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Citizen participation is key to learn of actors' lived experiences for the design of just energy policies. Many members of society, however, experience barriers to participation. As a result, the injustices they experience are likely to remain hidden from public decision-making processes. This paper applies the 'hidden morality' framework to a case study of migrants with a low socio-economic status (SES) in the Dutch city of The Hague. Through the analysis of 15 policy documents and 26 semi-structured interviews with migrants in a low-SES neighbourhood, this paper uncovers hidden injustices and the societal mechanisms forming barriers to participation. Simultaneously, the case study is used to test the conceptual framework. The study reveals that the interviewed low-SES migrants were not only considerably prevented from expressing their perceived injustices in decision-making, but were also unaware that they were subject to several procedural injustices. We identify three main barriers withholding low-SES migrants from participating in decision-making: unfamiliarity with (Dutch) democratic institutions and of their rights as citizens; language barriers; and weak social ties in their neighbourhoods. We conclude that the hidden morality framework proves useful for revealing injustices and barriers to participation that would otherwise run the risk of remaining hidden from scholars and policymakers.

1. Introduction

The transition to sustainable forms of energy production and consumption requires far-reaching transformations that tend to disproportionately impact the most vulnerable and marginalised actors in society (Sovacool and Dworkin 2015, Faber 2017, Wood and Roelich 2019). Energy justice scholars recognise the need to study the injustices experienced by such marginalised groups and to find ways of taking their lived experiences into account in decision-making, in order to create more just energy transitions (Jenkins *et al* 2021). Political participation of marginalised people is key to learn of their lived experiences. However, participatory processes are often the domain of the social elite, with diverse societal groups being overlooked and excluded (Hendriks 2010, Chilvers and Longhurst 2016, Pallett *et al* 2019). Especially those people with a low socio-economic status (SES) experience difficulty in participating (Verba *et al* 1978, Hooghe *et al* 2015). As a result, the injustices they experience are likely to remain hidden from public decision-making processes, while energy projects and policies might be developed that are unacceptable or outright harmful to them, worsening their marginalisation (Temper *et al* 2020). While feelings of exclusion and perceptions of injustice are often reasons for actors to protest policy decisions (Pesch *et al* 2017, Cuppen 2018), people with a lower SES are less likely to share their perspectives in such a way (Cainzos and Voces 2010, Hooghe and Marien 2013).

To learn of the injustices of low-SES people and other marginalised groups, scholars and policymakers aim to develop increasingly more inclusive forms of participatory governance processes (Hendriks 2010,

Gjørtler Elkjær *et al* 2021, Suboticki *et al* 2023). The underlying assumption is that actors will be enabled to express themselves in such processes. However, as options for political participation increase, the voices of low-SES people tend to become even less visible. New options for participation are consistently captured by privileged members of society (Kern and Hooghe 2018). For low-SES actors, such channels of participation often prove to be inaccessible, or are completely unknown to them (Honneth 1995, Hooghe *et al* 2015, Kern and Hooghe 2018). Paradoxically, by trying to uncover and address injustices through the increase of options for participation, injustices may in fact be reinforced.

In this paper, we apply and simultaneously test the ‘hidden morality framework’ (van Uffelen and ten Caat, [Forthcoming](#)) to explore injustices experienced by low-SES people and the reasons why these remain hidden from participatory decision-making processes. Based on the work of philosopher Axel Honneth (1995), van Uffelen and ten Caat ([Forthcoming](#)) developed this framework to allow for uncovering hidden injustices and for assessing the extent to which harms are rendered invisible to both policymakers and to the actors themselves. Simultaneously, the framework aims to improve the understanding of the societal mechanisms that cause people to be unaware of the injustices they are subject to and of those mechanisms that bar people from expressing their perceived injustices in decision-making processes.

We apply the hidden morality framework to a case study on the experience of low-SES migrants in the heat transition in the Dutch city of The Hague. The case specifically focuses on the neighbourhood of Moerwijk, which is the neighbourhood with the highest share of low-SES migrants in The Hague (Municipality of The Hague 2021a, *n.d.*, *n.d.*; Statistics Netherlands 2022a). This case is particularly relevant, as the combination of a low SES and a migratory background is found to make people in the Netherlands especially likely to encounter barriers to political participation (Kranendonk and Vermeulen 2019, Statistics Netherlands 2017 2022b). At the same time, however, the Dutch national government aims for all citizens to be involved closely in the heat transition as it will affect people’s living conditions through changing the way people heat their homes, cook and produce hot tap water. Municipalities responsible for implementing the transition, struggle with including the needs of low-SES migrants in their heat transition policies (Odekerken *et al* 2021), something also of concern to the municipality of The Hague (Municipality of The Hague 2016 2021b). In addition, the municipality of The Hague, together with other major local stakeholders, has outlined in several policies how municipal projects and the heat transition in particular should be organised in order for such projects to be considered just. These policies stipulate how citizens should be involved in the heat transition, how citizens can be impacted by the transition and how they should benefit from it.

We use this case study firstly to analyse the mechanisms that prevent low-SES migrants from sharing their perceived injustices in participatory processes and that cause them to be unable to perceive other injustices they were unknowingly subject to. To do so, we secondly use the case study to uncover some of the hidden injustices experienced by low-SES migrants in The Hague. We do this by analysing what people themselves perceive to be unjust, and compare the lived experiences of low-SES migrants to the (implicit) justice goals set by the municipality in their policy documents. This comparison allows for studying situations that people do not perceive as being unjust but which are unjust according to the municipal goals. Thirdly, and most importantly, the case study serves as a way to test the conceptual framework developed by van Uffelen and ten Caat ([Forthcoming](#)) through an empirical study, to pinpoint and address several conceptual and methodological challenges in (the application of) the hidden morality framework. Our central research question in this study was therefore: *How does the Hidden Morality framework aid in identifying hidden injustices and the societal mechanisms that hide these injustices among low-SES migrants in the heat transition of The Hague?* This question was split up in sub-questions in line with the research objectives: (1) *What are the goals for a just heat transition according to the policies of the municipality and the housing corporations?;* (2) *Which injustices were the low-SES migrants subject to, both from their own perspective as well as according to the justice goals of the municipality and housing corporations?;* (3) *Which barriers did low-SES migrants encounter in resolving their injustices?*

In the next section, we discuss the energy justice concept and the hidden morality framework (van Uffelen and ten Caat, [Forthcoming](#)). Section 3 describes the methodology. Section 4 presents the results of the case study. Section 5 interprets the results and discusses their implications for the use of the concept of hidden morality in energy justice research. The sixth and final section presents concluding remarks, policy implications and further avenues of research.

2. Theoretical framework

This paper uses the framework of hidden morality (van Uffelen and ten Caat, [Forthcoming](#)) to study whether low-SES migrants are subject to injustices and the mechanisms through which these remain hidden. The energy justice framework will be used to help categorise the types of injustices they faced and perceived.

2.1. Energy justice

Researchers in the field of energy justice are concerned with revealing and reducing social injustices in energy policy and energy production, transportation and consumption systems, in order to grant every individual fair access to safe, affordable and sustainable energy (McCauley *et al* 2013, Heffron and McCauley 2017, Jenkins *et al* 2016 2021). Energy justice scholars investigate to what extent energy systems are unjust, and what causes these injustices (Sovacool *et al* 2017). Most commonly, they use an energy justice framework based on three core tenets: distributive, procedural and recognition justice (McCauley *et al* 2013, Jenkins *et al* 2016 2021, Levenda *et al* 2021).

The exact definitions of the three tenets tend to differ slightly among researchers. Often, scholars define these in normative ways, stating that burdens and benefits should be distributed *equally*, or that procedures should be *inclusive* and *transparent* (van Uffelen *et al* 2024). Such an idea of what justice should be is not necessarily shared with other scholars, let alone with societal actors. Wood (2023) and Hoffman *et al* (2021) point out that energy justice scholars employ a wide variety of moral principles to draw conclusions regarding justice, with many failing to explicate the moral basis of their conclusions. Societal actors also hold their own ideas of what justice should be, based on their own moral frameworks. These ideas could conflict with the dominant moral framework in society. This could lead the dominant structures in society to dismiss the perceived injustices of such actors, thereby hiding these injustices. As such, applying the moral frameworks of energy justice from either scholarship or society to the analysis in this paper would run the risk of inducing further issues of hidden morality.

In this study, we therefore avoid to define the three tenets in a normative way, instead allowing actors to formulate their own ideas of what justice should look like, and what injustice would be. In our empirical analysis, we do still categorise actors' expressions of (in)justice according to the three tenets, which we therefore aim to define in as neutral a way as possible. We define distributive justice as the ways in which benefits and burdens are distributed over members of society, generations, locations or otherwise (without stating what distribution is just). Procedural justice relates to perceived injustices in decision-making procedures. Recognition justice refers to the inclusion of actors' perspectives and needs based on their (1) emotional attachments to others (love); (2) equal treatment under the law; (3) appreciation of their contributions to society (status order) (van Uffelen 2022).

2.2. Hidden morality

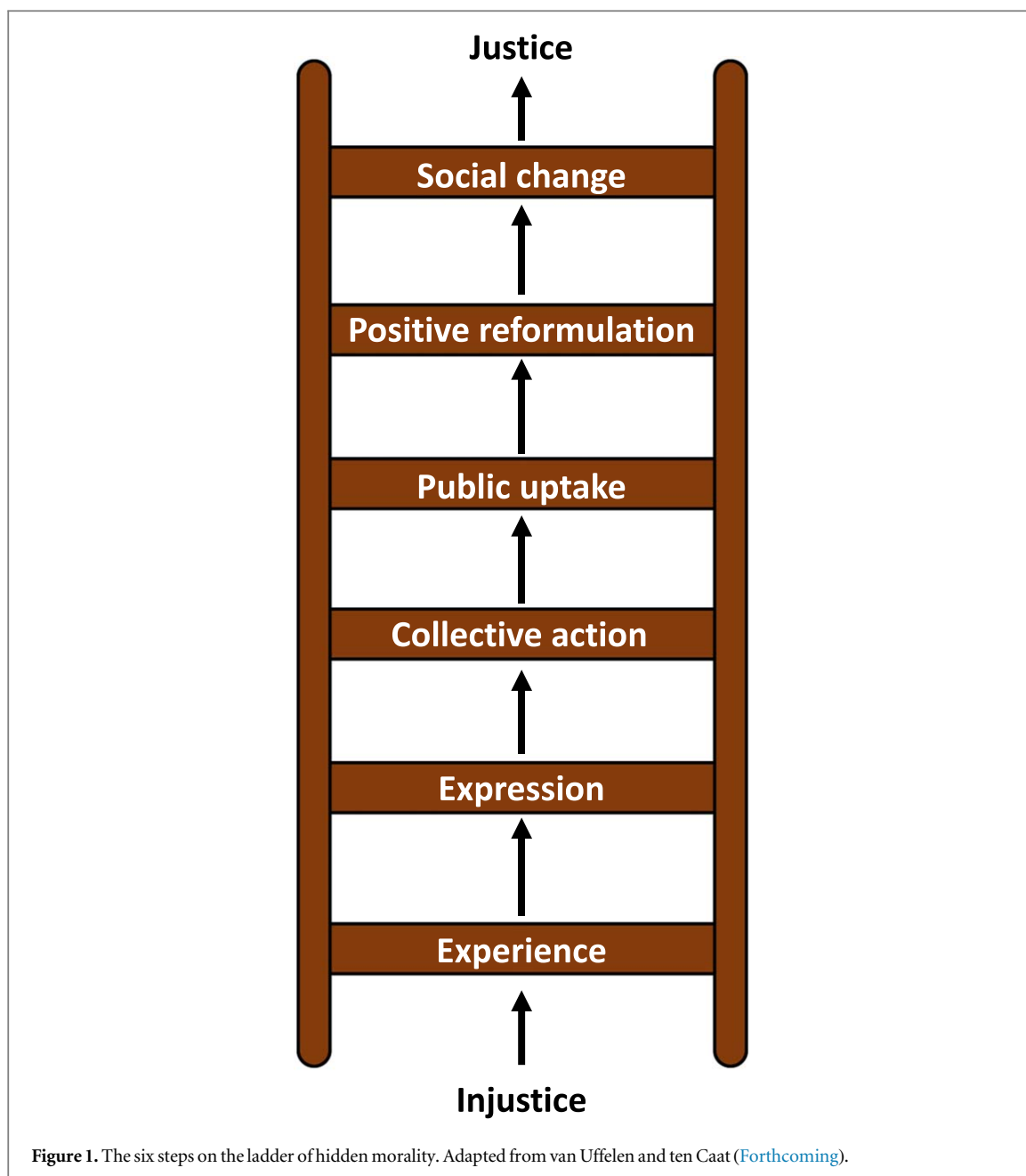
The tenets of energy justice are a useful tool for analysing and understanding what the injustices in energy systems are like, for notifying policymakers of injustices resulting from existing energy policies, and for educating these policymakers on how to design more just policies (Jenkins *et al* 2020). The framework does not, however, allow for discussion on injustices that remain unresolved and hidden from both decision-making processes and from the victims themselves, and neither does it enable the systematic study of the societal mechanisms that are responsible for hiding these injustices. Both van Uffelen and ten Caat (Forthcoming) and this paper therefore work on the hidden morality framework to fill this gap.

The framework of hidden morality draws on work by Axel Honneth (Honneth 1995, van Uffelen and ten Caat, Forthcoming). Honneth posits that actors could be suppressed in expressing their perceived injustices through a large variety of mechanisms, the exact workings of which differ per society (Honneth 1995). This is often not a deliberate suppression. Rather, it is the result of the organisation of society which privileges some people over others—which could, of course, have deliberately been designed in such a way. Elites shape societal institutions to align with their needs, which could lead to the (active) exclusion of the cultures and traditional forms of expression of other actors (Pavanelli *et al* 2023).

Whereas the issues of hidden morality are not unique to the energy transition but a possible part of any decision-making process, this paper and van Uffelen and ten Caat (Forthcoming) show the relevance of this theory to energy justice scholarship and energy policymaking. Van Uffelen and ten Caat (Forthcoming) distinguished between six levels of suppression. These are visualised in figure 1 as a ladder with six steps, leading from a situation of injustice to justice. If someone is subject to an injustice, the first step to take is towards the conscious *experience* of that injustice. Actors can be unaware of the injustices they are subject to. This can result from a harmed relation-to-self: because of the dominant norms and perspectives in society, actors might not think that they deserve to be treated differently and thereby not feel negatively about their current situation.

Actors who do perceive injustices can still be unable to take the second step and *express* those feelings. An inability to express oneself can originate from a lack of proper words to do so (resulting from the dominant language system), taboos or other cognitive, physical and cultural barriers. To reach the necessary change to improve the unjust situation, actors could engage in *collective action* to gather support for their feelings. Collective action does not automatically translate into the *public uptake* of the discussion on the expressed injustices into public discourse. This fourth step could, for example, demand significant financial resources. Actors' claims could also be dismissed or even ridiculed, a form of testimonial injustice (Fricker 2007).

At some point, it is necessary for actors perceiving an injustice to *reformulate* their negative feelings into positive claims for justice (*positive reformulation*). Feelings of injustice start as a negative emotion towards a



situation (Honneth 1995). An idea that something is wrong and, perhaps, why it is wrong. It can be hard, however, to claim how a situation should change in order to become just. It might be unclear what the right course of action is to solve an injustice and finding a feasible solution requires a thorough understanding of the mechanisms behind the injustice. Actors can take this step at different moments. Once actors have expressed their feelings of injustice, they might immediately have a clear idea of what should change and how. However, solutions to particularly complicated situations might only be found after collective organisation or through discussion in public discourse.

Serious uptake of positively formulated ideas of justice in public discourse might still not result in *social change* towards a just situation. Conflicting societal interests, for example, could lead to a decision in which the currently unjust situation is maintained to retain the position of others. Despite all previous steps taken by actors experiencing an injustice, the injustice will then remain. Van Uffelen and ten Caat (Forthcoming) have elaborated further upon the barriers that might exist in taking each of the steps.

3. Methodology

This paper used a case study in The Hague to apply and test the hidden morality framework. We answered the first sub-question to our main research question—on policy goals for a just heat transition—through a policy

document analysis. In addition, we conducted interviews with low-SES migrants to identify the injustices they perceived in the case study (sub-question 2) and the barriers they encountered when trying to resolve these perceived issues (sub-question 3). Finally, a comparison between the policy goals and the interview data highlighted circumstances that were unjust according to the policies, but that the interviewees did not perceive as such (sub-question 2).

3.1. Case: the heat transition in Moerwijk

The transition away from natural gas directly impacts the ways of living of Dutch households. People's homes need a variety of new systems to replace gas that instead run on electricity or are suitable for district heating. This means new electrical stove tops, new heating systems and new water heaters. To retain similar levels of comfort compared to the natural gas system, most homes require significantly improved insulation (Scholte *et al* 2020). In The Hague, and many other Dutch cities, people with a low SES and migratory background mainly live in social housing. These properties are owned by housing corporations. Housing corporations are therefore responsible for the necessary improvements to the homes of most low-SES migrants. Municipalities are required to make heat transition plans on the neighbourhood level. This paper studies the neighbourhood with the highest share of low-SES migrants in The Hague: Moerwijk (Municipality of The Hague 2021a, n.d., n.d.; Statistics Netherlands 2022a). The majority of inhabitants in this neighbourhood has a migratory background (79.0% in total, 62.5% non-western) or earn a low income (69.7%), with 47.2% of the population being low educated (Statistics Netherlands 2022a; Municipality of The Hague 2021a, 2023a, 2023b).

At the time of research (in the Spring of 2022), the heat transition in The Hague was in its starting phase. This meant that general municipal-level plans were being drafted and made available to the public for citizen feedback (Municipality of The Hague 2022a, 2022b). The municipality organised five consultation meetings for this purpose (Municipality of The Hague 2022a). Low-SES migrants did not participate in these consultation meetings (own observation) and municipal policy makers mentioned that low-SES migrants were also missing in other participatory processes for the heat transition.¹ For each neighbourhood in the Netherlands, the responsible municipality should work together with inhabitants and other stakeholders to decide on the best transition strategy. Dutch governments wish for such active participation of as many people as possible, not merely because the success of the heat transition depends on public support, but also to avoid the possible negative effects limited participation might have for the citizens themselves (Scholte *et al* 2020). The heat transition runs the risk of increasing the share of energy poor Dutch households by 33% by 2030, especially among those who are already in an economically precarious position (Middlemiss *et al* 2020, Berkel *et al* 2021). In addition, the heat transition requires drastic modifications to people's homes, including an extensive upgrade of the insulation, new cooking equipment and a change in the heating source for hot tap water and central heating. These changes could impact liveability and health, especially among people with a migratory background and culturally specific ways of heating and cooking, as they are often improperly involved by local governments (Asmoredjo *et al* 2019, Odekerken *et al* 2021).

Simultaneously to this drafting of plans, housing corporations started renovating and insulating homes in several neighbourhoods in preparation for new, more sustainable heating technologies (Municipality of The Hague 2019a 2021c). In Moerwijk, homes were being prepared for the implementation of district heating using geothermal heat and residual heat from the Rotterdam harbour industrial cluster. This heating solution should be in use before 2030 (Municipality of The Hague 2022b). Research mainly focused on one active and one finished renovation project from two different social housing corporations. Similar to 90% of the houses in Moerwijk (Statistics Netherlands 2022c), these specific homes were heated using natural gas-powered central heating boilers and used natural gas for cooking. As an in-between step towards district heating, the finished project introduced individual heat pumps and electric cooking to the homes, whereas the active project concerned a complete reworking of home insulation.

3.2. Analysis of policy documents

The municipality and housing corporations established certain justice goals for the heat transition through their formulation of guidelines and aims for the role of and engagement with citizens. To analyse these (often implicit) goals, the first author studied a total of 15 policy documents of the municipality and of the three housing corporations owning the largest share of homes in Moerwijk: Vestia, Haag Wonen and Staedion. These documents concerned the heat transition policies, approaches to participatory processes and agreements between the municipality and housing corporations that were in effect at the time of research or that were referred to in the most recent policy documents as being the foundation for those policy documents (table 1). The documents were coded by hand, using the three tenets of energy justice as defined in section 2.2. We

⁴ The first author was present at the five consultation meetings and separately spoke to the municipal Manager Heat Transition, Manager Energy Transition Strategy and the Communications Advisor in April 2022.

Table 1. Overview of analysed policy documents.

Policy topic	Document	Year	Description of contents
Heat transition	Implementation Plan Bouwlust/ Vrederust	2018	Policy plan for heat transition pilots in a different neighbourhood, referred to in later documents for its details on citizen participation.
	Energy Transition Plan	2018	Original policy for all parts of the energy transition in The Hague, setting the foundations for later policy.
	The Hague Framework Policy on Sustainability	2019	Policy document that set the basis for municipal sustainability policy in the period 2018–2022.
	City Energy Plan	2021	Policy that elaborated on the energy transition policy first described in the Framework Policy.
	Transition Vision Heat	2022	Described the planned implementation of the heat transition on a neighbourhood level.
Public participation	Participation Regulation The Hague	2012	Foundational policy for citizen participation in policymaking.
	Action Plan Citizen Participation	2016	First additions to Participation Regulation to improve citizen participation.
	Vitalisation Plan for Democracy in The Hague	2021	Most recent addition to the Participation Regulation.
Housing corporations	Framework Agreement Housing	2019	Agreement between the municipality, housing corporations and tenant organisations on social housing, including goals on the heat transition and citizen participation.
	General Conditions for tenants of the housing corporations Haag Wonen, Staedion and Vestia	2014, 2016, 2021	Explained the options for tenant participation in decisions made by the corporations, and in general the rights and duties of tenant and corporation in respect to each other.
	Business Plans of Vestia, Staedion and Haag Wonen	2018, 2020, 2021	Outlined, among other topics, the goals of the corporations in the heat transition and related renovations, and how tenants should be involved in and impacted by these.

analysed whether paragraphs mentioned how burdens and benefits should be distributed, how citizens should be included in fair procedures or how the recognition of (groups of) citizens should be ensured. We subsequently qualitatively compared the coded paragraphs per tenet, from which we derived the approaches to distributive, procedural, and recognition justice.

The justice goals were used to identify where interviewees did not perceive injustices but where their lived experiences deviated from the municipal justice goals. We interpreted these as not-experienced injustices in accordance with the hidden morality framework. This process did not allow us to identify all possible not-experienced injustices, as, for example, an assessment of heat transition effects on energy poverty would have required insight into interviewees' household budget in addition to the interviews. However, this paper mainly aimed to identify the *barriers* people encountered in addressing injustices instead of the exhaustive list of injustices they were subject to.

3.3. Semi-structured interviews

To uncover low-SES migrants' expressed and not-experienced injustices in the heat transition, the first author conducted 26 semi-structured interviews with people of varying migratory backgrounds living in Moerwijk. For interviewee selection, we confined the research area to social housing complexes in Moerwijk. This aided in ensuring that interviewees were low-SES migrants. Additionally, before the interviews, the first author asked two verifying questions about people's level of education and ability to pay their energy expenses. After 26 interviews, we found that the point of saturation had been reached and no new results were obtained. Interviewees were identified in three ways: by visiting three events organised by local neighbourhood initiatives, where people were invited to be interviewed at a later date; by going door-to-door in social housing complexes that had been renovated within the last two years; and by visiting a party organised by a housing corporation to celebrate the completion of a renovation project, where people were interviewed on the spot. Before door-to-door interviews, the first author hand-delivered notifications to each home. The interviewer explained the contents of the interview and purpose of the research and obtained written consent from the interviewees before starting the interviews. 17 of the interviewees lived in homes part of the two renovation projects. In addition, 9 interviews were conducted with people living elsewhere in Moerwijk, to ensure that the results were not unique to the renovation projects. Interviewees were not asked their region of origin, but independently indicated roughly

Table 2. Region of origin and generation of migrants as indicated by interviewees.

Indicated generation and region of origin	Number of interviewees
First generation migrants	23
<i>Of which:</i>	
– Turkey	7
– Suriname	5
– Iran	2
– Cabo Verde	1
– Eastern Europe	1
– Former Dutch Caribbean	1
– Kurdistan	1
– Libya	1
– Sierra Leone	1
– Syria	1
– Other country in Africa	2
Second-generation migrants (no further specification in region)	3

their area of origin during the interviews, except for the 3 second-generation migrants who only indicated that they were second-generation migrants (table 2). The interviews were conducted from April to June 2022.

The diversity of nationalities in Moerwijk posed a methodological challenge. Interviews were conducted in either Dutch or English as the first author was proficient in these languages. However, most interviewees' native languages were different and they were still in the process of learning Dutch. To accommodate the interviewees, and to overcome any possible language barriers, the first author provided all necessary materials for the interviews in Dutch, English and—through machine translation—also in Turkish, Arabic, Polish and Bulgarian. These were the dominant languages in the six main regions of origin of migrants in Moerwijk (Kennissplatform Inclusief Samenleven 2021). We made these translations for the pre-prepared questions, door-to-door notifications and additional explanatory material that explained details about the heat transition. These translated materials were used only in case of otherwise insurmountable misunderstandings between interviewer and interviewee.

The interview questions (Appendix A) concerned interviewees' opinion on, knowledge of, and ability to participate in: their current housing and heating situation and the renovations; the municipal heat transition plans; and relations with their neighbours and housing corporations. Specific questions were based on the six steps on the ladder of hidden morality (figure 1). Marques *et al*'s (2015) case study on perceived justice of dam construction projects and a report of the Dutch government on public support for the heat transition (Scholte *et al* 2020) provided further useful input for the design of the questions. In case of the renovations to homes, interviewees were for example asked if they had been familiar with these plans before the start of the renovations, how and why they participated (or did not participate) in decision-making on these renovations, what their opinion was on the decision-making process, what their opinion was on the renovations and whether their needs were taken into account, and—if interviewees expressed negative opinions—how decision-making or renovations could have been improved, and which steps the interviewees had already taken to address their concerns. The interviews were semi-structured to allow us to focus on those aspects and issues most relevant to the lived experience of the interviewees, without having to discuss interviewees' action at length if they had not taken any action, and allowing them to discuss issues we had not thought of when designing the questions.

The additional explanatory material used during the interviews consisted of an easy-to-understand explanation of the municipal heat transition plans, and a visual explaining the possible changes to a home. The visual consisted of examples of devices and objects that could be installed in the home of an interviewee as part of the municipal heat transition plans. The aim of this visual was to overcome language barriers and for the interviewees to understand which measures were part of the heat transition.

17 out of the 26 interviews were recorded. 9 could not be recorded because interviewees did not agree to a recording or because the interview setting did not allow for a recording, which was the case for interviews during the party celebrating the completion of renovations. In those cases, the first author took notes.

3.4. Interview data analysis

The first author transcribed the interview recordings and coded these at the sentence level using the ATLAS.ti software. In case a recording was not available, the interview notes were written out and coded. The first author deductively developed a codebook (table 3) based on the steps of hidden morality, and the three tenets of energy justice. The first two code groups (*Injustices not experienced* and *Expression*) referred to the (perceived) injustices, and to the first two steps of the hidden morality framework. These code groups were used to code the instances when interviewees were unaware of an injustice or where they expressed a perceived injustice, respectively. To further structure the analysis of these injustices, codes in these two code groups were categorised per tenet of energy justice (recognition, procedural and distributive). We used the inverse of the municipal and housing corporation justice goals—as found through the policy analysis and discussed in section 4.1—to define the codes for *Injustices not experienced*. The other four code groups (*Collective action*, *Positive reformulation*, *Public uptake* and *Social change*) referred to the four remaining steps of the hidden morality framework and were thus used to analyse the ability of the interviewees to address the injustices they had expressed. This codebook was tested on the first ten interviews for adding and removing codes inductively. In this testing round, the first author paid particular attention to the barriers interviewees encountered in experiencing or addressing (perceived) injustices. The resulting codes are presented in section 4.

4. Results

This section will first detail the justice goals in the heat transition as defined by the municipality and housing corporations. These are then compared to the interview data to find the injustices that interviewees could not experience or not express. Thereafter follow those injustices that interviewees did express, after which we will describe interviewees' ability to positively reformulate their claims. The final part will detail the collective action interviewees took, and study their influence on public discourse and social change.

4.1. Policy goals for a just heat transition

The justice goals of the municipality and housing corporations were analysed per tenet of energy justice. The findings in this section informed codes for *Injustices not experienced* in table 3.

4.1.1. Procedural justice

4.1.1.1. Open and accessible participation

The municipality and housing corporations state that participatory processes and public support are crucial for a just heat transition and therefore provide most details on procedural justice. They see the heat transition as a bottom-up process, in which plans are drawn up together with citizens (Municipality of The Hague 2016, 2019b, 2022b). Tenants of housing corporations should receive the possibility to share their own ideas for improving the sustainability of their homes, and to adapt the plans made by housing corporations to fit the needs and wishes of the tenants (Municipality of The Hague 2019a). Decision-making should therefore be open and accessible (Vestia 2018, Staedion 2020, Haag Wonen 2021).

4.1.1.2. Accessible and transparent information provision

In order for participation to succeed, the municipality finds transparency, clear information dissemination and accessible information sources a necessity (Municipality of The Hague 2016, 2019b). Both the municipality and the housing corporations should actively make citizens aware of what the heat transition is, and what its use, urgency and goals are (Municipality of The Hague 2018a, 2018b, 2021c, 2022b). People should be informed as to why and in what ways they can participate in and contribute to the transition and to the design of heat transition policy. What such transparent communication should look like in practice is not specified in more detail than that it should fit the circumstances of a project (Municipality of The Hague 2016, 2019b). Citizens should be informed in a timely manner—at least well before the start of actual construction—about the plans for their neighbourhoods and the effects of these plans (Municipality of The Hague 2019b, 2021c).

4.1.2. Distributive justice

The municipality states that the heat transition should be affordable and profitable for all citizens. People should benefit in ways that address their needs, such as housing corporations focusing on reducing energy bills while

Table 3. Codebook used in the analysis of interview data.

Code group	Code and description	Translated example quotes
Injustices not experienced	Recognition (not experienced): Interviewees unaware that the heat transition should have included their perspectives and needs, and should have strengthened social ties in their neighbourhoods.	
	– Lack of social ties in neighbourhood: Only if interviewee was unaware that social ties should have been strengthened.	‘No-one here knows each other. Why does no-one know who is who?’
	– No attention for individual needs: Only if interviewee was unaware of this or unaware that their needs should have been taken into account.	‘They placed a large water heater here. [...] So, what did I do? I simply turned it off. And when I shower, then... Well, I do still shower, but then I simply boil the water first.’
	Procedures (not experienced)	
	– No freedom of choice: Could not shape heat transition renovations to their home and unaware that they should have been enabled to do so.	When asked an interviewee who disliked the renovations how they could shape them: ‘They came with a tablet. On that tablet you should sign the contract, but because of COVID [...] you could not see the contract.’
	– Lack of participation: Not involved in decision-making and unaware that they should have been.	When asked whether the interviewee had any influence in making plans: ‘No, we only received a booklet explaining what and when they would do it.’
	– Not familiar with rights and institutions: Not aware of their rights as Dutch citizens or familiar with Dutch institutions.	‘I am a new inhabitant. I do not know what my rights are.’
	– Not informed: Not informed of heat transition plans and unaware of this.	Response of interviewee whose home had already been renovated: ‘I do not know about this plan, but we want to know.’
	– Way of being informed not right: Interviewee unaware that information dissemination did not meet their needs.	Interviewee who had already received a letter, but did not know: ‘No, no, I have not received information. [...] Any way [of informing] is fine. E-mailing is easy, letter also.’
		(This code was never applied.)
Expression	Distribution (not experienced): Interviewee unaware that they mainly receive burdens instead of benefits.	
	Recognition (expressed): Interviewee expressed feeling that they were not being recognised in love, law or cultural status order.	
	– Discrimination or racism	‘Because it is so racist here, I do not involve myself.’
	– No attention for individual needs	‘It has only been for show. [...] Whereas I have been waiting for years until they made these homes somewhat healthy to live in.’
	Procedures (expressed): Expressed they were not enabled to engage in the decision-making process.	
	– Inaccessible procedures: Interviewee wanted to participate but found procedures to do so inaccessible.	‘They could nearby us... in our surroundings, make meetings, assemblies. Then we could have participated, we could.’
	– Insufficient level of participation	‘They [housing corporation] sent us a message saying: ‘You could vote against the measures, but that will not matter.’’
	– Not informed	‘No, no, I have not received information.’
	– Way of being informed not right	‘But that is the problem. [...] It’s all old people here, who are bad with digital stuff. [...] Like you said: ‘It is on the website.’ But how many people look on the website?’
		‘They only do it to save as many costs as possible, but the inhabitants suffer. The rent increases, but the inhabitants... they only get more nuisances.’
Collective action	Distribution (expressed): Expressed benefits and burdens were shared in an unjust way over society, social groups, time or locations.	‘Everyone who still lives close to here, they... well, we did see each other during the renovations, got

Table 3. (Continued.)

Code group	Code and description	Translated example quotes
	Collective discussion on situation: Interviewee shared and discussed their perceived injustices with others outside their household.	to know each other, because we were all in it together.'
	Collective expression: Interviewee mentions form in which community communicated their felt injustices to others, or interviewee speaks on behalf of their community.	'[Neighbours] informed me that the housing corporation was being difficult, and was sending threatening letters. Then they asked me to call [the corporation].'
	Collective action taken	'We should organise a coup, and we are doing it, but the coup is still way too small against the housing corporation.'
	Language barrier	'I speak too little Dutch, I understand too few Dutch words. I found it real hard.'
	Lack of social ties: Interviewee indicated that they lacked neighbours or others to share their experiences with.	'No-one will help. The real help I have to organise myself.'
Positive reformulation	Positive normative claim: Interviewee expressed how their situation should be improved.	'Look, they should be there to talk to the inhabitants and to listen to their issues, and address the issues and search for a solution together with the inhabitants.'
	Difficulty in making claim: Interviewee struggled to answer question of the reasons behind their injustices or the ways in which their situation should change.	'No, yes... what, what can we do? I do not know.'
Public uptake	Discussion in public sphere: Perceived injustices were discussed in politics or news media.	'Then we reached the point that the issue became [known] nationally. It appeared in newspapers and such. But well, I have also often done radio, TV, I have done everything.'
Social change	No result from action	'It has already been published in the media, but there is no change.'
	Action successful	'And at some point they [the housing corporations] wanted to collaborate with me.'

minimising rent increases through their heat transition renovations, or additional attention to cooling options for building complexes with large shares of elderly inhabitants (Municipality of The Hague 2019a). The transition should help resolve energy poverty, and as such, the first to benefit should be those facing the largest energy related challenges to their household budget (Municipality of The Hague 2019a, 2022b). Nuisance from the transition should be kept to a minimum, while comfort and liveability of homes should be improved (Municipality of The Hague 2018a, 2021c).

4.1.3. Recognition justice

The municipality aims for a heat transition that equally includes the identities, perspectives and needs of diverse groups of citizens and that ultimately strengthens the social cohesion in neighbourhoods (Municipality of The Hague 2019a). Housing corporations try to enable people of different backgrounds and income levels to be able to live together in harmony in their building complexes (Vestia 2018, Haag Wonen 2021). The municipality says it pays special attention to the inclusion of marginalised (unspecified) groups in the transition (Municipality of The Hague 2022b).

In summary, the justice goals of the municipality in the heat transition are:

- Open and accessible participatory processes that allow people to shape the transition to their needs;
- Accessible, transparent and timely forms of information provision;
- Affordable and profitable heat transition measures for all citizens, in line with their specific needs;
- A transition inclusive to the needs and perspectives of all citizens regardless of their identities;
- Improved social cohesion in neighbourhoods.

4.2. Lived experiences in the heat transition

The interview data was analysed according to the six steps of the ladder of hidden morality (figure 1), starting with injustices that interviewees did not consciously experience, followed by expressed injustices, collective action, public uptake, positive reformulation of injustices and social change.

4.2.1. *Injustices not experienced*

Comparing the interview data to the justice goals of the municipality and housing corporations indicated that 19 out of the 26 interviewees were unknowingly subject to procedural injustices. They were not informed of the heat transition or of options to participate in the transition at moments that they should already have been informed according to the policy goals of the municipality and housing corporations.

23 out of 26 interviewees did not know exactly what the heat transition was, but knew that it would affect them in some way, with two additional interviewees not having heard of the heat transition at all. When asked, this group of interviewees indicated that they were unaware that they could have participated in municipal decision-making. Ignorance of the heat transition was not necessarily unjust according to the policies of the municipality and housing corporations. However, the homes of 19 out of these 23 interviewees were (being) renovated. They should have been informed, yet they were either unaware of participatory processes of housing corporations, or of the exact renovation plans, or even of the entire heat transition. They were thereby unable to exert their right to shape the heat transition to their needs.

Three main factors made people unaware of their rights as Dutch citizens and thereby formed barriers to their experience of procedural justice: unfamiliarity with the Dutch democratic systems, socialisation in unjust societal systems, and barriers to being informed. Fourteen interviewees showed or expressed unfamiliarity with Dutch democratic institutions and organisations. They did not know what kinds of services, information and treatment they should expect from the municipality and their housing corporations. One interviewee stated that as ‘I am a new inhabitant, I do not know what my rights are.’ Because they, for example, did not know that they had the right to be informed, they did not search for the information that the municipality did provide. They thought that it was ‘normal to not have heard and understand everything. That is okay.’

Three interviewees had low expectations of how the municipality and housing corporations would treat them, because they had been socialised to the harmful and unjust systems of other countries. They therefore assumed the treatment they received in the Netherlands to be comparatively just: ‘I don’t think the government... like not in our own African governments, who can just say things to benefit themselves, but if, like, the government here [in the Netherlands] says: ‘This and this is what we are going to do,’ then that surely is going to benefit the people.’ Among other effects, socialisation to authoritarian regimes can influence people to embrace the alternatives they are presented with or to disengage with political processes (Neundorf and Pop-Eleches 2020). For these interviewees, they seemed to embrace the Dutch system to such an extent that they felt no need to engage in processes of decision-making. It felt more likely to them that they would be treated worse, and thus they did not expect to be treated any better. Another interviewee explained that ‘I have learned to be content with what I get. [...] Because I have had it worse, you know?’ This socialisation in unjust systems removed their ability to experience injustices.

Interviewees encountered two main barriers to being informed of the heat transition: language barriers and weak social ties. When interviewees received information, they could often not understand it sufficiently well to act on it, as their proficiency in reading Dutch was still limited: ‘And even if we had received information, we have trouble reading. [...] Our Dutch is not good.’ The weak social ties that many interviewees experienced in their neighbourhoods, especially within their social housing complexes, meant that they did not seek help and were not helped out by neighbours who did have information. Apart from their friends and family, who experienced similar barriers as they did, they often had a very limited number of people they could approach: ‘I have someone... I have someone but actually only one person.’

4.2.2. *Expressions of injustice*

23 out of the 26 interviewees expressed feelings of unjust procedures. Nine interviewees, whose homes had been renovated, expressed that they had had no opportunities to actually take part in any participatory processes set up by housing corporations, either related to the heat transition—if they were aware of the heat transition—or concerning other topics. They felt that housing corporations were deliberately ‘toying with me’, ‘thinking we could only whine’ and ultimately ‘ignoring us again and again’. Those interviewees expected all of their citizen inputs shared in participatory processes to be useless, because ‘I do not know if participation is influential, you know. [...] I think they do not use it at all.’

This meant that the majority of the interviewees were unaware of one procedural injustice while simultaneously expressing that they were subject to a different procedural injustice. Most often, interviewees whose homes were (being) renovated were unaware of options to participate in the municipal decision-making for the heat transition while they were simultaneously aware and did express that their housing corporation had not given them meaningful options to participate in decision-making for the renovations.

For several interviewees, the decision-making and participatory processes of housing corporations were untransparent and inaccessible. They claimed to have received misleading or no information on renovations and participatory processes: ‘Everything has been explained to me in the wrong way, I think.’ They stated that

inhabitants were actively being discouraged from participation through misleading letters that claimed that: 'You can agree or disagree, but that will not matter as we will go through [with the plans] anyway.'

Perceived recognition injustices came in two forms. Firstly, interviewees felt that both the municipality and housing corporations regarded them as a simple underclass, because they lived in Moerwijk. 'A deprived neighbourhood', as one interviewee put it, whose inhabitants were supposedly seen as being 'less than the hairs stuck in the shower drain.' Interviewees felt that the municipality and housing corporations therefore decided to 'talk about us, not with us.' Assuming the needs of people instead of asking those people what they needed, because according to those organisation, 'all of us are stupid and all of us are fat', so the inhabitants of Moerwijk were thought to be incapable of expressing their needs.

The second form of expressed recognition injustice was felt by nine interviewees, all tenants of the same housing corporation. They told the researchers that their homes were in serious need of maintenance—even after renovations. However, for the majority of the tenants, the housing corporation 'simply expects you to keep your mouth shut.' According to the interviewees, their low socio-economic status and migratory background were the reasons for their housing corporation to deliberately mistreat them, because they were seen as harmless citizens who could not fight back against such injustice: 'Only those who speak up, who are Dutch, who talk well: they get everything.'

This felt recognition injustice resulted in perceived distributive injustices as well. Five interviewees stated that they received renovations that only addressed the exterior of their homes, like 'some sort of makeup [on a person]. Until you wake up next to them, with all the makeup gone and you think: Oh my God!' This supposedly served the purpose of making the neighbourhood 'look nice for the people who will move into the new buildings, [people] with a higher income' without considerably improving the insides of the homes. The interviewees therefore felt like they experienced all the nuisance, whereas the improvements were for others.

Whereas interviewees could express these perceived injustices to the interviewer, they experienced barriers in expressing their opinions to others. One of those barriers was a fear of repercussions. Two interviewees, who organised collective action on behalf of a large number of their neighbours, stated that this fear affected many. They claimed that people feared to share their opinions and complaints openly outside their private circles, because 'that is what happens a lot here in the neighbourhood: [...] they do not dare to honestly speak up. That is because of the fear that the housing corporation would hold it against them.' A second important barrier was the language barrier. As almost all interviewees found it difficult to explain their feelings in Dutch, they experienced considerable challenges in expressing their feelings to neighbours, housing corporations or the municipality.

Ten interviewees stopped expressing their concerns, even though their feelings of injustice remained. They had complained before, but as one interviewee stated: 'I do not feel like I have so much power, or a voice to say something or to do something about it. [...] It will not be... I do not feel heard... Why would I put in any effort then?' Because these ten felt ignored by the municipality and housing corporations, they saw no use in continuing to express their perceived injustices: 'I have said, asked, 100 times! I got fed-up, I said to myself: 'Alright! Alright... let's leave it at that.'

4.2.3. *Collective action and public uptake*

The interviewees took little collective action. Only the two aforementioned interviewees were involved in collective action. Other interviewees tried to find a collective voice, but ran into several barriers.

A first barrier were the weak social ties in the social housing properties in Moerwijk as expressed by the interviewees—partially resulting from experienced discrimination and language barriers. Neighbours lived through the same heat transition projects and were tenants of the same housing corporations and therefore often perceived similar injustices. However, interviewees mentioned that they and other neighbours had little to 'basically no contact, but I do try in my own way to get in contact with the people here.' A second barrier was that interviewees felt that one of the housing corporations tried to create dissent among neighbours. They felt that some tenants deliberately received preferential treatment over others, with the goal of creating animosity among neighbours instead of enabling them to engage in collective action.

Interviewees who did not express their feelings to others also did not take part in collective action. Additionally, six interviewees did not realise that taking (collective) action, or even contacting their housing corporation, was an option for bringing about change. They were left to wonder: 'What can I do? [...] What can I say? Yeah, I actually do not ask for anything. I do not report anything yet.' Seven others had diverse reasons for not seeking a collective voice, as they experienced racism from neighbours, or thought that their problems were not significant enough, or that action would have no effect.

The two interviewees who helped organise collective action addressed problems related to overdue maintenance of social housing. This became relevant in the heat transition because homes needed to be renovated to transition away from natural gas. Even though the concerns of the two interviewees were related, their actions were separate. Both experienced significant trouble in gathering support among neighbours and collecting the means for organising forms of protest. More or less by accident, one came into contact with

members of a local political party and the other met a municipal researcher. With the support of these people and their organisations, they were enabled to organise action and influence the public discourse by gathering the perspectives of their neighbours and sharing these in local news outlets. This brought the topic under the attention of municipal politics.

4.2.4. Positive reformulation

23 out of 26 interviewees could formulate some idea of how their unjust situations could be addressed. Regarding procedures, interviewees mainly wanted improved accessibility to participatory processes, which should also be more influential in the decision-making of the municipality and housing corporations. Interviewees were unsure as to how such accessible and influential participatory processes should be designed, giving mainly superficial examples such as ‘through a meeting, that is easy’, or ‘email, my best way of communicating’ or ‘an anonymous questionnaire, I think?’ They also wanted the municipality and housing corporations to more actively and transparently share information. Communication should mainly be improved by providing information in a larger number of different languages, besides Dutch. Next to that, interviewees wished for more direct communications on topics in which they were directly affected stakeholders. This would ideally happen some time early in a project, and all information should be easily accessible. However, interviewees had trouble deciding on proper forms of direct communication (e.g. letters, emails, in-person) and how information should be made more accessible (e.g. online, through newspapers).

Positively reformulated claims relating to recognition and distribution were limited to demands to stop discrimination of (low-SES) migrants and to fairly distribute the benefits of the heat transition. Interviewees had differing opinions on whether a fair distribution meant an equal distribution, or that those people most in need should receive most benefits.

Only the two interviewees involved in extensive collective action made more elaborate claims. This mainly regarded the recognition of the perspectives of low-SES tenants, and how such recognition should be achieved in practice. Referring to countless previous projects aimed at improving conditions in Moerwijk, one of them saw that ‘everyone wants to build connections with the neighbourhood. We all want to do things together. But in the meantime *they* decide what *you* should be doing. And then they act like you had a say.’ According to her: ‘Often the biggest issue in the neighbourhood is communication.’ Therefore, she claimed that ‘we now have to try to bundle all projects, activities. To become one, in one cooperative.’ The ability of these two interviewees to make elaborate claims, which other interviewees were not able to do, seems to be explained by them having overcome the barriers of knowledge and experience. These two interviewees learned more of the reasons behind injustices through the interaction with many other inhabitants of Moerwijk. One mentioned that ‘everyone here really wants to talk to me, actually.’ This gave them the necessary knowledge of these complex problems. Through their interaction with policymakers, they also gained experience with and knowledge of the intricacies of addressing societal problems through policy.

4.2.5. Social change

Only the two interviewees involved in extensive collective action were able to enact limited social change. They managed to bring the issues related to overdue maintenance of social housing under the attention of local politics. The resulting political pressure spurred several housing corporations to contact the two interviewees to seek their input for new policies related to upkeep and maintenance. As these changes to policy happened shortly before the interviews, the two interviewees were unsure whether the new policies would bring actual long-lasting improvements. None of the interviewees were able to bring about social change for the other (perceived) injustices in the heat transition.

4.3. Summary of the results

In short, we found that the interviewed low-SES migrants were both unknowingly subject to injustices and perceived injustices that remained hidden from participatory decision-making processes, and that they encountered considerable barriers in making these injustices visible to policymakers in order to work towards solutions. They already encountered barriers in experiencing injustices, with interviewees being unaware of some procedural injustices. Municipal policy prescribed that the interviewees should have been able to participate in decision-making and should have been informed in a timely manner, whereas 19 out of the 26 interviewees had not been informed and were unaware of options for participation. Barriers hindering them to experience these injustices mainly resulted from their familiarisation to regimes different from the Dutch democratic system, and their resulting ignorance of Dutch institutions and of their rights as Dutch citizens. In addition, interviewees encountered language barriers and weak social ties in their neighbourhoods. These barriers also influenced interviewees’ expression of perceived injustices, for which reason language barriers and weak social ties have been included multiple times in table 4. Interviewees often refrained from expressing their

Table 4. Summary of barriers encountered in addressing injustices.

Position on ladder	Barriers encountered	Nr. of interviewees who encountered the barrier
Injustices not experienced	Language barriers	18
	Unfamiliarity with Dutch democratic institutions	14
	Weak social ties	12
	Socialisation in unjust societal systems	3
Expression	Feelings of being ignored	10
	Fear of repercussions	5
	(Language barriers)	(18)
Collective action and public uptake	Ignorant of options for action	6
	Orchestrated dissent among neighbours	6
	Racism	5
	(Language barriers)	(18)
	(Weak social ties)	(12)
Positive reformulation	Knowledge of the complexity of issues and intricacies of the policy-making process	13
Social change	(No clear additional barriers)	—

perceived injustices outside of the interviews, did not reformulate these in a positive way, and did not develop their perceived injustices into collective expressions and action. The barriers were considerable enough to stop interviewees' progress towards social change somewhere halfway up the ladder (figure 1). In this way, almost all (perceived) injustices remained unaddressed.

5. Discussion

The results show that the interviewed low-SES migrants were subject to issues of hidden morality in their experience of the heat transition and that the application of the hidden morality framework (van Uffelen and ten Caat, [Forthcoming](#)) allowed us to uncover both these injustices and the barriers to social change. Simultaneously, the research process allowed us to reflect on further challenges in applying the hidden morality framework to the study of energy justice.

5.1. Addressing barriers to the inclusion of hidden injustices in decision-making

The interviewed low-SES migrants were subject to injustices that they were not aware of and they perceived injustices which they were unable to address. The barriers to experiencing injustices and enacting social change make it likely that (perceived) injustices will persist and continue to affect the interviewees. Interviewees were unable to resolve their perceived injustices by themselves, as solutions depended on their housing corporations and the municipality. Simultaneously, interviewee experiences of perceived past pseudo-participation had made them grow sceptical of the municipality and housing corporations, as they feared their participation would be meaningless. The barriers were so effective in stopping the interviewees from resolving their perceived injustices, that ten interviewees gave up in trying to work towards solutions and stopped to express their injustices. In so doing, they moved down the ladder of hidden morality. This, in turn, will have made it increasingly hard for the municipality and housing corporations to learn of and subsequently address both the perceived injustices and those not consciously experienced by the interviewees. Without proper action of policymakers to remove these barriers, injustices will likely remain.

The results show that such barriers do not only depend on the actor—through for example their SES or their familiarity with democratic institutions—but also on the organisation that has caused or is able to resolve perceived injustices. Most interviewees were expressing some injustices, while simultaneously being unable to experience others. As Rasch and Köhne (2017) point out, the experience of an injustice depends on the setting and historical and socio-technical context of that injustice. In this study, most interviewees were more familiar with their housing corporations than with the municipality. This gave them clearer ideas of the kind of treatment they should expect from their housing corporations, allowing them to experience injustices related to the housing corporations more easily. As such, the interviews showed that an actor can be on multiple steps of the ladder at the same time, experiencing different barriers, depending of the particular (perceived) injustices and their context.

Important to note is that the justice ideals or goals of the interviewees uncovered in this case study did not necessarily contradict those of the municipality and housing associations. Both the interviewees and the policy

documents indicated that they wished for open, accessible, inclusive and impactful participatory decision-making processes together with transparent information provision. Marginalised people, like the interviewees, should be recognised as valuable stakeholders in the heat transition and should feel like they were. However, most interviewees felt that these goals were not reached, with nine even feeling that the municipality and housing corporations did not truly care for their input to decision-making. Some even felt disregarded and disrespected exactly because of who they were. Similarly for distributive justice, the low-SES interviewees saw the possibility and felt the need to use the renovations to help resolve energy poverty issues and improve their living conditions. This point was reflected in heat transition policy. In the lived experience of the low-SES migrants, they were instead often worse off after the renovations. The similarity in these justice goals, contradicted by the misalignment between goals and lived experiences, further points to the importance of removing barriers to enacting social change and participating in decision-making. That would allow policymakers and inhabitants to work together in finding out how to apply their shared justice goals in ways that all stakeholders feel like the goals are being reached.

The barriers we have found in this study are not uniquely related to the case or even to the energy system as a whole. The familiarisation in non-democratic regimes, causing people to be ignorant of their rights as citizens in democratic countries, is known in migration studies (Ginieniewicz 2007). Similarly, the language barriers, role of social ties, discrimination, limited knowledge of the political and policy system, and inaccessibility of (non-) institutionalised participatory processes have been encountered before in earlier studies (Gibson-Wood and Wakefield 2013, Sicotte and Brulle 2017, Bartiaux *et al* 2018, Kranendonk and Vermeulen 2019, Odekerken *et al* 2021). In avoiding and remediating injustices through the study of energy justice, engagement with scholarly fields critically analysing societal structures and political systems—such as political science, sociology, culture studies, and others—could therefore be fruitful. Application of the hidden morality framework could then aid in pinpointing, understanding and ultimately addressing barriers that actors encounter, while simultaneously detecting the lived experiences hidden by such barriers.

In the case study, the municipality assumed that low-SES migrants would recognise their own needs in the heat transition and would be able to address these and share their concerns proactively with the municipality. However, the identified barriers and their effects show that people who are in need or who face injustice are not always aware of what they need or deserve, and do not necessarily have the tools at their disposal to make their needs sufficiently clear (Ginieniewicz 2007, Willand and Horne 2018). These insights of hidden morality are in line with conclusions of environmental justice scholars, who point out that experiences of injustice and actors' perception of their political agency are influenced by structural, systemic marginalisation. Faber (2017) points out that a lower social status comes with increasing amounts of harms, as societies and its institutions are shaped to benefit those with a higher social status (Foster 2017, Sovacool *et al* 2023). At the same time, however, this valuation of some social positions over others can be stigmatising and create social narratives that disregard the experiences of lower social classes. This necessitates a narrative or societal reframing to not only appreciate, but actively try to include these marginalised experiences and moral claims in societal discourse to avoid issues of hidden morality (Moody-Adams 2022).

5.2. Challenges in applying the hidden morality framework

The application of the hidden morality framework in energy justice research still encounters some challenges. A first, pointed out in this case study, is the definition of energy justice. Energy justice scholars currently differ in the ethical principles they apply to judge whether forms of distribution, procedures and recognition are just. Often, they do not explicitly state which principles they adhere to (Pellegrini-Masini *et al* 2020, Hoffman *et al* 2021, Wood 2023). Diverse actors in society will define justice in their own ways and therefore disagree with the definition used in a study. In our case, we used the justice goals as formulated in the policy of the municipality and housing corporations. This is not an objective or universal definition of justice, and applying a different definition to the same interviews might therefore result in a different set of injustices that the interviewees could not experience. However, openness in which definition of justice is used in a study allows others—especially politicians and policymakers—to critically engage with our findings and to decide if and in what ways the identified injustices should be addressed. Scholars therefore need to be clear in what they take as a measure of justice and why, especially in those cases in which actors themselves cannot experience injustices or are inhibited from formulating their own ethical framework (Honneth 1995).

A second challenge lays in experiences without expression. In this case study, we only studied whether actors could express injustices both to us researchers and to others. Some actors, however, might be entirely unable to speak of the injustices they perceive. People could perceive a subject as taboo or lack the linguistic concepts to put their experiences into words (Fricker 2007). Even more challenging are those situations in which an actor is physically unable to speak of their injustices, either because they are non-human actors (Celermajer *et al* 2021), have disabilities, or are traumatised by their experiences. In such cases, it is of even greater importance for

scholars to employ well-grounded theories of justice to compare to actors' lived experiences, and to be clear about the moral principles they apply. Furthermore, for scholars to gain an understanding of these lived experiences and to share these perspectives with policymakers requires novel methodological approaches that allow actors to convey their perspectives through other means, such as artistic expressions (Fraaije *et al* 2023) or through valid representatives.

The order of the steps of the ladder of hidden morality (figure 1) presents a third challenge. According to the framework, actors will take the step of positive reformulation of their perceived injustices only after the step of taking collective action. However, we found in the case study that actors could be on multiple steps at the same time, depending on the context of injustices. In addition, except for two persons, the interviewees experienced difficulty in engaging in (collective) action and in achieving the uptake of their injustices in public discourse. However, many interviewees did manage to some extent to reformulate their feelings in a positive way. This indicates that the order in which actors take their steps up the ladder might depend on the context, at least in regards to positive reformulation, collective action and public uptake.

The fourth and final challenge encountered in this research is the active side of hidden morality. Our case focused on low-SES migrants who were subject to issues of hidden morality. We mainly uncovered societal mechanisms that 'passively' hid injustices. However, the societal elite at the origin of these mechanisms could take an active role in hiding injustices. We encountered this when interviewees' thought that one of the housing corporations deliberately caused dissent among neighbours and thereby quenched any collective action. Next to studying experiences of injustices, this requires a thorough understanding of the role of societal elites, such as policymakers. To what extent are they aware of injustices? Do they actively—but perhaps unknowingly—hide these through racist, sexist or classist measures? Do they try—and perhaps fail—to remediate harms, or do they simply not know what to do?

6. Conclusions and policy implications

In this paper, we aimed to test the use of the hidden morality framework for uncovering the hidden injustices in the lived experiences of low-SES migrants and the barriers responsible for hiding these injustices. We found that, by applying the framework to the case study of the heat transition in Moerwijk, the framework allowed us to show that low-SES migrants were subject to procedural injustices they were not aware of and that they perceived procedural, distributive and recognition injustices they could not address. Barriers resulted from interviewees' unfamiliarity of Dutch democratic institutions and of their rights as Dutch citizens. In addition, interviewees experienced language barriers and weak social ties in their neighbourhoods. These barriers withheld them from engaging in collective action, hindering them from enacting social change to resolve their (perceived) injustices.

We found that the hidden morality framework can thus be useful for energy justice scholars to detect hidden injustices and identify hiding mechanisms, as a first step in addressing both for the creation of more just energy transitions. However, the framework does not allow for conclusions on whether or not policymakers actively and consciously try to hide or even create injustices. In addition, detecting injustices that actors are not aware of challenges scholars to compare actors' lived experiences to a definition of justice, although there is not one shared definition among energy justice scholars. As a final challenge, detecting whether actors consciously experience an injustice that they are not able to express, requires novel methodological approaches.

6.1. Policy implications

The results indicate that energy transitions cannot be regarded as separate from other societal policy issues. The barriers to citizen participation that we identified are not unique to the energy system. For low-SES migrants, as well as for other marginalised actors, policymakers cannot expect them to share their perspectives in participatory processes and policymakers should therefore be aware that the views of these actors could be missing in decision-making.

The case study made it clear that low-SES migrants would benefit from communications in a larger number of languages. People are often willing to read letters in the official language (Dutch in this case) or participate in consultation meetings, for example. However, official communications are often too difficult or people feel too insecure about their ability to understand and speak the official language. Policymakers could therefore investigate which groups' voices are missing in participatory processes and communicate to these people in languages that are more accessible to them, provide contact persons who speak the relevant languages, and allow for these people to share their inputs in those languages.

In addition, if policymakers truly aim to engage actively with low-SES migrants to involve them in decision-making, they could benefit from employing bridging actors (Spekkink and Boons 2016). These are actors that are connected to both the social network of the policymakers and the network of the low-SES migrants. The interviewees often did not know of projects of the municipality or housing corporations, and were unaware that

they could participate in decision-making. Even if they were aware of options to participate, interviewees feared their participation to be meaningless because they felt that their involvement in previous participatory processes had been without impact. At the least, policymakers should be aware that low-SES migrants are less likely to proactively involve themselves in the decision-making, as they might not realise that this is an option. To overcome these challenges, suitable bridging actors could, for example, be found in professional community workers, active members of the local community, community centres, or leaders of local religious services who can involve and activate people and help overcome scepticism or distrust.

In taking the step towards collective action, many interviewees encountered a barrier because of the weak social ties. Investing in social capital might thus be a way to uncover social injustices. Increased social capital might not only lead to collective action, but as people are enabled to share their perspectives in their community it also allows the aforementioned bridging actors to pick up on these perspectives and subsequently share those in institutionalised participatory processes.

A major barrier to be tackled is that of people's ignorance of their rights, which is strongly related to their unfamiliarity with democratic institutions. Perceived injustices related to housing corporations were subject to fewer issues of hidden morality (and even developed into collective action) than felt injustices related to the municipality. Interviewees were more familiar with their housing corporations than with the municipality. Ideally, policies should ensure that people become familiar with institutions and organisations with a key role in people's lives—such as governments, landlords, employers and educational facilities—and with their rights and obligations towards these organisations. In this specific case, where we studied low-SES migrants, people could be familiarised with institutions through immigrant integration procedures.

6.2. Recommendations for further research

This case study allowed us to study barriers to the experience and (collective) expression of injustices by low-SES migrants. Barriers to the public uptake of perceived injustices and to social change, and possible solutions to these barriers, are to be found in future research. Collective perspective forming might introduce additional barriers. In this study, we found barriers that hindered people from contacting each other and organising themselves as a collective, which formed a barrier to social change. Enabling people to organise collectives might thus be fruitful. However, when people formulate a collective perspective some individual perspectives could be excluded. Further research could investigate whether and how the process of creating a collective perspective could for example be dominated by certain people or lead to groupthink, thereby resulting in the exclusion (and hiding) of the alternative perspectives of certain individuals.

Following Honneth's philosophical contributions, we theorised that low-SES migrants were most likely to experience the most severe issues of hidden morality. A comparative study between different groups in society might show that other actors experience more, fewer or different barriers and therefore get 'stuck' on different steps of the ladder. In addition, the context of injustices could be found to be more important for the extent to which these are hidden than people's status in society. In the case study, interviewees addressed injustices related to housing corporations somewhat more easily than those related to the municipality. Some institutional contexts could, for instance, also be more open to distributive injustices than issues of recognition, making the problems of hidden morality dependent on the type of injustice. The organisation of the societal system could also influence people's ability to enact social change, for example because the society is more collective instead of individualistic, with strengthened social ties, or because there are different taboos in that society. Further empirical research can provide a more thorough understanding of such mechanisms that hide or expose injustices.

Data availability statement

The data cannot be made publicly available upon publication because they contain sensitive personal information. The data that support the findings of this study are available upon reasonable request from the authors.

Declaration of competing interest

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

Ethical statement

All participants were at least 18 years old and provided their written and informed consent prior to participation in this study. Participants were made aware that participation was voluntary and could be withdrawn at any time.

The Leiden University research institute did not require an ethical review by an ethics committee.

The research was conducted in accordance with the principles embodied in the Declaration of Helsinki and in accordance with local statutory requirements.

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References

- Asmoredjo J, van Hal L, Heskens H and Badou M 2019 Communicatie tussen gemeenten en migranten met lage taalvaardigheid (Kennisplatform Integratie & Samenleving)
- Bartiaux F, Vandeschrick C, Moezzi M and Frogneux N 2018 Energy justice, unequal access to affordable warmth, and capability deprivation: a quantitative analysis for Belgium *Appl. Energy* **225** 1219–33
- Berkel P van, Kruit K and Dehens J 2021 *Energiearmoede in de warmtetransitie (No. 21.200304.163)* (CE Delft)
- Caínzos M and Voces C 2010 Class inequalities in political participation and the ‘death of class’ debate *International Sociology* **25** 383–418
- Celermajer D, Schlosberg D, Rickards L, Stewart-Harawira M, Thaler M, Tschakert P, Verlie B and Winter C 2021 Multispecies justice: theories, challenges, and a research agenda for environmental politics *Environmental Politics* **30** 119–40
- Chilvers J and Longhurst N 2016 Participation in transition(s): reconceiving public engagements in energy transitions as co-produced, emergent and diverse *J. Environ. Plann. Policy Manage.* **18** 585–607
- Cuppen E 2018 The value of social conflicts. Critiquing invited participation in energy projects *Energy Research & Social Science* **38** 28–32
- Faber D 2017 The political economy of environmental justice *The Routledge Handbook of Environmental Justice* ed H S Banzhaf (Routledge) (<https://doi.org/10.2307/j.ctvqsdxmz>)
- Foster S R 2017 Vulnerability, equality and environmental justice: The potential and limits of law *The Routledge Handbook of Environmental Justice* 1, ed R Holifield, J Chakraborty and G Walker (Routledge) (<https://doi.org/10.4324/9781315678986>)
- Fraaije A, van der Meij M G, Vermeeren A P O S, Kupper F and Broerse J 2023 Creating room for citizen perspectives in ‘smart city’ Amsterdam through interactive theatre *Research for All* **7** (1) 5
- Fricker M 2007 *Epistemic Injustice: Power and the Ethics of Knowing* (Oxford University Press) (<https://doi.org/10.1093/acprof:oso/9780198237907.001.0001>)
- Gibson-Wood H and Wakefield S 2013 Participation’, White Privilege and Environmental Justice: Understanding Environmentalism Among Hispanics in Toronto *Antipode* **45** 641–62
- Ginieniewicz J 2007 The scope of political participation *Int. Migration & Integration* **8** 327–45
- Gjørtler Elkjær L, Horst M and Nyborg S 2021 Identities, innovation, and governance: a systematic review of co-creation in wind energy transitions *Energy Research & Social Science* **71** 101834
- Haag Wonen 2021 De koers van Haag Wonen 2018 en verder [Web page]. <https://yumpu.com/nl/document/fullscreen/59973488/de-koers-van-haag-wonen-2018-en-verder> (accessed 7.2.22)
- Heffron R J and McCauley D 2017 The concept of energy justice across the disciplines *Energy Policy* **105** 658–67
- Hendriks C M 2010 Inclusive governance for sustainability *Tackling Wicked Problems* ed J Harris, V A Brown and J Russell (Routledge) 150–60
- Hoffman J, Davies M, Bauwens T, Späth P, Hajer M A, Arifi B, Bazaz A and Swilling M 2021 Working to align energy transitions and social equity: An integrative framework linking institutional work, imaginaries and energy justice *Energy Research & Social Science* **82** 102317
- Honneth A 1995 Moral consciousness and class domination: some problems in the analysis of hidden morality *The Fragmented World of the Social: Essays in Social and Political Philosophy, SUNY Series in Social and Political Thought (SUNY series in Social and Political Thought)* ed A Honneth and C W Wright (State Univ. of New York Press) 205–19
- Hooghe M, Dassonneville R and Marien S 2015 The impact of education on the development of political trust: results from a five-year panel study among late adolescents and young adults in Belgium *Political Studies* **63** 123–41
- Hooghe M and Marien S 2013 A comparative analysis of the relation between political trust and forms of political participation in Europe *European Societies* **15** 131–52
- Jenkins K E H, McCauley D, Heffron R, Stephan H and Rehner R 2016 Energy justice: a conceptual review *Energy Research & Social Science* **11** 174–82
- Jenkins K E H, Sovacool B K, Mouter N, Hacking N, Burns M-K and McCauley D 2021 The methodologies, geographies, and technologies of energy justice: a systematic and comprehensive review *Environ. Res. Lett.* **16** 043009
- Jenkins K E H, Stephens J C, Reames T G and Hernández D 2020 Towards impactful energy justice research: Transforming the power of academic engagement *Energy Research & Social Science* **67** 101510
- Kennisplatform Inclusief Samenleven 2021 *KIS Wijkmonitor* [Online dataset] https://kis-wijkmonitor.nl/jive/Report/?id=factsheet_wijk&input_gem=gemeente_518&input_geo=wijk_051836&openinputs=true (accessed 4.19.22).
- Kern A and Hooghe M 2018 The effect of direct democracy on the social stratification of political participation: Inequality in democratic fatigue? *Comp Eur Polit* **16** 724–44

- Kranendonk M and Vermeulen F 2019 Group identity, group networks, and political participation: Moroccan and Turkish immigrants in the Netherlands *Acta Polit* **54** 625–66
- Levenda A M, Behrsin I and Disano F 2021 Renewable energy for whom? A global systematic review of the environmental justice implications of renewable energy technologies *Energy Research & Social Science* **71** 101837
- Marques S, Lima M L, Moreira S and Reis J 2015 Local identity as an amplifier: Procedural justice, local identity and attitudes towards new dam projects *Journal of Environmental Psychology* **44** 63–73
- McCaughey D, Heffron R, Stephan H and Jenkins K 2013 Advancing energy justice: the triumvirate of tenets *International Energy Law Review* **32** 107–10
- Middlemiss L, Mulder P, Hesselman M, Feenstra M, Tirado Herrero S and Straver K 2020 *Energy Poverty and the Energy Transition* TNO
- Moody-Adams M 2022 Justice and the Narrative Imagination *Making Space for Justice: Social Movements, Collective Imagination, and Political Hope* (New York: Columbia University Press) 187–222
- Municipality of The Hague 2023a Migratieachtergrond - 2023 - 36 Moerwijk *Den Haag in Cijfers* [Online dataset] https://denhaag.incijfers.nl/Jive?workspace_guid=22b64778-4e15-43f4-a17f-45989ad9e294 (accessed 1.29.24)
- Municipality of The Hague 2023b Wijkprofielen - werk en inkomen - 36 Moerwijk *Den Haag in Cijfers* [Online dataset] <https://denhaag.incijfers.nl/dashboard/nl-nl/wijkprofielen/werk-en-inkomen> (accessed 1.29.24)
- Municipality of The Hague 2022a Concept-transitievisie warmte ligt ter inzage [Web page] Duurzame stad Den Haag <https://duurzamestad.denhaag.nl/nieuws/den-haag-op-schone-energie/> (accessed 6.15.22)
- Municipality of The Hague 2022b Concept raadsvoorstel tot het vaststellen van de transitievisie warmte Den Haag [Policy document] <https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/734737>
- Municipality of The Hague 2021a Zuidwest in cijfers [Policy document] https://denhaag.raadsinformatie.nl/modules/13/overige_bestuurlijke_stukken/673826
- Municipality of The Hague 2021b Vitalisering democratie in Den Haag [Policy document] <https://denhaag.raadsinformatie.nl/document/10378952/2/RIS309465%20Vitalisering%20democratie%20in%20Den%20Haag>
- Municipality of The Hague 2021c Stedelijk Energieplan 2020 [Policy document] https://denhaag.raadsinformatie.nl/document/9651577/1/RIS306869_Bijlage_3
- Municipality of The Hague 2019a Raamovereenkomst wonen 2019-2024 [Policy document] <https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/524898>
- Municipality of The Hague 2019b Nota Duurzaamheid: Schone energie in een groene stad [Policy document] <https://www.denhaag.nl/nl/in-de-stad/natuur-en-milieu/duurzaamheid/haags-plan-voor-een-duurzame-toekomst.htm>
- Municipality of The Hague 2018a Uitvoeringsplan Bouwlust / Vrederust verwarmen op binnenstedelijke geothermie (convenant No. 5) [Policy document] <https://www.rijksoverheid.nl/documenten/convenanten/2019/05/22/den-haag-bouwlust-aanvraag-en-convenant-proeftuin-aardgasvrij-wijk>
- Municipality of The Hague 2018b Basisversie Programmaplan Energietransitie [Policy document] https://denhaag.raadsinformatie.nl/modules/13/overige_bestuurlijke_stukken/434185
- Municipality of The Hague 2016 Actieplan Burgerparticipatie 2016-2020 [Policy document] <https://denhaag.raadsinformatie.nl/modules/13/Overige%20bestuurlijke%20stukken/343697>
- Municipality of The Hague n.d. Wijkprofielen - bevolking - 36 Moerwijk [Online dataset] *Den Haag in Cijfers* <https://denhaag.incijfers.nl/dashboard/wijkprofielen/bevolking> (accessed 7.8.22)
- Municipality of The Hague n.d. Wijkprofielen - wonen en woningmarkt - 36 Moerwijk *Den Haag in Cijfers* [Online dataset] <https://denhaag.incijfers.nl/dashboard/wijkprofielen/wonen-en-woningmarkt> (accessed 7.8.22)
- Neundorf A and Pop-Eleches G 2020 Dictators and their subjects: authoritarian attitudinal effects and legacies *Comparative Political Studies* **53** 1839–60
- Odekerken M, Brock A, Haydary M and Bellaart H 2021 *Naar een inclusieve energietransitie* Kennisplatform Integratie & Samenleving
- Pallett H, Chilvers J and Hargreaves T 2019 Mapping participation: a systematic analysis of diverse public participation in the UK energy system *Environment and Planning E: Nature and Space* **2** 590–616
- Pavanelli J M M, Sang E V, de Oliveira C E, dos Reis Campos F, Lazaro L L B, Edomah N and Igari A T 2023 An institutional framework for energy transitions: Lessons from the Nigerian electricity industry history *Energy Research & Social Science* **97** 102994
- Pellegrini-Masini G, Pirni A and Maran S 2020 Energy justice revisited: A critical review on the philosophical and political origins of equality *Energy Research & Social Science* **59** 101310
- Pesch U, Correljé A, Cuppen E and Taebi B 2017 Energy justice and controversies: Formal and informal assessment in energy projects *Energy Policy* **109** 825–34
- Rasch E D and Köhne M 2017 Practices and imaginations of energy justice in transition. A case study of the Noordoostpolder, the Netherlands *Energy Policy* **107** 607–14
- Scholte S, de Kluienaar Y, de Wilde T, Steenbekkers A and Carabain C 2020 *Op weg naar aardgasvrij wonen: De energietransitie vanuit burgerperspectief* Sociaal en Cultureel Planbureau <https://www.scp.nl/publicaties/publicaties/2020/05/25/op-weg-naar-aardgasvrij-wonen>
- Sicotte D M and Brulle R J 2017 Social movements for environmental justice through the lens of social movement theory *The Routledge Handbook of Environmental Justice* ed Ryan Holifield, Jayajit Chakraborty and Gordon Walker (Routledge) (<https://doi.org/10.4324/9781315678986>)
- Sovacool B K, Bell S E, Daggett C, Labuski C, Lennon M, Naylor L, Klinger J, Leonard K and Firestone J 2023 Pluralizing energy justice: Incorporating feminist, anti-racist, Indigenous, and postcolonial perspectives *Energy Research & Social Science* **97** 102996
- Sovacool B K, Burke M, Baker L, Kotikalapudi C K and Wlokas H 2017 New frontiers and conceptual frameworks for energy justice *Energy Policy* **105** 677–91
- Sovacool B K and Dworkin M H 2015 Energy justice: conceptual insights and practical applications *Appl. Energy* **142** 435–44
- Spekkink W A H and Boons F A A 2016 The emergence of collaborations *Journal of Public Administration Research and Theory* **26** 613–30
- Staedion 2020 Staedion ondernemingsstrategie 2021-2025 [Web page] <https://www.staedion.nl/STAEDION/media/Staedion/Over%20Staedion/Onze%20organisatie/Staedion-Ondernemingsstrategie-2021-2025.pdf> (accessed 7.3.2022)
- Statistics Netherlands 2022a Kerncijfers wijken en buurten 2020 [WWW Document] *StatLine* URL <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84799NED/table?ts=1657295440104> (accessed 7.8.22)
- Statistics Netherlands 2022b Het verschil in opkomst tussen Tweede Kamerverkiezingen en gemeenteraadsverkiezingen [WWW Document] *Centraal Bureau voor de Statistiek* URL <https://cbs.nl/nl-nl/longread/statistische-trends/2022/het-verschil-in-opkomst-tussen-tweede-kamerverkiezingen-en-gemeenteraadsverkiezingen?onpage=true> (accessed 3.5.22)

- Statistics Netherlands 2022c Woningen; hoofdverwarmingsinstallaties, wijken en buurten, 2022 [WWW Document] *StatLine* URL <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/85677NED/table?ts=1706533118867> (accessed 1.29.24)
- Statistics Netherlands 2017 Het profiel van het electoraat in 2012 [WWW Document] *Centraal Bureau voor de Statistiek* URL <https://cbs.nl/nl-nl/achtergrond/2017/08/het-profiel-van-het-electoraat-in-2012> (accessed 3.5.22)
- Suboticki I, Heidenreich S, Ryghaug M and Skjølsvold T M 2023 Fostering justice through engagement: a literature review of public engagement in energy transitions *Energy Research & Social Science* **99** 103053
- Temper L et al 2020 Movements shaping climate futures: a systematic mapping of protests against fossil fuel and low-carbon energy projects *Environ. Res. Lett.* **15** 123004
- van Uffelen N 2022 Revisiting recognition in energy justice *Energy Research & Social Science* **92** 102764
- van Uffelen N, Taebi B and Pesch U 2024 Revisiting the energy justice framework: doing justice to normative uncertainties *Renew. Sustain. Energy Rev.* **189** 113974
- van Uffelen N and ten Caat S Forthcoming Detecting energy injustices: climbing the ladder of 'hidden morality.' Available at SSRN: <https://doi.org/10.2139/ssrn.4446707>
- Verba S, Nie N H and Kim J 1978 *Participation and Political Equality: A Seven-Nation Comparison* (Cambridge University Press)
- Vestia 2018 Ondernemingsplan 2018-2021 [Web page] <https://www.vestia.nl/Media/68ec2258-a953-4c36-a9e7-42ab5f3823f5/original/ondernemingsplan-1.pdf> (accessed 7.2.2022)
- Willand N and Horne R 2018 They are grinding us into the ground'—The lived experience of (in) energy justice amongst low-income older households *Appl. Energy* **226** 61–70
- Wood N 2023 Problematising energy justice: Towards conceptual and normative alignment *Energy Research & Social Science* **97** 102993
- Wood N and Roelich K 2019 Tensions, capabilities, and justice in climate change mitigation of fossil fuels *Energy Research & Social Science* **52** 114–22