



**Driving Urban
Transitions**

EUROPEAN PARTNERSHIP

Deep-dive #2: How can PED stakeholders be mobilised and organised to promote social justice?

CHRISTOPH GOLLNER, JONAS PERSSON, ANNELOES VAN NOORDT

ENZA LISSANDRELLO, DIETER BRUGGEMAN





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1 Introduction & Background

The Positive Energy Districts Transition Pathway (PED TP) is one of three thematic priorities of the Driving Urban Transitions Partnership (DUT) and builds on the PED Programme as a joint initiative between the SET Plan and JPI Urban Europe. In this context, five transnational calls have been launched so far¹, with 25 R&I projects working on the strategic and operational development of the PED concept. It is a central ambition of DUT to synthesise outcomes of the different projects, promote exchange and cooperation between them and stimulate the conceptual discourse in perspective of delivering substantial inputs for Europe’s ambition of becoming climate-neutral (Green Deal, Cities Mission).

At the DUT projects meeting in Brussels in April 2024, many project partners clearly expressed a need for thematic exchange between PED. The **PED Thematic Deep-Dives** have been set up as a series of thematic exchanges between the JPI UE- and DUT-funded PED projects – they represent an excellent opportunity to share insights, collaborate with fellow professionals, and explore best practices in the field of sustainable urban development. Furthermore, the PED Deep-Dives shall serve as a starting point for synthesising approaches, achievements and learnings in different areas from the PED projects. The PED Deep-Dive event series has been initiated and organised by the PED Expert Support Facility (ESF)², and takes place between December 2024 and May 2025 within the ESF, and might continue within the new Knowledge Hub-function across all 3 pathways within DUT, and serves as a build-up to the PED Conference in autumn 2025:

#	Deep-dive thematic area	Date
1	How to operationalise the PED Framework	6 Dec 24, 13:30-16:00
2	Stakeholder engagement and social aspects	6 Feb 25, 13:30-16:00
3	Digital Twins and decisionmaking tools for PED	6 Mar 25, 13:30-16:00
4	Energy balance, Flexibility Services and Climate Impact Assessment	8 May 25, 13:30-16:00

The second deep dive – **How can PED stakeholders be mobilized and organized to promote social justice** – focusses on the **advancing frames, methods and tools to mobilize, involve and organize PEDs in relation to social justice within the Mission of 100 climate-neutral and smart cities by 2030**. Starting with an overview of research on the social and urban dimension of PEDs, the deep dive gave the floor to four project pitches giving the opportunity to learn from each other and providing input to the discussion on aspects such as stakeholder mobilization and organization and how to operationalize the processes in specific contexts.

The recording of Deep-Dive #2 is available [here](#).

¹ as of January 2025

² The PED ESF is a panel of experts from JPI UE PED Call II projects, aiming at promoting cooperation between the projects and developing joint outcomes. It is operating from 2022 to 2025.

2 The social and urban perspective of PEDs

To set the scene, the deep dive first introduced the social dimension of PEDs as well as diving into how PEDs are integrating urban processes.

2.1 Stakeholders and Social Justice within PEDs

Research into the social dimension of PEDs make up a major part of ongoing PED projects. Work on social themes is clearly seen as **part and parcel of PED development and implementation**. Although the mapping of research activities demonstrates that this is evident for PED researchers and stakeholders, the PED concept is still framed in highly technical terms. When introducing the PED concept, it is often still reduced to 'urban areas' that produce more renewable energy than they consume – in relation to greenhouse gas emissions. In that sense it is important to highlight the shift from a purely quantitative and more technical to a contextual approach in the PED Framework Definition 3.0 that has recently been published.³

The social dimension in ongoing PED research is characterized by **a large diversity of concerns and approaches**. Research on social themes goes in multiple directions, indicating that no standard approaches do exist on issues such as stakeholder mobilization and management, tackling energy poverty or inclusive practices of renewable energy production and consumption. The need to work on a better definition of the relation between PEDs and their socio-spatial contexts is seen as a major point of attention in the further development of the concept.

One key insight from the social dimension is the benefit to **actively engage social and neighbourhood stakeholders** from early on in the PED implementation process. All PED Call II projects involve participation, co-production and co-creation with (local) stakeholders. Projects note that this also entails having to deal with questions on representation, competency, etcetera.

Research on the social dimension of PED highlights the nature of **PED as a process**. A PED is not just a new, more sustainable 'model' (or socio-technical system) that simply replaces the former one, but requires a transformation over time that has to gradually aim to rebalance technical, social and economic aspects and urban dynamics within a neighborhood. Again, this is reflected in the PED Framework Definition 3.0. In relation to this last development an urban planning perspective can be helpful to integrate socio-technical aspects with socio-spatial processes.

³ [PED Framework 3.0: A Policy Guide to Advance Positive Energy Districts in Europe | dut](#)

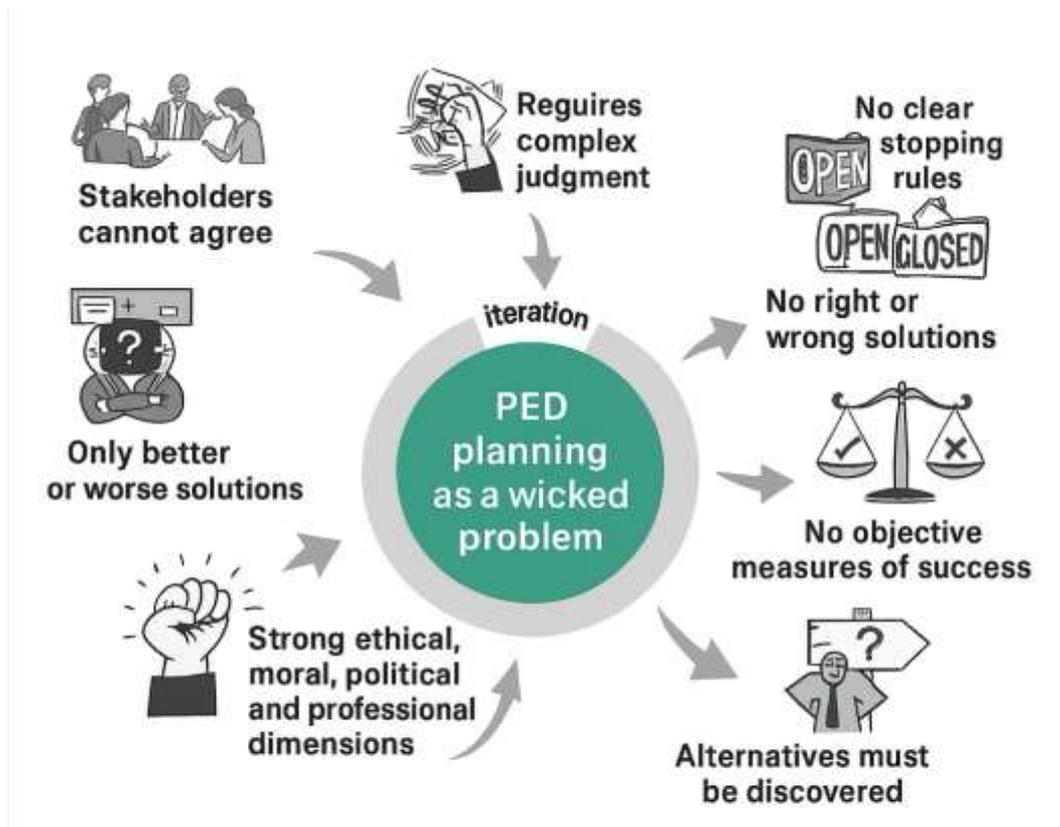


Figure 1: Interpretation and elaboration from Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences*, 4(2), 155-169 (Elaboration: Enza Lissandrello, Aalborg University)

2.2 Framing PEDs from an Urban Planning Perspective

The PED framework definition 3.0 integrates aspects on urban process which tend therefore to expand the purely technicality of solutions to the socio-spatial relations. Energy is an urban issue that develops within cities and that requires a **relational, non-linear and reflexive framework**.

Cities currently account for 70% of global carbon dioxide emissions. This makes cities central to the climate transition and the implementation of Positive Energy Districts (PEDs) a cornerstone. Although the energy issue is crucial for cities and municipalities to achieve climate neutrality, it is still rarely considered central in urban planning. However, PEDs as framework and processes can exploit this potential of making buildings, neighborhoods, and eventually whole **cities becoming active drivers of climate-neutrality** and hubs for innovation and net producers of clean energy, not just consumers.

The DUT partnership identifies PEDs as drivers of urban transitions towards more sustainability. As such they are part of very complex processes and depend on many elements and dynamics and system innovation.

- **High complexity of operating in an urban context** – socio-spatial relations – that depend on socio-technical possibilities and upcoming societal challenges considered 'systemic' are often seen as holistic and difficult to understand, as well as difficult to 'control'. The complexity especially lies in the impossibility to understand all the

consequences related to it both in the short and the long term. However, the urban planning paradigm has for long now discussed the shift on the mind-set that the future is not controllable and that planning implies that we are working with radical **wicked problems** (Rittel and Webber, 1974) as well as that we are moving in an understanding that planning PEDs should look not only to the 'big picture' but more closely on micro social practice that develop with and within such a processes. (Eg: Jacobs, J. (1961). The Death and Life of Great American Cities, 21(1), 13-25.)

- The idea that socio-spatial dynamics are complex and wicked means that **knowledge** can no longer be understood as something 'one possesses' but as something that is shaped by **power relations** (co-produced). Knowledge depends on who is participating in process making, for whom those processes are carried out and with whom. Therefore, public participation and the varieties of governance (e.g. Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.; Fung, A. (2006). Varieties of participation in complex governance. *Public administration review*, 66, 66-75.) are key in PED processes.
- Futures are '**path contingent**' not completely 'path dependent'. PED is part of the 'travelling ideas' entangled with other relational threads - relations, flows and mobilities, rather than fixities and stabilities - much more attention is needed to specific experiences rather than to the articulation of general rules and universal statements about phenomena (e.g. Healey, P. (2013). Circuits of knowledge and techniques: The transnational flow of planning ideas and practices. *International journal of urban and regional research*, 37(5), 1510-1526.).
- Planners should continuously reflect on their own position in critical knowledge and skills in those processes, their **reflexivity when aspiring to social justice** (e.g. Lissandrello, E., & Grin, J. (2011). Reflexive planning as design and work: lessons from the Port of Amsterdam. *Planning Theory & Practice*, 12(2), 223-248.; Uitermark, J., & Nicholls, W. (2017). Planning for social justice: Strategies, dilemmas, tradeoffs. *Planning Theory*, 16(1), 32-50.).

PEDs can be seen as processes of co-creation, a form of agency that can trigger societal processes enforcing and (re)balancing power relations, emphasizing the importance of inclusion in addressing urban and energy vulnerabilities. In that way, PEDs can inspire more social just processes and integrated urban neighbourhoods, by active engagement of marginalised or vulnerable communities in energy transitions. PEDs can be seen as 'travelling ideas' that need to be 'fed' by experiences rather than by general rules. PEDs also have the potential for an urban transition from the perspective of social justice / social sustainability, inclusive participation and the making of active citizenship for the energy transition.

3 Project Pitches

Within the deep dive four projects were invited to share their thoughts on stakeholder involvement and social justice and how they approached these concepts within their project. The projects were chosen to represent diverse generations of PED call funded projects with a strong focus on the PED process, stakeholder involvement and social justice.

3.1 PED-ID (PED Call I)

Presenter: Lise-Lott Larsson, White Arkitekter SE. Website: [PED-ID | JPI Urban Europe](https://whitearkitekter.com/services/sustainability/positive-energy-districts-ped/)

The PED-ID project (2021-2023) consists of a 'Holistic assessment and innovative stakeholder involvement process for identification of Positive-Energy-Districts'. White Arkitekter is an intermediary organization that has developed as a change agent through the PEPP (Positive Energy participatory Process) methodology in several projects, including the "Holistic assessment and innovative stakeholder involvement process for identification of Positive-Energy-Districts" (PED-ID). The aim is to guide stakeholders through the PED process. **Energy is considered an urban development issue**, in each of the three living labs in Sweden, Austria and Czech Republic for an effective collaboration. The methodology is focused not only on kilowatt hours and carbon dioxide equivalents, but on developing attractive and energy-positive districts that contribute to human well-being, safeguard biodiversity and thus create through **PEDs the conditions for sustainable living** – where people, businesses and nature can flourish.

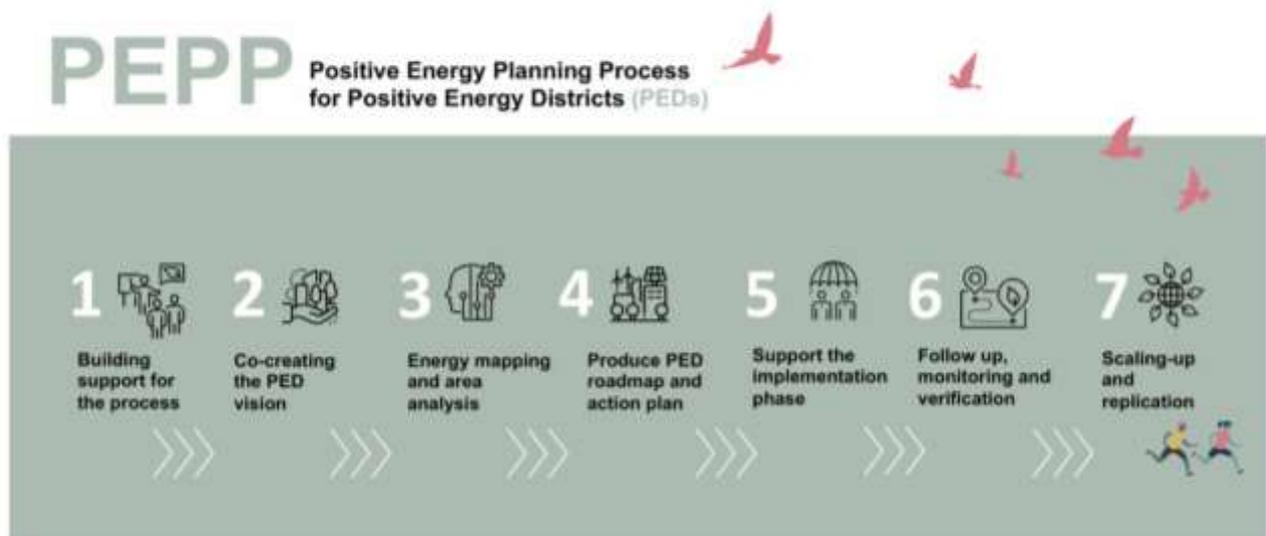


Figure 2: Positive Energy Planning Process for Positive Energy Districts: <https://whitearkitekter.com/services/sustainability/positive-energy-districts-ped/>

3.2 Citizens4PED (PED Call II)

Presenter: Laura Grassini, Politecnico di Bari IT. Website: [Citizen4PED | JPI Urban Europe](https://citizens4ped.com/)

The Citizens4PED project (2022-2025) approaches PEDs holistically, including sufficiency as a core dimension to achieve zero-emission cities alongside efficiency, production and flexibility, and focus on renewable energy communities as key enabling mechanism. Citizens4PED aims to stimulate alternative imaginaries on how energy production and demand can be met. The methodology includes Living Labs in

each of four existing neighborhoods. The living labs go through **four main stages during the project: exploration, co-creation, experimentation and evaluation** with PEDs. The living labs have been performed in the diverse neighborhood communities in La Roue (Belgium – Brussels), Kahlenbergerdorf (Austria – Vienna) and San Paolo (Italy- Bari) with **tailored strategies to approach the local communities**. For example, establishing agreements with the schools on how to involve the children in educational activities in the energy field.



Fig.3: One the tailored initiatives in Citizens4PED with the School in the neighborhood of S. Paolo in Bari, Italy

3.3 FLEXPOSTS (PED Call II)

Presenter: Lasse Schytt Nørgaard, Aalborg University DK. Website: [FLEXPOSTS | JPI Urban Europe](https://flexposts.jpi-urban.eu)

Within FLEXPOSTS (2022-2025) the stakeholder engagement framework has been developed by inspiration from the guide released by The Carbon Trust (2018) which follows five distinct steps of 1) identifying the relevant **potential stakeholders** in the PED project; 2) **mapping the stakeholders** and their relations to the PED project and each other; 3) **prioritisation of the identified stakeholders** according to perceived importance for the success of the PED project; 4) planning a more **concrete stakeholder engagement strategy**, establishing who to involve, why, where, and how; 5) engaging the stakeholders and revising the plan to better suit the newly **expressed needs of the stakeholders**. When looking to the primary objective of the research project, the team is investigating the PED feasibility of Aalborg East as opposed to a normal green field development process. This means that there are no direct stakeholders in the conventional sense (actors holding a stake in the development – as no actual development is currently there), but rather **local actor’s strategic potential** – these presumptions have since been substantiated through work carried out in the area. Generally, the focus has been on identifying stakeholders that have already carried out extensive energy renovations and therefore play an important role in the (local) energy supply.



Fig. 4: Example of stakeholder prioritisation grid – the initial layout of the relative positions of the stakeholders in the case of Aalborg East in Denmark

3.4 CO2PED (DUT Call 2022)

Presenter: Griet Juwet, ENDEAVOUR, BE. Website: [CO2PED | dut](https://co2ped.dut.be/)

CO2PED (2024-2026) - Collective agency and co-evolution towards inclusive energy transitions focuses on reaching **vulnerable neighbourhoods** across Europe, empowering residents and neighbourhood associations as active agents in the transformation of their neighbourhoods within 8 neighbourhoods in Belgium, Estonia, the Netherlands, and Portugal. As a result, the co-production process can strengthen the capacity of municipalities and other stakeholders to facilitate more inclusive energy transition strategies for the development of positive-energy districts (PEDs). The methodology for stakeholders engagement with a strategy that departs from the **everyday energy practice** and by **connecting them to urban spaces**, actors and opportunities. The project focuses on **active workshops** in diverse strategic locations and by experimenting with new practices such as the 'house of the future' installed in Rotterdam. The project makes a **direct objective on social justice issues** relating to energy.

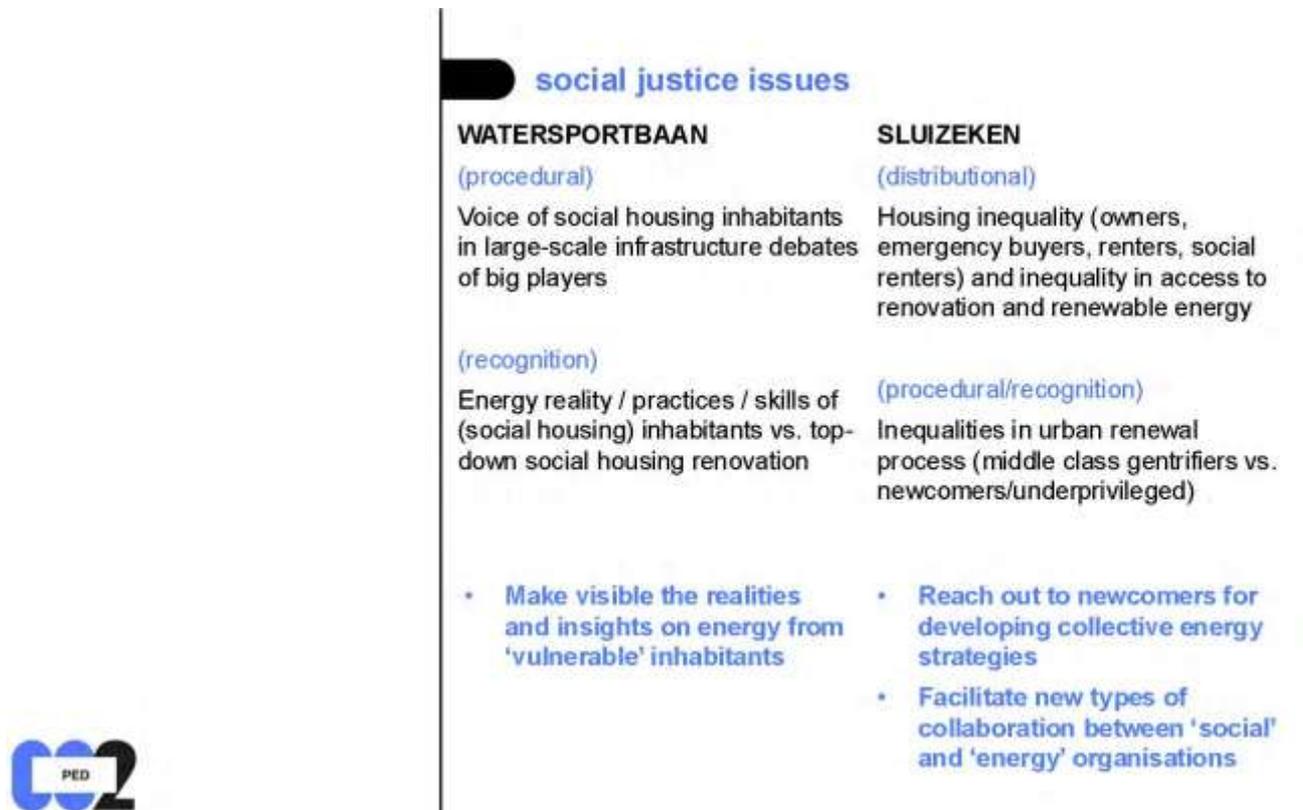


Fig. 5: Examples of the two cases (Watersportbaan and Sluizeken) related social justice issues in stakeholders engagement and experimentation with PEDs in Ghent, BE. By Endeavour.

4 Discussion

A central part of the DD#2 was the discussion in breakout rooms centred around three main questions to launch the dialogue with the participants.

- **Stakeholder management:** *How to organize the stakeholders, people, means and materials involved in PEDs to realize the (urban) energy transition?*
- **Inclusion:** *How might we ensure that PEDs embrace the variety of urban lifestyles and offer people an active and meaningful role in the energy transition?*
- **Social justice:** *How might we ensure that PEDs promote a just transition where nobody is left behind?*

4.1 Stakeholder Management

When dealing with stakeholders it is important to identify the relevant, or right, stakeholders and ensure no stakeholders are missing. Their needs should be listed and integrated into the PED process and a strategy needs to be developed on how the different stakeholders can be involved in the decision-making process. Moreover, the larger the area of a PED, the bigger the impact and the more stakeholders that

need to be involved. It is however important to see that no matter how large the PED is, each one has an impact also at the city level. Here it is important to see that there are two types of stakeholders when looking from a PED-project perspective: the stakeholders that are organizing the PED, or the PED-project stakeholders on the one hand and the stakeholders (citizens, businesses, ..) affected by the PED development.

Stakeholders represent different interests, ownership, bills, ... when dealing with stakeholder management these different approaches to a PED need to be accounted for. The process of PED development can only be started once shared goals are identified. Moreover, the technical terms used in PEDs are often difficult to understand for citizens, alternative ways of communicating with different stakeholder groups needs to be developed.

The development of PEDs also goes hand in hand with creating new dependencies between people and creating personal responsibilities, especially when an energy community is developed in the framework of a PED, local ownership increases, but also the dependency on local assets. Not everybody has the capacity to participate within these new power dynamics or even wants to shift to this new reality. At the moment people behave as consumers, since we have been educated as consumers, but in cooperation, people need to work together, in participation.

4.2 Inclusion

The ability to embrace the diversity of urban lifestyles and give them an active and meaningful role in the energy transition is key to ensuring equity in the PED transition.

The definition of an appropriate engagement strategy is important to achieve this goal, with particular attention to the involvement of the most vulnerable groups, who are the hardest to reach. Some groups may have little motivation to play an active role in the process, if their presence in a particular neighbourhood is perceived as temporary and insecure, as is the case for social housing residents. Other groups may even adopt an aggressive attitude, if they feel threatened by the project.

The ability to bring different perspectives into the process and to establish a constructive dialogue therefore depends first and foremost on the ability to make people understand that the transition is not just a technical change, but that it will affect and improve their lives in a concrete way. To do this, it is important to understand what motivates each group to participate. Motivations can be very different for various groups, also depending on their energy practices and potential vulnerabilities. The economic leverage is very important, but it may be ineffective under certain conditions, e.g. in the case of irregular connection to utilities, while other benefits (recognition, legitimacy, etc.) may prove to be more successful in attracting attention and interest. This is also related to the multidimensionality of energy poverty and the need to address all of them in order to pursue just energy transitions.

Finally, it is also important to highlight how PED transitions will bring benefits not only on an individual basis but also at a community level, as the management of PED systems will involve common ownership of energy assets. The activation of collective management practices can strengthen community dynamics and promote solidarity, with new governance processes revolving around people's empowerment and democratisation dynamics.

4.3 Social Justice

Energy transitions often risk exacerbating inequalities if they do not actively involve diverse stakeholders. The discussion at the round-table highlighted that social justice in PEDs is often treated as an implicit goal, but without deliberate attention. Meaningful stakeholder engagement is essential, yet it remains a challenge due to the complexity of energy projects and the difficulties in reaching marginalised communities.

A crucial issue is the selection of stakeholders at the start of a project in specific pilot areas. By ensuring early-stage engagement with local communities, PEDs can be designed to reflect real needs and avoid top-down interventions that fail to resonate with residents. Social housing corporations, for example, have been identified as difficult partners in many projects, requiring new strategies to bring them on board.

A recurring theme was the disconnect between the technical nature of PEDs and the lived experiences of residents. Energy discussions often take place at a high level, with little input from the people most affected by them. Participants emphasised the need to go beyond theoretical discussions and meet people in their everyday environments, understanding energy as a day-to-day issue rather than an abstract concept.

Encouraging ownership among local stakeholders was considered essential. Without it, PEDs risk becoming external impositions rather than community-driven transformations. In this regard, engaging local schools emerged as an effective strategy to embed energy awareness in communities in an organic way. Participation challenges were a key concern, with reflections on past projects showing that traditional engagement strategies often fail.

5 Conclusions

- **PEDs are processes of co-creation**, a form of agency that can trigger societal justice processes and have an influence enforcing or (re)balancing power relations, emphasizing issues of inclusion and energy-urban relations and vulnerabilities
- **PEDs can inspire social justice processes** and integrated urban neighbourhoods, by active engagement of marginalised or vulnerable communities in energy transitions and created policies leveraging people needs and potentials
- **PEDs are also 'travelling ideas' that need to be 'fed' by experiences** rather than by general rules only. The experimentation in local contexts, the emerging learning and the transnational exchange of situations and contingency is a great value for DUT PED projects and their implementation
- **PEDs have potential for driving sustainable urban transition** from the perspective of social justice / social sustainability but inclusive participation is key for processes of democratic sustainability. How DUT PED project teams involve stakeholders in their processes, through active citizenship for the energy transition is an integral part of democratic practice and also in mobilising the culturalisation of sustainable transitions.
- **Policy regulations can create barriers** – Although the new PED framework 3.0 is geared to be as inclusive as possible, it could also create barriers and underline the differences among EU countries. Dealing with PEDs in general and social processes in particular needs local adaptation. A remaining question is how planning and policy at EU and national levels be mobilised to address future energy challenges and promote energy justice in diverse territorial contexts?