain rooted in liberal democratic assumptions which presume open deliberation, institutional safeguards, and participatory governance [19]. Yet in many regions today, the energy transition is unfolding under far-right and authoritarian regimes, where democratic institutions are weakened, dissent is suppressed, and conventional rights-based frameworks prove insufficient. Critical work in energy justice [e.g. [18]] and in the burgeoning field of political ecologies of the far-right [e.g. [20]] show how these contexts are marked by elite capture by oligarchs, depoliticised sustainability discourses, and climate securitisation.

With this article, we revisit the conceptual foundations of energy justice, particularly its relationship with democracy in order to expand the energy justice scholarship by deciphering how far-right authoritarian formations shape energy governance, potentially creating uneven justice outcomes. Rights-based energy justice frameworks provide the grounding blocks for this endeavour. They signal a shift from viewing individuals as mere energy consumers to recognising them as rights-bearing citizens entitled to adequate energy access [21]. They help rethink energy justice not just as a matter of the right to being included in decision-making and benefitting fairly from energy services but also as an entitlement rooted in a broader social contract [21]. However, the very notion of a social contract is challenged in far-right authoritarian settings, where power is exercised through exclusion (e.g. based on ethnicity or political affiliation) rather than reciprocity. Under far-right authoritarianism, citizens are positioned not as rights-bearers in relation to the state, but as subjects of top-down rule or exclusion. Energy justice is situated within broader questions of political legitimacy and state-society relations [22,23]; questions that far-right authoritarian regimes often resolve through coercion rather than consent.

Contrary to common assumptions, rights-based frameworks are not solely individualistic or neoliberal in orientation. In effect, liberal rights language can coexist with more collective or redistributive justice demands. In the context of far-right authoritarian energy governance, reclaiming the collective dimensions of rights is crucial – not only for advancing equitable energy access, but for reaffirming the democratic ideals of participation, reciprocity, and shared political agency that such regimes actively undermine. Rights-based energy justice frameworks can therefore offer a language of legitimacy, especially where legal institutions are weak or inaccessible. Thus, community demands for reduced electricity prices can become grounded not only in legal and economic claims, but also in moral and rights-based appeals drawing from notions of fairness and justice, particularly in response to socio-environmental harm [24]. At the same time, rights-based frameworks can support collective empowerment. They can help shift affected groups from passive recipients to active political agents. In Romania’s Jiu Valley, for example, rights to work, to a clean environment, and to participate in decisions have been mobilised in response to the EU Green Deal’s coal phase-out [25].

While rights-based energy justice frameworks may empower collective claims in democratic settings, their efficacy is deeply shaped by

<sup>3</sup> By governance, we refer to the assemblage of formal and informal institutions, actors, and practices that shape how decisions about energy transitions are made, who is involved, and whose interests are prioritised. In contrast to technical or managerial definitions, we approach governance as a political process involving power struggles over legitimacy, control, and accountability [10]. This perspective allows us to examine how governance structures may enable or constrain energy justice, particularly in contexts of democratic backsliding.

political conditions. Where authoritarian regimes restrict public participation, co-opt legal institutions, or deploy sustainability discourse as a depoliticised technocratic tool, rights-based approaches risk becoming symbolic at best; or reinforcing exclusion at worst. The emphasis on energy as a right can contribute to overlooking structural and historical inequalities that in turn can be used for blaming certain groups of populations. Such scapegoating rhetoric (that justify why certain people should have no or less rights) is essential for far-right authoritarian regimes to self-legitimise their grip on power. For example, the narrative of energy as a fundamental right can overlook the Romas' struggle with systemic poverty and social exclusion over centuries. As a result, they may be unfairly blamed for economic challenges, reinforcing the power structures that benefit the regime. A social contract [21] is difficult to imagine in a society and polity that is built on artificial divisions, and even hate, maintained on purpose by the ruling power.

Energy justice is not ideologically neutral nor immune to co-optation. And yet, most current frameworks, even those that are rights-based, fail to systematically account for how energy projects interact with the dynamics that enable and normalise authoritarian governance. These dynamics are reinforced by the fact that energy justice claims are often underpinned by contestable normative assumptions, particularly regarding whose rights are prioritised and how justice is operationalised across scales [26].

Recent attempts in energy justice research to move beyond these limitations are useful for our endeavour: they focus for instance on how energy justice concerns become embodied in everyday lives of marginalised peoples and ecologies [27]. Calls are growing for more reflexive approaches attuned to the political economy and ecological contexts in which the pursuit of energy justice unfolds [28] – calls especially pertinent to far-right authoritarian contexts [29] – acknowledging how energy (in)justices materialise from bottom-up and in interaction with national-level policies [30]. This work is crucial for grounding our exploration of how energy transitions not only unfold within but also reinforce or contest broader far-right authoritarian political formations.

More directly related to democratic challenges, emerging scholarship has begun to critically interrogate how right-wing authoritarian regimes manipulate energy transitions and environmental discourses to reinforce political control, raising fundamental challenges for energy justice frameworks [31]. In Poland, the socio-economic costs of the green transition disproportionately affect the working class, creating fertile ground for far-right movements that portray environmentalism as an elitist imposition [32]. Energy justice narratives can be hijacked to serve exclusionary agendas, particularly when justice is framed in nationalist terms and contradictory ways, with far-right authoritarian leaders invoking justice to justify top-down control or delay decarbonisation efforts [26].

Such ambiguity is strategically employed: green objectives are promoted rhetorically, but actual implementation tends to reinforce elite interests, rather than foster equitable or democratic participation [26]. The phenomenon can be described as some kind of “anti-resilience” [33] i.e. how energy systems under authoritarian regimes are structured to resist transformation – not by lacking capacity, but by entrenching structural inequalities and political inertia. The risks posed by authoritarian misuse and abuse of energy justice are not confined to Central and Eastern Europe. Right-wing narratives in Western democracies increasingly deploy climate whataboutism [34]– deflecting blame for emissions to other countries as a strategy to undermine international climate cooperation and justify domestic inaction. Most right-wing authoritarian governments selectively engage with environmental issues when it serves their political interests, but rarely embrace comprehensive or inclusive climate action [35].

This growing body of critical work helps us reconceive energy justice not only as a policy goal or legal entitlement but also as a contested political terrain involving power struggles over legitimacy, control, and accountability [10]. Engaging with these complexities allows for a more

nuanced deployment of a rights-based framework in energy justice, with particular attention to energy justice's conceptual limitations in far-right authoritarian contexts. Building on this framework helps us integrate energy transition, energy justice and democracy as three interrelated analytical foci. This is even more necessary as empirical engagements with this intersection are scarce, and there is an over-emphasis on deliberative and participatory democracy at the local scale. We argue that shying away from engaging directly with democracy in the energy transition runs the risk of failing to disrupt underlying injustices and challenging the extractivist logics that underpin far-right, authoritarian state-making. Within such state-making processes, nature becomes something to be used alongside marginalised population groups [36], precluding attention from caring human-nonhuman relations which are at the centre of democracy concerns [11].

For our analysis, we focus on energy transition projects and policies to understand how they integrate concerns for intersectional justice [37] and how people struggle against the perpetuation of inequalities and ecological risk. We are ultimately interested in how these struggles can be conducive to democracy. We hold in creative tension the fact that the exercise of power always contains both oppressive and emancipatory possibilities [38]. This ambivalence of power processes prompts us to emphasise those marginalisations that national and local governments, communities, and institutions reproduce *in the name of* inclusion, equality and low-carbon development. Rather than on the impacts of energy transition initiatives, our attention is on how they catalyse new political and socioenvironmental relations from which democratic processes can emerge as a power-laden, ambiguous, and often contradictory outcome [39]. We mobilise a feminist approach which refers to an epistemological commitment grounded in intersectionality that interrogates how multiple axes of power such as gender, ethnicity, class, and political affiliation shape authority, legitimacy, and exclusion in energy governance [37]. This perspective allows us to move beyond distributive questions to examine the relational processes through which energy transitions reproduce or challenge democratic deficits. It has the potential to guide a response to how inclusive, equitable and democratic processes for coping with climate change can be supported through a new energy justice agenda.

We emphasise a crucial distinction between energy transition, understood as a technical policy goal, and energy transformation, which we see as the articulation of democracy, energy transition, and energy justice: a normative political project rooted in democratic aspirations. Fig. 1 offers a visual synthesis of this conceptual framing while also highlighting the complexity and interdependence of these domains and suggesting avenues for future research.

### 3. Methodology

#### 3.1. Methods

The paper relies on a mixed-methods approach that combines interviews with a policy review as well as empirical observations during field visits. Between 2022 and 2024, 28 semi-structured interviews were conducted with a variety of actors and stakeholders within the energy sector. Interviewees included policy experts, political actors, energy (poverty) researchers, activists, social workers, persons living in energy poor contexts and members of energy-independent alternative communities (for a full list of anonymised interviewees see Table 1). The interviews were collected as part of four separate field works that took place in October–November 2022, March–April 2023, October–November 2023 and March–April 2024. Interviews with experts and researchers were centred around three main questions: 1. Personal and professional pathways into the energy topic and interviewees' assessment on how approaches to the energy transition have changed since the start of their involvement with it; 2. Interviewees' assessment of the politics of energy poverty with a special focus on how energy justice is understood and engaged with in Hungary, and; 3. What interviewees

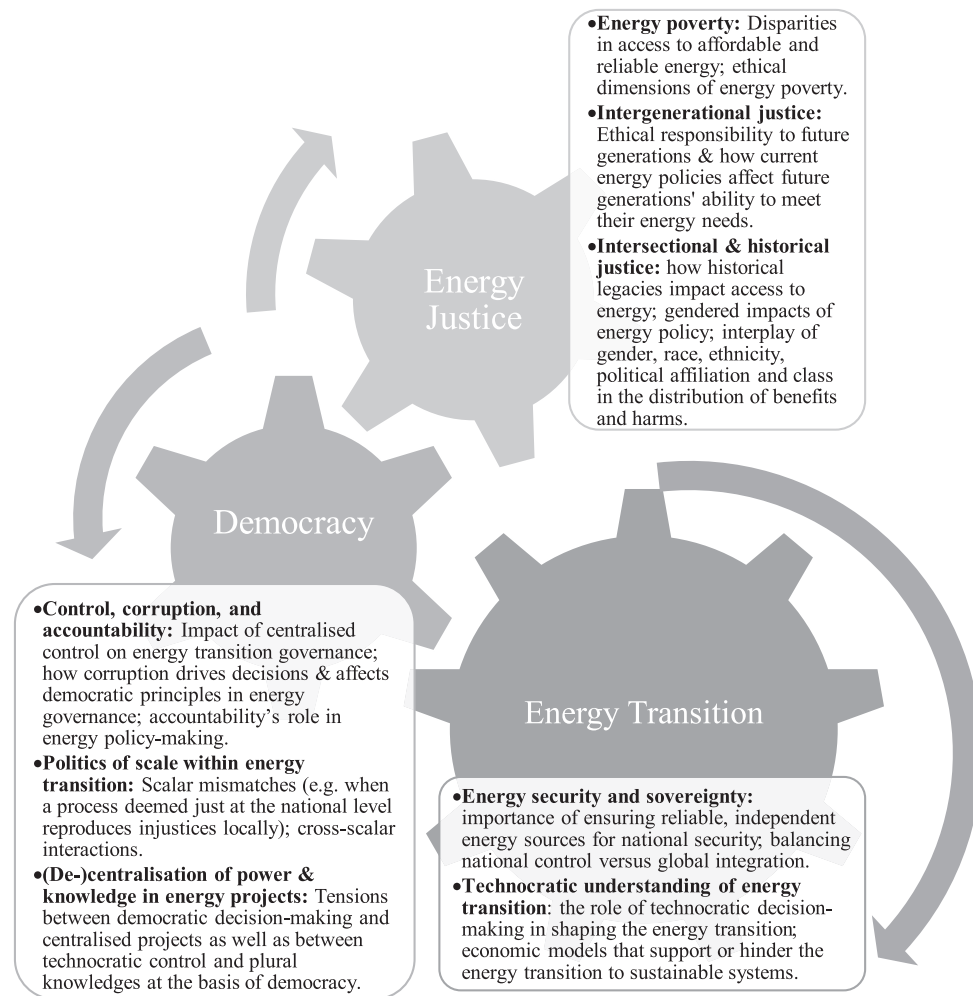


Fig. 1. Energy transformation as the articulation of democracy, energy transition, and energy justice—a normative political project rooted in democratic aspirations.

would do in relation to the energy sector were they to find themselves in a position of high-level decision-making. Interviews with persons living in energy poor contexts and energy-independent communities focused on challenges related to energy consumption, fuel source choices and strategies for adapting to changing bureaucratic-, accessibility-, and availability-related issues. Interview data was first transcribed and then coded using NVivo, relying on qualitative text analysis [40]. This involved reading transcripts multiple times, inductively constructing broad categories, followed by coding using these categories, as well as sub-categories that emerged through the readings. Finally, codes were once again grouped together and main theoretical observations were drawn from the analysis.

To evaluate governmental approaches to the energy transition, we conducted a qualitative document analysis of national-scale policies guiding decision-making in the energy transition [41]. Using strategies for identifying grey literature [42,43], we included in our analysis the *National Energy and Climate Plan* (NECP – a mandatory reporting requirement by the European Commission), the *National 2030 Strategy with a Perspective towards 2040: Clean, Smart and Affordable Energy* (NES – an independent national strategy representing Hungary's broad energy goals), and the *National Climate Change Strategy* (NCCS – including the National Decarbonisation Roadmap and the National Adaptation Strategy). We used a directed content analysis approach [44] informed by prior interviews, as well as energy poverty- and energy justice scholarship to develop two overarching questions and a subsequent coding frame. The guiding questions were: 1. How is energy justice conceptualised in energy transition policies (if at all)? and 2. How ideas of

democracy are conceptualised (if at all)? The coding frame used the keywords “justice”, “poverty”, “vulnerability”, “modernisation”, “Roma”, “disadvantaged”, “rural”, “municipal”. Documents were either read in full or keyword-searched (in Hungarian), and coding was applied to trace how concepts of energy justice and democracy were framed across the NECP, NES and NCCS.

Throughout our field work we visited several Roma communities and disadvantaged rural settlements. Three of these visits were conducted in collaboration with a Hungarian NGO<sup>4</sup> focusing on housing and energy poverty, while one was conducted as an independent field visit, following recommendation by experts we interviewed. These visits involved direct observation of the local energy environment and informal conversations with residents and municipal actors. The approach was guided by qualitative fieldwork and participant observation practices in ethnography [45]. Interactions were documented using field notes, recording impressions and interviews using prior consent. These notes were later reviewed and thematically coded in line with our research questions about energy justice. While each of the four locales yielded interesting insights into the realities of energy poverty in Hungary, none stood out more than the village of Tiszabó (see Map 1). The socio-economic and demographic characteristics of the village, the centrality of governmental and non-governmental energy interventions and their intertwinement with politically connected economic interests

<sup>4</sup> We do not disclose the name of the NGO due to the ongoing attacks on civil society in Hungary.



**Table 1**

List of respondents.

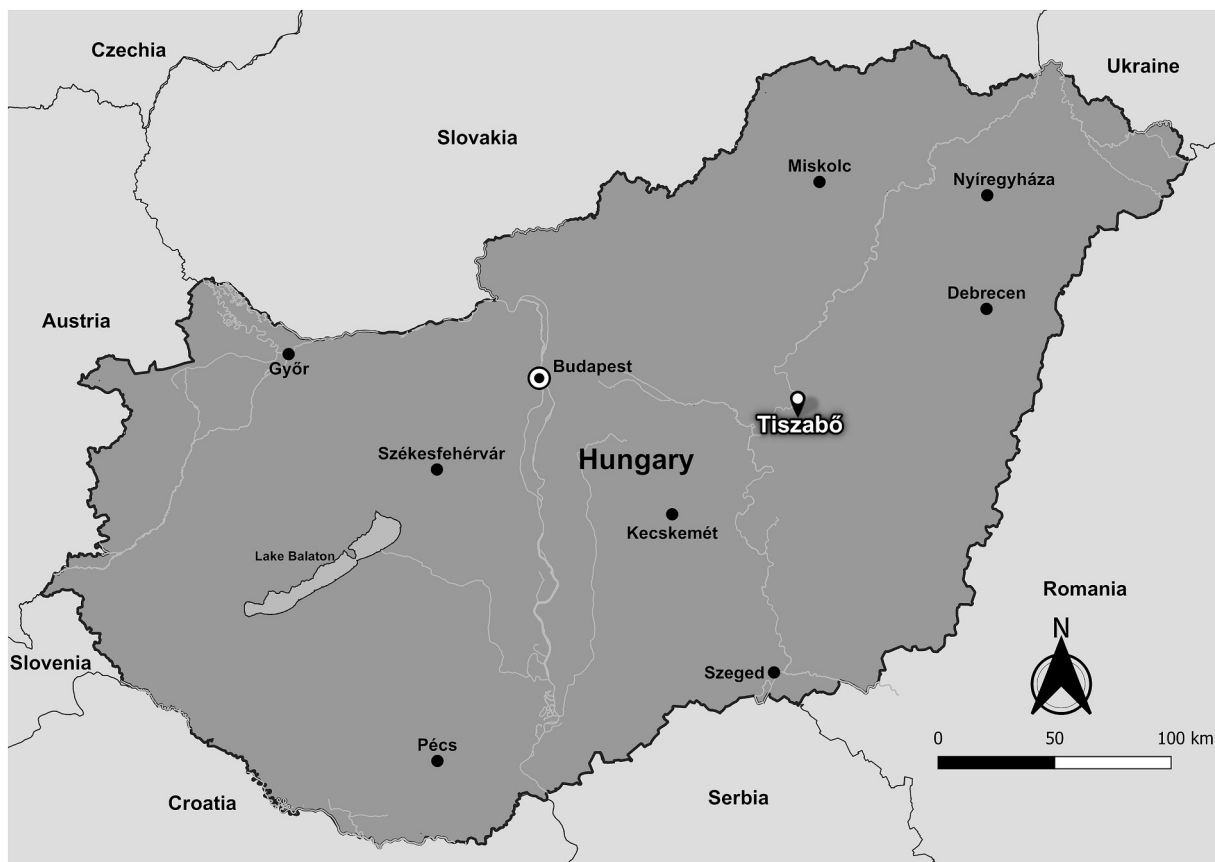
N°	Individual or Collective Interview (I/C)	Pseudonym	Gender of the Respondent or Mixed Group (M/F/Mix)	Role & description	Place of work if relevant	Date of Interview
1	I	Ágnes	F	Energy poverty researcher	Academia	22/10/2022
2	I	Róbert	M	Professor, researcher on energy politics, public figure	Academia	25/10/2022
3	I	Barnabás	M	Professor, energy expert, researcher	Academia	26/10/2022
4	I	Ilona	F	Professor, energy expert, researcher	Academia	23/01/2023
5	I	Krisztián	M	Professor, energy expert, researcher	Academia	23/01/2023
6	I	Dávid	M	Researcher on authoritarianism and the environment	Academia	3/04/2023
7	I	Domonkos	M	Professor, energy expert, researcher	Academia	04/04/2023
8	I	Szilárd	M	Forestry expert	Forest Management Company	08/11/2023
9	I	Tamás	M	Independent energy consultant, former government employee	Independent, former Ministry employee	27/10/2022
10	I	Franciska	F	Leader, community with energy democracy project in South-Western Hungary	Local energy democracy initiative	02/11/2023
11	I	Aladár	M	Leader, community with energy democracy project in South-Western Hungary	Local energy democracy initiative	02/11/2023
12	I	Benedek	M	Leader, community with energy democracy project in Northern Hungary	Local energy democracy initiative	07/11/2023
13	I	György	M	Mayor, Northern Hungary	Local government	06/11/2023
14	I	Eszter	F	Social worker, Northern Hungary	Local government	06/11/2023
15	I	Violetta	F	Climate & energy policy expert close to the government	Ministry	22/10/2022
16	I	Judit	F	Energy poverty researcher, activist	NGO	24/10/2022
17	I	Katalin	F	Energy poverty researcher, activist	NGO	25/10/2022
18	I	István	M	Energy poverty researcher, activist	NGO	26/10/2022
19	I	Terézia	F	Energy poverty researcher, activist	NGO	04/04/2023
20	C	Zora & her family (husband & 2 teenagers, 2 small foster children)	Mix	Roma family from North-Eastern Hungary	Not relevant	31/10/2022
21	C	Virág & her family (husband and 2 small children)	Mix	Roma family from North-Eastern Hungary	Not relevant	31/10/2022
22	C	Zsuzsa & her family (husband & 2 adult children)	Mix	Roma family from North-Eastern Hungary	Not relevant	31/10/2022
23	C	Edina & her family (mother in law)	Mix	Roma family from North-Eastern Hungary	Not relevant	31/10/2022
24	I	Krisztina	F	Roma community in Northern Hungary	Not relevant	2/11/2022
25	C	Emese & her family (husband and adult children)	Mix	Roma community in Northern Hungary	Not relevant	2/11/2022
26	I	Annamária	F	Woman living in energy poverty in Northern Hungary	Not relevant	06/11/2023
27	C	Several inhabitants of Tiszabó	Mix	Tiszabó	Not relevant	09/11/2023
28	I	Barbara	F	Energy and climate policy Consultant	Research and consultancy Institute	26/10/2022

make it an emblematic case for understanding the processes of far-right authoritarian state-making through energy transition projects. In this article, we use Tiszabó as a prism to illustrate the intersections between energy (in)justice and (the lack of) democracy in Hungary.

### 3.2. Positionality

Before we present our results and analysis, we acknowledge our specific positionality as Hungarian researchers and that we are not neutral observers, but embedded actors with our own situated

knowledges [46]. Having witnessed the dismantling of academic freedom, limitations on freedom of speech, as well as the often-contradictory environmental policies of the Orbán regime over the past 15 years, we cannot fully separate this writing from our stake in democratic, just and progressive politics. Nevertheless, we believe that this positionality contributed positively to our research by enabling us to approach a field that is often steeped in highly depoliticised technical narratives with a perspective of care, fairness and empathy. We also want to stress that we are not against renewables, green energy, and the green transformation in general – rather, that we find uncritical beliefs



**Map 1.** Localisation of Tiszaabó within Hungary (source: Google Earth).

around their role in energy justice problematic. We believe that the lack of considering the democratic deficits that can emerge from the energy transition might fail to lead to progress on the environmental sustainability and the social justice fronts.

#### 4. Results

We divide our results into three main sections, following the analytical foci identified earlier: energy transition, energy justice, and democracy. Incorporated into these sections are the main aspects that emerge from the policy analysis: the centrality of energy security and sovereignty questions, a technocratic understanding of energy transition imperatives neglecting household level and democracy-related challenges; the problematisation of renewables being vectors of energy justice; how energy poverty and intersectional marginalisation entangle with far-right authoritarian politics, and; how the intersection of energy transition and far-right authoritarianism results in an exclusionary form of state-making.

##### 4.1. Energy transition

###### 4.1.1. A fraught relationship

The Hungarian regime has had a fraught relationship with the energy transition. For much of its rule beginning in 2010, the Orbán-government maintained a hostility towards renewable energy sources (with the exception of nuclear, which in its political narrative has been consistently described as “clean energy”). For instance, between 2016 and 2024, legislation practically excluded the possibility of developing wind energy farms in Hungary by stating that wind turbines could only be installed at a distance of minimum 12 km from settlement limits [47,48]. An expert in energy transition described the nature of Hungary’s energy and climate policy as being of poor quality:

You can really see in climate and energy policy that they are making such poor-quality policies, no proper planning, no foresight.

They highlighted the authoritarian tendencies of centralised energy governance, where high-level directives are issued without consultation or transparency.

It’s as if the top decision-making level has some kind of deranged attitude: *they* issue these ultimatums that must be complied with. There’s more sensibility at the lower levels of the Ministry, but they just can’t get things through.

The expert also pointed to a breakdown between technical expertise and political decision-making which undermines policy coherence and responsiveness.

So, we get these half-measures, which are worse than if nothing would happen. Wind energy was banned without knowing why, so all that’s left is solar. But solar is done in the least environmentally friendly way: instead of a residential solar programme, they drop all these panels on green fields. And then they forget to develop the grid, so now users can’t get reimbursed for the overproduction of electricity. It’s just done so haphazardly (Interview with Judit,<sup>5</sup> October 2022).

According to this expert, authoritarian governance distorts both the means and ends of energy transition. Far from a rational and inclusive process, the policies seem to lack strategic planning, social sensibility, and infrastructural coordination. Together, these insights challenge dominant energy justice framings, which often assume institutional

<sup>5</sup> These are pseudonyms. Most of the respondents did not want their real names displayed.

functionality, rational governance, and the possibility of procedural fairness. They suggest the need for a more critical, power-aware lens that acknowledges how democratic deficits shape the production of energy policy itself.

In addition, Hungarian energy politics is also selective and shaped by personal political preferences of the Orbán-regime. Both Orbán and his foreign secretary Péter Szijjártó have voiced their dislike of how wind turbines affect the landscape [49,50]. Yet, an energy expert working with the regime and supportive of the government justified why wind energy farms have not been prioritised:

We are a sunny country, not a windy one. The Balaton region has good wind, but we can't destroy the scenery there. And that's it. The Poles are much windier, the Austrians have hydro, so do the Albanians. We are sunny and this is a great portfolio, because we are on the same energy market with Balkan countries. (Interview with Violetta, October 2022).

In parallel to the hostility towards wind energy by political leaders, household-scale solar panel development was also limited and the regulation constantly changed which discouraged investors. As highlighted by a former Ministry worker critical of the regime, energy politics are steered following the needs and the desires of the regime and their allies.

They don't deal with the new energy policy at the systemic level because it's not in their interest. It's always going to be a power thing and a matter of feudal favours. So, they combine power plays, stripping opposition politicians from benefiting from renewable energy. Renewable energy is better business than land politics, because you can constantly enforce regulatory risk. So you can put a different regulation on it every week, which is good for me, but not good for my competitors. (Interview with Tamás, October 2022).

Lack of efforts to promote investments in wind and solar energy is coupled with the regime positioning itself as the protector of the European car industry and the 'car driver' in general [51], even opposing EU environmental policies affecting cars. Indeed, since 2010, many investments have targeted Hungary's automotive sector— particularly by German firms— drawn by tax incentives, low wages, weak labour laws, and limited union power. The industry makes up about 5 % of the GDP, and along with battery manufacturing, is projected to reach 10 % by 2030 [52]. Government promotion of this strategy even introduced a measure to limit fuel prices for Hungarian drivers while downplaying the industry's related environmental and economic harms [53].

Yet, at the turn of the 2020s, and especially entering 2024, the topic of the energy transition began to take prominence in government communication [54]. Investments in large-scale battery power plants, loosening wind energy policy limitations, and renewed possibilities for solar investments began to dominate the political-economic landscape. In this context, the extent to which energy transition projects and policies integrate concerns for justice, with which understanding of justice, and how energy politics can become an instrument for strengthening far-right authoritarian governance become imperative questions to ask.

#### 4.1.2. The centrality of energy security and sovereignty questions

This section zooms out to examine how Hungary's broader energy policies centred on energy security and sovereignty shape the conditions under which local energy injustices unfold. Understanding this national framing is crucial: it reveals how energy justice in Hungary is conditioned by far-right authoritarian governance logics that prioritise elite accumulation over public accountability or equitable access.

A central component of Hungary's policy approach revolves around trying to find a balance around the 'energy trilemma', namely the ability

for net energy importing nations to simultaneously ensure energy security, affordability and sustainability [55]. In this regard, the National Energy and Climate Plan (NECP) claims that the global energy supply developments following the invasion of Ukraine by Russia<sup>6</sup> has facilitated a shift where energy security takes precedence over affordability and sustainability. Though the NECP claims that such precedence does not need to come at the cost of the latter two, it is clear that sovereignty and security are defining aims of Hungarian energy politics in the 2020s: "*energy security and energy sovereignty have grown to become a question of national security*" [56]. This was further explained by the above-quoted former Ministry employee, critical of the government:

Energy security has always been the most important component of energy strategies. A supplier doesn't supply energy, a state doesn't support energy supply – they supply energy security. This is what consumers buy, you get it? For decades we've been buying energy security, both as enterprises and private individuals (Interview with Tamás, October 2022).

The NECP also highlights the struggling global macro-economic environment, where inflation, slowing economic growth, as well as stability issues within supply chains contribute to growing risks in energy supply. The latter also serves to justify the importance of energy security. Overall, the NECP places Hungary's energy security and sovereignty into two overarching political strategies: 1) building the country's capacity as a regional transit hub for energy [56], in relation to; 2) establishing itself as global representatives of 'connectivity' – the link between East and West, an aspect which has been increasingly present in governmental communication [57]. Being a regional transit hub for energy means that the country serves as a critical intermediary for the transportation, storage, and distribution of energy resources within a specific geographic region. Such status would give Hungary a pivotal role in the energy trade and security of neighbouring nations. Beyond the economic benefits, it would strengthen Hungary's geopolitical influence with a greater say in regional energy policies and relations. Furthermore, as a global representative of 'connectivity', Hungary would control energy infrastructures such as pipelines and storage for energy sources, between Eastern producers (e.g. Russia, Azerbaijan) and Western consumers [58].

On the face of it, these aspects are important for non-authoritarian countries too and may even characterise the run-of-the-mill energy politics of a 21st century neoliberal political elite. Indeed, in the European Union, the importance of creating regional energy corridors able to provide alternative energy channels are widely recognised [59]. For instance, Greece and other Mediterranean states have been the central focus of scholarship exploring options of enhancing energy connections to Asia, the Middle East and Africa, through gas corridors and building transportable renewable capacity in the region [60]. These states are mostly focused on building the resilience of national energy systems.

For far-right authoritarian regimes such as Hungary under Orbán's rule, energy security and sovereignty become an instrument for state-making. The Hungarian state operationalises energy security and sovereignty with concepts of connectivity and transition hub through distinctly strengthening alliances with other far-right authoritarian regimes. Indeed, the building of the Paks II nuclear power plant is done so through Rosatom, Russia's national nuclear agency, and the details of the cooperation have been made confidential for 30 years [61]. Connectivity is used to describe Hungary's position linking Eastern and Western industries, but in practice is providing room for Chinese economic expansion within the EU, through allowing Chinese battery power plants and electric car manufacturing factories to settle in Hungary – with potentially irreversible damage to local environments, national energy supply, water tables and the job market [62]. Balázs

<sup>6</sup> Note that these documents do not refer to the war in this manner. Instead, they call it the "Russian-Ukrainian war".

Orbán, FIDESZ MP justifies this strategy as the following:

Similar to a stone in the centre of an arch, Hungary would be the rock connecting the two pillars, giving stability to the whole system. This is the concept behind everything we're doing, this is the role Hungary wants to play between Asia and Europe [63].

#### 4.1.3. A technocratic understanding of energy transition neglecting household level and democracy-related challenges

Hungarian energy policy documents make it clear that the energy transition plays an important role in the country's energy politics. However, the analysis of these ambitions indicates that there is little consideration given to household level and democracy-related concerns of this transition. This is apparent in the way these documents (do not) conceptualise ideas of 'just transition', 'vulnerability' and even 'energy communities'.

For instance, the National Energy Strategy (NES) uses "just transition" primarily in relation to industries that are likely to be impacted by changing energy-production practices, such as mines, coal power plants and ensuring the retraining of labourers within these sectors [64]. In the National Climate Change Strategy (NCCS), vulnerability is conceptualised in sectoral, economic and regional terms:

The achievements of modern civilisation (i.e. public infrastructure, IT networks, industrial activities, infrastructures and food-supply) are extremely vulnerable to changes in the outside environment [65].

The NCCS acknowledges that the energy sector is the driving force of the economy and society at large and that even small environmental changes can have significant impacts [65].

Besides two mentions – on page 75 and 168<sup>7</sup> in the NCCS [65]–, individual and household vulnerabilities fail to be mentioned and marginalised communities such as Roma settlements do not appear as beneficiaries of energy transition policy proposals. Similarly, the NECP spends minimal effort at discussing energy justice and energy poverty, only mentioning "vulnerable energy consumers" (*sérülékeny fogyasztók*) twice [56]. In both cases, there are no concrete legislative or policy recommendations noted to address "energy vulnerability" which is only vaguely mentioned– as opposed to extensive proposals for other fields (gas, renewable energy, etc.). In addition, there is no explanation of where this energy vulnerability comes from (marginalisation, poor, energy-efficient housing conditions, poverty– as shown through our interviews with people living in energy-poverty). Furthermore, the NECP states that the research-innovation priorities of Hungary are: energy efficiency; alternative propulsion in transportation; renewable energy, specifically solar power; energy production, transportation, and storage [56]. This shows that while technocratic solutions to energy transition are put forward, energy justice and energy poverty are not part of these priorities, or only marginally.

A researcher in energy politics in Hungary reflected on this vulnerability and the measures implemented to alleviate energy poverty by the Hungarian government, consisting primarily of price cuts for those household using limited amounts of energy:

So many people live in shitty conditions or just have the money to heat one room [...] and they all live in there. Their energy consumption goes down, but their quality of life and well-being goes down as well. [...] And this is where Hungarian energy policy is completely wrong, [...] because the focus is only on reducing price, but not investing in energy efficiency. And I think we can all say 'yeah okay, that was a good move at the time to reduce the price of

energy because it was really going up'. But also Orbán got lucky, because the price of gas and energy actually did drop (Interview with Barnabás, October 2022).

An NGO worker in energy poverty also highlighted that without investing in energy efficiency, reducing energy usage will not only come at the cost of well-being but also renders talking about community energy useless:

There are no subsidy programmes for residential energetic renovations, so it makes no sense to talk about community energy while we waste most of the energy we produce (Interview with Terézia, October 2023).

Energy communities are described in the policies as potential actors in reducing the capacity overload of the national grid while making renewable energy more widely accessible [56]. Energy communities are understood in these documents as a combination of energy producers and consumers connected through a smart grid, which could include individual households with solar panels, as well as small biogas power-plants, wind-turbines or car-charging stations. The government proposes the introduction of legislation and financial programmes that aid the emergence and operation of such energy communities [56]. The purpose of supporting them is to "expand renewable energy to energy poor who are unable to invest into renewables; to buildings unfit for renewable infrastructure; houses of heritage importance where such infrastructure cannot be placed; and shared buildings, where renewable investment is dependent on the will and financial capabilities of all habitants" [66]. Yet, as our field interviews show the actual existence of such legislation is limited and tends to favour energy community projects run by government-loyal oligarchs and/or not-for-profit organisations with close ties to the government.

Bottom-up energy democracy initiatives uniting poor and marginalised households would be more than necessary but difficult to implement without the support of civil society that has progressively been eliminated during the Orbán regime's rule, as highlighted by the above-quoted NGO worker:

We should incorporate energy into communal, local levels, including in areas of deep poverty. But it's impossible to do this without an innovative, experimental, pro-democracy civil society – without those who want to be allies to these people, when they are grasping for air too (Interview with Terézia, October 2023).

## 4.2. Energy justice

### 4.2.1. The problematic assumption of renewables being vectors of energy justice

In addition to limited consideration of justice within energy transition, in cases where it does appear it is often coupled with the assumption that renewables are vectors of energy justice. For instance, the NES states that decarbonisation will pave the way for economic competitiveness, growth, social welfare and the fight against poverty [64]. Similarly, modernising buildings are considered not only vital for reducing GHG emissions, but also key for achieving social welfare, energy security, improving overall health levels and reducing energy poverty [64]. On page 66, the document explains that much of the Hungarian population lives in energy poverty, which is defined as spending more than 10 % of their income on energy. It suggests that besides generally low incomes, this is primarily caused by the high energy needs of everyday appliances (heating, lighting, etc.) – the modernisation of which is beyond the financial capabilities of these households. Indirectly, such claims suggest that simply subsidising the modernisation of households and ensuring access to renewable energy sources facilitates a rise out of energy poverty.

An emblematic aspect of linking renewables to energy justice in these documents relates to the use of firewood. The NECP highlights how

<sup>7</sup> Here the document notes women's increased vulnerability to the effects of climate change, but goes on to argue that in Hungary differences in sex "determine the effects of climate change to a lesser extent" [65].



firewood continues to provide the backbone of renewable energy use in households and that further incentives for using biomass can be a partial solution to household-scale heating. It expects that by 2030, biomass will continue to make up more than 42 % of total renewable energy use. As such, the policy document notes the importance of increasing forested areas, both to supply this need and to increase carbon capture [56]. This is problematic for multiple reasons. For one, categorising firewood as a renewable energy source ignores the multitude of studies uncovering the role of wood burning stoves in GHG emissions and the slow reproduction cycle of forests [14,67]. Secondly, as our field research also exemplified, firewood is primarily an energy source used by the most marginalised segments of Hungarian society [68,69].

Indeed, a significant portion of the population in Central and Eastern Europe appears to be caught in what was described by one of our interviewees, a Hungarian researcher on energy transitions as a “firewood trap” (Interview with Ilona, January 2023): a phenomenon that poses a contradiction in the context of the energy transition. According to the energy ladder hypothesis [70] as household income increases, people gradually move up the “energy ladder,” transitioning to energy sources that are more efficient, cleaner, and of higher quality. This theory assumes that once a household switches from firewood to natural gas or electricity, the change is permanent and that previous energy sources are fully abandoned. As we observed during our field visits, the reality for poor households in Hungary is different. Households tend to combine and alternate between different energy sources based on changing economic or environmental conditions. For example, households may rely on natural gas when prices are low or during particularly cold periods, while reverting to firewood when gas prices rise. The use of multi-fuel heating systems also allows for this kind of flexible, hybrid energy use.

The fact that the population is trapped in firewood dependency is further entrenched by the firewood regulation as highlighted by several of our interviewees (e.g. Interview with Ilona, January 2023, Interview with Judit, October 2022). This situation becomes unsustainable not only for households, but also for forest management, though the latter is not our focus here. Another major concern is that Hungary is only able to meet its 14.5 % renewable energy targets set by the EU because of this widespread use of firewood. This is a problem that underpins the intersections between energy poverty, as well as the prospects of both energy transitions and energy democracy. Indeed, by continuing to support the use of firewood – justified as a means to meet renewable energy targets – energy poverty is supported. Resolving this issue appears to lack serious political will and existing programmes such as the social fuelwood programme (“*szociális tűzifa program*”) fail to include the poorest segments of society.

As recounted by an NGO worker active with Roma communities in the North-Eastern region of the country, access to the programme requires an address card proving permanent place of residency, which many people lack. Some Roma settlements situated in abandoned mining communities even lack formal addresses, subsequently depriving them of official recognition:

In these settlements there are a lot of informalities, often the people living there are not the ones registered, or more people live there in reality. So it's not assured that they can request firewood (Interview with István, October 2022).

Furthermore, a major oversight – if not deliberate misrepresentation – on the part of the government occurred during the submission of the NECP. In governmental documents, the enforcement of utility cost reduction policies was presented as a success, claiming notable reductions in energy poverty, a decrease in the number of consumers in arrears, and improvements in the ability to heat homes to adequate temperatures. According to these indicators, the overall situation appeared to improve, yet the underlying structural issues remain unaddressed: this was described by one of our interlocutors in Hungarian as the “nagy cheat” (the big cheat) (Interview with Ilona, January 2023).

#### 4.2.2. Inequalities on the ground: The solar energy project in Tiszabő

The poverty-stricken village of Tiszabő is a stark reminder of misguided government policy on the energy transition. It is also indicative of how processes maintained by far-right authoritarian politics have very real impacts on the energy needs of people living in poverty. Located in eastern Hungary, the village of 2164 inhabitants is considered to be one of the most disadvantaged communities in the country, with unemployment above 40 %, low educational levels, high levels of poverty, drug and alcohol abuse, prostitution, and crime, including domestic violence [71]. Upon arrival in the village, one of the first things we noticed is the overwhelming amount of surveillance cameras, as well as regularly patrolling police vehicles. Amongst the dilapidated buildings we found only a single grocery store where customers are not allowed to roam the aisles themselves but are rather served by clerks from behind the counter – a practice almost non-existent elsewhere in the country.

The history of Tiszabő is fraught with processes of dekulakization in the 1960s,<sup>8</sup> forced resettlement of Roma communities, the gradual decline of governmental economic support and the disappearance of agricultural production, propelling the village into deep poverty as early as the 1980s – a situation that remains unchanged in 2025 [71]. Failed governmental policy interventions over the past decades have led to a recent transformation in the institutional set-up of the village: from 2020 onwards the FIDESZ government of Prime Minister Orbán mandated a Hungarian charity, the Hungarian Charity Service of the Order of Malta (*Máltai Szeretetszolgálat*) to take over all administrative, logistical, and infrastructural responsibilities from the municipality. This includes governance, education, bath houses, food production, as well as maintaining a solar energy project. The mandate is part of a broader alliance between the ruling government and the charity, a yet understudied relationship that brings into question the legitimacy and truly non-governmental nature of the NGO. Despite filling in gaps and providing on-the-ground services, over the past years the charity has been involved in several controversial cases. In 2016, the charity expressed its support for the government's referendum on denouncing the EU's migrant quota, arguing that Europe has rejected its ‘Christian values’ [73]. In 2022, the charity received an expensive lake-side property from the government, which it immediately sold on to FIDESZ interest groups [74]. In the same year, the vice-president of the NGO was made a governmental vice-commissioner [75], while in the 2024 municipal elections, the charity registered over 800 Venezuelan refugees in one of their Budapest asylum centres (which holds only 70 beds) – most of whom ended up voting for the FIDESZ government [76]. This entanglement of political, economic, and civil society actors is a key feature of Hungary's energy governance landscape, where energy projects, even those aimed at social justice, become tools for regime consolidation.

In this context, the solar energy project in Tiszabő requires further scrutiny as well. The social energy project has as its mission to supply each household that has at least one child younger than 3 years with at least one heated room [77]. It currently supplies more than 70 of the village's poorest families – most of them of Roma ethnicity – with a certain amount of kilowatts per month for heating [78]. At first sight the project speaks to recognitional, distributional and procedural justice concerns: the project targets the most marginalised members of Tiszabő's community, supplies them with sustainable and green energy and does so through initiating a seemingly localised energy community. Yet, delving into the characteristics of the solar project reveals

<sup>8</sup> The term ‘kulak’ was coined in Russia to describe wealthy peasants who owned large tracts of land and animals and were key actors in village affairs. Following the 1917 Russian Revolution kulaks were increasingly alienated through economic and cultural means. At the height of communist propaganda across the Soviet Union, the term was used for any farmer unwilling to subscribe to forced collectivization and was used to justify their persecution [72].

shortcomings that speak to the ways in which far-right authoritarian contexts bandwagon energy transition narratives to further erode democratic norms.

The NGO created the project in collaboration with the energy company E.ON Hungária Zrt. in 2020. In 2021, the subsidiary of this company responsible for the region including Tiszabő – called E.ON TITÁSZ –, was acquired by Opus Energy Zrt., itself subsidiary of Opus Global Zrt. This company is owned by Lőrinc Mészáros, Hungary's wealthiest businessman and well-known strawman to Prime Minister Orbán. After the purchase, the energy company now responsible for the region was renamed Opus TITÁSZ Zrt. One reason as to why this ownership structure and the traceability of the solar project to the oligarchy matters is surplus energy. While the project calls for ambitious plans to supply all poor families with electricity, the reality is that this happens only with a small number of families, and even for them, in just one room, and only during the winter months. This means that the solar park produces large amounts of surplus electricity year-round that is redirected to the national electricity grid through companies that belong to the oligarchy's interest circles. Simultaneously, the village continues to rely heavily on the governmental social firewood and coal programme that provides most of Tiszabő's households with a certain amount of firewood and coal per winter season.<sup>9</sup> In contrast to the amounts of green energy that is not utilised through the social energy project and is instead sold on for capital gains, the fact that polluting and less efficient firewood and coal are promoted is problematic for reasons already discussed earlier. This disjuncture between the project's stated aims and its operational realities reflects how energy justice framings can be co-opted in authoritarian regimes, turning what could be emancipatory projects into vehicles for political legitimisation.

In addition, there's indications that some of the political land grabbing dynamics documented in other scholarly papers [see [80,81]] also intertwine with green transition energy projects in Hungary [82]. The speculation on single area-based payments received from the Common Agricultural Policy for agricultural land is now complemented by the novel possibility to install solar parks on these lands [83]. In Tiszabő, while the linkages between the social solar project and land ownership structures are difficult to establish, another private solar park on the outskirts of the village may have more direct linkages to the oligarchy.

At the household level, we observed how the implementation of solar grid connections risks further stigmatisation. Beneficiaries use special pre-paid cards and electricity meters, which visibly mark their homes – residents noted these can be identified by “the white box in front” (Personal Communication, March 2024). The system's red warning light triggered when credit runs out, publicly signals poverty, reinforces exclusion and ethnic marginalisation. It exists in other primarily-Roma villages we visited too.

Through the Tiszabő case we see that energy poverty and intersectional marginalisation entangle with far-right authoritarian politics in Hungary. Democracy, or rather the lack of it, is central in such entanglements.

#### 4.3. Democracy in the energy transition

The use of firewood by the energy-poor serving decarbonisation goals; the example of the energy poverty alleviation project in Tiszabő; and the lack of democratic concerns taken into account in policy documents reflect the entanglements between energy politics and the consolidation of far-right authoritarianism in Hungary. The latter both relies on and leads to the further marginalisation of already marginalised populations, such as the Roma. The contradictory nature of “just” transition projects (as they are designated) often become vehicles for state-building, elite accumulation, and the reinforcement of patron-

client networks [84]. In Tiszabő, the solar energy project supposed to benefit the most marginalised segment of the Hungarian population was operationalised through multiple layers of corruption, ranging from the involvement of a dubious non-governmental organisation to companies with ties to the oligarchy and land grabbing. It is also apparent that contradictory policy incentives – coming from both national and EU-level renewable energy targets and policies – problematise the upscaling and full exploitation of it for the benefit of the local community. At the household level, the project can enhance social stigma and support the repetition of cycles of poverty that the Romas are blamed for in far-right narratives.

Hungary's energy transition politics – a blend between renewable and nuclear energy – have become central to the Orbán regime's statecraft. The fact that the Hungarian national electricity company has been in part bought by a politically connected oligarch and childhood friend of Prime Minister Orbán, Lőrinc Mészáros – the same person whose involvement in agricultural land-grabbing helped forge the far-right authoritarian state illustrates that energy, as a sector to control, thus becomes a political and economic opportunity for the state, as well as for politically connected oligarchs. Mapping these dynamics across actors and scales reveals how the intersection of energy transition and far-right authoritarianism results in an exclusionary form of state-making, where energy policy serves elite interests at significant social, environmental, and democratic costs.

## 5. Discussion

Our research began with two overarching questions: how do social inequalities and intersectional struggles enrolled within energy transitions shape democracy outcomes? And what role can democratic practices play in advancing energy justice within authoritarian political contexts? Drawing on insights from the literature and empirical findings from Hungary, our discussion highlights how energy poverty, energy transition politics, and the far-right authoritarian state co-construct one another.

### 5.1. Energy justice and far-right authoritarianism: Linking literature and case evidence

One central insight from the literature on energy justice is that justice must not only be understood through distribution, recognition, and participation, but also through the lived experiences of those at the margins of energy policies and projects. In far-right authoritarian contexts, we find an additional layer of complexity: namely that the exclusion of marginalised groups is not only a policy failure or a historical legacy but also a tool for political consolidation. In Tiszabő, while the local solar project was framed as a pro-poor initiative, it lacked mechanisms for meaningful participation or accountability. Residents, many of whom are Roma and live in energy poverty, were excluded from planning and decision-making processes. This mirrors the broader trend in Hungary, where top-down narratives about energy justice and poverty obscure exclusions based on ethnicity that underpin far-right and racist politics. At the same time, energy poverty offers a fertile ground for far-right authoritarian discourses to prosper: it serves as a rhetorical device through which governments claim to act on behalf of “the people” while simultaneously implementing measures that lack structural solutions. In this context, the condition of the often-racialised and scapegoated energy poor, as in the case of Roma communities, is framed not as a result of systemic inequality but as a personal or cultural failure. Such narratives legitimise exclusion and punitive welfare approaches, reinforcing a racialised moral hierarchy. These dynamics are instrumentalised in electoral campaigns, where highly visible, symbolic infrastructure projects like rural solar parks are showcased as evidence of action, even as they deepen existing injustices and silence the voices of those they purport to help.

Solely focussing only on who gets excluded from justice does not

<sup>9</sup> In 2022, 500 households received approximately 1 ton of firewood per household [79].

allow for fully explaining the processes that help consolidating far-right authoritarian rule. We find useful exposing contradictions over justice and democracy in energy transitions. The Tiszabő example illuminates these contradictions: a solar project justified through pro-poor rhetoric is used to consolidate elite power at the local and national levels. Contradictory power politics are not the prerogative of authoritarian regimes solely, yet the latter have been particularly skilled at perpetuating ambiguities in the narrative of justice, equity and progress in the name of the interest of the (vulnerable) people. Examples for this include the strong pro-smallholder narratives of the Orbán-regime coupled with measures and policies that further marginalise small- and medium sized landowners [85] and pro-environmental narratives by the far right coupled with exclusionary and harmful economic policies [35]. This focus on contradictions showcases how pro-poor energy transition policies and projects can easily morph into their opposite, allowing oppressions to prosper: working against rather than towards justice; working against, rather than towards democracy.

This brings us to a second key point from the energy justice literature: scale matters. Choices about scale shape which justice and which energy poverty aspects emerge as causal, which impacts are taken seriously, and which levels are prioritised in decision-making processes [86]. As discussed previously, the technocratic understanding of energy transition imperatives in Hungarian policies neglects the household level with consequences for energy justice. Top-down and large-scale energy transition initiatives often clash with the interests, values and aspirations of local residents, thereby thwarting bottom-up efforts towards empowerment. In Tiszabő, the failure to address energy poverty at the household level despite a high-profile local solar project demonstrates how energy justice claims can be instrumentalised at higher levels of governance without delivering meaningful improvements on the ground.

Far-right authoritarian governance in Hungary does not just block justice: it reshapes it through scalar politics and contradictory narratives. We argue that justice in energy policies and projects can only be assessed by examining multiple scales and places of interaction including national level energy and climate policies, EU imperatives and policies, the role of the pro-regime oligarchs in the energy sector, the state and non-state actors involved in the fight against energy poverty, the history of marginalisation of ethnic groups, as well as their interactions – just to cite some of the main aspects to take into consideration. The case study of Tiszabő helps anchor these abstract dynamics in real-world consequences for vulnerable communities.

In sum, attention to these two central insights from energy justice – justice as lived experience and the politics of scale, – reveal how far-right authoritarian regimes instrumentalise justice narratives to maintain control while excluding groups they claim to protect.

## 5.2. Rethinking democracy through energy justice in far-right authoritarian contexts

Having explored how a far-right authoritarian regime reshapes justice through the lens of national policies and a village case study, we now turn to the urgent question of how democratic practices can be reimagined. Energy justice scholarship raises attention to the fact that local communities' lived experiences of energy (in)justices are not solely framed by questions of distribution, participation, and recognition: they are also tied to their right to live in alignment with their identities, cultural perspectives, and epistemologies [87], including their possibility to exist off-grid. Our findings reinforce that the latter right needs to serve as a cornerstone for contemporary energy justice struggles. This entails embracing pluralistic perspectives without perpetuating a false dichotomy between 'science' and 'traditional' knowledge or 'modern' and 'backward' paradigms – a dualism that right-wing authoritarian regimes often exploit [88]. Historical legacies are also key to consider. For instance, in contexts such as Hungary, exploring how historical experiences of enforced cooperativism under state socialism shape

contemporary attitudes towards democracy within energy transitions can offer valuable insights.

Because authoritarian regimes are on the rise across the globe, energy transition initiatives are often implemented in regions governed by authoritarian governments or within systems where electoral processes are manipulated to ensure the continued dominance of their leaders. Discussions of elections, political representation, advocacy, and the separation of powers are becoming less and less relevant in many parts of the world. Moreover, solely relying on the possibility of these leaders losing future elections is not a viable approach: climate change needs to be acted upon now.

The task of envisioning how a new energy justice agenda might foster democratic outcomes is further complicated by the lack of a clear relationship between sustainability and democracy. These two ideals can easily come into conflict. Far-right parties increasingly adopt eco-authoritarian rhetorics of the 1970s [89] to call for reduced democracy in the name of the Green Transformation. They also like to dissociate climate concerns from local environmental ones to promote an environmental agenda that is marked by localism and nationalism [90]. Some have even advocated for suspending democratic processes [91,92], arguing that existing institutions and norms obstruct the urgent action required. Nevertheless, instances of successful – albeit small-scale – environmental activism suggest that democratic approaches can, in fact, coexist with and support progress towards sustainability [93].

The techno-scientific logics and the evidence-based approaches imposed by engineers, scientists, economists and technologists to solve environmental problems are detracting attention from the importance of democracy in debates on climate and energy justice thereby relegating it to a secondary priority in discussions about urgent climate action. They also limit the potential for dialogue between diverse approaches rooted in local knowledge, needs, and struggles – a plurality that are foundational to democratic practices. The case of Tiszabő showed that projects risk reinforcing far-right authoritarian rule rather than enabling community agency. Under regimes such as Hungary, advancing energy justice demands not only technical solutions, but also a profound repoliticisation of the energy transition [94] – one that foregrounds local agency, challenges elite capture, and reinvigorates democratic participation from below. Technocratic single-mindedness in current attempts to govern climate change is hampering liberal sovereignty for states. There is need to rethink the role of nation-states as responsible for caring for their citizens [95] which would include giving more attention to small-scale solutions, bottom-up initiatives and initiatives driven by solidarity and care for humans and non-humans [25]. It is only through such radical rethinking of the relationship between society, nature and energy that democratic communities built on justice, equity and fairness can emerge.

## 6. Conclusion: Energy justice and the far-right authoritarian turn

In this article, we exposed the current theoretical and empirical shortcomings in energy justice literature by focusing on the interplay between energy transition, energy justice and democracy through policy-review, a village case study, and interviews with energy expert and people living in energy poverty in Hungary. In doing so, we showed how far-right authoritarian regimes can mobilise energy transition discourses, policies and projects to consolidate power, while simultaneously marginalising communities already at the edge of the society. Under regimes like Orbán's in Hungary, the prospects of energy democracy understood as participatory, pluralistic, and community-driven is not just hindered, but actively undermined. While energy democracy has gained increasing attention in academic discourse and practitioner circles [96–98], it still requires further conceptual development when it comes to upscaling democratic demands. For instance, there is a need to go beyond its current focus on electrification and participatory democracy.

Democratic erosion alters the very conditions under which energy justice can be pursued, making it imperative to link climate action to struggles for democratic renewal. As far-right authoritarian politics gradually permeate both established and more recent democracies, energy justice must be reimagined beyond its foundational triad of distribution, recognition, and participation [23]. In Hungary, within fifteen years of rule by the Orbán regime, energy policy has become entangled in broader struggles over political legitimacy, with technocratic governance frameworks often serving to depoliticise transition debates while reinforcing elite control. The Orbán regime's centralised energy agenda couched in pro-vulnerable people and pro-environmental rhetoric simultaneously marginalises oppositional voices and entrenches oligarchic interests. More recently, in the US under Trump, backlash against climate policy has been accompanied by anti-regulatory and fossil fuel-centric politics that undermine the prospects of meaningful climate action. These contexts expose the need to rethink energy transitions as emancipatory political projects [99], rather than as technical adjustments led by expert elites.

Our analysis has underscored how techno-scientific paradigms in climate governance, often championed by institutions like the EU, can obscure the democratic dimensions of energy transitions. This paradigm is embedded in the dichotomy between “modern” scientific knowledge and “traditional” or local, non-hegemonic epistemologies, a dualism frequently weaponised by authoritarian regimes to silence dissent and delegitimise alternative imaginaries. In Hungary, this has manifested in the side-lining of household-level concerns and local energy justice struggles, despite official narratives of justice and inclusion. Such contradictions are not accidental but central to the performative politics of right-wing and authoritarian regimes, which invoke the language of justice to consolidate power while masking structural exclusion [100]. Recognising this dissonance reveals how energy transition initiatives can actively contribute to far-right authoritarian governance, particularly when questions of scale and power are left unexamined. It is in this context that energy democracy must be recentred as both a theoretical and political imperative. The Hungarian village case shows that where democratic voice is suppressed, the procedural and epistemic dimensions of energy justice lose its meaning. Energy democracy, when understood not merely as access or local participation but as a right to shape energy futures, can offer a counterpoint to far-right authoritarian energy governance.

Theoretically, this calls for more integrated work at the intersection of energy transition, energy justice and democracy. It is not enough to identify exclusion; we must also examine how and why particular groups are denied the capacity to define and direct energy transitions. Empirically, deeper engagements that bridge place-based case studies like the one in Tiszabő with national policies and narratives are needed to map how local injustices reflect and reproduce broader far-right authoritarian trends.

Moving forward, a new energy justice agenda in this context requires a deliberate recentring of democracy – not as an abstract ideal, but as a pluralistic, contested, and situated practice. As our work suggests, addressing energy poverty in contexts like Hungary demands attention not only to material deprivation but also to the epistemic and political violence of exclusion by far-right authoritarian politics [101]. A justice agenda that fails to account for how these regimes manipulate narratives, scalar politics, and policy implementation will remain incomplete. We must also advocate for a radical expansion of democratic space, supporting grassroots resistance, cross-scalar solidarities, and a vision of energy transitions that empowers rather than silences. Only through such a shift can energy justice become a meaningful framework for both ecological transformation and democratic survival.

#### CRediT authorship contribution statement

**Noémi Gonda:** Writing – review & editing, Writing – original draft, Validation, Supervision, Project administration, Methodology,

Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Péter József Bori:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation.

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#### Data availability

The authors do not have permission to share data.

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