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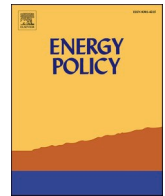
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Who is listening? Comparing 7 cases of citizen participation at different levels of government in the Dutch energy transition

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ABSTRACT

Citizen participation about energy policy is organized for substantive, normative and instrumental reasons. Myriad factors influence how these rationales and goals are shaped and attained. Of these factors the influence of the socio-political context in which participation is organized remains poorly understood, as most approaches to engaging society focus on discrete participatory events. This paper addresses this knowledge gap by providing insights into how the level of government at which participation about the energy transition is organized influences the goals and rationales of politicians, policymakers and citizens. Seven similar cases are compared – all based on the Participatory Value Evaluation (PVE) method – in which 28,000 citizens advised their national, regional or local government about the sustainable energy mix. In all cases, most citizens worry about climate change and support sustainable energy objectives. However, different energy mixes are advised, and different values prevail in the motivations participants provided for their advice across multiple levels of government. Evaluative survey questions indicate citizens have more elaborate rationales and higher expectations when engaging in local participatory processes, which are most frequently criticized for their narrow scope. Finally, we observe local governments put most effort into satisfying multiple rationales for conducting participatory processes, based on 6 group discussions and 6 interviews with involved politicians and policymakers. Finally, we discuss the policy implications of the observed gap between citizen and government rationales across multiple levels of governments, arguing there is a need for aligning participatory processes in meaningful and effective participatory repertoires spanning across levels of government.

1. Introduction

1.1. Background

There is a growing consensus regarding the necessity to decarbonize the energy system (Batel and Rudolph, 2021). However, sustainable energy policies often encounter social resistance (Rodhouse et al., 2021; Cass et al., 2010). This can be attributed to several factors, one of which is the complex or unstructured nature of the sustainable energy transition (Hisschemöller and Hoppe, 2001), which involves a range of uncertainties with respect to knowledge and values (Metze et al., 2023). Consequently, actors typically have different understandings of what the problem is and how it should be solved, which may give rise to conflict (Pesch et al., 2017; Cuppen et al., 2020). In response to such conflicts, there is increasing emphasis on citizen participation in energy policy

and planning (Chilvers and Longhurst, 2016; Liu et al., 2021).

1.2. Knowledge gap

Citizen participation may be organized for various reasons (section 2.2). Governments seeking to implement a policy may think that involving stakeholders (including citizens) can help make it better in many ways, i.e., more legitimate, supported, innovative (Fiorino, 1990; Stirling, 2008). Moreover, citizens may engage in participatory decision-making processes about the energy transition for various reasons, for instance because they do not (or seek to gain) trust in the process, to express they do (not) support a certain standpoint or to provide local input and improve the quality of the decisions. Myriad factors influence how these rationales and goals are shaped and attained. These include the actors (who is involved), arenas (spaces,

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formats and rhythms) and wider context (social, political and economic structures) in which citizen participation is organized (Fung, 2006; Bobbio, 2019; Hofer and Kaufmann, 2022). Of these factors the influence of the wider context arguably remains most poorly understood, since scholars predominantly study participatory practices through an instrumental and interventionist lens (Chilvers and Kearnes, 2016a; Chilvers and Kearnes, 2019). This ignores important insights from science and technology studies about how participatory decision-making processes are actively co-constructed in practice (Delgado et al., 2011; Chilvers and Longhurst, 2016b; Armstrong, 2021), “both shaping and being shaped by wider social, political, and technoscientific orders” (Chilvers and Kearnes, 2016b). Hence, there is a need for more empirical work reflexively evaluating how contextual factors influence the goals and effectiveness of participatory processes (Chilvers and Kearnes, 2019).

The contextual factor of interest in this study is the ‘territory of government’ (Chilvers and Kearnes, 2016a) in which participatory processes are conducted. This term, introduced by Chilvers and Kearnes (2016a), is inspired by Barry (2001), who argues that traditionally, the spatiality of government has always been “conceived in terms of a relation between a national population and a national territory”. But as energy technology innovations “have become an increasing preoccupation of contemporary social and political debate”, this has increasingly caused governments “to operate not just in relation to spaces defined and demarcated by geographical or territorial boundaries but in relation to the zones formed around the circulation of technical practices and devices” (Barry, 2001, p.3).

This trend can be observed in many countries (Smith, 2007; Ohlhorst, 2015; Sedlacek et al., 2020; Di Nucci and Prontera, 2021; Martínez-Reyes et al., 2025). It is widely accepted that energy systems will evolve towards more distributed, decentralized polycentric systems (Svedin et al., 2001; Golthau, 2014; Sovacool and Van de Graaf, 2018; Brisbois, 2020), managed by multi-stakeholder and multi-level action (Ostrom, 2012; Nocht and Skelcher, 2020). This can pose a threat to democratic decision-making but also provide opportunities through increasing collaboration and participation (van der Meer and Edelenbos, 2006; Hendriks, 2008; Bryson et al., 2014). However, it remains poorly understood how multi-level governance arrangements influence the rationales and outcomes of participatory processes.

1.3. Research objective & approach

This study seeks to contribute to alleviating this knowledge gap by answering the following research question: *How do the rationales and goals of various actors concerning participatory processes about the energy transition in the Netherlands differ across multiple levels (national, regional, local) of government?*

To answer this question, we conduct a comparative case study of 7 participatory processes which are similar enough in their design to allow for a meaningful comparison. This study is structured as follows. Section 2 discusses key multi-level governance dynamics and how these can influence the goals and rationales of actors engaging in participatory processes about the energy transition. Section 3 introduces the participatory method (PVE) that was applied in each case study (section 3.1), the case selection and descriptions (section 3.2) and the analytic approach for our comparative evaluation (section 3.3). The results are also split in three sections. Section 4.1 summarizes the PVE results to provide insights into citizens’ preferences for various sustainable energy strategies and their underlying beliefs, focusing on how these vary at different levels of government. Section 4.2 subsequently evaluates the rationales and goals for organizing participation at different levels of government from a policy perspective, based on participatory observations during the collaborative design of the PVEs, 6 group discussions (technical briefings and focus groups) about the PVE results and 6 interviews with politicians and policymakers involved in the case studies. Section 4.3 finally evaluates to what extent normative, instrumental and

substantive rationales for participating were present and achieved according to the participants at different levels of government. This evaluation is based on an analysis of survey questions answered by all 28,000 citizens and written feedback a selection of participants in each case study provided about the participatory process.

2. Theory

In the Netherlands, as in many other countries, the implementation of internationally agreed upon sustainable energy targets (Paris Agreement, 2015) and nationally formulated policy proposals (Climate Agreement, 2019) is increasingly delegated to regional administrative bodies (Koelman et al., 2018; Hoppe and Miedema, 2020; van Dijk et al., 2022; Gerritsen, 2024). In these so-called ‘RES-regions’, multiple municipalities work together with provinces, water boards and social parties (such as grid operators and NGOs) on a Regional Energy Strategy (RES). The RES-regions can rather autonomously decide how they realize their contribution to the national goals. No clear guidelines for this decision-making process exist, although involving citizens in the process is recommended. This has brought about a proliferation of new modes of participatory governance and experiments with new participatory methods.

2.1. The challenges of organizing citizen participation in multi-level governance settings

Organizing participatory initiatives in this multi-level governance context raises several challenges. A key characteristic of the multi-level governance of the energy transition is that different policy issues concerning the same policy dossier are administratively handled and politically debated across multiple levels of government (Hendriks, 2008). Therefore, policymakers and managers must work across the boundaries between (different levels of) state, market and civil society (Fung, 2006), which is challenging because state, market and civil society are very different from each other in terms of their regulation and coordination (Benington, 2009). Pressing questions that need to be addressed include: At what scale should participation take place? Who is the intended public? And with what mandate can citizens participate? (Delgado et al., 2011; Fung, 2015; Bobbio, 2019; Hofer and Kaufmann, 2022). When these questions are inadequately addressed, multi-level governance arrangements can lack responsiveness, public accountability and democratic legitimacy (Ansell and Gash, 2008; Hendriks, 2008; Lawhon and Murphy, 2011). Establishing the mandate of participatory processes is particularly challenging in multi-level governance settings, because administrators at various levels delineate the policy issue. Since citizens might not be aware of this administrative reality, the expectations, rationales, and goals of a participation process can differ significantly from a citizens’ perspective and a policy perspective (Provan and Milward, 2001; Ansell and Gash, 2008; Benington, 2009) and between different levels of government (Hendriks, 2008; Chilvers & Kearnes, 2019; Metze et al., 2023).

2.2. Three rationales for citizen participation

The aim of this paper is to provide new insights into how the level of government (national, regional, local) at which participation about the energy transition is organized influences the goals and rationales of politicians, policymakers and citizens. To structure this investigation in our comparative case study, we adopt a distinction of three rationales for participation – normative, instrumental and substantive – which is commonly made in the literature (Fiorino, 1990; Stirling, 2008) and understandable for politicians and policymakers (Mouter et al., 2021d).

The normative rationale for citizen participation focusses on improving the process of democratic decision making by empowering social actors, involving them in such a way that the process can be regarded as adequate, fair and more inclusive (Chilvers & Kearnes,

2019; van Der Meer & Edelenbos, 2006). It maintains participation should be designed with the aim of realizing certain normative, democratic commitments, for instance by empowering vulnerable citizens to participate and ensuring everyone is equally heard (Fung, 2006; Cuppen, 2018).

The instrumental rationale for citizen participation focusses on achieving a particular predefined end, for instance, increasing public or restoring trust in the government (Liu et al., 2019). Organizing participation can help clarify perceived social problems and produce possible solutions. If societal norms, values and concerns are subsequently embedded in the design of energy projects, this may increase trust in or public support for the eventual policy decisions Cuijpers and Koops (2013); Demski et al. (2015).

The distinguishing feature of the substantive rationale is that the outcomes in question are not defined instrumentally, or in terms of specific interests. Instead, the substantive rationale for citizen participation focusses on learning and co-creating knowledge (Turnhout et al., 2020) about certain local issues such as energy (in)justice or power imbalances (Cuppen, 2018), general qualities such as environmental quality (Coenen et al., 1998), or human well-being (O'Brien, 2000). This rationale is based on the idea that a diversity in perspectives that challenges the status quo (substantively) improves the quality of the outcome of a decision-making process (Beierle and Konisky, 2000). This learning effect can occur in both directions, to governments learning from citizens (e.g., about local qualities) and to citizens learning from governments (e.g., about policy dilemma's).

3. Methods

This section introduces the methods used to comparatively evaluate how the level of government at which participation about the energy transition is organized influences the goals and rationales of various actors. Section 3.1 describes why we selected participatory processes based on the PVE method for our comparative evaluation. Section 3.2 describes the case selection process and introduces the reader to our case studies. Finally, section 3.3 details our analytic approach.

3.1. Participatory Value Evaluation (PVE)

The participatory processes that we comparatively evaluate in this study were all based on Participatory Value Evaluation (PVE) method. The essence of a PVE is that citizens advise on a specific decision-making problem of a government in an easy-to-access manner (Mouter et al., 2021a). Citizens are basically 'put into the shoes of a policy maker'. In an online environment, they see which policy options the government is considering; the impacts of the options among which the government can choose and the constraint(s) that the government faces (Fig. 1). Subsequently, citizens are asked to provide a recommendation to the government in terms of the policy options the government should choose, considering constraint(s).

Two characteristics of PVE arguably make this method well-suited for comparing citizens' goals and rationales for engaging in participatory processes about the energy transition at different levels of government. The main benefit of comparing PVEs is that its online participatory 'arena' can be clearly delineated and the deliberative process of citizens in this arena can be protected from various dynamics which offline participatory methods are susceptible to, such as expert influence (van Beek et al., 2024) and outspoken voices (Mouter et al., 2021d). Although experts and policymakers still influence citizens' deliberative process in a PVE by delineating the policy issue and policy options (van Beek et al., 2024), we selected 7 cases which are maximally similar in their design to minimize differences between the participatory arenas. Another benefit of PVE is that it can engage large and diverse groups of citizens (Mouter et al., 2021b). Compared to offline participatory methods, in which certain stakeholders' groups (e.g. older citizens, people with strong or vested interests) tend to be overrepresented,

PVE can therefore capture a more diverse and representative sample of citizens' goals and rationales for participating (Mouter et al., 2021d). In all the PVEs included in this case study, the sample was largely representative for the municipal, regional or national population in terms of age, gender and education (see policy reports in Table 1).

3.2. Case selection & description: 7 similar PVEs about the energy transition

In addition to the beneficial characteristics of PVE discussed above, a pragmatic reason for comparing participatory processes based on the PVE method is that PVE is increasingly used to engage citizens in the energy transition in the Netherlands (Mouter et al., 2021d; Itten and Mouter, 2022). Authors 1, 2 and 4 have frequently applied this method in the Netherlands, allowing us to select 7 PVEs which are maximally similar in their design and maximally different in terms of the level of government.

The main question in every PVE included in this study (Table 1) was: 'how to achieve the government's sustainable energy target? This became an important policy question for Dutch governmental organizations following the Dutch Climate Agreement in 2019 and PVEs have been organized to engage citizens in this question across the country. In total, the authors were involved in seven PVEs about this question; two were conducted at the national level, two at the regional level, and three at the local level. In all PVEs, participants could advice to implement policy options by moving the sliders from left (do not implement) to right (maximally implement) on a 5-point scale. When doing this, speedometers directly showed the effects of participants' choices (Fig. 1). The policy options, slider labels and policy effects in the PVEs were determined in collaboration with policymakers and experts, to ensure relevant information was provided to the participants.¹ This means there exist some variation in the policy goals (Table 1), options and effects (supplementary material A), reflecting contextual differences between the cases. Consequently, it is difficult to directly compare the PVEs. Hence, we draw on several analytic methods and data sources to analyze the case studies.

3.3. Analytic approach

Table 2 provides an overview of our analytic approach. Three data sources are distinguished, which we analyze in the following ways.

3.3.1. Interpretative analysis of the PVEs

Since we cannot directly compare the PVEs, we adopt an interpretivist approach. Such an approach suits our research objective, since according to Boswell et al. (2019), the interpretivist's primary rationale for comparison is to provide 'decentered' explanations of the social world; to unpack social phenomena focusing on "the contingent beliefs and actions of individuals as the basis for explanation, as opposed to laws and rules, correlations between social categories or deductive models." Interpretivist comparison focuses on dilemmas and how these are experienced by different actors. All PVEs included in this study were designed to address the following policy dilemma was 'which sustainable energy technologies should be implemented to realize the energy transition?' By comparing the PVE policy reports (references in Table 1), we shed light on how this dilemma was experienced at different levels of government, both from a policy perspective and from citizens' perspective. To elucidate the former, we compare how the PVE designs were influenced by the level of government in which they were conducted (section 4.2.1). In doing so, we draw on the methodology sections of the policy reports which summarize the collaborative design of the PVEs, in which authors 1, 2 and 4, together with other researchers,

¹ For a detailed description of a similar PVE design process, see Mouter et al. (2021c).

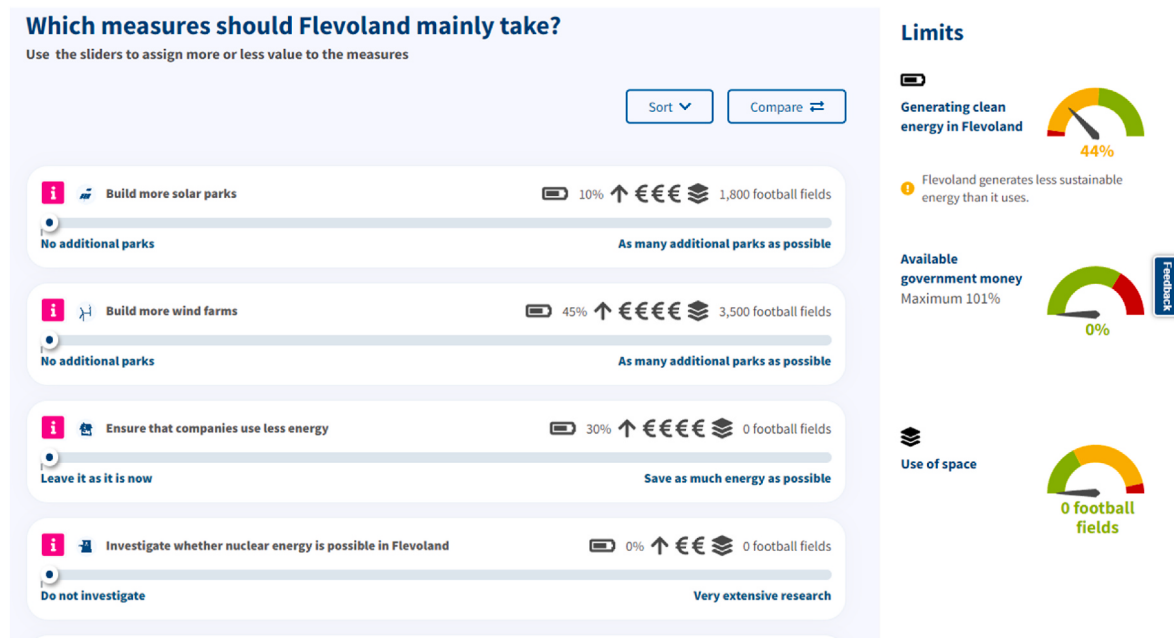


Fig. 1. Screenshot of the Flevoland PVE choice task (not all policy options are visible). Participants could advice to implement a particular policy option by moving the sliders from left to right. The maximum effect each policy option has on the speedometers is presented at the top right of each slider. If a speedometer colored red, participants could not proceed with the choice task. If it turned orange, they received information about the consequences but could proceed. If it turned green, they could proceed immediately. Participants could access detailed information about the policies and their consequences by clicking the pink 'i'-button. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

Table 1
Overview of the PVE case studies.

Case nr.	Level of government			Data collection		
	Case (policy report)	Scale	Primary policy questions (modelled as restrictions in the PVE designs) ^a	PVE online	Online PVE Participants	Focus groups & interviews with policymakers ^b
1	Eemnes (de Vries et al., 2023b)	Municipality	- How to achieve min 70 % sustainable energy in 2030? - How much can residents do themselves?	Jul–Aug 2023	N = 464	- Focus group incl. 1 policymaker of this case. - Interview with 1 politician. - Interview with 1 policymaker.
2	Heeze-Leende (Geijssen et al., 2022)	Municipality	- How to achieve min 100 % sustainable energy in 2030? - How much space should be used for sustainable energy?	October 2022	N = 436	- No data.
3	Wijk bij Duurstede (de Vries et al., 2024)	Municipality	- How to achieve min 100 % sustainable energy in 2050? - How much insecurity (by selecting novel technologies) about sustainable energy production do we accept?	February 2024	N = 2.045	- Technical briefing for the municipal college. - Technical briefing for the municipal council. - Interview with 3 policymakers.
4	Flevoland (de Vries et al., 2022).	RES-region	- How to achieve min 55 % sustainable energy in 2030 and how ambitious should we be for 2050? - How much (scarce) land should be made available for energy production?	Jun–Jul 2022	N = 2.397	- Technical briefing with policymakers from the RES-region. - Interview with 1 policymaker.
5	Gelderland (Mouter et al., 2022)	Province	- How to achieve the minimum target of 55 % CO2 reduction in 2050 and how ambitious should the province be for 2050?	Aug–Sept 2022	N = 3.298	- Interview with 2 policymakers - Focus group incl. 1 policymaker and 1 policy advisor of this case.
6	Ministry of EZK (economics and climate) (Mouter et al., 2023)	National level	- How to achieve min 100 % sustainable energy in 2050? - How much instability of the energy system is acceptable? - How much insecurity of the energy system is acceptable?	Dec–Jan 2023	N = 7.986	- Interview with 1 policymaker
7	Dutch parlement (de Vries et al., 2023a)	National level	- How to achieve min 100 % sustainable energy in 2050? - How much sustainable energy is generated in the NL? - At what costs?	Feb–Mar 2023	N = 11.582	- Technical briefing for 5 members of parlement.

^a See supplementary material A and B for more information about the PVE design and results.

^b See supplementary material D.

Table 2

Overview of the data and analytic approach used to obtain the results in section 4.

Data source	Citizen goals & rationales	Policy goals & rationales
PVE policy reports	4.1 Interpretivist comparison of PVE results: - <i>Preferences</i> : statistics of average choices of all participants. - <i>Beliefs</i> : thematic analysis of written motivations for these choices provided by some randomly selected (n = 300–500) participants per case.	4.2.1 Interpretivist comparison of the PVE design processes: - <i>How the level of government influenced the PVE designs</i> .
Technical briefings, focus groups & interviews	Not used to analyze citizen goals & rationales	4.2.2. Interpretivist comparison of: - <i>How politicians and policymakers evaluated the participatory process</i> . Not used to analyze policy goals & rationales
Evaluative survey questions	4.3 Analysis of: - <i>Quantitative</i> : survey questions about the PVE answered by all participants. - <i>Qualitative</i> : written feedback about the participatory process provided by 100 participants per case.	

sought to involve all relevant actors (politicians, policymakers and various stakeholders) by organizing multiple design workshops.² Before presenting the differences in the PVE designs, the results section 4.1 compares how citizens' preferences and beliefs regarding the energy transition differ between the PVEs organized at different levels of government. Here, we interpret the differences between the average policy portfolios selected by a representative sample of participants in each PVE (see supplementary material B), and we summarize the qualitative analyses of the written motivations a random sample of participants provided for their choices presented in the PVE policy reports. The aim of this analysis is to capture broad patterns across cases, not to provide strong claims about the statistical distribution of specific preferences and beliefs across different governmental levels or demographic groups. These patterns help to interpret the other data.

3.3.2. Interviews and group discussion with involved politicians and policymakers

Section 4.2.2 further investigates policy rationales and goals for organizing citizen participation, interpretatively analyzing data obtained through group discussions (four technical briefings and two focus groups) and six semi-structured interviews (Table 1). The goal of the four technical briefings, which all lasted approximately 1 h, was to discuss and interpret the PVE results with politicians (two in case 3 and one in case 7) or policymakers (in case 4), who could ask questions after a presentation of the policy reports. Their questions about the participatory process and PVE results provide valuable insights into the actual rationales and goals for organizing participation, going deeper than the objectives formulated in the government's participation plans. Hence, we tried to interview politicians and policymakers involved in the other cases and managed to conduct one interview with a politician and five interviews with involved policymakers, all lasting approximately 30 min. The interviewees were questioned about their interpretation of the PVE results, how they (and the politicians they were working for) experienced the participatory process and how it influenced the government's decision-making. In addition to these interviews, we could obtain access to a focus group in which researchers asked similar

questions to policymakers involved in three participatory processes (including case 1 and 5) based on the PVE method. For more details about the structure of the briefings, interviews and focus groups, we refer the reader to supplementary material D.

3.3.3. Survey questions and a feedback form answered by PVE participants

Section 4.3 evaluates citizens' rationales and goals for engaging in the participatory processes. This is done by analyzing survey questions participants answered after completing the PVE, which provide some indication of how the processes contributed to the 3 rationales distinguished in the theory section. In answering these questions, citizens reflected on whether they learned something from participating (substantive rationale), the fairness of the process (normative rationale) and to what extent it contributed to trust in and support for their government's decision (instrumental rationale). To interpret these results, we analyzed the written feedback participants provided about the participatory processes in an open question. The question was: 'what did you find bad about this consultation?' The qualitative analysis was informed by previously analyses conducted for the policy reports, based on which we knew participants provide valuable feedback about myriad factors which influence the design and implementation of a participation process. Given the research objective of this paper, we generated a randomly ordered dataset and selected the first 100 written responses to this question in which participants referred to factors (i.e. the actors, arena and wider socio-political context) which might influence citizen's goals and rationales for participating (recall section 2.1). Feedback which was unrelated to these factors (e.g. generic opinions or expressions of frustration) were ignored.

4. Results

4.1. PVE results: citizen's preferences and beliefs

In all cases, a majority of the participants expressed they were concerned about climate change and that they support their (national, regional or local) government's sustainable energy target. However, when comparing the average policy portfolios selected in the PVEs (supplementary material B), differences can be observed between different levels of government. Table 3 shows that in the PVEs conducted at the local and regional level, building wind turbines and solar installations on land ranked lowest whereas in the PVEs conducted for the national government these strategies ranked among the upper half of all energy related options. The written motivations participants provided for their choices suggest these differences can partly be ascribed to the prevalence of different beliefs (values and concerns) at the national, regional and local level.

At the national level, 'security of supply' is among the most frequently mentioned values and participants give various reasons why they believe it is important to minimize dependence on foreign countries for energy supply. Some participants mention external shocks such as Covid-19 and the war in Ukraine as the reason why they desire more security over the Dutch energy supply. Others argue this is important because it reduces the risk of sudden, sharp increases in energy costs. Additionally, 'protecting the climate' is a frequently mentioned value in the national cases. Some participants argue that the Netherlands should generate more clean energy, either out of national pride or to take responsibility for mitigating climate change.

In the regional and local cases on the other hand, some participants consider 'protecting the climate' to be the most important value, but most participants prioritized other values, such as landscape aesthetics, place identity and health. 'Security of energy supply', which was a widely shared value at the national level, is also sparsely mentioned in these cases. Instead, many participants offer reasons and suggestions for considering local values when planning new energy technologies. For instance, many participants who did not select wind- or solar energy installations state there are better alternatives that not negatively affect

² For an overview of such a collaborative PVE design process, see [Mouter et al. \(2021d\)](#).

Table 3

Ranking of the average commitment to energy strategies (see supplementary material B).

#	Eemnes	Heeze-Leende	Wijk bij Duurstede	Flevoland	Gelderland	Ministry EZK	Parliament
1	Isolation	Solar roof	Isolation	Solar roof	Save energy	Wind sea	Heat grids industrial
2	Solar roof	Isolation	Solar roof	Isolation	Solar roof	Save energy	Wind sea
3	Heat pump	Biogas	Water energy	Energy storage	Isolation	Wind + Solar land	Heat grids geo-energy
4	Solar land	Wind land	Wind land small	Heat grids	Wind land	Heat grids	Wind + Solar land
5	Heat grid	Solar land	Nuclear	Solar land	Solar land	Gas + CCS	Biogas
6	Wind land		Solar land	Wind land		Nuclear large	Hydrogen
7			Biogas			Hydrogen	Nuclear
8			Wind land large				Gas + CCS

local values, such as environmental qualities in and around the village. In Heeze-Leende, participants primarily mentioned the value of nature, while in Eemnes and Wijk bij Duurstede, the 'polder landscape' and 'village character' were frequently mentioned.

4.2. Policy goals & rationales for organizing participation

The different preferences and beliefs observed in the national, regional and local cases cannot be seen separately from the territory of governance in which the cases were conducted. Below, we briefly reflect on how the level of government at which the cases were organized influenced the PVE designs (see supplementary material A). This is also relevant for interpreting the rationales and goals of policymakers and politicians for conducting the participatory processes (section 4.2.2). Besides, it helps to interpret the differences in the rationales and goals of the citizens who participated at different levels of government (section 4.3).

4.2.1. How the level of government influenced the PVE designs

In the national PVEs, the objective of 100 % sustainable energy in 2050, recorded in the Dutch Climate Agreement (2019), was not up for debate and thus posited as a minimum requirement in the PVEs. This meant participants could not advance with the choice task until they met this goal. Moreover, the policy issue was predominantly framed around (inter)national issues such as energy uncertainty, costs and stability of the national energy system. In the regional cases, policymakers did not want to strongly posit sustainable energy targets for 2050, since politicians were still debating how ambitious the targets of the municipality/region should be. Hence, both regional cases only posited their sustainable energy supply targets for the short term (2030), leaving space for participants to advise about the ambitiousness of the longer-term targets. This dynamic was also present in the local cases except in Heeze-Leende, where the municipality had the most ambitious targets (100 % sustainable in 2030). The other two municipalities were internally divided about their targets. Eemnes posited its short-term target (2030), to let citizens advice about the ambition level for the long term. Wijk bij Duurstede on the other hand decided to drop its short-term target altogether during the design process of the PVE and only posited the 2050 target imposed by the national government.

4.2.2. How policy goals and rationales differed at the national, regional and local level

The interviews and focus groups conducted with politicians and policymakers show the rationales for organizing citizen participation (normative, instrumental, substantive) were prioritized and achieved in different ways at different levels of government.

In the national case studies, politicians and policymakers largely expressed substantive rationales for participation. Reflecting on the PVE results, policymakers and politicians involved in these cases predominantly mentioned or showed how the substantive output of the PVEs helped them understand different citizen perspectives. Some explicitly mentioned the PVE helped bridge the 'large gap' between government and citizens, with which they meant a lacking understanding of citizens' values and concerns regarding sustainable energy policy. One telling

example, is that a government official involved in the national energy consultation for the Dutch parliament (case 7) said he could clearly see how members of parliament primarily used the technical briefing to test their own views about the opinions of their voters. The record of the briefing shows a member of the agrarian party (BBB) solely asking questions about how citizen perspectives between urban and rural areas and a member of the green party (GroenLinks) asking several questions about citizen perspectives concerning climate justice. In the other national case, conducted for the ministry of Economics and Climate, a policymaker stated that many Dutch citizens prioritize 'energy independence' and the way in which citizens talk about this public value was previously not on the radar of the ministry. This policymaker explained that discussions about the energy transition at the national level tend to revolve around technical issues, causing decisions about public values to disappear to the background, or to become neglected entirely. According to this policymaker, the PVE raised awareness about how technical decisions also influence public values, which was useful for policy discussions during the formulation of the National Energy Plan for 2050.

In the regional cases, the substantive rationale remained present, but additional efforts were also undertaken to achieve normative goals. Bridging the gap between government and citizens was also mentioned as a main reason for applying the PVE in the regional cases. Policymakers involved in these cases expressed great interest in the substantive PVE results and their reflections show what they learned from the citizen perspectives. For instance, during the technical briefing of the Flevoland PVE results, a discussion arose between the present policymakers (from the province and 6 municipalities). The group came to the realization that citizens expect support from the government in many ways (e.g., for local initiatives to save and store energy and informing citizens about the heat transition) while they were primarily concerned with technical tasks and challenges (e.g. how and where to realize more sustainable energy production). How to deal with this discrepancy was left unanswered during the discussion, but the policymaker coordinating the revision of the regional energy strategy used to PVE results to describe how each policy recommendation in this report related to the values, concerns and expectations of citizens. A notable difference between the regional and national cases was the importance of the normative rationale for the participatory process, which was more clearly an aim in and of itself in the regional cases. One of the politicians who initiated the Gelderland case stated in a public interview: "*I thought it was time to really do something like this in Gelderland. [...] We need new ways to involve residents and show them that their opinion matters*" (EP, 2023). In the national cases, policymakers also mentioned the importance of a fair and inclusive process, but their actions indicated that it was less important in this context. National politicians and policymakers were satisfied once a nationally representative sample in terms of education, gender and age was collected, suggesting normative aims primarily served a higher objective: warranting the legitimacy of the substantive results. In the regional and local cases, policymakers undertook additional actions to reach this objective. Additional focus groups with young citizens were organized in Flevoland because this group was somewhat underrepresented in the PVE. Similarly, street interviews were conducted in Gelderland to include citizens who did not have access to digital participation methods. Moreover, the province of

Gelderland went a lot further by combining the PVE with a citizen assembly. Integrating the PVE results in the citizen assembly's recommendations was part of the original plan, but in the end, the PVE results were sparsely used by the citizen assembly. Reflecting on this with two involved policymakers, it became clear that this did not negatively influence their evaluation of the participatory process. One policymaker said: *"it is also a success if it leads to a satisfied group of 150 people who tell people in their environment about what they have done"*, which suggests normative goals trumped substantive goals.

At the local level all rationales were important. When asked what they learned from the PVE results, the immediate response of politicians and policymakers involved in tended to be that there were no new insights. Contrary to the national and regional cases, local politicians and policymakers stated they were already well-informed about the values and concerns of citizens – and nobody mentioned the PVE helped 'bridge the gap' between government and citizens. For example, a policymaker involved in the Wijk bij Duurstede case stated: *"The PVE did not necessarily provide new insights into what perspectives there are."* Upon further reflection, it became clear that a substantive contribution of the local PVEs was that it provided a better understanding of how frequently certain citizen perspectives occurred in the municipalities. The policymaker quoted above for instance continued by stating: *"But [it did] made clearer what you already assume about which different perspectives exist in society. I really liked that. And what I also liked, which is perhaps a new insight, is that the size of the group that is very much against wind turbines is quite small. With all the shouting in the media you tend to think this group is a lot larger, but it turns out that it is only a quarter of the population which is outspokenly against."* We also observed that local politicians were nervous about the PVE results. This was explicitly mentioned by a policymaker from Wijk bij Duurstede and Eemnes, the latter stating: *"There was some fear of cold feet, mainly fear that something other than the administration's position would emerge."* The alderman of Eemnes confirmed this in another interview, stating: *"I spoke to aldermen of neighboring municipalities and not everyone has the courage to use the PVE. They are scared that the outcome might not fit the current policy."* This anticipation of the PVE results about the degree of public acceptance for specific policy options suggests that in the local cases, instrumental rationales (i.e. realizing public support) were important for local policymakers and politicians. The way in which politicians responded to the PVE results further supports this. In Eemnes, the alderman quoted above saw a confirmation of his own position in the PVE results and rushed to the regional media once the report was published, stating how it confirmed his party's perspective that the people of Eemnes do not want wind turbines (Danvers, 2023), which was not concluded this bluntly anywhere in the PVE report. On the other hand, in Wijk bij Duurstede, where the PVE results were presented to the municipal council in a technical briefing, several councilors *"found it difficult that their own perspective was less frequently present than expected"*, according to an interviewed policymaker. During the briefing, these councilors strongly questioned the legitimacy of the process by criticizing the fairness and inclusivity (normative rationale) of the participatory process and the accurateness of the analyses (substantive outcomes). Anticipating this dynamic, politicians and policymakers involved in the local cases also strongly focused on normative aims about the representativeness and inclusiveness of the PVE throughout the process. In both Eemnes and Wijk bij Duurstede, council members were involved in designing the PVE to enhance the legitimacy of the process. In Eemnes, the alderman responsible for the participatory process referred to this transparent and inclusive design process to fend of the abovementioned criticism from council members during the technical briefing of the PVE results. The normative rationale was also important in and of itself though, at least for some politicians and policymakers. In Eemnes the PVE results were used by a citizen forum which provided policy recommendations to the municipality. And in Wijk bij Duurstede an alderman noted 'a deep democracy approach' is needed to continue involving the group that is strongly opposed to the energy transition.

4.3. Citizen goals & rationales for participating at different levels

Table 4 shows the PVEs conducted at the national level are more positively evaluated by participants, receiving a higher-grade average (7,2–7,4), compared to the local PVEs (6,6–7,0). Specific survey questions are also evaluated differently. Participants of the national PVEs more frequently stated the process can lead to more acceptance of and trust in the government's policy decisions (instrumental goal), compared to the local PVEs. Moreover, at the regional and national level, a higher percentage of participants stated they learned (substantive goal) about the government's choices (61–69 %) compared to the local level (42 %). Conversely, a higher percentage of participants at the local level believed the policy issue was important to share their opinion about (normative goal) (84–90 %) compared to the national level (78–79 %). The lower scores the local cases received on all other questions however suggests these cases did not fulfill participants' needs in the same way as the cases conducted at higher levels of government did.

Qualitative analysis of written feedback participants provided about the participatory processes provide insights into the beliefs underlying these results (supplementary material D). Two key findings stand out. First, particularly the participants at the local level expressed criticism about the framing of the sustainable energy objectives. Several participants in Eemnes stated they did not know where the objective of 70 % sustainable energy in 2030 comes from. In the Heeze-Leende case, several participants questioned why the municipality has such ambitious (200 %) sustainable energy goals or stated it is unclear how this objective came about. Further analysis suggests the lower evaluation of the local cases can be largely ascribed to these cases receiving scrutiny for decisions made at higher levels of government. In all local cases, some participants explicitly referred to this multi-level governance dynamic. For example, in Eemnes a participant stated: *"The aldermen and mayor [...] will be under great pressure in the coming years due to the wishes of the province of Utrecht under the guise of: it is required by the government."* But this criticism was observed most frequently in Wijk bij Duurstede, where many participants believed they were presented with a fair accompli. One participant mentioned this explicitly, but most participants voiced this criticism in an implicit way, intuitively responding to how policy choices were framed by recent decisions made by higher level governments, which they perceived to be unjust. They stated something along the lines of *"It is all very biased"* or *"I feel like I'm being pushed in a certain direction. Namely, that I can't get out from under windmills."*

Second, local participants expressed more interest or concern about how their input is used by policymakers. Participants in the national cases often stated they have no idea what will or can happen with the results. But particularly in local cases, participants made explicit reference to the administrative body that initiated the participatory process, stating they hoped (or feared) the results would (not) be used. For example, in Eemnes one participant stated: *"The population of Eemnes has not heard anything more about the pilot projects (heating network, heat pump, geothermal energy, etc)."* Such remarks are not observed in the national cases, suggesting the participants in the local cases are more interested in, or aware of, the political decision-making process for which the participatory processes were organized.

5. Discussion

This paper investigated how the rationales and goals of various actors concerning participatory processes about the energy transition in the Netherlands differ across multiple government levels (national, regional, local).

5.1. Key results: mismatches in actors' rationales and goals for participating at different levels

Our results show that rationales and goals for organizing

Table 4
Citizen evaluations of the PVE case studies.

Case nr.	Territory of government		Grade	Normative		Instrumental		Substantive
	Location	Scale		This was an important topic to share my opinion about	Should the government prioritize the input of residents (R) experts (E) or both (B)?	If many people participate, it is easier for me to accept the government's decisions	If people participate more often in this way, I will have more confidence in government decisions	
1	Eemnes	Municipality	7,0	Agree: 90 %	R: 23 % B: 57 % E: 21 %	Agree: 54 %	Agree: 54 %	Agree: 42 %
2	Heeze-Leende	Municipality	6,7	N/A	R: 22 % B: 58 % E: 20 %	N/A	N/A	N/A
3	Wijk bij Duurstede	Municipality	6,6	Agree: 84 %	R: 26 % B: 46 % E: 28 %	Agree: 40 %	Agree: 48 %	N/A
4	Flevoland	RES-region*	7,3	N/A	N/A	N/A	N/A	N/A
5	Gelderland	Province	7,2	N/A	N/A	N/A	N/A	Agree: 61 %
6	Ministry of (economics & climate)	National level	7,4	Agree: 78 %	R: 28 % B: 42 % E: 30 %	Agree: 58 %	Agree: 60 %	Agree: 63 %
7	Dutch parliament	National level	7,2	Agree: 79 %	R: 30 % B: 48 % E: 22 %	Agree: 60 %	Agree: 59 %	Agree: 69 %

participation differ across levels of government. At the national level, politicians and policymakers mentioned various goals for organizing participation, but their actions indicated the substantive goal of bridging the (knowledge) gap about citizen's preferences and beliefs regarding the energy transition was most important (section 4.3.1). National politicians predominantly asked questions about the outcomes to learn about the diversity of citizen perspectives about the energy transition and national policymakers used the outcomes to better incorporate public values in plans for the national energy system. At the regional level, in addition to this substantive goal, normative goals were also important to policymakers, as additional emphasis was placed on achieving fair and inclusive participation processes. But the most complex dynamics were observed at the local level, where all three rationales were important. Although local politicians and policymakers stated they were already well-informed about citizen perspectives about the energy transition, the participatory processes provided them with useful insights about the frequency in which these perspectives occurred (substantive rationale). However, learning was not the primary goal of these processes for the involved local governments. Instead, local politicians and policymakers were primarily interested in the outcomes of the participatory processes, to gauge public support for specific energy policies and substantiate their own positions (instrumental aim). Normative aims to enhance the inclusiveness and representativeness of participatory processes partly served to safeguard the legitimacy of these claims, though some politicians and policymakers also demonstrated these goals were important in themselves.

The goals and rationales citizens expressed about their engagement in the participatory processes were also most complex at the local level. Local participants more frequently stated the policy issue was important to share their opinion about (section 4.2.1) and voiced more specific local values about health, livability, cultural values and place identity, among others (section 4.1.1), compared to the citizens who participated at the national level. That local communities often express lower levels of public acceptance for specific energy technologies than national public support surveys indicate has been well-established in the literature (e.g. Carley et al., 2020) and has been referred to as the 'social gap' (Bell et al., 2006). In the past decades, resistance to sustainable energy projects has come to be commonly regarded as an expression of value-related emotions, associated with perceptions of distributional or procedural injustice (Gross, 2007; Wüstenhagen et al., 2007), ideological leanings and trust (Clulow et al., 2021), environmental concerns (Azarova et al., 2019) and a wide variety of place-based values (van der Horst, 2007; Devine-Wright, 2009; Dugstad et al., 2023). Seeing these local values and concerns as valid rationales instead of irrational 'not in

my backyard' (NIMBY) behavior (see Wolsink, 1994, 2000; Devine-Wright, 2005, 2013) opens up the question how multi-level decision-making processes can become responsive to these local rationales (Wolsink, 2007; Hendriks, 2008). This study reveals that two governance dynamics in particular frustrate the rationales and expectations of citizens engaging in local participatory processes (section 4.2.2). First, local participants relatively frequently criticized the narrow scope of the policy issue presented to them, expressing frustrations about their inability to influence earlier decisions about sustainable energy objectives that had been made at higher levels of government. Second, only local participants recalled negative experiences with previous participatory processes. For these reasons, participants in the regional and local more frequently questioned whether their input would be used by policymakers. Similar findings have previously been found in several other studies of local decision-making processes in the Netherlands (Wolsink, 2007; Koelman et al., 2021; Peuchen et al., 2024) and beyond (Söderholm et al., 2007; Williams et al., 2022; Ryder et al., 2023). But the multi-level perspective of this study sheds new light on how these challenges could be addressed.

5.2. Towards an improved participatory repertoire for energy governance

To ameliorate the gaps between policy and citizen rationales at different levels of government discussed above, scholars have recommended to improve collaboration between national, regional and local levels of government (Smith, 2007; Ansell and Gash, 2008; Sperling et al., 2011; Ingold and Fischer, 2014). Despite these recommendations, the desired feedback loop between national, regional and local governments appears difficult to establish in practice (Fraune and Knodt, 2017; Williams et al., 2022; Ryder et al., 2023). This suggests there exist more structural problems that need to be addressed.

Several scholars argue for a more systemic approach to understanding and organizing citizen participation (Chilvers et al., 2018, 2021; Armstrong, 2021; Metze et al., 2023). For instance, Chilvers et al. (2018) argue for the need to study 'ecologies of participation', which they define as consisting of "relational dynamics of diverse interrelating collective practices and spaces of participation which intermingle and are co-produced with(in) wider systems and political cultures." Our study underscores their view that "it is not possible to properly understand any one collective of participation without understanding its relational interdependence with other collective participatory practices" (Chilvers et al., 2018). By mapping the rationales of various actors concerning similar participatory processes about the energy transition conducted at different levels of government in the Netherlands, we also

shed some new light on the challenges of aligning participatory processes in meaningful and effective ‘participatory repertoires’ (Metze et al., 2023) that are responsive to the rationales of different actors involved.

A key principle that such a repertoire must consider is that local processes will continue to receive stronger criticism than those conducted at higher levels of government. As pointed out by Wolsink (2007), public attitudes will always be shaped by perceptions of the fairness and concrete (e.g. environmental) consequences of local planning processes. To deal with this, some scholars recommend integrating participatory processes organized at multiple levels government through subsequent participatory processes at the local, state and national levels in the same sequential process (Fraune and Knodt, 2017). In theory, this might help to scale local participatory outcomes to the national level (Pogrebinschi, 2013). But in practice this will be challenging if not impossible, given that many (international) sustainable energy commitments and decision-making power about the energy transition resides in most countries still resides with national governments. When numerous political decisions have already been made (by higher levels of government), Metze et al. (2023) argue it is necessary to explore how combining many alternative forms of participation – for example also including conflict mediation about local siting issues – might together provide meaningful and effective ‘participatory repertoires.’ Adding to this, Metze et al. (2023) note it might also help if national governments anticipate potential conflicts they may cause during the policy formation phase, for instance by organizing small scale, local participatory initiatives to listen to local values and interests early in the decision-making processes. This recommendation reflects the observation by Sperling et al. (2011) that respecting both (inter)national sustainable energy commitments and local values and planning conflicts, requires a simultaneous centralization and decentralization during the implementation of 100 % renewable energy visions.

Many argue this needs to be facilitated by shifting knowledge production and planning instruments’ aims towards local and regional policymaking (Wolsink, 2007; Amundsen et al., 2010; Sperling et al., 2011; Brisbois, 2020; Williams et al., 2022; Ryder et al., 2023; De Jonge, 2024). Based on interviews with approximately 25 local and regional politicians and policymakers involved in the Dutch energy transition, De Jonge (2024) for instance observes that many stress the need for regional networks, in which national, regional and local research comes together, linked to specific social tasks. But while many tasks have been transferred to lower levels of governments, knowledge infrastructures about the energy transition remain largely focused on national governments (Sperling et al., 2011; De Jonge, 2024). Moreover, the regional networks that have emerged in the Netherlands in recent years (van Dijk et al., 2022; Gerritsen, 2024) still largely focus on administrative and technical issues, instead of social issues (De Jonge, 2024).

A key social issue that regional networks could set out to address in the future is how to communicate and legitimize local decisions that are informed by national objectives. These are ultimately highly political decisions with various societal and normative implications (Fraune and Knodt, 2017; Cuppen et al., 2020). Among the normative, political issues at stake here are the pace of implementing large-scale changes, the distribution of energy measures across different areas, and the allocation of benefits and burdens. As Wolsink (1994) pointed out more than two decades ago, citizens become frustrated if their concerns about these matters are treated as selfish and irrational. Particularly in Wijk bij Duurstede, we observed this frustration is exacerbated if local government, which often find their agency is confined by higher levels of government (Koelman et al., 2021), tries to legitimize local sustainable energy policies by referring to decisions made at higher levels of government. Although all participatory processes must employ instrumental rationales to justify ‘closing down’ citizen engagement to come to a final decision (Stirling, 2008), if this is done too prematurely at the local level, for instance because local governments are pressured into organizing participation within a short timespan to fit in rigid policy

processes at higher levels of government, this can contribute to performative processes of participation that stray from widely accepted best practices and are negatively evaluated by local communities (Ryder et al., 2023). This underscores, there is a need for more meaningful and effective participatory repertoires (Metze et al., 2023) that help shape, explain and legitimize local objectives which are informed but not completely predetermined by higher-level government objectives. Currently, there is no coherent narrative about this process in the Netherlands and many other western countries with multi-level energy networks. This ‘social gap’ (Bell et al., 2006) remains deserving of attention to help citizens understand and influence the rationales behind specific actions in particular locations, the benefits of these actions, and the concessions made by others. This can help policymakers base these difficult decisions on more than technical information, incorporating social values and concerns as well.

5.3. Limitations

This study is a response to recent calls for more empirical work reflexively evaluating how contextual factors influence the goals and effectiveness of participatory processes. This is a challenging task, because as the context changes, other factors (i.e. the actors, participatory arena and other socio-political dynamics) also change. Although we tried to include seven cases which were maximally different in the contextual factors of interest (i.e. the level government) and maximally similar in terms of their design and actors involved, these factors might have influenced our comparative evaluation. Hence, a different selection of cases might have yielded different insights. Moreover, the PVE benefits of scale (e.g. the representativeness of the quantitative analyses) also has drawbacks. For example, our summary of the thematic analyses of citizens’ values and concerns reported in the PVE policy reports captures broad patterns across cases, but we could not make strong claims about the statistical distribution of specific values and concerns across different governmental levels or demographic groups. Hence, further research is required in this direction (see Demski et al., 2015). Another limitation is that lacking face-to-face interactions with citizens, our research risks overlooking nuanced concerns or context-specific issues that smaller, more targeted research could produce. Comparing cases based on other participatory methods using other analytic approaches such as ethnographic observations, might therefore yield other insights into citizens’ goals and rationales for engaging in participatory processes about the energy transition at different levels of government. Relatedly, the inability to analyze completely identical survey questions, focus groups and interview across all cases may have influenced the consistency of our findings. This limitation is common in interpretive and participatory research and following standard practice, we sought to ensure the robustness of our findings by triangulating them with additional data sources, including our participatory observations in designing and implementing the cases in collaboration with policymakers. Nonetheless, our inability to organize interviews for two cases might have limited the depth of policymakers’ perspectives in these cases. Regardless of these limitations, the main conclusions of this paper still stand.

CRedit authorship contribution statement

M.O. de Vries: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Project administration, Methodology, Investigation, Formal analysis, Data curation. **N. Mouter:** Writing – review & editing, Validation, Methodology, Investigation, Conceptualization. **T.A.P. Metze:** Writing – review & editing, Methodology. **S. Spruit:** Writing – review & editing, Methodology.

Declaration of competing interest

The authors declare the following financial interests/personal

relationships which may be considered as potential competing interests: Niek Mouter and Shannon Spruit report having stocks and Martijn de Vries reports having certificates in the private company Populytics, a start-up of Delft University of Technology, which commercially applies the Participatory Value Evaluation method and other kinds of policy appraisals. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.enpol.2025.114998>.

Data availability

Data will be made available on request.

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