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Paper in Innovation Studies no. 2026/10



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Unpacking green discontent: Socio-economic marginalisation and experiences of misrecognition in the German heating transition

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Abstract

This article contributes to debates on green discontent, climate-policy acceptance, and the geography of discontent by showing how experiences of (mis)recognition can turn uneven place-based transition readiness into wider political and emotional discontent in left-behind regions. We develop this argument through the case of Germany's domestic energy transition and the implementation of the Building Energy Act ('Heating Law'), which triggered widespread opposition, particularly in socio-economically marginalised regions of East Germany. Using a sequential mixed-methods design, we combine attitudinal segmentation based on nationally representative survey data (n=2,048) with 33 semi-structured interviews. Our findings show that through processes of misrecognition, climate policies can become vehicles through which long-standing place-based grievances are vindicated and (re)activated. Discontented East German homeowners experienced climate citizenship as contingent on purchasing power, making the transition an acute reminder of uneven development. The implicit assumption of financial readiness was perceived as a misrecognition of lived realities, generating epistemic mistrust. The expectation of financial participation also devalued non-monetary contributions to the transition, vindicating longer-standing experiences of denied social esteem. Finally, the misrecognition of post-unification development trajectories allowed the policy to attach readily to place-based fears of further disruptive transition and decline. Together, these experiences generated emotions of invisibility, disrespect, fear, and betrayal, creating fertile ground for narratives of expropriation, elite hypocrisy, and systemic unfairness. The article highlights the importance of addressing both uneven readiness and uneven acceptance by creating the material conditions for participation while recognising differentiated lived realities, contributions, and histories of marginalisation.

Key words: green discontent, left-behind regions, just transition, recognition, heating transition

JEL Codes: Q56, Q58, R11

Funding acknowledgement: This work was supported by The British Academy (Small Research Grant, SRG25\250731)

1. Introduction

Across Europe and beyond, growing expressions of green discontent have emerged as a significant political challenge to climate action, raising concerns that opposition to transition policies may slow, dilute, or derail decarbonisation efforts. Green discontent is pervasive, becoming visible across multiple dimensions of the transition. From protests against fuel taxes in France (Bourdin and Torre, 2023; Martin and Islar, 2021) to resistance against renewable energy infrastructure (Eichenauer and Gailing, 2022; Sovacool et al., 2022; Häußermann et al., 2023), agricultural reforms (Harrahill & Douglas, 2019; Van Der Ploeg, 2020; Cigna & Lopez-Uroz, 2026), and environmental regulations, climate policies have increasingly become focal points of broader political contestation (Rodríguez-Pose & Bartalucci, 2024). Understanding the origins of green discontent is therefore central to both the effectiveness and legitimacy of sustainability transitions.

Yet explaining opposition to climate policy remains challenging because green discontent is as elusive as it is pervasive. First, although correlating with income and wealth, green discontent is by no means confined to socio-economically marginalised groups (Eversberg et al., 2024; Compagnucci et al., 2026) and is strongly influenced by political preferences (Mares et al., 2025; Weisskircher et al., 2026). Green discontent therefore reflects distributional conflicts that cut vertically across income groups, as well as horizontal conflicts over what constitutes markers of socio-economic success and appropriate forms of socio-economic provision (Eversberg et al., 2024).

Second, green discontent emerges not only from newly generated transition-related pressures such as job losses in industries negatively affected by the transition (While and Eadson, 2022) or disputes over land-use, but is attached to broader political contestation. Transition-related grievances are therefore amplified by historically accumulated grievances stemming from uneven development and place-based marginalisation (Bourdin & Torre, 2023; Martin & Islar, 2021; Tallent, 2026; Mewes et al., 2024). Consequently, whilst personal characteristics such as income and political preferences matter, green discontent is also geographically polarised and particularly prevalent in left-behind places (Mewes et al., 2024; Weisskircher et al., 2026; Tallent, 2026). Here place-based narratives and emotional geographies are central to the political mobilisation of (green) discontent by populist actors (Greve et al., 2023; Batel & Devine-Wright, 2018; Paterson et al., 2024; Abreu & Öner, 2020), who selectively connect transition pressures to broader narratives of loss and exclusion (Paterson et al., 2024). These narratives are highly place-specific, meaning that similar policies can generate very different political responses across place and social groups.

While existing research establishes that material inequalities, political orientations and place all matter for climate-policy attitudes, less is known about the process through which climate policies reactivate

broader grievances in left-behind places, including grievances that predate the green transition. We argue that experiences of misrecognition provide a mechanism through which this occurs. When climate policy is perceived to operate on assumptions that misrecognise existing vulnerabilities, contributions and histories of marginalisation, they vindicate and reactivate established emotional responses to peripheralisation, giving climate policies and pressures a wider political meaning. In this way, experiences of (mis)recognition provide an important mechanism linking uneven readiness to uneven acceptance. Drawing on the tripartite framework of transition justice (McCauley & Heffron 2018; Colenbrander et al., 2018; Bulkeley et al., 2014), we argue that distributional justice shapes the material capacity of households and places to participate in the transition, while recognition shapes whether these lived realities are socially and politically validated. Drawing on theories of recognition (Fraser 1995; Honneth 1995), we show why misrecognition is consequential. By denying social esteem, it generates feelings of invisibility, disrespect, betrayal and resentment, which are particularly susceptible to exploitation by populist narratives. Misrecognition therefore provides a relational mechanism through which material inequality acquires moral and emotional significance.

Empirically, we develop this argument through the case of the German heating transition, where legislation to support the decarbonisation of domestic heating systems became a highly politically contested element of German climate policy despite state support covering up to 70 per cent of the costs of replacing heating systems (Semb et al., 2026; Loschke et al., 2026). Opposition to the Building Energy Act (Gebäudeenergiegesetz, GEG), commonly referred to as the 'Heating Law', that required newly installed heating systems to operate with at least 65 per cent renewable energy, was especially pronounced in parts of East Germany, where the policy became associated with narratives of expropriation, social injustice, and elite detachment. We employ a sequential mixed-methods design combining an attitudinal segmentation of nationally representative secondary survey data (n = 2,048) with 33 semi-structured interviews. This approach allows us to identify both the socio-spatial distribution of climate policy attitudes and the mechanisms through which these attitudes are formed.

Our findings show that respondents experienced participation in the green transition as effectively dependent on purchasing power, making climate citizenship feel 'monetised' and serving as an acute reminder of long-standing inequalities. The 'Heating Law' was perceived to take financial capacity for granted, leading respondents to interpret its assumptions about households' ability to participate as evidence that policymakers failed to recognise their lived realities. This generated epistemic mistrust as respondents sought to reconcile the gap between their everyday experiences and what was acknowledged in official discourse. The monetisation of participation was also perceived as a misrecognition of non-monetary contributions thereby reactivating feelings of devaluation and denied social esteem. Finally, by taking financial capacity for granted, the 'Heating Law' was perceived to

misrecognise the causes of persistent peripheralisation rooted in post-unification development trajectories. This allowed the policy to attach readily to existing fears of further disruptive transition and decline. These experiences of misrecognition transformed material constraints into feelings of invisibility, disrespect, and betrayal creating fertile ground for populist narratives about expropriation, elite hypocrisy and unfair treatment.

The article proceeds as follows. The next section reviews existing research on green discontent. We then develop a climate justice framework linking uneven readiness and uneven acceptance through distributional and recognitional dimensions of justice. After outlining the case context and mixed-methods design, we present the empirical findings before discussing their implications for scholarship on green discontent, social acceptance, and just transitions.

2. Drivers of green discontent

Green discontent is pervasive across multiple dimensions of the green transition. It is evident in concerns over employment losses in carbon-intensive industries, resistance to changes in land use and agricultural practices, and opposition to shifts in mobility systems, among other areas. It is also pervasive across socio-economic groups exposing vertical social hierarchies in income and wealth but also horizontal divides over preferences between public- or private property-based provision (Eversberg et al., 2024) and therefore strongly correlates not only with income but also party-preferences (Weisskircher et al., 2026) and belief in the effectiveness of state-intervention (Mares et al., 2025).

Whilst individual characteristics – whether material circumstances or political preferences – matter, green discontent is also geographically polarised being more concentrated in ‘left-behind’ regions – often rural and economically declining (Mewes et al., 2024; Tallent, 2026). Germany for instance, shows a persistent East-West divide (Mewes et al., 2024; Weisskircher et al., 2026). This suggests that common underlying drivers interact with local economic, social, and political contexts through everyday interaction, producing distinct patterns and expressions of green discontent across places.

Explanations of uneven acceptance primarily emphasise *emerging grievances* in the productive transition that arise with the creation of new spatial divisions of labour (While & Eadson, 2022) and economic restructuring in sectors negatively affected by decarbonisation (Rodríguez-Pose & Bartalucci, 2024), including carbon-intensive industries (Harrahill & Douglas, 2019) as well as sectors such as tourism and agriculture (Van Der Ploeg, 2020; Cigna & Lopez-Uroz, 2026). Beyond productive restructuring, green discontent has also been linked to procedural exclusion from decision-making processes, particularly in relation to land-use change and renewable infrastructure development

(Eichenauer and Gailing, 2022; Sovacool et al., 2022; Häußermann et al., 2023). Further emerging grievances relate to the destabilisation of dominant cultural imaginaries of success (Compagnucci et al., 2026).

While these accounts capture important sources of transition-related contestation, evidence from the mobility transition - notably the French Yellow Vest movement - suggests that in peripheral regions green discontent is amplified by *historically accumulated grievances* rooted in uneven regional development, inequality in income, wealth and access to public services. These generate place-based structural vulnerabilities to transition costs arising from car dependence, declining local services and greater distances to employment and essential services (Bourdin & Torre, 2023; Martin & Islar, 2021; Tallent, 2026).

At the same time, uneven material geographies do not mechanically translate into expressions of discontent (Green et al., 2025; Torre & Bourdin, 2026). Rather, geographies of discontent emerge from place-based collective imaginaries (Hannemann et al., 2024; Roessler, 2024) and the exploitation of these emotional geographies of fear, loss and betrayal by post-truth politics (Greve et al., 2023; Batel & Devine-Wright, 2018; Paterson et al., 2024; Abreu & Öner, 2020). Recent evidence from rural France shows that material, structural constraints become cultural grievances when climate policy is perceived to challenge place-based narratives of belonging, as expressed for instance land and car ownership, pride in agricultural and industrial heritage or local landscapes. (Tallent, 2026). Overall, expressions of discontent are strongly associated with long-term regional economic decline, rather than recent economic downturns. For example, East Germany's historically most prosperous regions, Saxony and Thuringia, experience the highest levels of populist support due to a sense of historical loss and betrayal (Greve et al., 2023). This sentiment has contributed to what Hannemann et al. (2024) describe as 'collective embitterment'. The lingering memory of the post-reunification transition shock has fostered a deep aversion to further structural change, constraining the capacity of local actors to embrace opportunities offered by the green transition (Roessler, 2024; Roessler, 2026). Post-truth politics exploits these emotional geographies through place-based narratives that resonate with lived experience but bypass scientific evidence. In the UK, for example, populist rhetoric portrays renewable energy infrastructure as threatening national identity, local autonomy, and democratic legitimacy (Batel & Devine-Wright, 2018). The political mobilisation against transition policies is itself geographically differentiated, with populist parties tailoring opposition to transition policies selectively to specific geographic and socio-economic contexts (Paterson et al., 2024).

3. From uneven readiness to uneven acceptance: a climate justice perspective

Existing research has made important advances in explaining the origins of green discontent, showing that material realities, political orientations, and place matter, while identifying both newly emerging grievances associated with the green transition and historically accumulated grievances rooted in uneven regional development and experiences of marginalisation as important drivers of discontent. Emotional geographies and place-based narratives are central to the political expression of these grievances and their exploitation by populist movements. While we know that material inequalities and emotional responses both matter, we know less about the processes through which climate policies become attached to longer-standing place-based grievances, i.e. the translation of uneven readiness into uneven acceptance.

We fill this gap by arguing that green discontent in left-behind places emerges where historically accumulated material inequalities intersect with experiences of misrecognition. Drawing on McCauley & Heffron's (2018) tripartite model (see also Colenbrander et al., 2018; Ciplet & Harrison, 2020; Bulkeley et al., 2014), we conceptualise climate justice as comprising three interrelated dimensions. Distributional justice concerns the allocation of costs, benefits, risks, and opportunities associated with the transition. Participatory justice encompasses both the inclusiveness and fairness of the decision-making processes through which transition pathways are negotiated and, at the household level, the material capacity to engage in the behavioural, consumption, and investment practices through which decarbonisation is realised. Such participation ranges from repair and circular economy practices to low-carbon mobility, sustainable consumption, and investments in housing decarbonisation. Restorative justice introduces a temporal dimension by recognising that contemporary transitions unfold on landscapes shaped by past injustices, requiring attention to historically accumulated inequalities and experiences of marginalisation.

These dimensions are mutually constitutive. In particular, distributional and restorative justice establish the conditions under which meaningful participation becomes possible. Procedurally inclusive arrangements, for example, can (re)produce distributionally unfair outcomes if participants enter decision-making/ participation processes with highly uneven resources, capabilities, and historical disadvantages. Inequalities in income, wealth, housing, infrastructure, and access to finance also influence the ability to adopt low-carbon technologies and practices, resulting in uneven patterns of readiness across socio-economic groups and places. Distributional outcomes, therefore, shape the geography of readiness by determining the material capacity of households and places to participate in the green transition. Such uneven readiness can in itself generate perceptions of injustice by systematically limiting opportunities to participate in, and benefit from, transition processes.

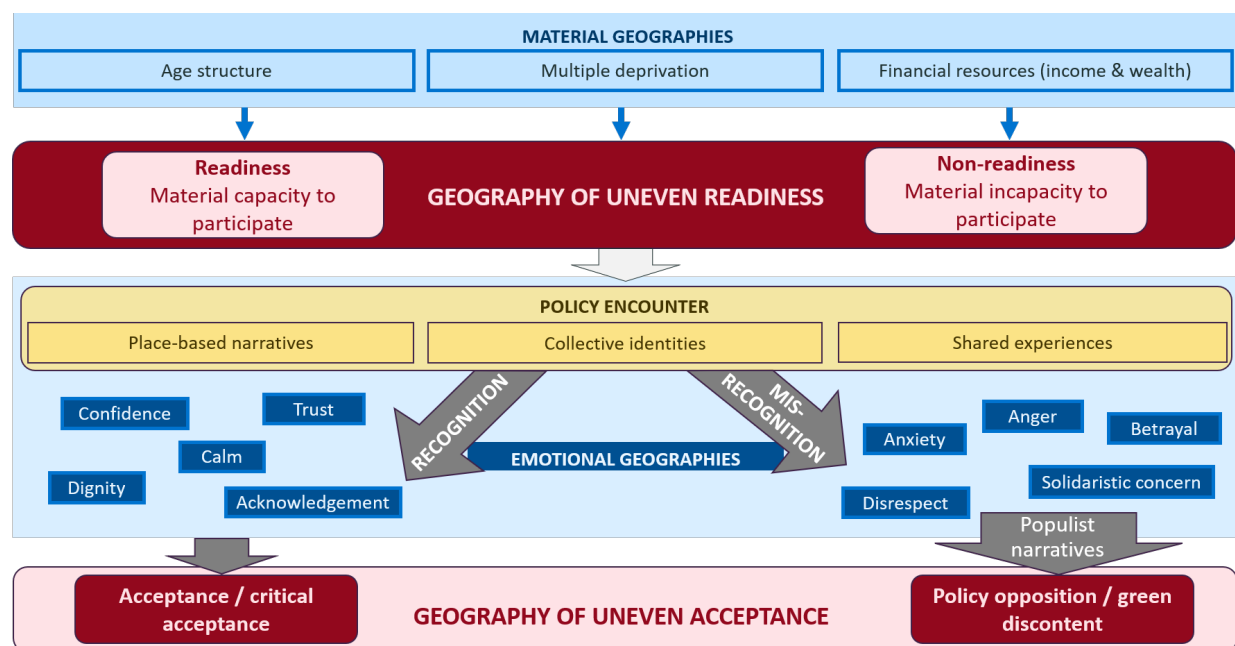
Yet uneven readiness to participate alone cannot explain uneven acceptance. Drawing on Fraser (1995) and Honneth (1995), we argue that recognition provides the missing link between readiness and acceptance through its impact on emotional responses. For Honneth (1995; 2004), misrecognition lies at the root of social conflict because recognition constitutes the intersubjective conditions through which individuals can develop and sustain a positive relation to themselves. Drawing on Hegel and Mead, he distinguishes three spheres of recognition: love and care, which provide the basis for self-confidence; legal recognition, which secures self-respect through recognition as an autonomous moral person possessing equal rights and finally social esteem, which supports self-esteem through the valuation of an individual's particular qualities and contributions within a shared social horizon of values. Recognition across these spheres being constitutive of a positive sense of self, means, by extension, that denial of recognition constitutes a form of social injury and provides the moral basis for social conflict, as individuals and groups contest relations in which they experience themselves as denied recognition (Honneth 1995).

Recognition failures are emotionally consequential and give rise to feelings of invisibility, disrespected, dismissal, and, where expectations of institutional responsibility are violated, betrayal (Avraamidou, 2020; Smith, 2022). Such emotions can become collectively embedded within places through shared memories, narratives, and experiences of marginalisation, shaping belonging and collective evaluations of justice (Drozdowski et al., 2016; Guerra-Ayala et al., 2026). At the institutional level, misrecognition can also reinforce uneven development to the extent that it fails to consider the lived realities of marginalised groups (Simcock et al., 2021). As misrecognition concerns not only the disregard of particular contributions but also the prevailing standards through which some activities and ways of life are defined as socially valuable and others as unimportant (Honneth 2004), it is structurally rooted in institutionalised relations of status and power and may intensify or take on new forms during major societal transformations in which established identities and lived realities are reevaluated or disregarded (Tarasova, 2024).

We therefore propose a relational mechanism linking uneven readiness to uneven acceptance. Historically accumulated distributional and procedural injustices shape contemporary capacities to participate in transition processes, producing uneven geographies of readiness. Recognition—or its absence—shapes how these realities are interpreted and whether they are perceived as legitimate. Through this process, material inequalities become translated into emotional and political responses that structure the acceptance of climate policy. Green discontent emerges from the interaction between historically accumulated inequalities, uneven readiness, and experiences of misrecognition. This theoretical framework is summarised in Figure 1.

While Honneth (1995) highlights the emotional and political consequences of denied recognition, how to address misrecognition remains a matter of debate. Dryzek and Niemeyer (2008) locate recognition in the representation of marginalised discourses, because dominant discourses reproduce existing power relations that deny marginalised groups visibility and agency. Relatedly, Fraser (1995) argues that social justice requires both the recognition of social groups whose experiences, identities, and contributions have been devalued or rendered invisible and the redistribution of material resources. Fraser thus rejects the tendency to treat recognition as a substitute for redistribution, instead emphasising that material inequalities and status inequalities are intertwined. Critically, for Fraser, redistribution and recognition must be pursued in ways that transform rather than reinforce existing social divisions. She cautions against merely affirmative forms of redistribution and recognition (e.g. welfare state coupled with multicultural identity politics), as these risk reinforcing group divisions. Instead, she advocates transformative forms of redistribution that tackle inequality at their source and recognition that deconstruct rigid group distinctions by deconstructing privilege. Applied to climate policy, affirmative recognition entails acknowledging lived experiences, vulnerability and contribution; transformative recognition goes further by providing a credible account of how these conditions were produced, why they persist, and how they might be changed. Recognition therefore involves not only communicating those particular experiences matter (Sovacool et al., 2025), but also situating them within a meaningful account of social and economic change that integrates diverse practices, values, and ways of life (Bennett et al., 2019).

Figure 1. From uneven readiness to uneven acceptance in the German residential heat transition: A schematic overview



Source: Authors' illustration

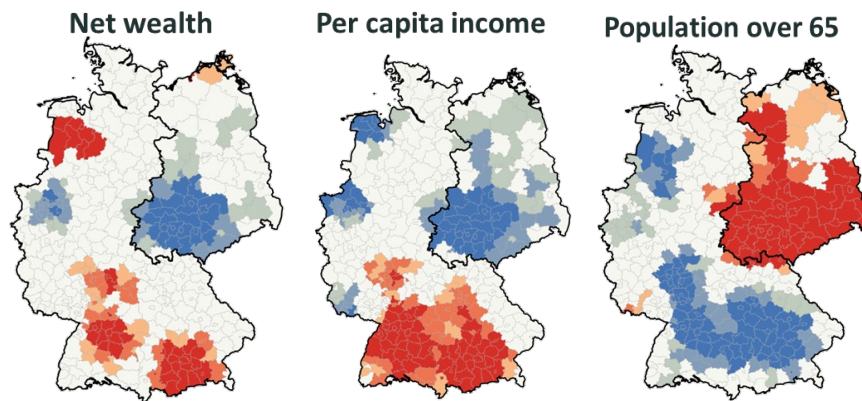
4. Case context and methods

Empirically, we develop this argument through the case of the German heating transition. A key pillar for its implementation was the Building Energy Act (Gebäudeenergiegesetz, GEG), the focus of our article, commonly referred to as the 'Heating Law'. Coming into force in January 2024, the legislation initially required that all newly installed heating systems use at least 65% renewable energy. The rollout was staggered for newbuilds and standing buildings, thereby permitting repairs of existing gas-based systems (Loschke et al., 2026).

The policy was carried out against a context of strong and geographically clustered inequality in income, wealth and demographic dynamics (Figure 2). Notably, vast areas of East Germany appear as statistically significant outliers when considering income, wealth and population over 65, whilst Southern and central regions like Baden-Württemberg, Bavaria and the Rhine-Main area host statistically significant positive outliers (hotspots). Average wealth in Baden-Württemberg (€ 486,497), for instance, is more than five times higher than in Thuringia (€ 91,929) (calculations based on Bundesbank PHF).

Within this highly uneven material setting and entrenched post-reunification core-periphery dynamics (Wolf, 2026), the 'Heating Law' became one of the most politically contested components of German climate policy (Semb et al., 2026; Loschke et al., 2026), particularly in peripheralised areas of East Germany. Given the expressions of discontent, the law was modified in 2026, being replaced by the Building Modernisation Act, which abandoned the 65% renewable energy requirement in favour of a phased model where households must gradually increase the share of climate-neutral gases used to operate their heating systems.

Figure 2. Material geography in post-reunification Germany – Getis Ord G_i^* Hotspots and Coldspots¹



Calculations based on: Statistische Ämter des Bundes und der Länder, 2022 and Bundesbank Panel on Household Finances 2025 (wave 5)

To untangle the sources of green discontent expressed in the German heating transition, the article adopts a sequential mixed-methods design. The quantitative stage used national secondary survey data on attitudes towards climate policy generally ($n=2,048$) (Bundesministerium Für Umwelt, Naturschutz Und Nukleare Sicherheit (BMU) et al., 2025) with the aim to identify attitudinal patterns to green policies by tenure types and income groups. The subsequent interviews ($n=33$) then explored how these patterns were expressed specifically in relation to the residential heat transition and investigated the place-based narratives and experiences of (mis-)recognition behind them.

Based on the national survey data, we identified four dominant attitudinal clusters relevant for the heating transition summarised in Table 1: (1) progressive West German renters, demanding more ambitious climate measures, especially in the lowest income brackets; (2) satisfied West German homeowners, generally content with current policies across all income levels; (3) divided East German renters, least likely to find the measures “appropriate” but split between “going too far” and “not far enough” and (4) discontented East German homeowners, perceiving the policies as “going too far” especially in the lowest income brackets.

This attitudinal segmentation is not immediately intuitive. Given that renters are largely excluded from decision-making regarding building decarbonisation while potentially bearing indirect costs through rent increases, or green gentrification, they would be expected to exhibit stronger opposition. Conversely, homeowners are the primary beneficiaries of subsidy schemes designed to facilitate

¹ Getis-Ord G_i^* statistics detect statistically significant clusters of high or low values. For each district, the statistic considers the values of that district and its neighbouring districts and assesses whether their combined concentration is unusually low (coldspot) or high (hotspot) relative to Germany as a whole. G_i^* statistics therefore provide a measure of spatial/regional concentration, offering important insights into uneven readiness.

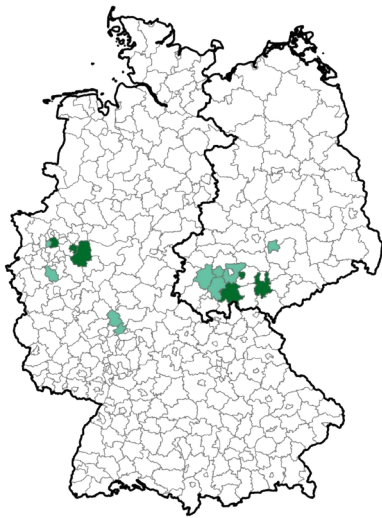
participation in housing decarbonisation. The pronounced regional divide observed among homeowners is therefore not readily explained by formal policy design alone and points to the importance of place-specific socio-economic conditions and perceptions of justice in shaping policy acceptance.

Table 1. Attitudinal segmentation regarding climate policy by income and tenure type

How do you assess the federal government's measures for ecological structural change?

Progressive W. renters					Content W. owners					Divided E. renters				
Does not go far enough	West		East		Is appropriate	West		Ost						
Income	Renters	Owners	Renters	Owners	Income	Renters	Owners	Renters	Owners					
< 2.000€	51%	37%	38%	25%	< 2.000€	32%	41%	25%	33%					
2.000 - 4.000€	46%	30%	37%	28%	2.000 - 4.000€	34%	46%	19%	34%					
4.000 - 6.000€	44%	39%	36%	31%	4.000 - 6.000€	42%	41%	36%	34%					
> 6.000€	43%	49%	50%	69%	> 6.000€	48%	32%	50%	0%					
Discontent E. owners														
Goes too far	West		Ost		Undecided	West		Ost						
Income	Renters	Owners	Renters	Owners	Income	Renter	Owner	Renter	Owner					
< 2.000€	11%	18%	17%	42%	< 2.000€	6%	4%	21%	0%					
2.000 - 4.000€	15%	21%	30%	28%	2.000 - 4.000€	4%	3%	15%	9%					
4.000 - 6.000€	9%	17%	29%	34%	4.000 - 6.000€	4%	4%	0%	0%					
> 6.000€	9%	18%	0%	31%	> 6.000€	0%	2%	0%	0%					

Table 2. Interview locations and participant characteristics

Location Map	Dimension	Category	n	%
	Tenure status	Rent	11	33 %
		Own with mortgage	11	33 %
		Own outright	11	33 %
	Degree of urbanisation	Urban	9	27 %
		Semi-urban	12	36 %
		Rural	12	36 %
	Macro-region	East Germany	18	55 %
		West Germany	15	45 %
	Wealth status	Cold spot	26	79 %
		National average	4	12 %
		Hotspot	3	9 %
	Education status	No university degree	11	33 %
		Graduate	22	67 %
	Age	Early career (25-44)	12	36 %
		Mid-/Late-career (45-64)	11	33 %
Retired (65+)		10	30 %	
Total: n=33				

5. The genesis of discontent in the German heating transition

The attitudinal segmentation of interview participants broadly mirrored the geographical attitudinal pattern identified in the national survey. While both supportive and discontented respondents were present across East and West German interview sites, the interviews revealed different dominant narratives in East and West Germany. West German homeowners more commonly regarded the 'Heating Law' as necessary and its associated costs as manageable (IP1, IP23, IP33). Even in West German coldspots affected by overlapping transition pressures, criticism focussed on features of the Law such as communication, technological feasibility, sequencing, and implementation (IP24, IP27, IP28, IP31). This resulted generally in acceptance or critical acceptance of the residential heat transition.

In contrast, East German homeowners more often interpreted the 'Heating Law' through persistent regional inequality, materially constrained homeownership and collective experiences of post-reunification disruption and misrecognition (IP3, IP5, IP9, IP14, IP15, IP17, IP21). Importantly, even some financially secure East German homeowners and early adopters of green residential heating technologies opposed the law because they interpreted the policy through shared place-based memories and solidarity with more vulnerable households (IP6, IP8, IP13, IP18, IP19, IP20, IP22). This contrasts with some more materially constrained West German homeowners who despite their lower personal material readiness overall remained acceptant of the German residential heat transition (IP28, IP31).

5.1. Uneven readiness and the material conditions of participation

Our findings demonstrate that green discontent emerged where homeowners experienced themselves as materially unable to participate in the transition while simultaneously perceiving these constraints as part of a longer history of unrecognised material and political exclusion.

Across interviews, respondents repeatedly described participation in the heating transition and the green transition more widely as reduced to financial capability. Participation became equated with the ability to replace heating systems, purchase electric vehicles, absorb rising energy costs or even supporting environmental charities with monthly donations (IP5, IP9, IP14). As IP14 explained:

*"I think what they all have in common is that, for an average person, they **always involve quite a lot of money**. An electric car was extremely expensive at first; changing the heating system is always a major project. I think that was a major problem: it **always involved relatively large investments**." (IP14)*

Hence, climate citizenship was experienced as monetised requiring households to make substantial private investments to adopt lower-carbon technologies and practices. In the heating transition, monetised participation exposed what we term 'precarious homeownership', i.e. households that possess property assets but lack the liquidity, savings, or credit access required to maintain them. These cluster in East Germany, where median household wealth is just 25% of that in West Germany. For precarious homeowners, homes were no longer perceived as an asset but as a liability. Particularly those living in older housing stock and relying on modest pensions or savings, felt unable to make necessary investments. As one participant explained:

*"I **just can't afford** that anymore. I **can't get a loan** either, when you're **retired**, you can't get one, and the **little savings** I still have are **for emergencies**."*

Furthermore, readiness was shaped by the scale and economic viability of the required investment. The age and condition of the housing stock, particularly the old and often large farmhouses common in rural areas (IP13), meant that heating-system replacement was rarely considered an isolated intervention (IP3, IP8, IP9, IP14, IP15, IP17, IP18, IP19) as “the entire house would need attention [to improve energy efficiency]” (IP8). For IP8’s elderly parents, the extensive investment required to modernise their property competed with savings reserved for potential care costs. Similarly, IP17 highlighted that “costs would be completely disproportionate and (...) the increase in the property value is in no relation to the required investment” (IP17).

5.2. Experiences of misrecognition

This uneven material readiness intersected with experiences of misrecognition. Three forms of misrecognition were particularly salient, namely misrecognition of unequal financial readiness; misrecognition of non-monetary contributions; and misrecognition of historically accumulated disadvantages shaping contemporary transition capacity.

First, respondents perceived financial readiness to participate as being taken for granted and by extension, as a denial of lived realities of persistent inequality and its reproduction.

*“Not everyone in the East has half million in their bank account (...) I’m living on a **poverty pension**, under €1,000 [despite a Master’s degree in Electrophysics].” (IP21)*

*“Now they are making their plans again and forgetting that, **for us**, they are **completely utopian**.” (IP13)*

“That is typical armchair thinking. It wasn’t thought through because you can’t expect people to go that far into debt or use so much private capital (...).” (IP18)

The ‘Heating Law’ directly confronted households with their financial capacity and by extension vulnerability, thus acting as a reminder of ongoing socio-economic marginalisation. As one participant from Thuringia noted “there are quite a few really economically deprived villages where there’s no industry and jobs are hard to come by—and this isn’t something that’s only emerged in the last five years” (IP14).

Second, respondents felt that public discourse failed to recognise non-monetary ways to contribute to the green transition. Several participants contrasted their own constrained lifestyles with what they perceived as the environmentally damaging behaviour of political and economic elites (IP3, IP5, IP14, IP17, IP21). As one respondent argued

“But in winter I only heat the living room. (...) When I see politicians flying to celebrations in their planes, or sitting up there in big limousines being driven around - all of them polluting the environment - They all earn ridiculous amounts,... It’s all too much for me, I have to tell you. And then there’s me, an ordinary citizen running a gas heating system...” (IP3)

While perceiving climate policy as insufficiently attentive to how its costs should be distributed, respondents frequently described their own low-consumption lifestyles as unrecognised forms of environmental contribution while high consumption norms escaped scrutiny.

“We live here in 75m². Back then with two children and my office, and it was enough. So, my energy consumption is already much lower to begin with. But now I’m being told that I’m not living climate-neutrally and that I’m supposed to make enormous investments.” (IP17)

“They grow their own vegetables, and they would never buy pineapple in winter – in fact, they would never buy a pineapple at all – and the strawberries come from their garden in early summer. And once they’re gone, they’re gone. (...) “The feeling is: We’re already doing so much – we’re the ones who already live environmentally friendly lives, so why should we have to pay even more?” (IP13 talking about their parents)

Hence, the perceived monetisation of climate citizenship not only reinforced awareness of persistent inequality but also had a moralising effect, as the non-monetary contributions of those excluded from financial participation were denied social esteem.

Finally, among East German respondents, perceptions of misrecognition were closely linked to memories of reunification and its aftermath. Participants frequently described contemporary transition policies through the lens of earlier experiences of economic upheaval, industrial decline, and perceived injustice. One respondent recalled that after reunification "some elderly people in the Thuringian Forest took their own lives because they no longer knew how to finance things. And this immediately came back to my mind" (IP3). The new policy encounter therefore became emotionally connected to an earlier failed transition associated with economic loss, insecurity, and a perceived absence of protection.

Noteworthy is that, within our sample, fears of renewed deindustrialisation were expressed repeatedly by East German respondents (IP15, IP17, IP18, IP19, IP21, IP22) but did not arise among West German respondents, not even among the steel workers in the Hagen region. Considering these collective experiences, the ‘Heating Law’ was interpreted as another imposed transition without adequate recognition of spatially uneven consequences. Evoking relatives in Lusatia, IP19 explained:

“In Lusatia an entire region lives from these power stations (...) something is really being destroyed, and destroyed far too easily and too quickly for alternatives to be created that could preserve these regions or give them a future. That future is not there.” (IP19)

Others described privatisation processes and factory closures as examples of longstanding patterns of exclusion and dispossession that continued to shape trust in political institutions (IP21).

*“**There were so many injustices.** The prime assets that existed here were snapped up by the people from the Treuhandanstalt, or by people they knew — **they basically grabbed everything for themselves.** A lot of unfair things happened. (...) in the end, **the porcelain factory was shut down, the equipment was dismantled and rebuilt in the West.** (IP21)”*

These experiences contrasted sharply with perceptions among some West German participants that substantial public resources had already flowed into East Germany, revealing profoundly uneven understandings of historical injustice and contemporary vulnerability.

“Over there in East Germany, a tremendous amount has been achieved through subsidies and public funding.” (IP1)

5.3. Emotional geographies of misrecognition

The joint experience of distributional exclusion and misrecognition was associated with an emotional response that made post-truth narratives more resonant. It is through experiences of (mis-)recognition that uneven readiness obtained political meaning. Where encounters with the ‘Heating Law’ reactivated collective experiences of misrecognition, populist narratives translated emotions of betrayal, disrespect, and fear into alarmist accounts of expropriation and destructive change. Three interrelated mechanisms were evident.

First, material constraints generated fear, insecurity and anger. As homes turned from assets into liabilities, the heating transition produced an acute emotional response of anger and existential fear. As one respondent put it “The topic just makes me really extremely angry” (IP5). Another described waking at night consumed by anxiety about the financial consequences of the transition:

*“I was... I was terribly afraid. I have to tell you, I really was. I'd wake up in the middle of the night at 2 or 3 a.m., and it all just floods your mind. (...) When you (...) think about what you've got on your plate, you **really get existential fears.** (...) And if that's what they want, drive me into ruin, **then I'll have to go to the attic and hang myself.** That's just how it is.” (IP3)*

These fears attached themselves to an emotional repertoire of insecurity, dispossession and injustice stemming from the experience of deindustrialisation and mass-unemployment and continued socio-economic marginalisation, which the contemporary transition could reactivate rather than resolve.

Second, recognition failures generated additional emotions associated with invisibility, devaluation and disrespect. The 'Heating Law' appeared detached from lived realities misrecognising households' financial capacity and built environment context. Respondents consequently described feeling ignored, dismissed, or treated as though their experiences were irrelevant to policy design. As one interviewee summarised "The main driver of resentment is people's feeling that they are neither seen nor valued: 'We don't count, our problems don't matter.'" (IP13). By making financial capacity the expected basis of climate citizenship and misrecognising non-monetary forms of contribution, the 'Heating Law' vindicating longer-standing feelings of denied social esteem. Reflecting on a lifetime of low-paid shift work in social care, raising children and caring for their father, IP3 contrasted a lifetime of socially necessary labour with a pension of €1,400 and the expectation of financing further major investment:

"[The people making the laws] are all people who earn much more than we did, compared with us who really toiled away, and I don't think it's fair, and I don't feel heard." (IP3)

The emotional injury therefore arose not only from insufficient resources, but from denied social esteem as neither their non-monetary contributions to the green transition, nor contributions to society more broadly, appeared to command recognition.

Third, misrecognition of lived realities generated epistemic distrust. When respondents observed that what they could see and experience on a daily basis was absent from official public discourse and laws, they became more receptive to interpretations involving the deliberate concealment of information and interests. The same mechanism operated through the perceived misrecognition of unequal ecological footprints. As one respondent put it:

*I have the feeling **of being constantly exposed to hypocrisy and lies**. It's really always about profit first. (...) And it's the same for the green transition. I have the **suspicion** that there's a huge commercial interest behind all of this — and in the end, it's all about **profit, profit, profit**. (IP 21)*

"If they were serious [about climate change] they'd have to start exactly where they are - right at the top." (IP5)

Importantly, these emotions extended beyond those directly exposed to the material constraints of the transition. Even financially secure East German homeowners, including those who had themselves undertaken substantial investments to improve the energy efficiency of their homes, often expressed

strong empathy and solidarity with financially more vulnerable homeowners. Their responses were shaped not only by their own material position, but by a place-based understanding of social justice. As IP18 explained “We can defend ourselves, in terms of our income and standard of living. Others cannot.” Similarly, IP6 emphasised “even though this is not my fear, I can completely understand it.”, while IP19 pointed out the vulnerability of elderly people living in old houses and former farmsteads in rural areas: “For them this law is basically fatal.” (IP19)

Respondents also expressed concern that the transition was exacerbating existing social divisions and undermining social cohesion. One participant argued that “It’s really starting at the wrong end, and through all these retrofit and heating renovations, social tensions are being unnecessarily reinforced.” (IP5), while another maintained that the ‘Heating Law’ “led to a polarisation of society that I find deeply worrying.” (IP13).

In this way, the experience of misrecognition was not confined to those who felt personally disadvantaged but extended to insufficient attention to the origin and reproduction of place-based inequalities. Personal material readiness could therefore co-exist with opposition or strong criticism of the ‘Heating Law’. Together, this place-based emotional mix created fertile ground for narratives of expropriation, elite hypocrisy, hidden commercial interests and engineered betrayal to take hold, reflecting a search for recognition and alternative accounts of the ‘truth’ when official narratives were perceived to deny lived realities.

6. Conclusions

Using the German domestic heating transition as a case, this article set out to explain drivers of green discontent, focussing on the process through climate policies attach themselves to historically accumulated grievances in left-behind places that transforms uneven readiness into uneven acceptance.

The article makes a theoretical contribution by linking this process to experiences of (mis)recognition. Distributional inequalities shape the material capacity of households and places to participate in the transition, producing uneven geographies of readiness. These acquire political and emotional significance when green transition policy is perceived to operate on assumptions that misrecognise existing vulnerabilities and contributions. Drawing on Honneth (1995, 2004) and Fraser (1995), we show that misrecognition constitutes a form of social injury that undermines individual and collective ability to positively relate to oneself and society generating emotional responses of

invisibility, disrespect, devaluation and betrayal which create a fertile ground for post-truth narratives to take hold.

Empirically, we illustrate this point through the place-based reactions to German legislation aiming at advancing the decarbonisation of domestic heating systems. The so-called 'Heating Law' faced significant contestation in spatially uneven ways clustering in peripheralised East German places. Based on nationally representative secondary survey data, we showed that attitudes towards climate policy differ between homeowners and renters in East and West Germany. We then traced the formation of these attitudinal profiles through semi-structured interviews focussing on homeowners in net wealth coldspots in East and West Germany showing that distinct place-based narratives emerged around the 'Heating Law'.

East German respondents perceived climate citizenship as highly 'monetised', i.e. contingent on purchasing power. Discontent among East German homeowners emerged where households experienced themselves as materially constrained to participate while simultaneously perceiving these constraints as unrecognised in policy design and public discourse. Three forms of misrecognition were particularly salient, namely misrecognition of spatially uneven financial readiness; misrecognition of non-monetary contributions; and misrecognition of the post-unification transition experience.

The consequences of these recognition failures operated through interconnected channels. The misrecognition of material readiness was experienced as a denial of lived realities, driving epistemic distrust. When respondents perceived a gap between what they experienced in everyday life and what was acknowledged in public discourse and laws, they became more receptive to interpretations involving the deliberate concealment of information and interests. By making financial capacity the expected basis of climate citizenship, the policy was perceived to misrecognise non-monetary forms of contribution, thereby vindicating longer-standing feelings of denied social esteem. Finally, the misrecognition of post-unification development trajectories allowed the policy to attach readily to place-based fears of further disruptive transition and decline. In this respect, the spatial clustering of income and wealth inequality solicited reactions of solidarity out of concern over social cohesion even among financially secure households and those who had carried out energy efficiency improvements to their properties.

These findings speak to several strands of literature. First, they advance research on the drivers of green discontent (Bourdin & Torre, 2023; Compagnucci et al., 2026; Eichenauer & Gailing, 2022; Eversberg et al., 2024; Mewes et al., 2024; Paterson et al., 2024; Rodríguez-Pose & Bartalucci, 2024; Semb et al., 2026; Sovacool et al., 2022; Tallent, 2026). Existing research identified material vulnerability, political preferences and place-based disadvantage as important drivers of discontent.

We show how experiences of (mis)recognition transform place-based material vulnerability into political and emotional grievances, helping explain why climate policies can become vehicles for wider expressions of discontent. Green discontent therefore emerges not only from transition-related costs. Through processes of misrecognition, contemporary climate policies can (re)activate longer-standing place-based grievances. This means contemporary sustainability policies can inherit political meanings associated with past experiences of decline, exclusion and betrayal. Second, the article broadens understandings of transition vulnerability beyond employment and sectoral exposure by identifying precarious homeownership as a distinctive source of climate-policy vulnerability. Households may appear asset-rich through homeownership but in practice lack the financial capacity to comply with capital-intensive decarbonisation requirements. Third, the article contributes empirically to the literature on climate justice (Tarasova, 2024; Simcock et al., 2021; McCauley & Heffron, 2018) by showing empirically how the different dimensions of justice co- and pre-condition each other and tracing the consequences of recognition failures.

To break the cycle in which climate policy reactivates emotions associated with peripheralisation, policy design must ensure the material conditions for participation across different aspects of the green transition whilst also being attentive to the pitfalls of misrecognition. In practice, this goes beyond offering compensation. It requires spatially mapping relevant transition-related vulnerabilities such as income and wealth and integrating them explicitly into policy design. Navigating recognition deficits also involves recognising non-monetary forms of climate participation - such as low-consumption lifestyles, repair practices, and existing resource restraint - as meaningful environmental contributions and communicating credibly how climate interventions will avoid reproducing them.

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