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BRIEF REPORT

REVISED Energy Transition in Northern Netherlands: seeking a balance between top-down and bottom-up initiatives

[version 2; peer review: 2 approved, 6 approved with reservations, 1 not approved]

Bas Oldenbroek[1], Ifigenia Psarra[1], Tineke van der Schoor[1], Cyril Tjahja[2]

[1]Research Center for the Built Environment NoorderRuimte, Hanze University Groningen, Groningen, Groningen, 9747 AS, The Netherlands
[2]Faculty of Humanities, Art and Culture, History, Antiquity, Vrije Universiteit Amsterdam, Amsterdam, North Holland, The Netherlands

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Abstract

This brief report focuses on top-down and bottom-up processes within the field of energy transition. It aims at gaining a better understanding of the needs of the local energy initiatives. On this basis, policy recommendations are formulated to help the municipality of Groningen to facilitate local energy initiatives, ultimately leading to a more balanced approach of the local energy transition. Thus, this study explored the (mutual) interests, barriers and expectations of the municipality and local citizen initiatives. The theoretical framework is the implementation analysis framework, distinguishing top-down and bottom-up approaches. Specifically, this qualitative (thematic analysis) research study investigates the mismatch in expectations between a number of local energy initiatives and the municipality of Groningen regarding their roles within the local energy transition context. To this end, semi-structured interviews have been conducted with members of the municipality of Groningen, Grunneger Power (a local energy intermediary), and four local energy initiatives. Need and expectation gaps have been identified and potential solutions have been explored. The main findings of the study illustrate the need of professional support for citizen initiatives, at both technical and organizational level, especially in the first phases of their development. Additionally, clear mutual communication on short and long-term planning and ambitions of the involved parties is of key importance for the alignment of the interests and the course of actions. Consequently, a clear context is needed, within which an exchange of feedback on the envisioned strategies, and the subsequent energy saving or generation interventions, can take place in an efficient and effective way. Additionally, such a context increases

Open Peer Review

Approval Status ✗ ? ? ? ? ✓

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1. **Marie Claire Brisbois**, University of Sussex, Brighton, UK
2. **Lorenzo De Vidovich**, Università di Trieste, Trieste,, Italy
3. **Mahyar Kamali Saraji**, Vilnius University, Kaunas, Lithuania
4. **Ruth Shortall**, Joint Research Centre (JRC), Petten, The Netherlands
5. **Lefteris Topaloglou**, University of Western Macedonia (UOWM),, Kozani, Greece
6. **Md Tasbirul Islam**, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia

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confidence and provides a clear understanding to the citizen initiatives regarding their role and the level and nature of support they can expect in their intended projects and activities. Based on these findings, policy implications have been drawn.

Keywords
energy transition, citizen engagement, local energy initiatives, bottom-up processes, balanced approach, Groningen, thematic analysis

Any reports and responses or comments on the article can be found at the end of the article.



This article is included in the Horizon 2020 gateway.

Corresponding author: Ifigenia Psarra (i.psarra@pl.hanze.nl)

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REVISED **Amendments from Version 1**

In the revised version of the brief report, a number of changes were made to enhance clarity and provide additional context. We have expanded the methodology section to include a more detailed explanation of our approach, alongside a table that outlines the Local Energy Initiatives that participated in the interviews. It has also been explained that, in qualitative research, ensuring the inclusion of all relevant perspectives often takes precedence over the sheer number of interviewees. Lastly, we have explicitly highlighted the core focus of this brief report, namely the formulation of recommendations, ensuring that this aspect is now more clearly articulated throughout the document.

Any further responses from the reviewers can be found at the end of the article

Introduction

The theoretical framework of this study is the implementation analysis framework (Sabatier & Mazmanian, 2005), according to which, two transition processes are distinguished: the ones emerging from a top-down, and those stemming from a bottom-up approach. To catalyse the energy transition, there is a need to broaden the commonly adopted strictly top-down approach, by embracing and fostering the roles that local government, entrepreneurs and citizens can play together (Allen *et al*., 2012) (Hargreaves *et al*., 2013) (Klösters *et al*., 2020) (Psarra *et al*., 2024). Furthermore, several authors discuss the role of intermediaries or 'middle actors', for example (Parag *et al*., 2013; Parag & Janda, 2014) find that intermediary organizations play a crucial role in the transfer of information to local energy organizations. They also point to the importance of capacity building for local energy activities.

In the Netherlands, numerous local grassroot energy initiatives have emerged with the goal of accelerating the local energy transition (Rotmans, 2011). There has been an enormous increase in the number of Local Energy Initiatives (LEI)s over the last seven years (HIER; RVO, 2021). In 2020, there were a total of 623 LEIs in almost every municipality in the Netherlands. Specifically, LEIs are defined as: "A group of citizens who collectively, with the intention of collaborating on making the local energy supply more sustainable and taking initiatives to that end. This includes activities aimed at energy generation, energy conservation, energy supply, collective purchasing or commissioning and other energy-related activities. The collective focuses on its own living environment and community (neighbourhood, village, city or region) and combines energy goals with social, societal and economic goals." (HIER; RVO, 2021)

In previous research conducted by the Dutch Organisation for Applied Scientific Research (TNO), insight was gained into the role of local initiatives in the energy transition, and the steps they go through when carrying out their activities (Klösters *et al.*, 2020). They focused on ten LEIs spread over different municipalities in the Netherlands. Various success factors and barriers that arose during this process have been formulated. A large number of these barriers relate to the role of the municipality in facilitating the activities of the local initiatives. Examples vary from barriers in legislation and regulations to diverging interests between local initiatives and the municipality.

Despite the growth in the number of LEIs, the impact of these collectives on the national and international climate objectives is still limited (Wiekens & Germes, 2020). LEIs and top-down energy planning procedures rarely align. The practical studies that are mentioned within the literature review on LEIs, show that the role of the municipality in facilitating LEIs is often dominant and top-down oriented (Klösters *et al.,* 2020; van der Windt *et al.*, 2021). However, according to Sabatier & Mazmanian (2005), a more balanced approach, taking into account the needs, interests, but also the barriers in the relationship between local energy initiatives (LEIs) and municipalities could accelerate citizen engagement and result in more successful local energy transition projects.

This brief report offers policy recommendations to help the municipality of Groningen to facilitate and better understand the needs of local energy initiatives, ultimately leading to a more balanced approach of the local energy transition. Thus, this study explored the (mutual) interests, barriers and expectations of the municipality and local citizen initiatives. The case study area is the Groningen municipality, which is located in the North of the Netherlands. Groningen is one of the two lighthouse cities participating at the Making City Horizon 2020 research program, in the context of which this study has been conducted. The various districts of Groningen are characterized by different stages of energy transition, as well as by a variety on the ways with which citizen engagement is approached. In some districts, LEIs have been formulated by residents, while in other districts they have been established and facilitated by the municipality. It is interesting to notice that usually the vision and the interests of these LEIs do not exclusively revolve around the theme of energy transition, but are broader. For instance, they usually relate to enhancing the overall well-being and the quality of life of the local residents, or making the district more sustainable. Then, energy transition usually constitutes an important aspect within this broader frame of interests and ambitions. Finally, the variety among the districts in terms of sociodemographics and characteristics of the built environment implies a different set of challenges and needs within the context of energy transition, and thus the need for different approaches on encouraging citizen engagement and supporting a local LEI.

In the following, the methodology that has been followed in this study is described, the results are then discussed and conclusions in the form of recommendations are drawn.

Methods

Qualitative data were collected through semi-structured interviews conducted between October 2021 and January 2022. These interviews involved a member of the municipality of

Groningen, a representative of the local energy intermediary Grunneger Power, and representatives from four Local Energy Initiatives (LEIs) (Table 1). A graduating student from the multidisciplinary Master of Science program 'Energy for Society' at Hanze University of Applied Sciences in Groningen, the Netherlands, conducted the interviews under the supervision of the co-authors.

It was intended to interview representatives of Local Energy Initiatives (LEIs) with diverse profiles, including various levels of maturity, years of existence, scopes of interest, and types of key activities. All the LEIs are active in the city of Groningen. As this is a qualitative study, the aim was not to achieve a large sample size, but rather to engage with key representatives from the most active and relevant LEIs in the city. Specifically, the case study focused on the municipality of Groningen, and given the limited number of LEIs in the area—approximately six in total—the four interviews conducted offer a representative view of their needs and expectations. In addition, speaking with a representative from the municipality and with a representative of Grunneger Power, which is a large and experienced local energy initiative that also acts as an intermediary for the other, smaller LEIs in the municipality, this sample was considered sufficient to cover the central topics related to local energy initiatives.

The interviewed representatives were highly engaged and provided valuable insights into how their respective LEIs interact with local society and the municipality. During the interviews, the needs and expectations gap between the LEIs and the municipality of Groningen regarding the LEIs role within the local energy transition context were discussed. Furthermore, potential solutions for bridging that gap have been explored.

Each interview lasted approximately one hour and was conducted in Dutch, except for the interview with the municipality representative, which was conducted in English. Due to COVID-19 restrictions, the interviews were conducted online via Microsoft Teams. The sessions were recorded and transcribed using the transcription tool Sonix.ai[1]. The collected data were then anonymized, and any transcription errors were corrected. The transcripts are available on the DataverseNL data repository (Psarra, 2024).

Data analysis

The collected data have been analysed with the thematic analysis method, by using the ATLAS.ti (version 7) qualitative data analysis tool[2]. First, open coding was performed (data being marked and labelled with a summary name), resulting in a list of codes. Next, code clusters emerged, by implementing axial coding. Then, the underlying connections and patterns were established in the form of five themes in line with the step-by-step method identified by Braun and Clarke (2006).

Results

Our findings highlight the challenges and needs faced by LEIs as they navigate their roles and responsibilities. The thematic analysis has revealed five key areas of focus: the need for professional support and the varying degrees of professionalisation, which are mostly related to the internal organisation of LEIs; the impact of mutual ignorance leading to mismatched expectations, as well as the necessity for clarity in roles and responsibilities, which mainly refer to the lack of sufficient communication between the LEIs and municipality; and the importance of effective communication, which refers to ways of improving the latter collaboration.

Below, each of these themes is discussed in detail.

[1] https://sonix.ai/

[2] https://atlasti.com/

Table 1. Overview of the LEIs that participated in this study.

Inteviewed LEI	*Role of interviewee*	*District in Groningen*	*Level of LEI's experience*	*Key activities*
LEI A	Founding member	Zeehelden buurt	Unexperienced (±2 years)	Making the district more sustainable and greener.
LEI B	Co-founder	Paddepoel	Experienced (±10 years)	Making houses in the district more sustainable.
LEI C	Founding member	Hoogkerk	Unexperienced (±1 year)	Making the neighborhood more sustainable within the themes of green, food, energy and culture.
LEI D	Chairman	Noorder plantsoen buurt	Experienced (±8 years)	Making the neighborhood aware of the energy transition.
Intermediary X	Initiative and process facilitator	All districts of Groningen	Experienced (±10 years)	Promoting energy transition and sustainability by helping LEIs and other corporations, and by setting up participation projects in the municipality of Groningen.

Need for professional support

Since LEIs consist of volunteers of varying degree of knowledge and experience, there is a great demand for professional support on both organizational and practical levels. A member of the city council mentioned in the interview:

"But citizens don't have the power or the time or expertise to do collective projects. And they actually need some support from the municipality or from another party like, well, could also be academia or a party like Grunneger Power to help to develop those ideas. The citizens are waiting for, well, either more guidance from the municipality or from the country also. I mean, it's not the municipality, it's also the national government who is lagging behind with legislation. But basically, they [the citizens] are waiting for somebody higher up and higher up is waiting for citizens to take their own initiative, basically."

Especially in their initial phase, most LEIs seem to struggle with organizational and practical matters. One of the LEIs states:

"To stimulate initiatives, it would be very nice if there is already some kind of plan or some kind of signpost, a route plan like: 'If you are going to set up an initiative, you have to take this, this and this into account, a kind of manual for local initiatives".

Some LEIs indicate that there is a need for a facilitating party, such as Grunneger Power, Groninger Milieufederatie and GrEK, with experience in supporting other initiatives that have encountered similar problems in the past. For instance, GrEK already gains a lot of experience within the role of the intermediary, offering lots of support to its members. Specifically, GrEK is more orientated towards the supply of support to initiatives in the province of Groningen, while Grunneger Power mostly focuses on the LEIs of the city of Groningen. Thus, it is also reasonable that the LEI member who has been interviewed has not been aware of the support and the courses that GrEK currently offers. In addition to organizational knowledge, support regarding practical activities is also deemed to be necessary. Furthermore, the need for technical support (such as contractors and installers) is expressed, as well as the need for a fixed municipal representative with whom a LEI can build a long-term relationship of trust. Finally, in addition to the aspects of professional support mentioned above, funding remains one of the basic needs of LEIs.

The desired degree of professionalization

The desired degree of professionalization varies among the LEIs. Several LEIs express the ambition of becoming more professional, by indicating aspects such as 'public relationships', 'a newsletter' or 'the opportunity to train someone internally'. However, there are also several LEIs emphasizing their volunteer nature, whilst some of those observe an implicit requirement from the municipality for them to professionalise.

"We just do it as volunteers, little by little in the evenings, a little bit at the end of the working day...In our group, everyone works full-time, or almost full-time, so yes, we have sometimes better things to do, so that also makes it very vulnerable."

On the other hand, a representative of the municipality explained:

"Actually, because we have all sorts of initiatives and corporations dealing with all sorts of topics, and some are more happy by not having the municipality involved that much. Some really don't know what to do at some point, so there is not really something to discuss about. But at a certain moment when there is something that they want to discuss or need to discuss, then it is something that they should reach out and say, OK, now we are at this moment and now we should really talk about how to make this into a more solid plan."

Mutual ignorance creates mismatched expectations

The LEIs indicate that they need a suitable project leader from the municipality who is aware of their vision and with whom they can collaborate. Both parties have expectations, which are to a great extent based on assumptions. Indicatively, municipalities set certain goals, for example being CO2 neutral by 2035, and they want to achieve these goals within a particular timeframe. On the other hand, LEIs often aim to trigger citizen engagement on a district level and are less focused on particular timeframes:

"The municipality is very much geared to programs and initiatives are not. Initiatives sometimes float there and then there again. And those two cultures don't work well with each other."

The mutual ignorance between the municipality and LEIs causes mismatched expectations, which appear to slow down the local energy transition process. On the one hand, LEIs expect the municipality to take the lead by giving them a clear role within the energy transition process, and by actively facilitating them. On the other hand, the municipality seems to have a wait-and-see attitude towards LEIs and to expect them to become more professional before concrete responsibilities are delegated to them regarding local energy transition. Indicatively, a representative of the municipality explained in his interview:

"If they have specific questions, then we will help them with that. And perhaps because when it comes to the infrastructure, they cannot do that by themselves. Yeah, and then it depends on when good time to do so and when they want to develop solar initiatives, they can better work together with Grunneger Power and the municipality or with some other corporation."

Need for clarity

It is important for LEIs to have a clear picture about which tasks and responsibilities are allocated to them. For instance, LEIs indicate that there is a need for (timely) clarity about whether their project ideas are considered feasible and realistic by the municipality. It is also indicated that there is a need for a more detailed municipal plan for the various

districts. This would create more clarity about how the LEIs can contribute to the municipal goals for the corresponding districts. LEIs aim at being regarded as a serious partner within the local energy transition context, for instance by participating in the formulation of the municipal district energy plans. These results tie in with the recommendations of TNO (2020), regarding the need for common goals and a clear position for LEIs. A LEI representative mentioned in her interview:

> *"I mean, does this mean that we as citizens should start our own plans? And for example, if we want to make local heat storage, that we as citizens have to do this? Or does it mean that there is still a possibility that we can get support from the municipality for doing this?"*

The importance of communication and collaboration

A lack of sufficient communication between LEIs and the municipality received also special attention during the interview sessions. For instance, the need for a platform on which information on district level about e.g. energy consumption data would be quite helpful for LEIs.

Additionally, there is also a need for communication and collaboration among the various LEIs, as they might often be engaged in similar activities or face similar problems (e.g. during the initial phase). In the C*ustomer Journey of Collectives* research, TNO (2020) also refers to insufficient knowledge sharing between LEIs. One of the interviewed LEIs indicates:

> *"And on the other hand, I think, if there is a neighbourhood initiative, to facilitate that in such a way that neighbourhood initiatives come into contact with each other to learn from each other, to avoid having to reinvent the wheel."*

Conclusions

To bridge the gap between the municipality and the LEIs, in the context of professional support, the following recommendations were formulated. First, the development of a professional support framework for LEIs by the municipality, in which the role of intermediary organizations is specified. In particular, regional or city scale energy co-operatives or organizations (such as "Energie van Ons" and "GREK"), which can play an intermediary role between the municipality and grassroot initiatives, can be beneficial for achieving a balance between top-down and bottom-up processes in local energy transition. That is also found in van der Schoor & van der Windt (2023). Various LEIs profiles can be considered, to allow for flexibility regarding the content and the ways that this support is provided. In addition, the creation of a clear municipal point of contact for LEIs is also important.

Secondly, it is crucial for both the municipality and Local Energy Initiatives (LEIs) to have a mutual understanding of their roles within the local energy transition context. LEIs should effectively communicate their vision and mission to the municipality. Intermediaries can facilitate the shaping of these ambitions and the subsequent needs for municipal support. Moreover, mutual agreements between each LEI and the municipality about the degree of professionalization expected by them, in relation to their vision and mission, can be very beneficial.

Thirdly, a collaboratively developed roadmap outlining the citizen engagement approach and the role of the corresponding LEI can be integrated into the district energy plans formulated by the municipality (Gemeente Groningen, 2020). Specifically, local district energy plans, characterized by a place-based approach, can serve as the foundation for a tailored roadmap. This roadmap can be customized according to the capacity and expertise available within the corresponding citizen initiatives and the specific socio-spatial context of the districts. Moreover, in developing these plans, LEIs can play a catalytic role by gathering and incorporating input and viewpoints from a broader segment of the local community, beyond just LEI members (Psarra *et al.*, 2024). Finally, the collaboration and knowledge sharing between LEIs, e.g. via structural consultations among various LEIs representatives, the municipality and intermediary organisations, should be encouraged.

Ethics and consent

The Hanze Ethical Advice Committee (HEAC) of the Hanze University of Applied Sciences has provided their approval to the retrospective review request for this research study. The committee used the Assessment Criteria Ethical Advice Committee of Hanze University of Applied Sciences. They approved the review request on the 7th of February of 2024. The approval number is: heac.T2023.050. The reason for requesting the review retrospectively was that it is a non-medical, low-risk research study.

Before starting each interview, we obtained oral consent from participants to record the interview and publish the findings. To obtain Ethical approval, we needed to submit written consents as well. Therefore, we contacted the participants afterward to sign the written consent forms.

Data availability

DataverseNL: Interviews with Local Energy Initiatives (LEIs) representatives. https://doi.org/10.34894/118BLP (Psarra, 2024).

This project contains the following underlying data:

- Interview transcripts

This project contains the following extended data:

- Semi-structured interview scheme
- Code clusters, as they emerged during the data analysis process

Data are available under the terms of the Creative Commons Attribution 4.0 International license (CC-BY 4.0).

Acknowledgments

We would like to thank the reviewers for their careful reading of this report and their insightful comments and suggestions. Additionally, we would like to thank the members of the LEIs and the municipality of Groningen who participated in the semi-structured interviews.

References

Allen J, Sheate W, Diaz-Chavez R: **Community-based renewable energy in the Lake District National Park — local drivers, enablers, barriers and solutions.** *The International Journal of Justice and Sustainability.* 2012; **17**(3): 261–280.
Publisher Full Text

Braun V, Clarke V: **Using thematic analysis in psychology.** *Qual Res Psychol.* 2006; **3**(2): 77–101.
Publisher Full Text

Gemeente Groningen: **Stap voor stap naar aardgasvrije wijken en dorpen.** Groningen, 2020.
Reference Source

Hargreaves T, Hielscher S, Seyfang G, *et al.*: **Grassroots innovations in community energy: the role of intermediaries in niche development.** *Glob Environ Change.* 2013; **23**(5): 868–880.
Publisher Full Text

HIER; RVO: **Lokale energiemonitor**. 2021.
Reference Source

Klösters M, Koning DN, Kort J, *et al.*: **De kracht van het collectief.** 2020.
Reference Source

Parag Y, Hamilton J, White V, *et al.*: **Network approach for local and community governance of energy: the case of Oxfordshire.** *Energy Policy.* 2013; **62**: 1064–1077.
Publisher Full Text

Parag Y, Janda KB: **More than filler: middle actors and socio-technical change in the energy system from the "middle-out".** *Energy Res Soc Sci.* 2014; **3**: 102–112.
Publisher Full Text

Psarra I: **Interviews with Local Energy Initiatives (LEIs) representatives.** DataverseNL, V2. [Dataset]. 2024.
http://www.doi.org/10.34894/118BLP

Psarra I, van Ulsen B, Turhan E, *et al.*: **Exploring residents' perspectives on local energy transition in Northern Netherlands.** *International Journal of Urban Sustainable Development.* 2024; **16**(1): 282–298.
Publisher Full Text

Rotmans J: **Staat van de energietransitie in Nederland.** 2011; Retrieved 10 06, 2021.
Reference Source

Sabatier P, Mazmanian D: **The implementation of public policy: a framework of analysis**. *Policy Stud J.* 2005; **8**(4): 538–560.
Publisher Full Text

van der Schoor T, van der Windt H: **Negotiating Dutch citizen-led district heating projects: managing internal, external, and material networks to achieve successful implementation.** *Energy Res Soc Sci.* 2023; **102**: 103166.
Publisher Full Text

van der Windt H, van der Schoor T, Bouw K: **Buurtwarmteprojecten door burgerinitiatieven**. 2021.
Reference Source

Wiekens L, Germes C: **Lokale energie initiatieven en ondersteunende organisaties in Groningen**. 2020.
Reference Source

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Benjamin Schmid
Institute of Geography and Sustainability, University of Lausanne, Lausanne, Switzerland
Ange Nkonko Kibelo Martin's
Institute of Geography and Sustainability, University of Lausanne, Lausanne, Switzerland

We would like to express our gratitude to the authors for their efforts in conducting this study. Better understanding and improving relationships between emerging local energy initiatives and municipalities is an important area of study to facilitate democratic energy transitions, not only in the Netherlands, but across Europe and globally. The study examines the expectations of various local initiatives, as well as the municipality and an intermediary in the city of Groningen, regarding their cooperation in the local energy transition. Although the study offers interesting insights into these dynamics, we see the need for a comprehensive review before we can recommend final indexing of the manuscript.

Our core issue, echoing in further questions, concerns the main purpose of the article. We are aware that the “short report” format differs from articles in other journals, as there is less space available, and the report character is more pronounced. However, the manuscript is currently written as if it is somewhere between a research article and a policy brief, which makes it ambivalent. Is the purpose of the analysis to identify and formulate specific recommendations for the situation in Groningen, or is the main purpose to provide a basis for more general findings (in the sense of a research article)? While the introduction emphasizes the former, the conclusion begins with a more general statement, indicating an ambition towards the latter purpose. The key purpose should be made clearer and less ambivalent.

If the manuscript is to be read as a research article, we have found that the embedding of the research interest in the established body of literature is underdeveloped, particularly in terms of the lack of a clear research gap relevant to the academic literature.

Furthermore, the application of Sabatier & Mazmanian’s *implementation analysis framework* as theoretical framework in the analysis seems both opaque and not entirely accurate:

- The framework is only briefly mentioned in the introduction, while it remains unclear whether and how it was applied as an analytical framework in the analysis. The fact that “open coding was performed…» (p. 4) as the first step in the data analysis suggests that the

framework was not used in any major analytical capacity. It is also not mentioned in the discussion or conclusion to make sense of the findings.

- It seems questionable to us how appropriate the framework is for the present study (assuming that the authors refer to the study/framework published in 1985 - and not 2005 as written). First, the framework was intended to be applied to policy implementation processes and not necessarily to transitions. Second, the terms “top-down” and “bottom-up” (notably in the title of the manuscript) are not entirely clear and seem to be interpreted differently than suggested in Sabatier & Mazmanian's framework. In the original framework, as we understand it, the difference between top-down and bottom-up refers to the *analytical perspective* (with bottom-up referring specifically to a focus on the local implementation process, including what happens at the local government and administrative level; whereas municipal action is understood as top-down in the manuscript). In contrast, the authors seem to understand the terms “top-down” and “bottom-up” to refer to different *governance approaches* to implementation itself and assume a current imbalance in favour of top-down approaches that should be more balanced in order to accelerate the energy transition. While this is a common assertion in the energy transition literature, it is hardly a direct claim of the policy implementation framework (there is a misleading indirect quote on p. 3 that Sabatier & Mazmanian have made such a claim).

In light of these issues with the framework, we suggest either dropping it altogether or making it clearer how it has been applied analytically and describing more explicitly the national/top-down policies whose implementation is being examined. In any case, the authors should make it clearer what they mean by bottom-up and top-down (processes).

Furthermore, if understood as a research article aiming to make more general statements, it would be desirable in the area of analysis/methodology to learn more about how the situation in Groningen is representative of situation elsewhere - why it is an appropriate case? Also, we wondered, firstly, why only the most active and relevant LEIs were interviewed (wouldn't the non-active LEIs also have been of interest to investigate the research question), and secondly, how the identified differences between the LEIs were reflected analytically (levels of maturity, municipality as initiator or not). How did these differences influence the statements and results on the individual LEIs? At present, the studied LEIs are treated rather homogeneously. Finally, we asked ourselves how representative the interviewees are of the organizations they speak for. While a single interviewee may be sufficient for the LEIs, it remains questionable whether the statements of a single person from the municipality (who apparently does not speak Dutch well, which notably may have complicated the exchange with the LEIs) sufficiently reflect the views and interests of the ‘city’. A critical discussion on these points would greatly improve the analysis (and also the robustness of the policy recommendations), maybe instead of mentioning all the software used.

With regard to the results, we found the direct quotes selected from the interviews to be well chosen and meaningful. We would also like to positively acknowledge that the interview transcripts were published. But we would have hoped for a little more (critical) discussion when interpreting the results/statements from the interviews. This especially concerns not attributing different views between LEIs and the municipality solely to a lack of knowledge/mutual ignorance but considering the fact that these actor types operate with different institutional logics, responsibilities, and with accountabilities to different publics. Linked to this point, we would find a revision of Table 1 desirable: instead of “key activities”, it would be more helpful for the analysis to present the ‘key objectives, as these appear to us to be more relevant for differences in expectations. Consequently, it would also be helpful to add the municipality as another actor and to mention its relevant key objectives / policies.

Many of our points are particularly important if the article is to be read as a research article. But we also see them as helpful if the focus is primarily on formulating policy recommendations.

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Not applicable

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Community energy, energy democracy, citizen participation

We confirm that we have read this submission and believe that we have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however we have significant reservations, as outlined above.

Reviewer Report 15 January 2025

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Adolf Acquaye
Khalifa University, Abu Dhabi, Abu Dhabi, United Arab Emirates

- The report is clearly presented and engages with current literature, citing relevant studies and frameworks.
- The study design, which includes semi-structured interviews and thematic analysis, is appropriate and technically sound for the research objectives.
- While the methodology section provides a good overview, more detailed descriptions of the interview process and data analysis steps could enhance replicability. Hence details of

methods and analysis for replicability is evaluated as **PARTLY**.
- The report mentions that transcripts are available on the DataverseNL data repository, which supports transparency and data availability.
- The conclusions are well-supported by the findings from the thematic analysis and the interviews conducted.
- The report is based on qualitative research, so statistical analysis is not applicable

Is the work clearly and accurately presented and does it engage with the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Sustainability Research

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Reviewer Report 06 January 2025

https://doi.org/10.21956/openreseurope.20270.r48334

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Paola D'Orazio
Technische Universität Chemnitz,, Chemnitz, Germany

The manuscript presents a comprehensive study on the role of Local Energy Initiatives (LEIs) in the energy transition of Groningen, offering a well-structured and detailed investigation.
The introduction effectively sets the stage by putting the research within the theoretical

framework of the Sabatier and Mazmanian implementation analysis framework, distinguishing between top-down and bottom-up approaches. The discussion emphasizes the need to foster collaboration among local governments, entrepreneurs, and citizens to catalyzes energy transitions. While the introduction is thorough and well-referenced, it could benefit from further clarification on how this study builds upon or diverges from previous research in the field. For example, the definition of LEIs is insightful, yet comparing these with similar citizen-driven initiatives elsewhere could enhance understanding.
Some references, such as those to HIER and RVO (2021), are mentioned but not fully integrated into the narrative, leaving gaps in their contribution to the overall argument.
The methodology section is clearly described, outlining the use of semi-structured interviews with representatives from LEIs, the municipality, and an intermediary organization.
The small sample size is justified as sufficient for qualitative analysis, but further explanation of its representativeness and the rationale behind selecting these specific LEIs would strengthen the section.
The use of thematic analysis with the ATLAS.ti tool is appropriate, but the manuscript would benefit from a brief explanation of why this method and software were chosen over alternatives.
The findings are well-organized around key themes, including professional support needs, mutual ignorance between LEIs and municipalities, and the importance of communication and collaboration. These themes are supported by direct quotations, which effectively highlight the perspectives of participants. However, certain findings, such as the impact of "mutual ignorance," could be better illustrated with concrete examples to clarify their implications. Similarly, the discussion on professionalization among LEIs is insightful but would benefit from further exploration of how differing levels of professionalization impact their ability to collaborate with municipalities effectively.
The manuscript provides thoughtful policy recommendations to bridge the gap between municipalities and LEIs. These include the development of a professional support framework, a clearer mutual understanding of roles, and tailored roadmaps for citizen engagement. While these recommendations are valuable, they could be more detailed and actionable. For instance, the proposal for a professional support framework is promising, but specific examples of successful implementation from other municipalities or countries would add depth and practical relevance.
The conclusion highlights the importance of collaboration and knowledge sharing, but it would benefit from addressing potential challenges, such as resource limitations or stakeholder resistance, that might arise in implementing the proposed strategies.

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?

Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: climate risks, sustainable energy transitions

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 03 January 2025

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Md Tasbirul Islam
Interdisciplinary Research Center for Sustainable Energy Systems (IRC-SES), King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Eastern Province, Saudi Arabia

I read the article and found very useful for broader energy transition-related academic discourse. I am satisfied with the approach that the authors taken towards the research method and illustrations of the findings in a clear and concise manner. Within the scope of a brief report, it delivered key messages from the ground level and I encourage the authors in-depth analysis in future towards a full-length journal article.
Thank you.

Is the work clearly and accurately presented and does it engage with the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Sustainability, Circular Economy, Life Cycle Assessment, Energy Policy, Waste Management, Material Flow Analysis

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Reviewer Report 14 December 2024

https://doi.org/10.21956/openreseurope.20270.r47824

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Lefteris Topaloglou
University of Western Macedonia (UOWM),, Kozani, Greece

The paper, *"Energy Transition in Northern Netherlands: Seeking a Balance Between Top-Down and Bottom-Up Initiatives,"* examines the interplay between local energy initiatives (LEIs) and municipal authorities within the energy transition process in Groningen, Netherlands. The study employs the implementation analysis framework to understand gaps in expectations and needs between the two parties. The article offers policy recommendations to address these challenges, emphasizing the importance of mutual understanding, professional support, and knowledge sharing.

- The framework Sabatier and Mazmanian is introduced without a clear rationale, and its application is not deeply integrated into the analysis. Please provide detailed justification for using this framework. Explain its relevance compared to alternatives and clarify how the framework informed data collection and analysis.
- The methodology section lacks detail about the thematic analysis. Please expand the methodology to explain the coding process, the tools used, and steps for ensuring reliability. Furthermore, discuss the strengths and limitations of using a small sample size for qualitative research.
- Please relate findings explicitly to the theoretical framework and existing studies on energy transitions and governance, aiming to strengthen the linkage with the theoretical discussion.
- The recommendations are practical. However, it would be interesting to elaborate on how these recommendations could be adapted to different socio-spatial contexts beyond Groningen.
- Suggest future research directions, such as comparative studies in other municipalities or quantitative analyses of LEI impacts.

Addressing these points will significantly improve the article's scientific validity and impact.

References

1. Oldenbroek B, Psarra I, van der Schoor T, Tjahja C: Energy Transition in Northern Netherlands: seeking a balance between top-down and bottom-up initiatives. *Open Research Europe*. 2024; **4**. Publisher Full Text

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

Are all the source data and materials underlying the results available?
Partly

Are the conclusions drawn adequately supported by the results?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: just energy transition, spatial justice, place-based approaches and analysis, governance of energy transition

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 22 November 2024

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Ruth Shortall
Joint Research Centre (JRC), Petten, The Netherlands

This report describes a qualitative study aimed at deriving policy recommendations regarding the needs of local energy initiatives. It aims to provide insights into the mutual interests, barriers and expectations of the municipality and local citizen initiatives. Given the benefits of qualitative approaches in analysing policy outcomes in socio-technical systems, the results are likely of value

for policy-makers at various levels and so are worthwhile to publish. As it stands, the text would not be sufficient if submitted as a journal article, however, I appreciate that the brief report format limits the authors. Nonetheless, certain (concise) additions would improve the report:

- It appears the analytical framework for the qualitative data is mainly based on the work on Sabatier & Mazmanian (2005). This appears to have been added as somewhat of an afterthought. Given the lack of theoretical background, it is not clear why the theoretical framework of Sabatier and Mazmanian was chosen, and not others? What makes this framework special, or more suitable for this study?
- What kind of thematic analysis was carried out exactly? It would be good to specify if deductive or inductive coding was used
- It is not mentioned whether or not, or how, the codes were checked for consistency
- The pros and cons of using a qualitative approach could be elaborated – what do we miss and gain from having a small but very rich data set?
- A bit more discussion and reflection, comparing and contrasting results to other studies, aside from those of TNO, would situate the results of this study more clearly in the existing broader literature. What do we learn overall and how do the results tie into the bigger picture of energy transition governance? Or energy justice?
- What are the limitations of this study and how might these impact on the use of the results by policy-makers?

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: energy justice, socio-technical policy appraisal, citizen engagement

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 21 November 2024

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Mahyar Kamali Saraji
Kaunas Faculty, Vilnius University, Kaunas, Lithuania

This research emphasizes both top-down and bottom-up processes related to energy transition. Its goal is to gain a deeper insight into the requirements of local energy initiatives. The top-down versus bottom-up strategies in energy transition are authoritative in the present endeavors toward sustainable development. The authors offer tangible solutions to policymakers by identifying the needs and barriers to LEIs that can foster better energy governance. The overall presentation of the study is also acceptable.
It extends useful information and suggests policies based on its findings, but its academic discipline can be significantly enhanced. There are some limitations regarding the work's relationship with the article's body of literature. The model developed by Sabatier and Mazmanian has been mentioned, but implementation analysis is not featured in the case study design or findings. It would be desirable to elaborate on such a framework, linking it to the more general discussions on the roles of intermediaries and LEIs that complement the paper.
The study's sample size of six interviews is relatively small in terms of qualitative research for which the study design is appropriate. Also, there is a need for more clarity about the data analysis, for example, how the codes came into existence and how they were tested, which were neglected in the study.
Although the recommendations for bridging the gaps between the LEIs and the municipality are very convenient, their relation with the findings needs more clarity and explanation. For instance, the argument that LEIs should design a roadmap could have been better substantiated with specific evidence or examples from the analysis conducted. It would also be beneficial to the overall impact of the paper to discuss the implications of these findings in terms of energy policy in other countries and other contexts.
To summarize, the study addresses a significant gap and has implications for policymakers, yet it does not make an academic contribution to the field. Greater integration of theory with empirical work, better methodological clarity, and a more coherent presentation of the findings would improve the quality of the work.

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Partly

Are sufficient details of methods and analysis provided to allow replication by others?
Not applicable

Are all the source data and materials underlying the results available?
Partly

Are the conclusions drawn adequately supported by the results?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Low-carbon energy transition, energy economics, and sustainability

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Version 1

Reviewer Report 23 August 2024

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?

Lorenzo De Vidovich
Università di Trieste, Trieste,, Italy

The paper focuses on the interplay between top-down and bottom-up processes within local energy transition initiatives. It aims at gaining insights into the ways that a more balanced approach can be achieved, by taking into consideration the (mutual) interests, barriers and expectations of the municipality and local citizen initiatives. Needs and expectation gaps in local projects have been identified and potential solutions have been explored relying on qualitative outcomes and on the "implementation analysis framework" as a theoretical framework, merely introduced to distinguishing top-down and bottom-up approaches, without a deepened and well-informed theoretical section. As a first comment, I therefore suggest to reframe a bit the theoretical framework to make it more effective, even using more references from Paul Sabatier or to other words that investigated the combination between top-down and bottom-up approaches.

Further comments

Please indicates what the acronym LEI defines at the very beginning of the article.

It is worthwhile to know, in a table, how many semi-structured interviews have been carried out, but in general, I have some doubts about this. It seems that six interviews have been conducted, and if so, I think that generalizations are hard to develop. Please substantiate in the methods how the outcomes of the interviews have been operationalized, otherwise the paper will results a bit fragile from a methodological side.
In this respect, I suggest to extend the sub-section "data analysis" to address the need of further details of methods and analysis.
Also, it would be good to know what was the benefit of using Sonix.ai.

In general, I think that the paper does not achieve the aim - illustrated in the Abstract - of "gaining insights into the ways that a more balanced approach can be achieved, by taking into consideration the (mutual) interests, barriers and expectations of the municipality and local citizen initiatives."
I think the aim should be recalibrate according to the empirical effort that has been carried out.

I suggest to better introduce the results and describe how the main topics raised from the qualitative analysis have been deployed. At the current form, these topics are merely summarized without a proper introduction to the discussion.

I suppose that this paper - according to its form of "brief report" - is dedicated to policy makers to provide some policy recommendations, as it does not fulfill several criteria for being considered an academic article. The theoretical framework is too concise, the presentation of methods is too synthetic, and the discussion of the outcomes is a bit disentangled from the rest of the analysis. However, the paper can still be significant for providing policy recommendations, and I think that this aim should be clearly stated in the introduction. If the aim was different, I think that paper should be densely reframed and reorganized from the abstract. The very aim of gaining insights into a more balanced approach between top-down and bottom-up should be better presented according to the contents of the paper, and this is currently not the case.

Based on this report, I think that the paper deserves some revisions before indexing. I suggest an approval with reservation, but I stress that report needs a revision of both the theoretical framework and the ways in which the outcomes of the qualitative analysis are presented, to better connect theory and empirical activities.

Below, I suggest some citations that could be useful to the authors.

References

1. Sabatier P: An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences*. 1988; **21** (2-3): 129-168 Publisher Full Text
2. Warbroek B, Hoppe T, Bressers H, Coenen F: Testing the social, organizational, and governance factors for success in local low carbon energy initiatives. *Energy Research & Social Science*. 2019; **58**. Publisher Full Text
3. Boon F, Dieperink C: Local civil society based renewable energy organisations in the Netherlands: Exploring the factors that stimulate their emergence and development. *Energy Policy*. 2014; **69**: 297-307 Publisher Full Text
4. Huang Z, Yu H, Peng Z, Zhao M: Methods and tools for community energy planning: A review. *Renewable and Sustainable Energy Reviews*. 2015; **42**: 1335-1348 Publisher Full Text

5. Arentsen M, Bellekom S: Power to the people: local energy initiatives as seedbeds of innovation?. *Energy, Sustainability and Society*. 2014; **4** (1). Publisher Full Text
6. Kivimaa P, Boon W, Hyysalo S, Klerkx L: Towards a typology of intermediaries in sustainability transitions: A systematic review and a research agenda. *Research Policy*. 2019; **48** (4): 1062-1075 Publisher Full Text
7. Hoicka C, Conroy J, Berka A: Reconfiguring actors and infrastructure in city renewable energy transitions: A regional perspective. *Energy Policy*. 2021; **158**. Publisher Full Text

Is the work clearly and accurately presented and does it engage with the current literature?
Partly

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
No

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Qualitative research, local welfare, energy transition, LEIs, energy poverty, renewable energy communities.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 10 Oct 2024

Ifigenia Psarra

Thank you very much for your insightful feedback and recommendations. We appreciate the time and effort you put into reviewing our brief report and have addressed your comments as follows:

- We have now introduced the framework in the introduction to provide clearer context and structure.
- We would like to kindly clarify that the format of a brief report emphasizes the inclusion of only "essential references." As such, we have adhered to this guideline, but we understand the importance of the broader literature. Consequently, we have

added a few additional relevant articles to the reference list.
- While we recognize the extensive literature on community energy, we believe that a more comprehensive discussion would exceed the scope of a brief report. Nevertheless, we have enriched our references where possible.
- As this is a qualitative study, the objective was not to maximize the number of interviews, but rather to ensure that key perspectives from representatives of the main energy initiatives were captured. Our case study focused on the municipality of Groningen, and apart from the LEIs representatives, we also interviewed a municipal representative actively involved in local energy policies.
- We compared our results with existing literature, especially referencing the TNO (2020) report, to identify if similar needs are experienced by LEIs in different contexts or cities.
- Lastly, as noted above, a deep theoretical discussion would exceed the format of this brief report, which is designed to highlight empirical findings and their implications.

We have endeavored to comply with the specific guidelines of the brief report format, which emphasizes conciseness in presenting essential empirical data, as outlined in the Open Research Europe guidelines. https://open-research-europe.ec.europa.eu/for-authors/article-guidelines/social-sciences/brief-report/ Thank you again for your valuable feedback, and we hope our revisions address your concerns.

Competing Interests: No competing interests were disclosed.

Reviewer Report 10 August 2024

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Marie Claire Brisbois
University of Sussex, Brighton, England, UK

The article reports on a study into barriers to community energy initiatives in Groningen, NL, and provides recommendations based on the findings. Findings are based on six interviews with local energy groups, the municipality, and a local intermediary.

The topic is interesting but it would have been very helpful to have more discussion of the theoretical approach. The abstract discusses an "implementation analysis" framework but this is not discussed in the text of the article. Text providing theoretical background and a discussion of the strengths and weaknesses of this approach would have been very helpful. Right now, the only links to academic literature appear in the Introduction and this thus reads more like a consulting report than an academic article. There is nothing wrong with consulting reports, and they are often very useful in providing insights for improving local energy activities. However, they are not academic articles which need clear theoretical background, robust evidence, and some form of

Discussion section which links the findings to wider knowledge on the topic. The literature actually has a lot to say about supporting local energy groups and it would be very helpful to situate the findings of this study within that broader knowledge.

Regarding the evidence, the data pool is very small and a lot of weight is put on a single interview from the municipality - as this represents the "top down" perspective. While a small sample can be appropriate in certain situations, this study appears to make claims about generalisability. For claims about generalisability, even if it's just to the North of the Netherlands (i.e. outside of the case study site), it would be good to have more robust data. Robustness could have been improved through more interviews at the "top" level, a document analysis, and also through links to wider literature and other contexts. I appreciate that there may not be many people working on local energy in this context, and it would therefore be difficult to secure other interviewees. With such a limited sample, it becomes very important to explore whether the results found here are consistent with those elsewhere, and whether lessons can be learned.

It also would have been nice to have a bit of reflection on the framework used. Was this useful for examining this context? Was anything important missed? Would you add anything?

In general, this looks like an interesting set of findings that will be very useful for the municipality but, to be published academically, the article needs to be developed as an academic article with sections establishing theoretical background and approach, and some kind of discussion section. Data robustness needs to be improved as well.

Is the work clearly and accurately presented and does it engage with the current literature?
No

Is the study design appropriate and is the work technically sound?
Partly

Are sufficient details of methods and analysis provided to allow replication by others?
No

Are all the source data and materials underlying the results available?
Yes

Are the conclusions drawn adequately supported by the results?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: energy transitions, community energy, energy governance

I confirm that I have read this submission and believe that I have an appropriate level of expertise to state that I do not consider it to be of an acceptable scientific standard, for

reasons outlined above.

Author Response 10 Oct 2024

Ifigenia Psarra

Thank you very much for your valuable feedback and thoughtful suggestions. We appreciate your insights, and have made the following revisions to the brief report:

- We see your point regarding the theoretical section. However, as the format of the brief report does not include an in-depth theoretical discussion, we have adhered to its structure as per the guidelines: Brief Report Guidelines.
- We have incorporated additional scientific articles that discuss top-down and bottom-up approaches, and we have added references related to the role of intermediaries to enrich the discussion.
- Thank you for pointing out the need to define the acronym LEI. We have now clarified this at the beginning of the article.
- We have expanded the explanation of our method and included a table listing the LEIs that participated in the interviews.
- The results of our analysis have been grouped and explained in greater detail. We included a brief yet accurate description of our analysis method, in line with the brief report format, and referenced further readings for more extensive information.
- Sonix was the tool we used to transcribe interviews (that is now clearly explained in the methods section).
- We have reformulated the research aims to align more closely with the study's outcomes. We reviewed our recommendations carefully to ensure they highlight specific actions that balance the top-down and bottom-up approaches.
- An introductory paragraph has been added to the results section to provide better flow.
- We appreciate your suggestion regarding policy recommendations and have placed more emphasis on them in our revisions.
- While we followed your recommendation to add additional references, we were mindful of the word limit imposed by the brief report format. Therefore, we ensured that the theoretical and methodological sections remain concise, as per the format's requirements.
- Finally, we have updated and clarified our research aim in both the abstract and the introduction. We also further categorized the results section for clarity. We hope these changes have enhanced the quality of the report and made it suitable for indexing in ORE.

Thank you again for your invaluable feedback.

Competing Interests: No competing interests were disclosed.