

D.5.1 Policy dialogues: From shared learning and insights towards impact

27.03.2025

Final Version





This project has received co-funding from the European Union's Life programme under grant agreement No 101077514

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

DOCUMENT DESCRIPTION

Related Work Package	WP5
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Grant Agreement Number/ Funding Body	101077514
Start Date / Project Duration	1 October 2022 / 36 Months
Type of Deliverable (R, DEM, DEC, Other) ¹	R
Dissemination Level (PU, SE) ²	PU
Date of Last Update	27.03.2025
Project Website	https://lifetandems.eu/

REVISION HISTORY

Revision No.	Date	Description	Author(s)
0.1	21.03.2025	Revision	Bart De Bruyne (Mechelen); Erik Laes (VITO); Maro Sarodaki (KampC); Teodora Stanisheva (EnEffect
0.2	25.03.2025	Revision	Sylvia Breukers (DuneWorks)
0.3		Revision	

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2

¹ **R** = Document, Report; **Dem** = Demonstrator, pilot, prototype; **DEC** = website, patent filings, videos, etc; **OTHER** = other ² **PU** = Public, **SE** = Sensitive

TABLE OF CONTENTS

DOCUMENT DESCRIPTION	N	2
REVISION HISTORY		2
TABLE OF CONTENTS		3
EXECUTIVE SUMMARY		5
LIST OF ABBREVIATIONS .		6
1. GENERAL INTRODUC	TION	7
2. methodological approach.		7
3. Policy dialogue in three pa	artner countries	9
3.1 Belgium: social justice	in the energy transition	9
3.1.1. Policy dialogue in F	landers	9
Flemish policy dialogue	: method and organisation	9
Solidarity as the key val	ue in community building	11
Inclusive collective ener	gy efficiency initiatives	14
Inclusive collective self-	consumption from PV installations	16
Inclusive collective heat	ing solutions	18
	g between municipality, region and energy community for ition	
Policy advocacy for a m	ore equitable energy transition through energy sharing	21
Background: energy sha	aring in Belgium	21
Policy dialogue process	around energy sharing, successes and remaining challen	iges .22
Comparative view		23
Recommendations for p	policy	23
3.2 Bulgaria: spreading be	est practices on energy community set-up	26
Current state of affairs in	n Bulgaria	26
Energy Sharing in Bulga	aria	27
Policy dialogue process	around energy sharing, successes and remaining challen	iges .28
Comparison with Belgiu	m and the Netherlands	29
Recommendations for F	Policy	30
3.3 Netherlands: local owr	nership, energy sharing and justice	33
3.3.1 A policy dialogue at	oout local ownership	33
Introduction		33
Interview session finding	gs	36
Scenarios and justice di	imensions	41
Summary: the scenario	evaluated on the justice dimensions	43

TANDEMS: Policy dialogues: From shared learning and insights towards impact

From insights to action: policy recommendations	44
From insight to action: justice dimensions made more concrete	44
3.3.2 Interview: interpretation of energy sharing for Dutch law-making	46
Background: energy sharing in the Netherlands	46
The policy dialogue and legislative process	47
Energy sharing in law: a step towards systemic change	48
The policy dialogue and the importance of good conversations	49
Comparative view and the European context	50
Recommendations to strengthen energy communities and energy sharing	51
4. Policy Dialogue for Energy Communities: Impacts and Reflections	52
4.1 The Open Collaboration Model for collaborative governance	52
4.2 Capacity building, advocacy and impact	53
4.3 Impact but not without policy support	54
References	55
List of participating organizations	56
ANNEX 1: List of actions and interactions	57
ANNEX 2: Interview guide	58
ANNEX 3: Annexes to the Dutch policy dialogue report	59
A: Structure of the interview session	59
B: Scenarios as used during the interview session	60

EXECUTIVE SUMMARY

Task 5.1 of the TANDEMS project explores the critical role of policy dialogues in advancing energy communities across Belgium, Bulgaria, and the Netherlands. This report examines how stakeholder engagement and collaborative governance can support a more just and inclusive energy transition. The policy dialogue work aimed to strengthen the relationships between various stakeholders—including local governments, energy cooperatives, and community representatives—for an effective implementation and scaling of energy communities in line with justice principles. The task focused on addressing challenges in policy development, energy sharing, local ownership, and social inclusivity.

The task work employed a multi-faceted approach, including dedicated policy dialogue sessions in different regions; in-depth interviews with key policy advocates from the TANDEMS consortium; and based on these, an analysis of stakeholder interactions and policy development processes.

This deliverable clarifies how collaborative governance (see also the Open Collaboration Model in WP2) is key to foster cooperation between municipalities, energy cooperatives, and community stakeholders. It describes how TANDEMS partners from Belgium, Bulgaria and the Netherlands have been able to significantly influence policy formation – e.g. on energy sharing; through recommendations for social justice in energy transitions; by sharing best practices in energy community development; and through improved understanding of local ownership arrangements.

The report underscores the need for structural financial support for energy community representatives, continued policy dialogues and an explicit and lasting EU commitment to supporting citizen-led energy initiatives. It highlights energy communities as a crucial pathway for democratic engagement in the energy transition, demonstrating how collaborative approaches can help address complex challenges of social and environmental justice.

The TANDEMS project provides a compelling case for inclusive, participatory approaches, emphasizing that the future of sustainable energy lies in empowering citizens and fostering meaningful stakeholder collaboration.

TANDEMS: Policy dialogues: From shared learning and insights towards impact

LIST OF ABBREVIATIONS

ACM: Authority for Consumers & Markets

AMvBs: Orders in Council (Netherlands)

CREG: Commission for Electricity and Gas Regulation (Belgium)

DSO: distribution system operator

EC: energy community EMD: Energy Market Directive

EPC: Energy Performance Certificate

LEKP: Local Energy and Climate Pact (Belgium)

NGO: non-governmental organisation

NVDE: Dutch Renewable Energy Association

OCMWs: Public Centres for Social Welfare (Belgium)

PPA: Power Purchase Agreement

REC: renewable energy community

SAAMO: organisation dedicated to building social cohesion (Belgium)

SERV: Social and Economic Council of Flanders

SME: small and medium-sized enterprise

VEKA: Flemish Energy and Climate agency

VREG: Flemish Regulator for Utilities

VVSG: Federation of Flemish Cities and Municipalities

1. GENERAL INTRODUCTION

The policy and legislative context that facilitates energy communities is still evolving, not finalized and still challenging – that is what we see in the three TANDEMS regions. The transposition of EU directives³ has progressed with varying speeds across the member states, and with different results - ranging from copy-paste exercises to well-thought-out arrangements to make life easier for energy communities. Energy communities are not just a new legal form, they embody a new narrative, one in which citizens are recognized as crucial stakeholders in the energy transition. When searching for the appropriate arrangements and wordings, the concept of justice is important – referring to the recognition and involvement of a variety of citizen needs and perspectives, and referring to the need to enable processes that are inviting and that help to achieve a more equitable distribution of benefits and disbenefits of the energy transition across society.

The pilot partners' efforts to improve cooperation between energy communities and local authorities, between energy communities and their citizen membership base, efforts to improve and implement organisational and business models have been documented as part of the work carried out in WP2, WP3 and WP4. WP5 focuses on the policy context. For Task 5.1 we aimed to prepare, organise and report on policy-oriented dialogues in the three partner countries. Policy-oriented dialogues are understood as conversations, interactions and engagements aimed at addressing the challenges for energy communities as identified by the TANDEMS pilot partners - based on the pilot-related experiences and with a commitment to justice. The purpose of this document is to report on the organisation, content and impact of the policy-oriented dialogues in each partner country. The issues addressed, such as affordability, energy sharing, local ownership, are not (yet) sufficiently addressed in national and regional policy. As such, the dialogues reflect struggles to achieve a transposition of EU directives that contributes to a more inclusive, affordable and citizencentred energy supply, in which energy communities can take on an important role. The concluding observations resulting from each dialogue process (together with e.g. the results of WP2) form a partial basis for the policy recommendations in Deliverable 5.2.

2. METHODOLOGICAL APPROACH

An overarching question inspiring this report could be formulated as follows:

How can we understand and harness the roles, relationships, and interactions between different stakeholders to effectively implement and scale energy communities within the TANDEMS pilot regions?

To address this question a variety of policy actors - at local, regional and/or national level – come to mind as well as the interactions between (local/supra-local) government and energy communities or their representatives. The aim was to have policy dialogues with a direct relevance for the pilot partners in TANDEMS, their pilots and their daily work. This meant that the work in Task 5.1 built on advocacy efforts already initiated by TANDEMS-partners as part

³ i.e., the (revised) Renewable Energy Directive (<u>Directive - EU - 2023/2413 - EN - Renewable Energy Directive - EUR-Lex</u>), Energy Efficiency Directive (<u>Directive - 2023/1791 - EN - EUR-Lex</u>), Electricity Market Design Directive (<u>Directive - EU - 2024/1711 - EN - EUR-Lex</u>)

of their daily work (e.g. in relation to the Otterbeek pilot, in 2022 a first set of policy recommendations was formulated).

Several internal meetings were organised with the pilot holders to decide on suitable topics and approaches. Efforts were made to ensure that the dialogues, interviews and the selected themes and topics were well aligned with ongoing conversations and discussions to ensure their relevance to the (pilot) partners and their projects and initiatives. This, and the countryspecifics in terms of political-institutional dynamics, led to the choices and approaches presented. At a consortium workshop in Vienna in April 2024 – during the general assembly meeting - relevant topics and approaches were discussed in break-out groups as well as plenarily. Following on this workshop, online meetings between DuneWorks and partners resulted in further clarifications and decisions (see Annex 1 for an overview of interactions). The result was that it was decided that in Belgium and the Netherlands, a dedicated policy dialogue session was to be organised. And because TANDEMS has provided means for the Belgian, Bulgarian and Dutch partners to become more actively engaged in policy advocacy and advise, we have also conducted interviews with Stanislav Andreev (EnEffect), Justin Pagden (Agem) and Bart de Bruyne (Mechelen Municipality) to show their efforts and impacts of these in terms of ongoing policy advocacy. An interview guide that was developed as a basis for these semi-and loosely structured interviews is provided in Annex 2.

For the Belgian partners, initially, two topics seemed most interesting and relevant for a dedicated dialogue session, the first one being the collaborative relationship between energy cooperatives and the so-called Energy Houses; the second one being energy sharing as a means to arrive at a more socially just energy transition. Eventually, the choice was made to focus on yet a slightly different topic, namely the broader topic of social inclusivity of energy community initiatives, because the more specific topic of energy sharing had already been given ample policy attention in organized stakeholder consultations (cf. Section 3.1.2) and official government advice by VEKA (the Flemish Energy and Climate Agency). Moreover, and separate from the dedicated policy dialogue in Flanders, the topic of energy sharing in relation to social justice has been elaborated on in an in-depth interview with Bart de Bruyne (City of Mechelen). A main focus of his advocacy, building on the experiences with energy sharing in the Otterbeek pilot, was oriented towards improving the inclusion of vulnerable groups in the energy transition.

In Bulgaria, EnEffect's ongoing policy dialogue consisted of a series of events where topics addressing the needs of energy communities were discussed and information was shared about the pilot projects, commenting on the challenges and possible improvements in the environment (regulatory, financial, technical assistance, etc.). An extensive interview was conducted with Stanislav Andreev (EnEffect) about this continuous policy dialogue to learn about the backgrounds, organization and impact of this ongoing dialogue.

For the Netherlands, at first the topic of energy sharing and its adoption into law was considered interesting for a dedicated session. However, as this is a highly complex issue, and as Justin Pagden is closely involved in the formation of policy and legislation on energy sharing, we decided to report on this through an in-depth interview with him. For the dedicated policy dialogue session, it was decided to focus on a concrete issue of relevance to the wind energy pilot project in Search Area K, namely the question of how local ownership can be organized and enshrined in local or regional legislation. This question is of relevance not only

for the specific local situation in Search Area K, but elsewhere too as local ownership needs to be elaborated in local and regional policy and legislation.

The structure of the remainder of this document is as follows. Section 3 describes in detail the dialogue activities in Belgium, Bulgaria and the Netherlands, and Section 4 concludes with a brief reflection on the results.

3. POLICY DIALOGUE IN THREE PARTNER COUNTRIES

3.1 Belgium: social justice in the energy transition

Below, we first present what was reported on the dedicated policy session by VITO – by including most of the report in section 3.1.1. Next, in sections 3.1.2., the interview with Bart de Bruyne, our partner that represents the municipality of Mechelen, is presented which addresses how his advocacy role and actions have taken shape over time and with what results.

3.1.1. Policy dialogue in Flanders

Flemish policy dialogue: method and organisation

At EU level, increasing attention is being paid to social justice in the energy transition. Consider, for example, the creation of the Social Climate Fund at EU level. Starting from 2026, the fund will co-finance national measures, requiring Member States to develop Social Climate Plans in 2025 outlining how they will use the funds to address energy and transport poverty. Next to this, the Flemish government will work out an Energy Poverty Plan, while social inclusion is also a topic of interest in the context of the Covenant of Mayors and the Local Energy and Climate Pact (LEKP). Following this focus on social inclusion in the energy transition, the TANDEMS partner VITO set up a policy dialogue in Flanders on how community energy initiatives can be made more inclusive for energy vulnerable households.⁴ The focus in addressing this challenge has been on the role of local authorities and RECs in meeting this challenge.⁵

<u>Methodology</u>

The point of departure in addressing this challenges involves the lessons learnt from the Flemish TANDEMS pilot projects managed by Mechelen/Klimaan and ZuidtrAnt (captured through several workshops with the TANDEMS partners in September 2024). Next, in preparation of the policy dialogue workshop, individual interviews were conducted with key stakeholders involved in energy and/or social policy, which highlighted key challenges and generated promising ideas (September-November 2024). A first set of interviewees was identified by the TANDEMS partners and expanded using the snowball effect, asking interviewees to suggest additional people to interview. Building on these findings, a policy

⁴ Following Bauwens (2021), we make a distinction between 'community energy' (CE) in a broad sense and '(renewable) energy community' (REC) in a narrow sense. Community energy in a broad sense encompasses diverse energy initiatives involving local organizations, such as partnerships and municipal projects, where the level of citizen ownership and control varies. In contrast, energy communities in a narrow sense, such as Renewable Energy Communities (RECs) under EU law, are citizen-led entities prioritizing local ownership, democratic governance, and delivering environmental, economic, and social benefits over financial profit.

⁵ For more information about this workshop or resulting report, please contact: erik.laes@vito.be; erik.laes@vito.be; katharina.biely@vito.be

dialogue was held in Antwerp on 5 December 2024, hosted by the energy cooperative ZuidtrAnt. Both the interviewees and Flemish TANDEMS partners were invited to the policy dialogue. During the workshop, participants explored how community energy initiatives can create inclusive value across three key scenarios: collective self-consumption from PV installations, collective heating solutions, and collective energy-efficiency services. These three scenarios were based on a recent report of the Social and Economic Council of Flanders (SERV) on collective projects for the energy transition. Giving the examples of district heating networks, shared solar panel installations, or group insulation projects, the SERV argues that collective projects can reduce costs for participants, foster community engagement and strengthen social cohesion by involving residents in shared goals. Using a world café method (text box 2), these discussions were enriched with real-world examples drawn from the TANDEMS pilot projects and preparatory consultations, enabling the cocreation of practical and actionable policy insights.

Text box 1: World Café Method

The roundtable discussions were conducted using the World Café method, a participatory approach designed to foster collaborative dialogue and generate actionable insights.

1. Setup:

- Three distinct scenarios were explored at separate discussion tables:
 - Inclusive PV projects.
 - Inclusive energy-efficiency services.
 - Inclusive district heating solutions.
- Each table hosted 3–6 participants per session. 0

2. Rotation:

- o Participants rotated between tables, ensuring everyone could contribute to each scenario.
 - The first round lasted 45 minutes, followed by two rotations of 30 minutes each, enabling a diverse exchange of ideas.
- 3. **Guiding Questions**: Each table addressed the following questions for its specific scenario:
 - What activities can drive inclusivity for this scenario?
 - What activities can drive inclusivity for this scenario:
 What forms of inclusivity should be pursued, and which target groups are most relevant?
 - O What criteria can be used to evaluate the success of creating collective value?
 - What is needed to implement the scenario in a socially inclusive way?

4. Facilitation Techniques

- o Collaborative Atmosphere: Participants were encouraged to ask questions, challenge assumptions, and view issues from multiple perspectives. This helped build shared understanding and generate creative solutions.
- o Open Dialogue: Facilitators emphasized a curious and exploratory mindset, steering discussions toward possibilities rather than immediate solutions.
- Documentation: Key insights and ideas were documented at each table to inform later discussions and ensure no perspectives were lost during rotations.

Representatives from the following organizations were interviewed and/or were present at the workshop.

- VEKA (Flemish Energy and Climate agency)
- VVSG (Federation of Flemish Cities and Municipalities)
- Technische Assistentiehub (Technical assistance hub for energy communities)
- SAAMO (organization dedicated to building social cohesion)
- Klimaan (REC based in Mechelen)
- ZuidtrAnt (REC based in Antwerp)
- REScoop Flanders (federation of Flemish renewable energy cooperatives)
- Kamp C (Centre for sustainability and innovation of the Province of Antwerp)
- Province of Antwerp

- City of Antwerp
- City of Mechelen

Presentation of the findings

The findings from the preparatory consultations and policy workshop are grouped into policy insights ('insights') and actionable policy knowledge ('action') under different themes. Policy insights are general observations or findings that help understand a policy issue and guide strategic thinking. They are conceptual and exploratory, framing the context of a problem but not necessarily providing direct steps for action. In contrast, actionable policy knowledge is practical and specific, offering clear guidelines or methods that can be directly applied to the design or implementation of policies. Together, they form a continuum from understanding a challenge to addressing it effectively.⁶

The themes discussed below are as follows:

- Solidarity as a key value in community building (and the different meanings of solidarity)
- Inclusive collective energy-efficiency services
- Inclusive collective self-consumption from PV installations
- · Inclusive collective heating solutions

Solidarity as the key value in community building

Background

Transitioning from merely collective to community energy initiatives grounded in a **rights-based approach** is crucial for ensuring a fair and inclusive energy transition. While collective energy projects focus on collective benefits based on shared interests, community energy initiatives emphasize **solidarity**, based on shared values, long-lasting relationships, and a collective sense of identity. A rights-based framework recognizes access to affordable and sustainable energy as a fundamental right, thereby establishing clear obligations for local policymakers and community organizations to ensure these rights are realized for all citizens and not treated as optional. Solidarity is a cornerstone of community energy initiatives, fostering a sense of belonging and encouraging mutual support, particularly during (energy) crises. It strengthens trust and deepens relationships among community members, creating a resilient foundation for collective action. In the context of community energy initiatives, solidarity with energy-vulnerable households can take on several distinct forms:⁷

- Altruism involves individuals or groups providing support to energy-vulnerable households
 without expecting anything in return. Examples include financial subsidies, donations to
 cover energy bills, or volunteering time and skills to help improve energy efficiency in
 homes. Altruism is driven by a desire to ensure everyone has access to essential energy
 services.
- Recognition emphasizes co-creation between energy-vulnerable households and other stakeholders, such as community groups, local policymakers, or energy communities, to develop solutions together. This might involve participatory workshops to design affordable energy programs, shared decision-making on renewable energy projects, or structurally involving organizations defending the interest of energy-vulnerable households in local

⁶ Although insights and actions are informed by the dialogue taking place during the consultations and workshop, their content remains solely the responsibility of the TANDEMS authors.

⁷ This classification emerged from the consultations with the Flemish stakeholders, and is loosely based on DellaValle and Czako (2022).

- policy making initiatives (e.g. in the context of local energy and climate plans or local energy poverty plans, or by using SAAMO's Expert Meetings, where selected vulnerable persons interested in energy, represent the voice of vulnerable households organised in a fixed setting by poverty organization SAAMO).
- Ownership provides energy-vulnerable households with a direct stake in energy projects
 or resources, empowering them to take part in and benefit from the energy transition. For
 example, energy-vulnerable households might become prosumers (benefitting from the
 ownership of a PV installation on the rooftop of their dwelling or co-owners of a local PV
 project, giving them access to clean, affordable energy. Ownership can also come in the
 form of knowledge and practical skills (e.g., on energy saving measures) so that energyvulnerable households become more structurally empowered to deal with their energy
 needs.

Insights

Adapt solidarity to the needs of different target groups

The group of energy-vulnerable households can cover distinct categories, e.g.:

- Households with a budget meter.
- · Households eligible for the social tariff.
- Emergency buyers.
- Social housing tenants.
- People with long-term health issues or disabilities.
- Households with a limited income.
- ...

It is essential to understand the needs of each of these different target groups, as well as to find the most adequate channels to reach them, before deciding on the form of solidarity that is both workable and of most benefit to them.

Key actors in community building

Local governments should take an active role (beyond providing financial support or other incentives) in community building with energy-vulnerable households, because they are uniquely positioned to fulfil this role effectively:

- They have **direct access to data and insights** about their local communities, enabling them to find and target energy-vulnerable households more precisely.
- Local governments already **manage essential services** for energy-vulnerable households, such as housing and social welfare, allowing for better integration and coordination of support measures.
- Municipalities often have established communication channels and trusted relationships with residents, which are crucial for engaging energy-vulnerable groups and building trust. They can function as facilitators for partnerships with energy communities and private actors to deliver tailored, inclusive solutions.
- Their role as policy implementers at the ground level makes them an essential link between regional or national strategies and community-level action, ensuring that broader goals, such as reducing carbon emissions or enhancing social inclusion, translate into concrete benefits for energy-vulnerable households in Flanders.

Local authorities are expected to take an active role, while recognizing that initiatives are often born through citizen initiatives or initiatives of poverty organizations. Opinions regarding the role of RECs as privileged partners are more divided. A REC as defined under the EU's Renewable Energy Directive is a legal entity that has to meet the following criteria:

- **Open and Voluntary Participation**: Membership in the REC must be open to all potential local participants and based on voluntary involvement.
- **Autonomy and Effective Control**: The REC should run autonomously and be effectively controlled by shareholders or members who are in proximity to the renewable energy projects owned and developed by the community.
- **Eligible Participants**: Shareholders or members can include natural persons, small and medium-sized enterprises (SMEs), or local authorities, including municipalities.
- Primary Purpose: The main aim of the REC should be to provide environmental, economic, or social benefits to its members or the local areas where it runs, rather than prioritizing financial profits.

Although the Directive specifies that a REC should prioritize social benefits over financial profit, it does **not provide a clear definition of what those benefits should encompass**. This lack of definition creates uncertainty about how RECs can or should address inclusivity.

Next to this, the definition of a REC clearly emphasizes citizen ownership and control of energy infrastructure. As such, RECs are **essential partners when co-ownership is a key aim of solidarity** in a community energy project. However, co-ownership often involves the purchase of a share, which, even at a modest cost, can be a financial barrier for energy-vulnerable households. While some argue that co-ownership should not be a priority for these households, pointing out the financial challenges it entails, this issue could be addressed through policy measures such as gradual payback schemes. Yet, this raises the broader question of whether public funds is being used for the most effective solutions in such cases.

Despite these uncertainties, it is clear that many RECs are driven by the **dedication of enthusiastic individuals who are deeply committed to creating social impact**, including addressing the needs of energy-vulnerable households. Whether defined broadly as energy communities (ECs) or more specifically as renewable energy communities (RECs), both are characterized by citizen leadership. Therefore, when energy communities take the lead or play a leading role in inclusive community energy projects, local authorities need to recognize that many energy communities, especially the smaller ones, rely heavily on volunteer work. As a result, time resources become as critical as financial resources. To ensure their effectiveness, adequate **financial**, **risk covering and in-kind support should be provided to sustain their efforts**.

Benefits of solidarity need to be made more visible

The benefits of inclusion and solidarity in local community energy initiatives are still poorly understood and under-researched. There is a clear need to provide both subjective beliefs and objective evidence regarding the social impact of Renewable Energy Communities (RECs), not only for research but also at the policy level. Policy support for community energy initiatives helping energy-vulnerable households should be linked to **clearly defined and measurable social impacts**, regardless of who proposes the initiative (i.e., RECs should be not be judged differently than other organizations). These impact measurements could be specified for the **three dimensions of solidarity as suggested above**: **altruism**, **recognition and (co-)ownership**. It is also important to highlight **real-world examples** where inclusive community energy initiatives have improved community well-being. For

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⁸ See Bielig et al (2022)

instance, by documenting cases where energy-vulnerable households gained access to affordable clean energy or where local energy initiatives created new jobs. This can also include **testimonials** from beneficiaries to 'humanize' the data and provide compelling narratives.

Action

The following actionable policy insights aim to empower local authorities in fostering inclusive community energy initiatives, particularly focusing on energy-vulnerable households:

- Effectively use existing ability and knowledge of local authorities (e.g., communication channels, data access, and established relationships) to find and engage with energyvulnerable households within the community. Involve poverty organisations in inclusive energy initiatives to a maximum extent, to assure that also the 'voice' of the vulnerable groups is heard.
- Develop programs that connect community energy initiatives to existing local community networks (e.g., neighbourhood workers), creating a personal and relatable presence for solidarity efforts. Use community events, neighbourhood centres, and preferably local ambassadors from the target group to build trust and raise awareness among energyvulnerable households.
- 3. Offer **training sessions** for local stakeholders, energy communities, civil servants, etc. to equip them with knowledge and tools to aid energy-vulnerable households effectively.
- 4. Energy literacy should be integrated into newcomer integration programs to familiarize individuals with the local energy landscape in Flanders. By providing early exposure to energy systems, such as district heating and the principles of free market choice, newcomers can more effectively navigate and take part in the energy transition.
- 5. Support community energy initiatives by **unburdening them** in their outreach and engagement of energy-vulnerable households in exchange for a **commitment to achieving social goals**.
- 6. Designate coordinators or '**single points of contact**' within local governments to oversee inclusive community energy initiatives. These individuals would function as mediators to connect initiators with local actors that could assist them in making their initiative more inclusive.
- 7. Foster collaboration and communication across different municipal 'silos' to avoid fragmented or duplicated efforts. Establish cross-departmental teams (especially from the climate & energy and social departments) focused on developing integrated solutions for energy-vulnerable households, combining resources and expertise.

Inclusive collective energy efficiency initiatives

Background

Improving affordable housing quality is arguably one of the **most impactful measures** for both poverty reduction and advancing the energy transition. Improved housing quality through collective renovation leads to better indoor comfort, health benefits, and overall well-being for residents. Next to this, renovation contributes significantly to the preservation and reuse of building materials, adding further to its strategic importance as a climate mitigation measure. Because of their direct impact on housing quality, energy efficiency measures are also **more directly relevant and accessible** to energy-vulnerable households compared to technologies like PV or district heating systems.

Insights

For energy-vulnerable households, private rental housing presents a critical area of focus, as social housing companies are already addressing renovations within their portfolios. Landlords should therefore be given greater recognition for their role, with proper compensation and incentives. Think of e.g. the 'Goed Plan' initiative in Turnhout, a collaborative effort to improve the quality and energy performance of private rental housing in the lower segment, focusing on the most vulnerable segments of the market. Developed with SAAMO Antwerpen, KampC, and local governments, it provides guidance to landlords, helping them renovate properties to meet housing standards and obtain conformity certificates.

- 1. The 'Pandschap' model in Flanders is a housing initiative aimed at transforming vacant or poorly maintained properties into high-quality social rental housing.⁹ It provides comprehensive support to property owners by managing the entire renovation process and leasing the homes through social rental agencies for a fixed period, typically 9 years. Property owners benefit from financial incentives such as increased renovation subsidies, exemptions from vacancy taxes, and guaranteed rental income, while vulnerable households gain access to affordable and improved housing. Focused on the lower segment of the rental market, the model addresses critical issues like housing shortages, energy inefficiency, and substandard living conditions. In first implementations, the model has shown to be successful and should therefore be scaled up and extended beyond the urban context. For instance, in Mechelen, TANDEMS partners Klimaan and city of Mechelen, have set up this Pandschap model together working also in the wider region and surrounding villages.
- 2. Contrary to widespread belief, vulnerable groups are engaged with climate issues and concerned about the future. However, the significant costs associated with the energy transition remain a major barrier for them. With many homeowners likely unable to afford the necessary renovations, continued reliance on programs like 'Mijn Verbouwpremies,' along with other financial support, loans, and guidance, is crucial. These efforts should particularly focus on reaching and prioritizing vulnerable groups. To enhance accessibility, the reach of these services could be expanded by providing support not only through 'Energiehuizen' but also via alternative pathways, where local energy communities can assume a role.
- 3. Local governments and energy communities have complementary strengths in delivering collective renovation services that enhance housing comfort and reduce energy bills. While local governments have the knowledge and resources to find and engage target groups, energy cooperatives bring expertise in executing collective renovation projects.
- 4. **Inclusivity should take the form of co-creation** (solidarity in the form of recognition) with the target group to address their specific needs and prioritize. Starting from the principle of a "right to..." fosters a sense of ownership among participants, as opposed to imposing top-down decisions by e.g. social housing companies. However, involving the energy-vulnerable households in decision-making can increase project complexity.
- 5. The feasibility of collective renovations varies between **urban and rural contexts**. For example, the Klimaatwerf project successfully offers group insulation services in rural municipalities and villa neighbourhoods, but collective heat pump installations face challenges due to the unique requirements of individual homes.

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⁹ www.pandschap.be

6. Shifting the focus of Energy Performance Certificates (EPCs) from **energy consumption to CO₂ emissions aligns better with climate goals**. Additionally, introducing EPC ratings per dwelling rather than per square meter would provide a fairer and more correct assessment of building performance, especially for smaller homes, and would thus work to the benefit of energy-vulnerable households.

Action

- To effectively reach and support energy-vulnerable households, collaboration between
 organizations familiar with their needs is essential, along with better integration of
 municipal services, such as housing departments and Public Centres for Social Welfare
 (OCMWs). Partnerships with organizations like SAAMO and the involvement of
 ambassadors from the target group, such as residents of social neighbourhoods, can
 further enhance engagement.
- Efforts must also address the tension between available budgets and the scope of needed renovation efforts. These could include group purchasing programs or pre-financing options, like the rolling fund initiative in Ghent, to address the delays in receiving subsidies after interventions.
- 3. Current funding allocation methods, which favour larger cities based on population size, should be revisited to ensure **fair support for smaller municipalities**.
- 4. Enhanced use and cross-linking of data sources such as **housing passports**, **neighbourhood renovation tools**, **and socio-economic profiles** can help find households in vulnerable situations and address their needs more effectively.
- 5. To prioritize inclusivity in the energy transition, it should be **set up as a condition for funding** through initiatives like Local Energy and Climate Plans, ensuring it remains a key focus for local governments. Practical measures, such as creating demonstration houses at accessible locations, like in the city of Roeselare, can help engage the target group.
- 6. The preparatory phase of the unburdening services offered by programs like 'Pandschap', and 'Goed Plan' requires additional time and resources, which **necessitate subsidies to sustain these efforts**.
- 7. Collaboration between 'Energiehuizen' and energy cooperatives should be stimulated. In particular, some cooperatives can bring in expertise on collective renovation projects, as demonstrated by the partnership between Energent and VENECO, and the TANDEMS work of Zuidtrant with Burenwerf.

Inclusive collective self-consumption from PV installations

Background

Inclusive PV projects on rooftops of public or industrial buildings can play a significant role in shaping an inclusive energy transition. These projects maximize the deployment of renewable energy by using underused surfaces to generate significant amounts of clean electricity. They also open up opportunities for energy sharing, enabling local communities, including energy-vulnerable households, to directly benefit from reduced energy costs and enhanced energy independence. The potential of energy sharing for energy-vulnerable households is also recognized in the Electricity Directive (2024/1711), which says that:¹⁰

¹⁰ Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024L1711

Member States shall take appropriate and non-discriminatory measures to ensure that vulnerable customers and customers affected by energy poverty can access energy sharing schemes. Those measures may include financial support measures or production allocation quota.

Member States shall ensure that energy sharing projects owned by public authorities make the shared electricity accessible to vulnerable or energy poor customers or citizens. When doing so, Member States shall do their utmost to promote that the amount of that accessible energy is at least 10 % on average of the energy shared.

Even without energy sharing, PV projects can create inclusive value by distributing the benefits of excess renewable energy production to energy-vulnerable households.

Insights

- 1. PV production on large roof surfaces is generally viable only if there is a positive business case, which requires **sufficient self-consumption** due to the currently low value of surplus electricity. This challenge could be partially addressed by integrating flexible charging services within the building under the present rules for energy sharing.
- 2. Building on the first insight, one solution could be to find a party that buys up the excess electricity production from the PV installation at a low but fixed price over the lifetime of the PV installation. Municipalities can assume this role (as is e.g. now the case for the city of Mechelen in the Otterbeek project). A more radical idea is to install a 'social energy provider' that would take over all the contracts of protected customers and buys up the excess electricity from PV installations at a guaranteed price, to be channelled preferably at affordable prices to vulnerable households.
- 3. The greatest potential for successful energy-sharing projects at present likely lies in industrial zones and business parks, where large volumes of electricity can be shared among a relatively small number of partners. Efforts should focus on exploring ways to channel the excess energy from these projects to benefit vulnerable households.
- 4. Individual energy sharing on a quarter-hour basis may **be less practical** for vulnerable households, as they need the flexibility to match their consumption with the timing of production. Some stakeholders thus questioned whether making individual energy sharing possible for energy-vulnerable households should be a priority for policy making.
- 5. Since many vulnerable households live as **tenants in apartment buildings**, making energy sharing in apartment buildings more appealing as a general policy would benefit energy-vulnerable households most.
- 6. The **split incentive challenge** in rental housing should be addressed. Currently, landlords have little financial motivation to invest in PV installations for rental properties, as the direct energy savings benefit tenants rather than the property owners.

Action

- 1. To **facilitate energy sharing in apartment buildings**, grid fees for the shared electricity volume could be reduced.
- 2. Streamline the administrative process for energy sharing by automating procedures (which should drive down the administrative costs for energy suppliers) and consider subsidizing administrative costs for vulnerable households.
- 3. For families with a budget meter, the distribution system operator could set up an 'energy community' by **contracting green energy** specifically for these customers.

- 4. Allow companies or public authorities to **fulfil their PV obligations** by investing in PV installations on social welfare buildings (OCMW) or the rooftops of energy-vulnerable households.
- 5. Enable companies or organizations to **donate excess electricity production** from their PV installations to vulnerable households free of charge, with the administrative costs potentially subsidized.
- 6. The split-incentive problem could be addressed by developing a **shared investment-recovery mechanism**. This would allow landlords to invest in PV systems while ensuring that renters contribute fairly to the cost recovery through regular contributions.

Inclusive collective heating solutions

Background

Collective heating solutions distribute heat from centralized sources – such as industrial waste heat, renewable energy, or cogeneration plants – through a network of insulated pipes to multiple buildings or homes. By leveraging economies of scale, collective systems lower installation and maintenance costs, while also enabling the integration of renewable energy sources and waste heat, contributing to broader climate goals. For energy-vulnerable households, collective heating can help mitigate the high costs of individual heating systems, reduce reliance on fossil fuels, and ensure more stable energy bills.

Insights

- 1. Collective heating projects often face **significant upfront costs**, which can delay development and limit accessibility for vulnerable groups.
- 2. New social housing developments offer a unique opportunity to integrate collective heating systems from the outset, ensuring energy-vulnerable households benefit from affordable and efficient solutions.
- 3. **High connection costs to district heating networks in existing neighbourhoods** are a major barrier for energy-vulnerable households.
- 4. Many energy-vulnerable households struggle with understanding the technical and economic aspects of collective heating systems, creating barriers to participation.
- 5. **Energy literacy gaps** among newcomers and vulnerable groups limit their ability to engage with local energy systems, including collective heating.
- 6. **Complex administrative processes and lack of financial support** for feasibility studies and project approvals often delay the implementation of district heating projects.
- 7. Profit-driven district heating systems risk imposing **excessive costs** on users, particularly energy-vulnerable households that are not protected by social tariffs.
- 8. **Industrial surplus heat that cannot be used internally is often underutilized**, despite its potential to support cost-effective and environmentally friendly district heating networks.
- 9. **Heat zoning maps alone are insufficient**; municipalities need comprehensive heating policy plans that include clear steps for implementation and management.
- 10. **Showcasing best practices and successful examples** of inclusive collective heating projects can build confidence and inspire wider adoption among stakeholders.

Actions

- Providing government-backed prefinancing for district heating infrastructure, such as interest-free loans, can significantly accelerate the development of heating networks. This financial support would not only speed up project timelines but also free up resources for community-oriented efforts, such as engaging vulnerable groups and ensuring their inclusion in the energy transition.
- 2. **Mandating collective heating systems** in new developments targeting energy-vulnerable groups ensures that these populations benefit from affordable and energy-efficient solutions. This approach can help stabilize energy costs while improving overall heating efficiency for households that might otherwise struggle with individual systems.
- 3. **Differentiated support mechanisms for connection costs to district heating networks** in existing neighbourhoods are essential to make these systems more accessible. Tailored financial aid can reduce the upfront burden on vulnerable households, encouraging broader participation in collective heating projects.
- 4. **Deploying ambassadors** who can function as intermediaries for socially vulnerable groups ensures that these groups are included in energy developments. Ambassadors can help translate complex energy concepts, provide clear information, and address concerns.
- 5. Simplifying administrative procedures for feasibility studies and tender applications can help clarify project viability sooner and avoid unnecessary delays. Streamlined processes would allow local governments and developers to move forward with greater confidence and efficiency.
- 6. Regulating profit margins for district heating infrastructure through legislation can ensure fair outcomes for all users. This would prevent excessive costs, particularly for socially vulnerable households that are not protected by social tariffs, while keeping the financial sustainability of the heating networks.
- 7. Companies should be required to make surplus heat that cannot be reused internally available free of charge or face penalties for wasting reusable heat. Such a measure would encourage the efficient use of resources and support the development of district heating systems that integrate industrial waste heat.
- 8. Municipalities should be required to **create comprehensive heating policy plans** that go beyond the current heat zoning maps. These plans should include clear steps for implementation, ensuring that local governments play an active role in developing and managing district heating projects.
- Platforms should be set up to showcase successful examples and best practices in district heating implementation. Highlighting real-world results and their social and environmental benefits can inspire confidence among stakeholders and encourage wider adoption of collective heating systems

The resulting key lessons that result from the policy dialogue – across the topics solidarity; energy efficiency; collective self-consumption and collective heating - have been summarised for policy makers in text box 1 below. The full report as well as a policy brief have been shared widely by VITO – with all participating stakeholders and with the stakeholders represented in the social working group of REScoop Flanders (umbrella organization of Flemish energy cooperatives). ¹¹

19

¹¹ https://lifetandems.eu/new-report-available-flemish-policy-dialogue-on-socially-inclusive-energy-communities/

Text box 2: 10 key lessons for policy makers

- 1. Organize community energy initiatives around a **rights-based approach** ("as a citizen of this community, I have a right to high-quality energy-efficient housing"). By treating access to and participation in the initiative as rights, clear obligations for policymakers and community leaders are established to ensure these rights are realized and not treated as optional.
- 2. While the rights-based approach to community energy initiatives ensures that policies and services are designed to benefit everyone, the principle of **proportionate universalism** implies providing additional support to those who face greater barriers or vulnerabilities. This approach recognizes that universal access to energy transition benefits is essential for equity but acknowledges that achieving fairness requires varying levels of assistance based on **solidarity with specific needs of energy-vulnerable households**.
- 3. **Solidarity in community energy initiatives should be customized** to the diverse needs of energy-vulnerable households, such as those with budget meters, eligible for social tariffs, or residing in social housing. Carefully consider what (combination of) type(s) of solidarity benefits a particular energy vulnerable group most in particular circumstances: **altruism, recognition (co-creation) or (co-) ownership**.
- 4. Local authorities are uniquely positioned to initiate inclusive community energy initiatives due to their access to community data, established trust with residents, and integration with social and housing services. They can act as facilitators, connecting stakeholders to deliver tailored solutions for energy-vulnerable households, or provide risk sharing instruments to support social innovations. Partnerships between municipalities, energy communities, and poverty organizations should be established to integrate social and energy goals. Cross-departmental collaboration within local governments can create cohesive strategies for addressing energy poverty.
- 5. Integrating **energy education into community energy initiatives**, such as newcomer programs or neighbourhood workshops, can empower energy-vulnerable households to participate in and benefit from the energy transition.
- 6. Policies supporting community initiatives should prioritize **measurable social benefits**, such as providing affordable clean energy to vulnerable households. Demonstrating these benefits through real-world examples can strengthen public and policy support. This can also include **testimonials** from beneficiaries to 'humanize' the data and provide compelling narratives.
- 7. Collective renovations lower costs through economies of scale and simplify complex processes. Specifically for energy-vulnerable households policies should prioritize private rental markets and offer financial incentives for landlords, building on successful models like 'Pandschap' and 'Goed Plan.' While local governments have the knowledge and resources to identify and engage target groups, energy cooperatives can bring expertise in executing collective renovation projects.
- 8. Since many vulnerable households live as **tenants in apartment buildings**, making energy sharing in apartment buildings more appealing as a general policy would benefit energy-vulnerable households most. Policy measures such as reducing grid fees for sharing in apartment buildings and/or limiting or subsidizing administrative costs should be investigated.
- 9. The greatest potential for successful energy-sharing projects at present likely lies in industrial zones and business parks, where large volumes of electricity can be shared among a relatively small number of partners. Efforts should focus on exploring ways to channel the excess energy from these projects to benefit vulnerable households
- 10. Providing **government-backed prefinancing for district heating infrastructure**, such as interest-free loans, can significantly accelerate the development of heating networks. This financial support would not only speed up project timelines but also free up resources for community-oriented efforts, such as engaging vulnerable groups and ensuring their inclusion in the energy transition.

3.1.2 Interview: mediating between municipality, region and energy community for social justice in the energy transition

Policy advocacy for a more equitable energy transition through energy sharing

Bart the Bruyne, a half-time employee of the city of Mechelen, coordinates energy transition projects. He serves as a liaison between the municipality, energy cooperatives, and civil society organizations, a role enabled by his close connection to the citizen movement for a fair climate transition 'Klimaan'. Bart focuses his advocacy on policy changes that can promote energy transition for vulnerable groups. The TANDEMS project has strengthened his position as his grassroots experience strengthens his strategic policy work.

Through TANDEMS, Bart expanded his policy advocacy to municipal, provincial, and Flemish levels, while collaborating with local energy communities and their federation REScoop Flanders. The stronger network position obtained through his activities within TANDEMS allows him to continue policy engagement beyond the project lifespan.

Bart's energy transition vision centres on social justice. He emphasizes: "Energy poverty is an important issue that requires attention. It's important not only to provide financial support, but also to create structural solutions that help people actively participate in the energy transition." He cautions that without attention to social justice, "energy cooperatives and energy sharing can become middle-class vehicles that merely exacerbates inequalities," undermining broader societal support for energy transition. Moreover, leaving the vulnerable out, risks that in the end those groups remain with fossil fuel energy, possible at higher costs when ETS 2 of Europe is introduced. The focus should be that all energy transition pathways should be made available to vulnerable households too and by preference having them in the piloting position as early implementors.

He explains that the municipality of Mechelen plays an active role in supporting energy projects and creating social policies aimed at reducing energy poverty. According to Bart, "The municipality is not only responsible for facilitating energy projects, but also for ensuring social justice." He advocates a proactive approach where the municipality acts as a bridge builder between different stakeholders, stressing the importance of cooperation and knowledge sharing between different actors to promote an energy transition that works for target groups in a situation of vulnerability. And energy sharing can be a pathway for energy communities to develop inclusive, feasible, and durable solutions, according to Bart

Background: energy sharing in Belgium

Bart de Bruyne and Steven Laurijssen (Klimaan) pioneered energy sharing in Flanders through an offer for social tenants in Mechelen's Otterbeek district. The project faced significant technical challenges and difficulties creating attractive options for tenants with and without solar PV installation. By early 2024, the Otterbeek pilot encountered major setbacks when administrative fees charged by energy suppliers eliminated benefits for tenants that receive energy through energy sharing. As a consequence, the positive effects of solar panels on social houses were limited to only the households that got the solar panels on their rooftop. Next, a Power Purchase Agreement (PPA) was agreed between Otterbeek and the city of Mechelen, providing revenue providing a minimum income from injected rest production that guaranties the offer of cheap energy supply to social renters. The PPA is in fact a contract for difference, whereby local government absorbs a part of the risk of the energy community, and allows Klimaan to experiment with a secured offer of guarantied low renewable energy prices for social tenants. As Bart explains: "Energy sharing is introduced in a cascade. The first to purchase solar power are the people in social housing themselves.

Next, remaining power can be shared with or sold to other social housing tenants. If that right isn't exercised, the rest is sold to an energy supplier. The local government guarantees a minimum purchase price." This scalable approach allows the city to cover any shortfall if the supplier's purchase price is too low. In the meantime, Klimaan searches for new pathways to optimize the use of excess energy for the profit of the vulnerable households, and studies what difference a neighbourhood battery or collective charging stations could make.

In line with this, the city of Mechelen and Klimaan promote energy sharing within multifamily blocks and advocate that often more vulnerable families live in such blocks and that the optimum of one solar installation for the building must be able to provide all tenants with renewable energy of the solar panels without additional costs for grid use or other charges as long as the energy does not leave the building. In the future, also collective heating and collective electrical vehicle charging stations can be connected to the solar installation.

Policy dialogue process around energy sharing, successes and remaining challenges

Within his time granted by TANDEMS to engage in advocacy, Bart started in 2023 two pathways to address identified bottlenecks of the energy sharing pilots in Mechelen and to stimulate opportunities to solve them.

- The first one involves close links with the Flemish Parliament and regulatory work through VEKA (The Flemish Agency for Energy and Climate Change). VEKA was invited to join the advisory committee of TANDEMS which created direct communication channels to address obstacles encountered. The fact that the previous chairman of Klimaan vzw worked for the cabinet of the Flemish Minister of Internal affairs, was an advantage when reaching out on regulatory issues.
- The second pathway involved working through the federation of the energy cooperatives, namely REScoop Flanders. Bart was very active with the start of an internal working group on social impact and this group developed a vision on energy poverty. Based on this vision, policy recommendations were formulated for the policies at the level of the region of Flanders. These recommendations were furthermore presented and spread through a webinar co-organised with REScoop Flanders. In addition, Bart participated in energy sharing expert group meetings of Flux 50 and SAAMO.

Within the city of Mechelen, Bart has become active in a variety of initiatives for the development of renewable energy policy, which he believes has contributed to four concrete results. First, speeding up the process of considering and deciding on the installation of more solar panels on municipal buildings in the city – through the appointment of a dedicated staff member and the establishment of an energy community of buildings in the city of Mechelen. Second, the city of Mechelen has been persuaded to join the Otterbeek energy community, which later led to the development of the above-mentioned PPA whereby the municipality buys excess solar power from the Otterbeek energy community. Thirdly, Bart was able to contribute to the development of a Memorandum on Climate Change by several Flemish cities. And fourthly, Bart has actively contributed to the definition of the Energy and Heat Charter of the municipality of Mechelen and has enabled Klimaan to be one of the first signatories supporting this charter.

These connections yielded significant outcomes. A learning document with policy recommendations from amongst others the Otterbeek experience was published on VEKA, VVSG (Association of Flemish Cities and Municipalities), and REScoop Flanders websites.

Recommendations included, among others: requests for specific regulatory changes, such as better data availability after Ean-splits; development of the Fluvius API for energy sharing; redefinition of the definition of apartment classification criteria; easier and faster procedures to obtain digital metering per quarter; reduction of distribution taxes for energy sharing; requests for open source software for energy sharing; EPC (Energy Performance Coefficient) of the collective of apartments to also apply to the individual apartments; and revised billing methods for PV installations in social housing.

The policy dialogues have resulted in some positive adjustments to the Flemish regulations, as Bart explains:

- Redefining apartment buildings beyond single addresses to include all parts organized within the same association of owners, made it easier to get one energy community in a building spread over several plots.
- Changing how solar panels are billed to social tenants from exactly 90% to a maximum of 90% of the social tariff, which simplified the invoice at a fixed price over a longer period of time, which is easier to handle administratively.
- Improving transparency of energy sharing tariffs on the VREG (Flemish Regulator for Utilities) website, making costs visible to citizens.

"The first two changes have been adopted as amendments to the law, directly based on our inputs", Bart comments. The third adjustment is the result of concerted effort with other organisations.

Significant challenges remain, particularly as energy sharing opposes energy suppliers' interests, creating a non-cooperative attitude on their part. Bureaucratic obstacles and resource shortages continue to impede models benefiting groups in a vulnerable position.

Comparative view

Comparing Bulgaria, the Netherlands, and Belgium, Bart notes that all three countries have recognized umbrella organizations vital for lobbying: EnEffect (Bulgaria), EnergieSamen (Netherlands), and REScoop Flanders. These organizations effectively advocate and unite energy sector stakeholders.

However, substantial differences exist, particularly between Bulgaria and Belgium/Netherlands. For instance, the basic right to connect rooftop solar to the grid remains problematic in Bulgaria but is considered standard in Belgium.

TANDEMS-facilitated experience exchanges have proven valuable and will continue. Bart notes: "When I manage to become more directly involved in co-writing pieces of the law at national level (Flanders), I can learn from our Dutch partners how they have gone about doing so."

Recommendations for policy

Bart continues advocating for greater justice in the energy transition. His key policy recommendations include:

- Requiring energy suppliers to reduce or eliminate high energy sharing tariffs, with special restrictions to charge for initiatives targeting vulnerable groups
- Requesting CREG (Commission for Electricity and Gas Regulation) to investigate differentiated grid costs for energy sharing based on load and capacity requirements

- Making energy sharing accessible for active budget meter customers
- Enabling energy sharing in multi-family buildings without additional charges
- Resolving Energy Performance Certificate (EPC) calculation issues for solar panels on apartment buildings and moving toward socially just calculations that recognize the efficiency of smaller living spaces.
- Expanding the Power Purchase Agreement model used in Otterbeek to other projects through contracts for difference that "offer an opportunity to share risks and support social tenants in the energy transition"

Bart advocates strengthening cooperation between local governments and energy cooperatives through inclusive joint projects supporting vulnerable groups. He calls for innovative financing models, financial incentives for energy cooperatives targeting disadvantaged groups, and impact monitoring to inform future projects. The projects should enable vulnerable groups to get involved as early as other citizens in making profitable steps in the energy transition.

TANDEMS has enabled Bart to deepen his engagement in policy networks and develop ideas. His advocacy now includes ministerial lobbying and network utilization, consistently emphasizing social justice. He intends to expand from local to Flemish and European policy advocacy.

Bart continues participating in platforms promoting climate justice and active energy poverty alleviation. Through REScoop Flanders, he contributes to policy inputs and white papers focused on energy sharing and energy poverty reduction. At the municipal level, he is preparing energy poverty alleviation policies for Mechelen. His ideas for the policies on energy poverty alleviation have reached beyond their intended audience to various energy communities and Provinces, establishing him as a valued expert and policy advisor, a position strengthened through TANDEMS support.

Table 2: Policy oriented activities taken on thanks to TANDEMS

Month	Activities
Oct 2022	Introduce Tandems learnings in a larger brainstorm exercise to collect learnings and policy recommendations within REScoop Flanders.
Dec 2022	Providing input on the definition of energy policies of the city of Mechelen. It resulted in the start of working on more solar panels on own buildings for which then a person (a dedicated staff member is recruited).
Feb 2023	 Participation in session 1 of Warmth Arena to define heating policies of Mechelen. Develop a document with learnings and policy recommendations for energy communities based on Otterbeek experience.
Mar 2023	 Further work on Warmth Arena Policy recommendations of Otterbeek and of energy sharing in apartment buildings and bringing some recommendations into the Flemisch parliament (through REScoop Flanders and sharking learnings with VVSG and VEKA.
May 2023	Distribute lessons learned of Otterbeek through VEKA.
July 2023	Start reflections on a possible memorandum for climate change of Flemish communities, under the lead of the city of Leuven. We have taken in Mechelen the opportunity to integrate our insights in their document. Also contacts with VREG resulted in more visibility on energy supplier administrative costs.
Sept 2023	Work on Memorandum Flemish Cities

TANDEMS: Policy dialogues: From shared learning and insights towards impact

Nov 2023	Specific action to VEKA to highlight 3 items for advocacy on energy communities for apartments:
	 EPC effect of solar panels of common parts to apply also into private EPCs. Reduce administrative tariffs of energy suppliers and distribution tariffs and taxes for energy sharing within one apartment building. Generate within Fluvius an API that allows for automated steering composition and distribution keys of energy communities.
Dec 2023	Repeat with VEKA once more our request of the previous month, and contact on them with the European project FOSSTER.
Feb 2024	Introduce to REScoop United the item on energy supplier administration fees and how they block social energy sharing for smaller often more vulnerable households.
Mar 2024	The message on tariffs of social energy suppliers was repeated on 2 events: one presentation for the broader community working on energy poverty, organised by VEKA and Rescoop Flanders and once in a newly created internal workgroup on Energy Poverty of Rescoop Flanders.
June 2024	Decision to advocate TANDEMS themes by linking forces with the impact working group of REScoop Flanders.
Aug 2024	Data collection for the VITO policy dialogue, and engaging civil society via impact working group REScoop Flanders. Invited by province of Antwerp to explain energy poverty during expert day.
Sept 2024	Various contacts to inspire local policy on energy poverty, in-depth meetings with REScoop Flanders.
Nov 2024	Formulate policy recommendations on energy sharing and energy poverty alleviation for VITO and for REScoop.vlaanderen. Further elaboration of local inspiration list and recommendations, together with Klimaan.
Dec 2024	Making up list of REScoop-examples and others on energy poverty as annex to policy recommendations of Rescoop Flanders. This, in parallel of workshop with VITO on policy recommendations for municipalities.
Jan 2025	National Webinar with REScoop Flanders on policy recommendations. Formulating answers to all participants in the webinar.
Feb 2025	Answering questions on webinar, following long list of VEKA and completing with additional suggestions. This results in an invitation to participate in expert meetings on energy poverty with VEKA. In the meantime start-up to get orientation in local energy poverty policy for Mechelen.

3.2 Bulgaria: spreading best practices on energy community set-up

The interview with Stanislav Andreev from EnEffect took place on March 10th 2025. It addressed the ongoing policy dialogue that he – and his colleagues at EnEffect and on many occasions also Gabrovo and Burgas Municipalities – are undertaking in order to help create a better environment for energy communities and to show others that energy communities are not impossible. In fact, even if the physical, regulatory and legislative context are not conducive, it is still possible to set up energy communities – as evidenced by Gabrovo and Burgas. Basically, the policy dialogue is a two-tiered effort: pressing for much needed institutional change while show-casing the possibilities to those that are still hesitant.

In the light of Task 5.1, the Bulgarian partners have been continuously involved in a policy dialogue (involving many initiatives, discussions, events, meetings), in which they advocate for the need to change legislation and policies in order to encourage energy communities and to enable energy sharing. EnEffect works closely together with the municipalities of Gabrovo and Burgas in this, and the successful establishment of the energy community in Gabrovo as well as the underlying model is presented and discussed whenever an opportunity is present. Below the report of an interview with Stanislav Andreev from EnEffect on the tireless efforts to achieve a more conducive context for energy communities and a more inclusive energy transition.

EnEffect is an NGO that supports local authorities and sustainable energy use and is a frontrunner, initiating innovative pilots and making them visible. "Like the energy communities in Gabrovo and Burgas, these pilots help us make a framework of the process, clarify how communities can be established, what should be done by the local authorities in support of energy communities and what regulations are needed in order to facilitate the process. Our goal in TANDEMS was to develop best practice examples and to create a basis for future development of these initiatives."

Current state of affairs in Bulgaria

Bulgaria faces several significant barriers to the development of energy communities. "Energy communities are not actively hindered, but they are not facilitated either, while that is what is needed." The current environment is not conducive in the following ways:

First, household energy prices remain artificially low through heavy regulation and subsidies. This removes financial incentives for citizens to explore alternative energy models, as conventional energy appears more affordable than it truly is. The subsidized pricing structure primarily benefits fossil fuel consumption, creating an uneven playing field for renewable alternatives. Currently, if a household enters the free market, pricing is based on standardized load profiles rather than actual consumption. "This means that even if I personally adjust my electricity usage according to price fluctuations throughout the day, it won't be reflected in my monthly bill." When net metering and smart metering for households is implemented, tax reductions should apply, especially for locally produced energy. Different network taxes apply for high voltage and low voltage networks. "When energy is produced and consumed locally, we shouldn't have to pay for high voltage network usage. Energy communities that produce and use energy on-site should receive some form of reduction in network fees.

Second, political instability has plagued Bulgaria since 2021, resulting in inconsistent governance and a lack of sustained policy direction. This instability has prevented the

development of coherent policies supporting energy communities and energy sharing models.

Third, Bulgaria's historical context has created public scepticism toward collective models. Many citizens remain unfamiliar with energy communities as a concept and tend to distrust arrangements that resemble collectivism. This cultural barrier compounds the lack of financial incentives.

Fourth, regulatory frameworks remain inadequate despite recent progress. While the European Commission's penalty procedure in 2021 forced Bulgaria to adopt a definition of energy communities in its legislation, implementation remains problematic. As Stanislav explains: "Just the definition is not doing anything by itself... now an energy community can be any legal form and that is not supporting." This regulatory ambiguity creates practical challenges:

"In both cases of the Burgas and Gabrovo energy communities, a possible legal form was applied that is not exactly made for energy communities and the exclusion/addition of new members is associated with a lot of bureaucracy. This needs to be improved as the current legal context does not allow for flexibility."

What Bulgaria urgently needs, according to Stanislav, includes the following:

- Market liberalization for household consumers to create realistic price signals
- Smart meter infrastructure deployment to enable energy sharing
- A national registry to officially recognize energy communities
- Specific legal structures adapted to community needs
- Clear operational guidelines for establishment and governance of energy communities

This all matters for energy justice, as the current model primarily benefits large corporations: "Most new renewable projects are huge power plants implemented by large investors, with no role for society. Ordinary people do not have any role in this process." Energy communities represent an alternative path that could democratize the energy transition, providing citizens with active participation in their energy future rather than remaining passive consumers in a system dominated by large-scale commercial interests.

Energy Sharing in Bulgaria

Bulgaria is in the early stages of developing energy communities and energy sharing initiatives. EnEffect has emerged as the leading non-governmental organization in Bulgaria that works to achieve a more inclusive energy transition, among others through its focus on energy communities. In this, it works closely with the municipalities of Gabrovo and Burgas, setting up concrete pilot projects.

These pilot initiatives represent important milestones in Bulgaria's energy transition, as they demonstrate that energy communities can be established even without optimal regulatory frameworks. As Stanislav notes: "Since 2019, a lot of people in Bulgaria are talking about energy communities, but they are just talking and complaining about the lack of proper legislation. They are right of course, but we also tell them to start acting and we show what we have been able to achieve even without supportive legislation."

The documentation, templates, and contracts developed through these pilot projects are now publicly available, allowing other municipalities to replicate these successes without having to

start from scratch. This practical approach is proving more effective than waiting for perfect legislative conditions, as those conditions are highly dependent on the political climate which has been very unstable over the past years.

Currently, Bulgaria faces a split energy market situation where municipalities and companies operate in a liberalized market, while households remain under regulated pricing. This creates challenges for energy community development, as the benefits of participation can vary significantly between different types of participants. Political sensitivity around energy prices remains high: "Two times governments in Bulgaria fell due to rise of energy prices."

Despite these challenges, recent political stability with "a permanent government that hopefully will last more than a year" provides cautious optimism for more consistent policy development. This stability, combined with new initiatives to adapt legislation for energy communities, suggests that in fact the conditions for energy community development in Bulgaria are slowly improving.

Policy dialogue process around energy sharing, successes and remaining challenges

A couple of weeks ago, on behalf of the Gabrovo energy community, an official letter to the Ministry of Energy and the National Energy and Water Regulatory Commission was sent by the community requesting a reduction in network taxes for the energy produced and shared with the municipality. It's an ongoing discussion. Based on this letter, EnEffect was invited to meet with the Energy and Water Regulatory Commission to discuss what can be done and how.

When asked what makes the policy advocacy difficult, Stanislav points out how policy makers do not find all of this an important topic. "It's not that they have a strong opinion against it. They just don't want to be bothered."

Political impasse and lack of will have been hampering the development of the necessary policies to stimulate the creation of energy communities. An energy community can produce and use energy locally, while a large PV plant located in a field far from consumption centres creates network issues. "When the network is overloaded, these large plants should reduce production, but our rooftop installations that use energy on-site wouldn't need to be curtailed. So, there is likely to be opposition from these large companies and investors that lobby for their narrative which is that it is much easier to reach renewable energy targets by building a few hundred-megawatt plants than thousands of smaller community-based rooftop PV systems.", Stanislav explains.

Increasingly, EnEffect is regarded as an expert organization, which contributes to the trust and long-lasting good relationships with different governmental bodies. "We've been asked by the Sustainable Energy Development Agency, which operates under the Ministry of Energy, to advise them on the development of short guidelines on the establishment of the first communities so other local authorities can use these and continue the process. This will be developed within TANDEMS. In the meantime, we maintain active communication with both national and local authorities on this matter."

Over the past years, EnEffect has established itself as the leading organization in Bulgaria for energy community expertise, actively engaging in various forms of policy dialogue and advocacy. Their approach combines practical implementation with strategic advocacy, creating a model that demonstrates how energy communities can function within existing frameworks while also pushing for regulatory improvements.

EnEffect's policy work spans multiple formats:

- Direct guidance for municipalities and local authorities: EnEffect has been asked to develop "short guidelines on how we established the first communities so other local authorities can use them." This practical guidance allows municipalities to implement energy communities based on proven models rather than theoretical concepts.
- Active participation in multi-stakeholder events: The organization regularly attends and
 organizes events focused on energy communities, often bringing along representatives
 from Gabrovo and Burgas municipalities who share first-hand experiences from the local
 authority perspective.
- Secretariat role for the Municipal Energy Efficiency Network: Through this network, EnEffect maintains active relationships with Bulgarian municipalities focused on sustainable energy use, providing a platform for continuous dialogue and knowledge sharing.
- Advisory capacity to national agencies: EnEffect works with the Sustainable Energy Development Agency (under the Ministry of Energy) to develop policy frameworks for energy communities.
- Support for legislative development: The organization and Gabrovo Municipality have expressed their readiness to support a new initiative with Innovation Norway and the Ministry of Energy to adapt legislation to stimulate energy communities, starting with legal framework analysis and development of a Energy Community Register in Bulgaria.

The TANDEMS project has provided crucial resources for these advocacy efforts, allowing EnEffect staff to dedicate significant time to policy dialogue. As noted by Stanislav, "thanks to the support of TANDEMS and being part of TANDEMS, we can spend a lot of time on these tasks." This has amplified their advocacy impact, enabling the whole team to engage in policy work, with several staff members becoming recognized "faces" of energy community development in Bulgaria.

EnEffect's approach to policy advocacy emphasizes practical solutions. Their core messages to other actors in the field has been direct: "stop complaining, stop waiting for somebody to do your job and just try to work harder in order to make things happen." This action-oriented approach has allowed them to make progress despite imperfect regulatory conditions.

For policymakers, EnEffect actively tries to frame energy communities as a political opportunity, arguing that politicians who provide a fair energy transition process can benefit in future elections if citizens recognize this as something good for them. This narrative positions energy communities as both socially beneficial and politically strategic.

Comparison with Belgium and the Netherlands

Bulgaria's position on energy communities and energy sharing differs significantly from Western European countries like Belgium and the Netherlands. Energy communities have been established in countries like Belgium and the Netherlands some years before, giving these countries a head start in developing effective models and regulatory frameworks.

This later start for Bulgaria creates both challenges and opportunities. While it means Bulgarian stakeholders must accelerate their efforts to catch up with EU Directives (EU/2023/2413 and EU 2019/944) requirements, it also allows them to learn from the experiences of early adopters and avoid mistakes made by them. This positioning allows Bulgaria to potentially leapfrog certain challenges by adopting proven solutions rather than

experimenting with approaches that have already failed elsewhere. As an example, the Belgium tax regulation is brought up, which is not well regulated in the different regions. Also, Austria is pointed out as an example which can help Bulgaria to implement more effective regulations from the start.

The Netherlands has developed a national umbrella cooperative EnergieSamen that serves as an advisory body and lobby for energy community development. This organization has grown quite substantially over the past years and is regularly consulted by municipalities and legislative processes. Similarly in Belgium there is REScoop Flanders, working to establish an equivalent umbrella role for energy communities. While their legal form may differ, these organizations serve comparable functions to EnEffect in Bulgaria, which has established itself as a central knowledge hub despite having a different organizational history.

A key distinction between Bulgaria and many other European countries lies in market liberalization. While Belgium and the Netherlands have fully liberalized energy markets, Bulgaria maintains regulated pricing for households while municipalities and companies operate in the liberalised, but still subsidised, market. This creates unique challenges for energy community development that differ from those in Western European contexts.

Recommendations for Policy

Based on the experiences shared in the interview and the comparative analysis with other European countries, several policy recommendations emerge for advancing energy communities and energy sharing in Bulgaria:

- Implement a practical regulatory framework: Bulgaria should develop a regulatory framework that allows energy communities to function effectively while continuously improving. The National Register for Energy Communities currently being developed represents an important first step, as it will formalize recognition of energy communities and enable targeted support measures.
- Establish clear energy poverty measures: as market liberalization proceeds, Bulgaria must implement effective measures to protect vulnerable households. As Stanislav explains: "we have a definition for energy poverty, but it's not applicable now because there is no responsible institution to apply this definition." Assigning institutional responsibility and creating support mechanisms for energy-poor households should precede full market liberalization.
- Develop a phased approach to market liberalization: the transition to a fully liberalized energy market for households requires careful planning and communication. This process should be communicated with the people to ensure citizens understand they won't be saddled with unaffordable energy prices. A phased approach is needed with targeted subsidies for vulnerable groups to mitigate the political risks associated with energy price increases."
- Education and awareness for local authorities: develop and implement awareness campaigns, information materials, and training for Local Authorities, equipping them with the knowledge and tools necessary to support energy communities.
- Financial support for pre-feasibility assessments: offer financial support for pre-feasibility assessments, covering costs associated with preparatory activities to assess the viability of establishing an energy community.
- Leverage existing knowledge networks: the Municipal Energy Efficiency Network and other existing structures should be utilized to disseminate knowledge about energy communities.

The public availability of templates, contracts, and procedural guidelines from successful pilot projects creates a valuable resource that should be actively shared through these networks.

- Secure ongoing resources for advocacy: the interview highlights how project funding through TANDEMS has enabled sustained policy advocacy. Continued progress will require similar resources, whether through new project funding or other mechanisms.
- Encourage action despite imperfect conditions: perhaps the most important recommendation is to encourage municipalities and other stakeholders to take action even without optimal regulatory conditions. The successful pilot projects in Gabrovo and Burgas demonstrate that you do not have to start from scratch and that progress is possible within existing frameworks. This action-oriented approach can create momentum for broader adoption while also informing regulatory development based on practical experience.
- Build on political stability: the recent establishment of a more stable government in Bulgaria creates an opportunity for consistent policy development. Stakeholders should leverage this stability to advance longer-term policy goals that previous short-lived governments could not address.

Table 3: Selected overview of high-level policy events attended by EnEffect (and Gabrovo and Burgas)

Dates & year	Event/activity	Involvement by Eneffect, Gabrovo and/or Burgas municipality
05.10.2023	National Round Table on Financing Energy Efficiency Investments in Bulgaria	Over 133 participants 18 representatives of national and local authorities Among the participants were Julian Popov (Minister of Environment and Water), Angelina Boneva (Deputy Minister of Regional Development and Public Works), Ivaylo Alexiev (Executive Director of Sustainable Energy Development Agency) Stanislav presenting the model of Gabrovo followed by discussion
13.10.2023	National Energy Conference "Renewable energy and energy security: benefits versus risks	Among the participants were policy makers and experts from the Ministry of Energy, the national Electricity System Operator, the energy distribution companies, and NGOs. Dragomir moderating a session focused on the need for changes in the approach and regulatory framework for harmonisation the development of renewable energy and achieve high energy security
28.11.2023	XVII Annual national conference of the Association of Bulgarian Energy Agencies	139 stakeholders in total 36 representatives from national and local authorities The main challenges of the Gabrovo energy community were shared and possible solutions were discussed
09.04.2024	Roundtable Energy citizenship in Bulgaria: Independence and Energy Transition	Participants: policy makers, researchers, academia, business and NGOs.

		Main topic of discussion: how active citizen participation will accelerate the goals of the energy
		transition and reduce costs to society.
		Stanislav presented the model of Gabrovo and details were discussed with the director of the Sustainable Energy Development Agency (who is one of the first members of Gabrovo energy community).
23-24.04.2024	Roundtable "The future of	98 participants in total
	financial instruments for sustainable energy" and XXV	27 policymakers
	National conference of EcoEnergy	Key takeaways highlighted the opportunities for renewable energy support aimed at both households and municipalities
		Stanislav presented the model of Gabrovo and new opportunities for businesses and local authorities to collaborate were discussed
30.05-01.06.2024	Energy Efficiency and Green	76 participants in total
	Energy Days	Citizens, policy makers, professional association representatives, NGOs and media representatives gathered to discuss critical issues related to energy efficiency and renewable energy
		The new energy community project in Burgas was officially announced together with the mayor of Burgas and the former minister of energy, Zhecho Stankov
03-04.07.2024	Mayors Talk conference	66 participants in person
		Representatives from the Ministry of Regional Development and Public Works, along with local authorities discussed the role of energy communities and how cities can actively contribute to the fight against climate change
		Gabrovo and Burgas model widely discussed
12-13.11.2024 -	National roundtable for financing	93 participants in total;
	sustainable energy investments and XVIII National Conference of the Association of Bulgarian Energy Agencies	Members of Renovate Bulgaria and the Association of Bulgarian Energy Agencies alongside representatives from the Ministry of Regional Development and Public Works, the Sustainable Energy Development Agency, the World Bank, the European Commission, and other experts. Discussed the need for structural reforms and active private sector involvement as well as citizen participation in the energy transition, specifically addressing the development of energy communities and public-private partnerships with Bulgarian municipalities.
30.11.2024	RES application in construction, BAU Academy forum	Presentation of Gabrovo and Burgas energy communities models and discussion with engineers, planners and architects with interest in EE and RES in construction.
25.02.2025	Online consultation for experts from the Ministry of Energy	Experts from EnEffect met with representatives from the Ministry of Energy and discussed key reforms aimed at strengthening support for energy

		communities. During the meeting, ministry representatives invited us to present our recommendations for legislative changes to further facilitate this support, recognizing our experience as initiators of the first operating energy community in Bulgaria.
11.03.2025	Meeting with Energy and Water Regulatory Commission	Experts from EnEffect and Gabrovo Municipality met with representative of the Energy and Water Regulatory Commission to discuss the requested reduction in network taxes for the energy produced and shared by Gabrovo's energy community and the Municipality.

3.3 Netherlands: local ownership, energy sharing and justice

We first report on the dedicated policy session organised with Agem, the municipality of Berkelland and Naoberwind energy cooperative in section 3.3.1. This session focuses on different ways to organise local ownership of renewable energy. Next, in section 3.3.2 follows the report of the interview with Justin Pagden, our partner from Agem. In this interview, he explains his advocacy role, his ideas about the adoption of energy sharing in Dutch law and how his advocacy has had an impact on the actual policy and legislative process.

3.3.1 A policy dialogue about local ownership

Introduction

Energy communities are supposed to give citizens a more central role in the energy transition, as part of a path towards a market organisation where not merely commercialeconomic values (and value creation for shareholders) stand central, but rather a combination of ecological, socio-economic and social values. How energy communities are to contribute to this is not yet entirely clear, as it is also not yet sufficiently clear what they can and cannot do. New collaborations between local governments and energy communities are also not yet a given. These so-called public-civil partnerships between governments and citizen initiatives are not anchored in existing rules, ways-of-doing and -thinking in the way public-private partnerships are. 12 The focus of the policy dialogue session was on local ownership, which can be seen as part of a broader exploration of new arrangements for public-civil cooperation.¹³ Unlike the Belgian policy dialogue session which was more broadly addressing a wide range of possible actions to enhance solidarity and justice, this policy session zoomed in on taking one specific topic to discuss how local ownership can get shape.

Local ownership

Local ownership is seen as an important component in strengthening the role of citizens in the energy transition and as a way to achieve a more equitable energy transition (as a way to

¹² The project Opgroeiruimte that addresses this as well (see https://www.duurzaamdoor.nl/nieuws/opgroeiruimte-de-praktijk-samen-leren-en-groeien-naar-eengelijkwaardig-partnerschap in Dutch)

13 in which private parties can also play a role

create and retain local value). The Dutch Climate Agreement mentions that 50% of all new wind and solar projects should be locally owned (NPRES 2024; Participatiecoalitie Noordholland 2021). It is up to local governments to give concrete substance to this. Several (local) governments are in the process of drafting policy specifying how project initiators are to commit to local ownership. Local ownership as a theme for a policy-oriented dialogue session was prompted by this context, from the observation that local ownership can be organised in different ways, with different implications for those involved. Local ownership can be made mandatory in several ways and in doing so, justice considerations could be included as well. This was the reasoning behind the idea of the policy dialogue. In line with this, it was decided to develop several local ownership scenarios and then ask how justice (i.e., recognitional justice; procedural justice; distributive justice) can give shape to each of these scenarios, and what that means for the role of the municipality and the role of the energy cooperative.

As a 'case study', Search Area K in the Dutch region of the Achterhoek (a TANDEMS pilot) was selected. Search Area K is an area spanning the municipalities of Oost Gelre and Berkelland that has been identified as suitable for wind power development in the Achterhoek Regional Energy Strategy. The Berkelland municipality, at the time of writing, is developing the spatial conditions for wind power development, in order to present these to the council. Simultaneously, a local ordinance is being drafted that focuses specifically on the interpretation of local ownership of renewable energy in the Achterhoek region. The municipality's official stance towards wind energy development was at the time of writing not yet made explicit in policy. The municipality was interested in participating as a way of exploring the topic of local ownership in relation to Search Area K. Energy cooperative Naoberwind also was interested in participating, as this theme touches on Naoberwind's potential future role in wind power development in Search Area K. For Naoberwind, participating in the policy dialogue was a way to get to grips with the ways in which local ownership can be interpretated. Naoberwind's position is that in case the municipality decides in favour of wind power implementation. Naoberwind wants to be ready to take up a leading role in order to ensure that it is being developed by and for citizens. But until that policy is in place, Naoberwind does not take a position on the desirability of wind energy, nor does it want to be actively involved in municipal policy-making processes.

Based on a number of exploratory consultations with the municipality of Berkelland, energy cooperative Naoberwind and Agem, a final outline for the dialogue session was drafted (see Annex 3 - A) and the session took place on December 3rd, 2024. Participants included Berkelland municipality, Naoberwind and Agem. The policy dialogue took place at a moment in time when there was no formal engagement between the municipality and Naoberwind on cooperation yet. The dialogue session was regarded by the participants as an exchange of ideas and an exploration of possibilities with no formal commitment to the outcomes.

Scenarios and justice dimensions

Local ownership can be organised in different ways, and three scenarios were drafted to start the conversation on this. Other scenarios are also conceivable, and the interpretation of the scenarios developed is not set in stone either. They were a means to enable a conversation about what is important when choosing a particular design for local ownership. To discuss 'what is important', the concept of justice was broken down into three dimensions, based on literature on the topic, which helped to make the conversation more concrete. With three

scenarios and three justice dimensions in hand, we asked the following overarching questions in the interviews and dialogue session:

- How can fulfilment of each of the 3 justice dimensions via local ownership take shape in each of the three scenarios?
- What does that mean for policy?

Before turning to the findings of the interview sessions, we briefly explain the justice dimensions and scenarios (see Annex 3 - B for more details on the scenarios).

Text box 3: Justice dimensions

- 1. Recognitional justice: stakeholders feel seen/heard. Who is seen, recognised as a stakeholder?
 - Recognise a diversity of people and diverse backgrounds, needs, interests, opportunities and perspectives.
 - There is extra focus on precisely those people who often don't participate, don't step forward, don't have time

(Recognition is closely related to inclusion, and inclusion is understood as the opposite of exclusion)

2. Procedural justice: the process is perceived as fair by those involved.

Who is invited and/or represented? (E.g. can people with limited resources also participate?)

- The purpose and scope of participation is clear to all involved
- All relevant stakeholders (including residents) are involved
- AND/OR: all perspectives of relevant stakeholders are represented in the process
- 3. Distributive justice: distribution of benefits, burdens, advantages and disadvantages is seen as fair
 - There is a focus on sharing the benefits and burdens throughout the development phase (in a process that actively involves the local stakeholders)
 - It is decided with the local stakeholders how the revenues (power; money) are to be distributed or deployed
 - And/or the diverse needs of the local stakeholders are taken into account in deciding how to distribute revenues
 - With extra attention to those with low ability to pay so that they benefit from the generation project and trajectory

Text box 4: Three scenarios for local ownership

- 1. 90% locally owned by Naoberwind, there are social land-compensation agreements with farmers and they are also members (1 vote each) of the cooperative.
- 2. This is purely 100% locally owned, but with a solid majority stake for the municipality (70%). Naoberwind has 30% ownership. Percentages are as in the first scenario fictitious and indicative
- 3. Steward-ownership model: the ownership of the generation facility lies with a foundation and through agreements it is ensured that decision-making is in line with certain principles (e.g. no-more-than-before/affordability; sustainability; cost+).

Below we report on the main issues that emerged in the discussion of the scenarios, structured according to the three justice dimensions. Various issues mentioned while discussing scenario 1 turned out to be of relevance to scenarios 2 and/or 3 as well. Therefore, we do not refer to the scenarios in great detail. In table 4, however, by way of summary, we do make statements about the possibility of shaping each justice dimension for each of the three scenarios. The intention of the conversation was not so much to achieve and present a comprehensive assessment of each scenario, but to clarify the main points of

discussion and consensus. Thus, the participants do not all agree on all points. We conclude with the policy recommendations made during the dialogue session, followed by an overview of the concrete interpretation for each justice dimension - to be further developed as policy suggestions.

Interview session findings

Recognition: how to make it inclusive and how inclusive?

Scenario 1 is a scenario in which Naoberwind represents the interests of the residents in Search Area K. The reason for establishing Naoberwind was to be able to organise the interests of residents and the local stakeholders (and not primarily to generate sustainable energy; or to make money). Hence, the health and well-being of residents, nature and the environment is central to Naoberwind. According to the energy cooperative, this is very clearly reflected in scenario 1.

Secure recognitional justice in the statutes and governance of the cooperative

Address justice in statutes, regulations and in governance

The question is how to secure recognitional justice in a way that allows you to also represent 'the smallest minority group' of residents. And how far to go in doing so. The cooperative can include considerations on this in its statutes or in the internal regulations. ¹⁴ Recognitional justice can be defined in the statutes, and coupled to that, principles and guidelines can be developed. Another idea is to appoint people in the board to represent 'non-members': a board member can represent precisely those who do not easily speak up; a board member can represent the young; in addition, someone can represent the future generations and a board member can represent the non-human stakeholder such as, for example, the 'meadow landscape' of the Achterhoek. This is a way to ensure that you keep paying attention to the minority voice and minority perspectives and include them in decision-making. How heavily those voices weigh, and whether they have a veto, is something that needs to be decided as well.

While organising this, it will become clear how far to go in this. A start can be made with including the most obvious stakeholders and perspectives that you know exist in the area but which you have not managed to involve yet. This can be expanded over time and it can be experimented with: How does it work out if someone is representing the meadow birds? Important is to not set a limit to diversity in advance, but to use a learning principle that is described in the statutes (or regulations).

How do you safeguard that, who oversees it?

A municipality could require what is described above in an ordinance. That would require project initiators to indicate how they plan to comply with that ordinance, e.g. by including recognition diversity in the statutes; or by drawing up a plan and/or setting up a supervisory board with externals to oversee this. Next, if a cooperative could show that it properly addresses recognitional justice, it could get a 'good rating' in the licencing and other

¹⁴ In the rest of the text, we talk about amendments to statutes, but this can also be arranged via the by-laws, saving a visit to the notary and ditto costs.

procedures on this point. In fact, this is where a cooperative could make a real difference compared to a commercial party – e.g., Naoberwind is much better positioned than a commercial company to include a variety of local perspectives and stakeholders.

Impose or advise and support?

This could work for the municipality. But for a cooperative, a residents' initiative, it could also be experienced as restrictive. Naoberwind would prefer it if the municipality first discusses these notions about recognitional justice with an initiative, that it provides suggestions and offers advice, however without directly imposing or laying down what exactly it should look like and what should be written down in the statutes. After all, the strength of the cooperative is that it rises from the bottom up, not that it follows a prescriptive approach set out by local government. Including recognitional justice in the statutes/articles of association is something that best arises from intrinsic motivation, not because the municipality says so. So, the question to the municipality is how far it wants to go in formalising this? Because it can be adopted in the statutes of a cooperative, but it could also be addressed through a general membership assembly decision on how to shape recognitional justice best – and get all members behind you in this.

This discussion touches on the issue of how to work together as a municipality and cooperative. Is there room to have the conversation, jointly flesh out justice dimensions and search together (while doing so) for the most appropriate way(s) to make it work? Or is it better to formalise this with detailed (cooperation) contracts and the like?

Other ways to hear all voices

Survey of residents

What was also suggested is to commission a survey among residents or with residents, with specific questions, so that the results can be used in the design of the process. This is related to procedural justice, as a seat at the table and a voice is given to the broad group of people who usually do not attend meetings and consultations. This can be complementary to formal consultations.

Citizen assembly

Another option is for the municipality to organise this with a genuine citizen assembly with broad representation, an 'environmental advisory assembly' in which it is ensured that there is representation from all possible stakeholders, that there are regular meetings, guided by an independent chairman, with a clear agenda for each deliberation. If there is agreement and clarity on how this process is organised, it means that the outcomes are also adopted by the initiator of the wind power project (regardless of which party that is - Naoberwind or the municipality or another party). This option moves beyond formal consultation in any case. It should be clear to what extent the results are compulsorily included the planning of the initiative and in what is proposed for licensing.

What should be done and by whom?

Here again there is the discussion to what extent it should become mandatory. A question rises as to whether a cooperative could be obliged to organise a citizen assembly as well? Or does this lie with the municipality, whereby the cooperative - if it is the initiator – is obliged to take into account the results and outcomes?

How to cooperate on recognitional justice?

Another suggestion is to not specify any form and organisation, but to ask for a certain outcome - for example, in a tender - without specifying how this should be achieved. Then you leave open how a cooperative (or other initiator) organises and gives substance to it (e.g., recognitional justice in the statutes; stakeholder representation via board members; residents' survey; citizen assembly; or otherwise). This is a more performance-based approach and it implicitly assumes that responsibility lies entirely with the initiator and not with the municipality (unless the municipality is the initiator, of course).

There is some debate and disagreement on how to organise the inclusion of recognitional justice. While for the municipality, it seems a good idea to include requirements that are to be met by initiators of wind energy projects, for energy cooperatives the notion of autonomy is highly valued. From the perspective of cooperatives and starting citizen initiatives, there is a need for good conversations upfront with the municipality. Conversations in which both sides can be open, in which the cooperative can indicate what it would like to see from the municipality (e.g. regular contact with officials who can advise on points; conversations with others who bring in experience and examples), i.e. a setting that provides space to explore cooperation and in which the cooperative is not directly 'captured' in formal rules.

Procedural justice

The public interest and the interests of all

From the perspective of the municipality there is emphasis on how the municipality, as a guardian of the general interest, is there for all citizens, even if it is not necessarily perceived as such by everyone. In this line of thinking, it would be up to the municipality to first recognise the wide variety of interests, review these and then make a weighted decision that is in favour of the public interest. That is why municipalities exist: because we do not manage to get that organised in society as neighbours. In practice, of course, politics and different interests interfere with this ideal process. Another difficulty lies in who is to define what 'the' public interest is. Moreover, the municipality also imposes decisions that part of the citizens disagree with. Such experiences do not work in favour of the municipality when it tries to organise citizen participation. At the same time, if the municipality is an initiator (in this case, of a wind farm in local ownership), and if an ordinance on local ownership is drafted with a focus on justice, then of course the municipality also is to adhere to it, just like anyone else.

Securing procedural justice from a municipal perspective

In the discussion on procedural justice, the municipality envisions this as follows in a scenario where it is initiator and (largest) owner. Suppose there is a policy choice in favour of wind power implementation and the municipality takes on an active role in the ownership of a wind project, then the question arises which values and justice principles are relevant and how these will be made concrete. The municipal council has to take a position on this. And in a representative democracy, any citizen can submit her/his views. At some point, the council makes a decision. If the municipality takes an active initiating role, this involves a process that goes beyond participation regulated by law. For example: very broadly inviting people to information meetings; invite people to think along about how this initiative can be organised even better; what interests need to be taken into account? That could even include a citizen

assembly. A saturation point is reached when the answer to the question *Will more* participation result in more quality of process or outcome? is No. Furthermore, the municipality emphasises that it has direct access to various (welfare) organisations. So, if the policy is to go for a cost price+ model, the municipality can firstly make that available to the people who need it and directly reach out to them. This is done in a similar way as the energy allowances were organised, namely via the energy transition programme line and with other programme lines such as poverty alleviation. The municipality can organise all that within its own organisations and programmes. In this thought-experiment, it seems that there is no need to involve the energy cooperative, but it is stressed that that is not the case.

Securing procedural justice within Naoberwind

For the cooperative it is clear that especially people from the search area can become members and sit at the table and help determine what the statutes will look like. Naoberwind's reason to exist lies precisely in the wish to have citizens think, do and decide. Once the basics of the model for wind project development are established with the input and involvement of those residents, other people can get involved – e.g. citizens that live elsewhere who want to participate financially (they will also have a vote).

Discussion points

From scenario 2, where the municipality is the initiator and has a majority share, it seems as if the municipality can do it all without any need for Naoberwind at all. But that is neither the case nor the wish. After all, Naoberwind has strong connections with residents and has held talks with many farmers and made agreements on socialised compensation with landowners.

Another point raised in favour of a firm role for the energy cooperative is that citizens are likely to find it easier to share their perspective with the cooperative than with the municipality. When citizens can easily reach cooperative board members, directly or via-via, this is easier than submitting their view to the municipality in a consultation process. Of course, the condition is that the cooperative is organised in an inclusive manner, but that is at the heart of Naoberwind.

Against the narrative of the municipality serving the public interest, it is further noted that a citizen's influence is virtually nil in scenario 2, being drowned out in decision-making by the council and board - and by political issues. Political changes furthermore can seriously affect the continuity of the process and direction. Wind power projects have a history of becoming the subject of local political strife and struggle, which does not make it easier for citizens to exert influence on the process.

However, within the cooperative, real influence of citizens is not guaranteed either. Over time, decision-making there too may increasingly fall to members who as a group are not representative of the wide variety of residents in Search Area K. It is also mentioned that there is a risk that the cooperative will not get it all organised (due to lack of knowledge, expertise, manpower, and other resources). The question that arises here is how professional the cooperative is and how administratively stable. And if the cooperative cannot deliver on its ambitions for wind power development, the consequence could be that the province decides to overrule, making way for a commercial party to develop the project and run off with the profits.

How and in what relationship to work together?

For Naoberwind, it is important not to be regarded as a mere vehicle for participation by the municipality. If the municipality claims a majority ownership percentage in the wind project, it will be difficult for Naoberwind to explain this to its members. For what does the cooperative then offer to its members – citizens and landowners - if it no longer has sufficient control over important aspects (e.g., financial model; the exact project design and the actual siting of the turbines)?

If the council decides that the municipality is to be the main initiator and owner, the cooperative may decide to decline the honour for the reasons set out above. However, things could also turn out differently, with the municipality being instructed by the council to give the best possible support to the cooperative. That would mean the municipality offers protection, advice and support while leaving room for the initiative to develop its own course. In such a case the municipality does not take a client role, but the role of a partner.

Variations on scenarios 1 and 2 are conceivable - ownership can also become *fifty-fifty*, opting for cooperation and partnership and with the cooperative as a co-owner taking part of the development risk. It is also possible for a partner to have a golden share, and/or have full control on a specific aspect and not on other points. This is something that can be discussed, decided and set up together.

The above shows that procedural justice can partly be organised in agreements, in contracts, decisions and statutes. However, that is not enough; good cooperation and partnership require regular meetings and conversations, where municipality and cooperative keep each other on their toes about procedural justice. But also to get to know, understand and trust each other better - where the questions one has about the other regarding representativeness, professionalism, stability, continuity can be addressed. Different forms can be used to set up participation in the best possible way (consider a combination of instruments deployed by both the municipality and cooperative; and/or by the project organisation in which both are represented). Cooperation agreements can explicitly name these instruments as well as an approach to monitor and evaluate the process.

Distributive justice

Members and non-members benefiting equally

For Naoberwind, it is important that citizens can participate, even if they do not want to or cannot invest in the wind project. In addition, the membership fee is very low, only 25 so that cannot be a huge barrier either. At the same time, even if a low membership fee removes financial barriers, it does not necessarily take away other reasons why people do not become members. One question that arises is whether one has to be a member to have her/his interests represented as a citizen. As a cooperative, how do you deal with the people who are not members? For the municipality, of course, this naturally is an important question - as guardian of the public interest. And how to ensure that the energy cooperative, despite the best intentions at the start, does not get captured by a small group and turned into an exclusive organisation?

In principle, an energy cooperative has no profit motive - in fact, the law says so - but it can distribute profits to its members. Here we enter a somewhat grey area, as in theory an

energy cooperative can decide how do distribute profits to its members. The question is if and what to write down in the statutes/articles of association, about investments by members and returns on investments and how that relates to voting rights. A lot of cooperatives consist of people who participate financially and have a vote. So the people who vote on the returns on investment are in part those with a stake in this. Some energy cooperatives got quite rich during the energy crisis. Some cooperatives have internally agreed not to pay out more than 3.5% in returns, while others have set no such limits. Some cooperatives reinvest profits in energy poverty alleviation, others do not. Either way, it is an important point to make agreements that are clear and in line with the values that a cooperative holds high.

Securing financial participation and control

From the point of view of distributive justice, there is the choice to separate money and influence (greater financial participation does not mean more control), and set a limit on distributing profits. A rule can be set that individual return on investments do not exceed 3.5% (for example) and that any remaining surplus is invested in (local) social causes. This can be laid down in the statutes.

Another distributive mechanism that differentiates between different stakeholders involves a 'circle of concern': the people living closest to the wind turbines will then have the first opportunity to buy a cooperative share in a crowdfunding. This is then set up for residents of the two involved municipalities in the case of Search Area K. This is quite common, and in doing so, it is possible to ensure higher returns for those who live closer (and suffer more direct impacts from the wind turbines).

In addition, you can opt for a cost+ model and set it up so that all residents can take advantage of a transparent and stable proposition that you develop, without having to become a member of Naoberwind.

These measures diminish the risk of capture by a minority within the energy cooperative.

Cooperation in cost+ for distributive justice

Discussions about the above were not intense, although the municipality did note that whatever is included in the statutes of a cooperative could in theory also be changed with a majority vote in the general assembly meeting. But of course, the municipality could also revise its policy, so there is no guarantee of continuity of a chosen approach there either. This again points towards the need for regular meetings, ongoing dialogue that addresses not only technicalities but that addresses the partnership itself, between municipality and cooperative. In case of shared local ownership, cooperation agreements can also lay down agreements on revenue sharing. Finally, in the cost+ model, the idea is to use surplus and profits to keep the price of energy low and stable for citizens, so a choice for that model is an implicit statement against excessive profit distributions.

Scenarios and justice dimensions

Tenure model as a combination of scenarios 1 and 2?

Participants found the steward-ownership model interesting, but also still unclear in how it could be applied in the context of the case of Search Area K. In some sectors, it is a well-known and proven model, but this is not the case for local renewable energy projects, let alone how it then could contribute to the justice dimensions. Nevertheless, some aspects have been identified that are interesting to explore more in-depth.

Scenario 3 was discussed as a combination of scenarios 1 and 2, or as a scenario that potentially solves some of the disadvantages and objections brought against each of these two scenarios. Scenario 1 places a lot of responsibility with a citizens' initiative, while in scenario 2 the municipality is rather dominant. With fifty-fifty shared ownership, the question rises as to how to organise that. In such a situation, one could decide to have the municipality and cooperative as initiators of the project, but the implementation with the stewards. So, taking the initiative to start a project in local ownership could be a joint effort, for which a process is organised where all interests are put on the table, good conversations are had, and agreements are arrived at. Next, a group of stewards could be made responsible for the implementation, based on the agreements made (including development, realisation, operation, and management). In such a scenario, neither the municipality nor the energy cooperative implement the project. Instead, a foundation is made responsible for this, in line with statutes or regulations that are drawn up together. This would mean that justice dimensions are discussed, agreed on and operationalised upfront and laid down in a mission and vision, so that the stewards can steer accordingly. In this way, the project decision making cannot be hijacked by cooperative members or by politics. The foundation with stewards is a vehicle to achieve the implementation of a certain mission, vision, strategy. The stewards are impartial and only bound by the mission, vision and strategy (and any agreements established in line with these).

Instead of a foundation, a project company could be chosen as a vehicle. There also, care needs to be taken to ensure an inclusive process. A company with shareholders is less 'protected' than a foundation with a social interest. In the Netherlands, there is no legal entity yet that specifically facilitates the stewardship model. What is more common is a company in combination with a foundation whereby the latter has a golden share and can intervene accordingly if needed. So, in the case of Scenario 3 for Search Area K, such a foundation would be set up after having had a participatory preparatory process - so that the mission, vision and strategy would be the outcome of that process that has been organised in accordance to the three justice dimensions. This raises the question of whether the stewardship model is not mainly suitable for the exploitation phase (and not so much the preceding phases).

In any case, if it is decided that it makes sense to use this model, then the statutes of that new foundation also adequately reflect residents' inputs.

It is suggested that a foundation sounds better than a company, because it is not commercial and has no shareholders. Another point brought up is that it may be difficult to explain the *steward-ownership construct* to 'the public', which also raised the question if this model is then presented it as a suggestion or a given.

The steward ownership model has not yet crystallised sufficiently, but it is interesting to explore further, not as an end goal in itself, but as a means to properly shape joint local ownership, specifically when cooperative and municipality are largely on the same page with

regard to wanting to generate and maintain value for the local community, in line with the three justice dimensions.

Summary: the scenario evaluated on the justice dimensions

The discussion on the pros and cons of the different scenarios mainly resulted in contrasting scenarios 1 and 2. The differences between these two were most articulated during the dialogue session. Scenario 3 was discussed mostly as potentially interesting to address some of the challenges of scenarios 1 and 2.

Tabel 4 below shows how the scenarios were evaluated by the participants on the three justice dimensions.

Table 4: Expressed opinions on how each scenario enables the justice dimensions

	Recognitional justice	Procedural justice	Distributive justice
Scenario 1 90% local ownership (majority interest for cooperative)	Better than in S2* because Naoberwind is more approachable than the municipality for residents. Recognition of the interests of all residents constitutes Naoberwind's raison d'être. Recognitional justice can be properly set up in various ways (statutes/articles of association; regulations; via general assembly decisions; via the organisation of the board)	Better than in S2 because Naoberwind engages all residents as much as possible in idea formation and decision-making and that is guaranteed in the statutes. By involving the opponents as well, the conversation with all voices can be continuous, which helps prevent polarisation and politicisation. Instead of pros and cons, the conversation can then address the conditions under which project development is acceptable.	Better than in S2. This can be well designed in the statutes with attention to distinction financial participation and control; with capping in the return distribution; and with attention to cost+model that prioritises the lowest and stable possible energy price for all residents. All residents can directly influence decision-making through membership.
Scenario 2 100% local ownership (majority interest for municipality)	Better than in S1 because the municipality looks after the interests of all citizens while a cooperative runs the risk to turn into an exclusive club over time. Recognitional justice can be set up by municipality in different ways (citizens' consultation; research; through public welfare organisations targeting vulnerable citizens)	Better than in S1 because the municipality ultimately makes the decision - after deliberate weighing of all interests and careful consultation.	Better than in S2 because there is no risk of being held hostage by an exclusive club. Municipality chooses where profit/surplus is spent and establishes a cost+ model that prioritises the lowest and most stable energy price for all residents.
Scenario 3 Steward- ownership	Recognitional justice is jointly shaped in the upfront process, and then it lands in the foundation's mission, vision and strategy. Recognition of future generations and other	Procedural justice is jointly shaped in the upfront process, and then it lands in the foundation's mission, vision and strategy (with e.g. attention to the type of decisions that need to pass	Control is completely decoupled from economic interests. The distribution of advantages and disadvantages, risks and returns is done according to clear agreements in line with

	also be part of this.	assembly). Value-driven	the mission and vision, and this is overseen by the stewards whose task it is to manage and execute these.
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^{*} S=scenario

From insights to action: policy recommendations

Policy recommendations focused on the local ownership regulation

At the end of the dialogue session, participants were invited to share their recommendations for policy - particularly for the regulation specifying local ownership. These recommendations and considerations were as follows:

- Organise a broad policy-oriented dialogue using scenarios (which you draw up
 participatively) and justice dimensions like it was done in the dialogue session held as
 it invites participants to express underlying arguments for choosing a particular scenario;
 and it provides suggestions as to how choices can take into account justice
 considerations (to achieve a more equitable energy transition).
- Ensure that the three justice dimensions are explicitly named, defined and given concrete substance in the regulations around local ownership. So that in choosing or crafting a particular scenario for local ownership, the initiator has the opportunity and duty to address justice considerations in an explicit manner.
- Include in the regulation on local ownership a request to the initiator to make concrete
 proposals for how to address each of the three justice dimensions. Also mention that
 discussions about this can be held with stakeholders and that expertise is offered from
 the municipality to shape this properly.
- Use the three scenarios for a 'crash test' with a draft regulation. In other words, when the regulation on local ownership is drafted, check if and how it can be complied with in each scenario.
- Consider how constituencies (internal and external) will be informed about the process and normative justice framework - paying attention to careful and consistent communication about this.
- Designate in the regulation on local ownership the possibility of cooperation with the municipality as a co-initiator.
- Emphasise in the regulation that local ownership is not limited to the 'standard' (financial) participation options but offers space in the regulation for alternatives such as the formation of energy communities in which own generation can be supplied at cost+ from local ownership.
- Using not 'the project' (production) but 'the energy community' (production & consumption) as a starting point.

The above suggestions can serve as a starting point for follow-up discussions between municipality(s) and Naoberwind and others involved in Search Area K.

From insight to action: justice dimensions made more concrete

In addition to the above recommendations, we summarise below the possible interpretations that can be given to each justice dimension, based on the dialogue session. Table 5 below shows - and this is a valuable outcome of the dialogue session - that justice considerations can be concretised using the subdivision into the three dimensions, and that these offer actionable suggestions (which can also be incorporated into policy). The table also reveals that there is ample room for further concretisation and elaboration, and follow-up discussions are needed for this. For all three justice dimensions goes that they can be included in the statutes or regulations of the energy cooperative: defining what it is, why it is important, how the dimensions relate to one another. With an objective and a plan on how to operationalise the dimensions, not casting it in stone but rather formulating learning principles that allow for monitoring, evaluation and adaptation. Where, for example, the board draws up a plan and then a supervisory council assesses whether the objectives as included in the statutes are sufficiently met in this plan. The municipality can request in its regulation on local ownership that the initiator of a project has a responsibility to do this.

Table 5: Concrete interpretation of justice dimensions

	Justice dimensions	Possible actions
1.	Recognitional justice	Appoint board members who represent unrepresented local interests (future generations; non-human stakeholders) and perspectives.
		Present recognitional justice and how to shape it in a decision to the general membership assembly and give it further substance in that way.
		Survey residents to gather perspectives, interests and needs. This is linked to procedural justice: this way, voice is given, as well as a place at the table - in addition to formal consultations you organise.
		Citizens' assembly, organised by the municipality, with representation of all possible stakeholders (with regular meetings, an independent chairman, and a clear agenda for each consultation). Including clarity on how outcomes will be adopted by the initiator in its plans and decision making.
2.	Procedural justice	A municipality can design participation in many ways, inviting all stakeholders upfront as much as possible. A municipality has the possibility to reach out to residents directly or via (welfare) organisations.
		A citizens' assembly can also play a role in determining how participation should be designed and in identifying the diverse perspectives and needs.
		In the initial period, only citizens living in Search Area K are invited to become members of Naoberwind. They will be engaged in drawing up the statutes and regulations. Their role and influence is not dependent on their financial participation and membership fee is low so that this won't be a barrier.
3.	Distributive justice	More financial participation does not mean more control.
		Capping the level of return at e.g. 3.5% and including in the articles of association that this cannot be changed by a general membership assembly resolution.
		Stipulations on how surplus is invested for (local) social purpose and/or in fighting energy poverty.

Establish cost+ model that is accessible and attractive not only to members but to all residents.
'Circle of concern': the people who live closest to the wind turbines are offered the first opportunity to buy cooperative shares. Next, all residents of the two municipalities are invited and after that the circle is drawn even wider. It could also be decided to offer a return on investment that is higher for those who live closer.

Institutional innovation as a policy brief

It is difficult to have a dialogue about cooperation, let alone partnership, as long as the municipality has yet to set policy on wind energy. That is why this dialogue was considered exploratory and informal. If, later on, municipality and cooperative do start 'for real' with such a dialogue, it needs to address the questions how to organise recognitional justice, distributive and procedural justice? This is not a checklist exercise. It can be made tangible and concrete; how to do so is context-dependent. Establishing a collaborative process and working together towards ways of shaping justice considerations in the interpretation of local ownership is a quest that comes with letting go of existing ways of doing and thinking and discovering new ways of doing and thinking – so as to enable a more central role for citizens in the energy transition and attention to a broader range of societal values. This institutional renewal will take shape, among other things, in the new policy arrangements around local ownership. Finally, this dialogue session has been a modest step intended to contribute to that process.

3.3.2 Interview: interpretation of energy sharing for Dutch law-making

The interview with Justin Pagden from Agem (February 5th 2025) covered his role in the process of national policy-making related to energy sharing. He was able to uptake that role and invest time and effort in this thanks to TANDEMS. In doing so, he has grown in his role as a valued and much-invited expert, who among others advises the Dutch ministries that work on including energy sharing in the renewed Dutch Energy Law. Before we go into his role in the policy and law-making process, we first present the substantive challenges of including energy sharing in Dutch laws and regulations from Justin's point of view. Next, the ongoing policy dialogue in which Justin has been and is involved in is addressed, followed by some of his reflections when comparing the Netherlands, Bulgaria and Belgium. The interview closes with policy recommendations from his perspective on how the position of energy cooperatives contributes to a just energy transition.

Background: energy sharing in the Netherlands

A clear distinction can be made between on the one hand *energy sharing within energy communities*, and on the other hand *energy sharing with free supplier choice*. This distinction is essential to understand the current discussions on energy sharing in the Netherlands, Justin explains. So this needs some attention first. Although both forms of energy sharing aim to empower active consumers and encourage collective self-consumption, in practice they work out very differently.

Energy sharing within energy communities involves a group of active consumers consuming their jointly generated energy themselves. This concept already existed in the Netherlands – e.g. energy cooperative Biozon, a TANDEMS pilot - and is now enshrined in the Energy Law through an amendment. Energy sharing with free supplier choice means that active consumers can exchange energy among themselves, regardless of whether they are part of an energy community or not and regardless of whether they have the same supplier. This does not yet exist in practice, is more complex and requires legislative changes.

The distinction is crucial because it strongly influences the organisational structure and associated responsibilities. In the first form, energy sharing within an energy community, there is *one* energy service provider, often a cooperative supplier, that facilitates both the sharing and delivery of energy to the members of the energy community. All cash flows, imbalance and profiling are through this one service provider. Justin mentions that this approach is regarded as the most logical model for the Dutch cooperative sector because it is the most efficient and effective way to align with their goals of a fair product at a fair price, without a profit motive. Moreover, it is in line with existing practices (e.g. Energie Samen 2024).

In the second form, energy sharing with free supplier choice, there is not one central service provider, but several, non-predefined service providers involved. And that makes it complex, as responsibility for profiling, imbalance and settlement of cash flows falls on different parties. The introduction of free supplier choice makes it more complicated for energy cooperatives to keep a grip on money flows, imbalance and profiling. And that affects the business case and the underlying business architecture. Not surprisingly, this form was not proposed by the cooperative sector. It results from European legislation – and requires changes in national legislation and systems.

The policy dialogue and legislative process

The current status of Dutch legislation around energy sharing is as follows. A new Energy Law was passed by the Lower and Upper Houses of Parliament in 2025. This law defines energy communities and allows them to supply energy without a licence. At the same time, many things in the energy law still need further elaboration in AMvBs (Orders in Council) and ministerial regulations. An amendment to the Energy Law has been passed describing energy sharing within an energy community. As Justin points out, this amendment was actually nothing more than 'codifying' an existing practice that was already possible but not yet described in the law.

In addition, a bill was also made for energy sharing with free supplier choice, a consequence of European regulations - the EMD (Energy Market Directive). This proposal has been submitted to stakeholders in a consultation round, responses have been received and it now goes to the Council of State and then to the Lower House. When energy sharing with free choice of suppliers will be fully implemented is still uncertain, but it is expected that this could certainly take several years. There is also plenty of discussion about how energy sharing should be geographically limited and/or rather encouraged, for example through tax breaks or discounts on grid tariffs.

The ministry envisages that the new Energy Law can be easily adapted in the future through annual adjustments if needed. The transposition of the EMD is seen as the first step in this

process. This provides flexibility to respond to changing circumstances and forming new practices. These rapid changes and enormous complexity also do pose a risk, certain issues or adjustments may go unnoticed or have unwanted effects.

Energy sharing in law: a step towards systemic change

The main success according to Justin is that a workable proposal for energy sharing with free supplier choice has emerged, despite the complexity of the matter and the potential risks. The risk of unworkable legislation has been averted. Why is this important? "It is crucial because if energy sharing is not going to work in practice, it will take on a negative connotation, with possible negative consequences for the rest of the activities of energy communities.", Justin explains.

Asked about the main challenges, Justin names several. One concern mentioned earlier is the complexity that makes it difficult to understand and implement the law properly. The implementation of the EMD (Energy Market Directive) is an extensive process that requires many adjustments to existing systems. The fact that legislative amendments are sometimes unclearly worded is not helpful either in this regard. The complexity of the current energy system, especially the way billing is done based on meter readings, can also complicate the implementation of energy sharing. It would be simpler if billing was based on allocated consumption. Now is therefore the time to question these fundamental aspects of the system, Justin believes.

The implementation of energy sharing (with free supplier choice) requires significant adjustments in the systems of grid operators and suppliers. The adjustments by the many suppliers (55 in the Netherlands) may slow down, as they will not all do so at the same time. And while resistance from incumbents has been partially overcome, it does remain a concern. Suppliers may charge for the implementation of energy sharing, which could negatively impact the business case for energy communities. Dutch politicians do not want to regulate tariffs, so it is up to the market to set costs. The regulating Authority for Consumers & Markets (ACM) should ensure that the costs are reasonable.

Another concern is that energy sharing is not a priority for DSOs. It does not directly or naturally contribute to reducing grid congestion - because that also requires behavioural change. Incentives such as discounts on grid tariffs and tax breaks would be needed, but are difficult to implement.

And there is still uncertainty about the business case. "It is still unclear how energy sharing with free supplier choice will work in practice and whether it will be financially attractive for energy communities. There is a risk that the costs charged by suppliers will exceed the revenues, making energy sharing meaningless.", said Justin.

Another concern is the long implementation period. It could easily take several more years before energy sharing with free supplier choice is fully implemented. So, energy cooperatives will have to be patient before getting started with energy sharing. Justin: "Two years would be quick. So, at best, in three years from now we will then have a situation where you can supply your excess solar power to your neighbour through that model. And of course, it's a bit shocking that that has to take so long."

At the same time, Justin stresses the importance of diligence. He insists that it is important to create a workable model so that energy sharing can be successfully implemented. And that this requires good substantive discussions, focusing on the impact on different parties, and a

fair distribution of costs. "A balance needs to be struck between the interests of the cooperative sector and commercial parties so that the energy system as a whole works well."

The policy dialogue and the importance of good conversations

"It's wonderful that Tandems made it possible for me to participate in policy dialogues. But it's also a lucky shot."

Justin is happy to have been able to pick up a solid role in the policy and law-making process, but stresses that this is not a luxury but a necessity. The cooperative sector is small and has no profit objective, making it difficult to invest in lobbying and policy advocacy. So, what TANDEMS has made possible here should continue beyond TANDEMS.

During the conversation with Justin, it becomes clear how much he has immersed himself in the complex issues surrounding energy sharing. However technical-legal the discussions may seem, underlying it is about a better anchoring of crucial values represented by the energy cooperative sector. Justin's desired future involves a large cooperative sector that can serve a significant part of the energy system, from generation to consumption. The sector will provide fair and transparent products at a fair price. At the same time, Justin stresses that his aim is not to thwart commercial companies, but to create a functioning market in which energy cooperatives can play a significant role. The role of energy sharing in all this?

"Energy sharing can be a foreland for what the energy sector might look like in 20 years' time and it forces a fundamental discussion about basic principles underlying our energy system,"

Below we list how Justin was able to actively influence the creation of legislation around energy sharing from the TANDEMS project:

- 1. Participation in the working group of the Dutch Renewable Energy Association (NVDE): Justin was asked by Energie Samen in January 2023 to participate in the NVDE's decentralised electrification working group. Within this working group, he was instrumental in drafting a Position Paper on energy sharing with free supplier choice (NVDE 2024). This allowed him to represent the interests of energy communities. The NVDE is an important representative of both suppliers and grid operators as well as energy communities.
- 2. Participation in substantive discussions: Justin participated in substantive discussions with stakeholders such as suppliers and grid operators, which was key to creating a feasible model for energy sharing. As he has a view on how legislation will impact the situation on the ground, he was able to help find a model that is realistic.
- 3. Consultation with the ministry: Justin was involved in fortnightly consultations with the Ministry of KGG (Min. of Climate and Green Growth) during the writing of the Energy Law to implement the European Energy Market Directive (EMD). Here, both the NVDE's Position Paper and the law were discussed. The ministry made explicit that it would try to incorporate the points made in the position paper into the law.
- 4. Amending the Energy Law: Justin was involved with Energy Samen in drafting these amendments. The amendments define energy communities and the existing practice of energy sharing, leading to its inclusion in the law.
- 5. Participation in working groups: Justin is still involved in working groups developing the data exchange agreements for the energy sector, as well as other parts of the energy law. He also sits on an NVDE committee on market and energy systems.

Justin thus played a crucial role in the whole process, from drafting Position Papers to actively thinking about legislative proposals and their implementation. He acts as an important link between energy communities, government and other stakeholders in the process of developing legislation around energy sharing. In all this, Justin tries his best to represent the interests of the cooperative sector in policy dialogue, with a view to a just energy transition. This entails nothing less than bringing about a systemic change in which energy is not seen as a commodity but as something everyone should have basic access to at a reasonable price.

Justin sees his role in the ongoing policy dialogue as an important one because it allows him to represent the interests of energy communities and the cooperative sector. He is active in day-to-day working practice and has a wide network and access to constituencies (through Energie Samen). He considers it important to be able to be a substantive interlocutor who has a constructive dialogue with various stakeholders, including the ministry, suppliers and grid operators. He is committed to building a bridge between the interests of the cooperative sector and the interests of the commercial sector - from a critical stance on the existing structures in the energy sector. He is not afraid to question fundamental aspects of the system, out of a commitment to a more transparent and just energy system in which abuses are prevented and cooperatives can play their part. Justin indicates that he is continuously involved and that it is an ongoing process that takes a lot of time and effort, and that he hopes to continue his role in the aforementioned policy processes after TANDEMS as well.

Comparative view and the European context

TANDEMS is a European project, with pilot partners in Belgium and Bulgaria, and so the question of an international comparison is obvious.

Starting with Belgium. Justin clearly sees parallels between the Netherlands and Belgium. And he stresses that there is also a lot of exchange of experiences and knowledge, not only between energy cooperatives like within TANDEMS, but also between the DSOs of both countries, and between policy makers at ministry level. The Belgian practice of energy sharing is fairly similar to that in the Netherlands, in terms of systems and challenges. Justin cites the example of the Mechelen/Klimaan pilot in Belgium where the business case of energy sharing does not pan out because of the high charges (see section 3.1.2 where Bart de Bruyne elaborates on this). Justin points out that this is a risk that is also present in the Netherlands, when the implementation of energy sharing involves administrative work and extra costs for suppliers.

Looking at Bulgaria and the Netherlands, differences stand out. The Dutch approach to energy sharing is based on the presence of smart meters and an active imbalance market. In Bulgaria the roll-out of smart meters has not yet even started. And market regulation is also very different in the two countries. The conversation about energy sharing in Bulgaria is very different, as it lacks the basic infrastructure and market structure that is present in the Netherlands. Bulgaria does not have the ability to simply adopt the Dutch model. At the same time, Bulgaria does have the opportunity to set things up better from the start - for example, the system of billing/invoicing.

Lessons from one country are not automatically applicable in another context, because different countries use different systems. In summary, Justin sees more similarities between the Dutch and the Belgian situation, while Bulgaria is at a very different stage and has different challenges. Justin sees the EU as an important actor to push different countries to

change, but stresses the importance of discussing the differences in national systems to come up with workable solutions for all member states.

Recommendations to strengthen energy communities and energy sharing

Based on the conversation with Justin, a number of recommendations emerge for policy actors at national and EU level. These can be summarised as follows:

- 1. Stay alert and actively involved in policy-making on energy sharing, both nationally and at European level.
- 2. Strive for a clear and structured enabling framework for energy communities, with good definitions of energy communities and energy sharing, as well as support to encourage the establishment of energy communities and to encourage energy sharing.
- 3. Structurally support the cooperative sector so that it can take on its role in promoting a fair energy transition; this includes structural support for the cooperative sector to continue participating in policy dialogues.
- 4. Investigate and consider alternative billing models, such as billing based on allocated consumption, as that is conducive to energy sharing.
- 5. Take a systems perspective: addressing the current energy system's shortcomings e.g. by making room for innovative concepts such as energy sharing.

The interview with Justin offers valuable insights into the complex world of energy sharing in the Netherlands, and the challenges and opportunities involved. The coming years will be crucial for the further development and implementation of these concepts. It is important that lessons learned are taken on board, as part of a drive towards a fair and workable energy transition in which energy communities play a central role.

4. POLICY DIALOGUE FOR ENERGY COMMUNITIES: IMPACTS AND REFLECTIONS

We have demonstrated how policy dialogue serves as a critical mechanism for bringing together stakeholders around key issues affecting the implementation and scaling of energy communities. These discussions addressed energy sharing, local ownership arrangements, challenges in transposing European directives into national legislation, and policy development— all viewed through a justice lens. Interviews revealed how TANDEMS partners across pilot regions have actively engaged in policy dialogue and advocacy, yielding tangible impacts such as policy adaptations and legislative changes. Importantly, these partners have become integrated into policy formation networks, enabling continued advocacy efforts going forward, subject to their available resources.

4.1 The Open Collaboration Model for collaborative governance

The Open Collaboration Model (Laes et al 2024), developed by VITO in TANDEMS, was designed to provide a structured framework for fostering cooperation between municipalities, energy cooperatives, and community stakeholders to support a just and inclusive energy transition. The policy dialogues and stakeholder engagements detailed in this report directly align with the principles of the Open Collaboration Model by demonstrating how collaborative governance can be designed, implemented, and refined to ensure equitable access to renewable energy solutions.

Both the Belgian case on social justice in the energy transition and the Dutch case on local ownership in relation to justice embody the core phases of the Open Collaboration Model:

- Initiation & Planning (DREAM phase): The Flemish policy dialogue was designed around the inclusion of energy-vulnerable households, a key concern in ensuring that the energy transition does not deepen inequalities. The Dutch policy dialogue was designed around the notion of local ownership as a way to ensure that the energy transition is organised with, by and for the local community (ensuring local value creation).
- Strategy (DESIGN phase): The structured engagement between local governments, energy communities, and civil society organizations reflects the model's emphasis on multi-actor collaboration to achieve systemic change. The Dutch exploratory workshop focused on how local government and an energy community can find agreement on how local ownership can be given substance in legislation.
- Evaluation & Scaling (DELIVER phase): The lessons from this process were
 synthesized into actionable policy recommendations, reinforcing the Open
 Collaboration Model's emphasis on scalability and knowledge transfer across different
 contexts. The Dutch exploratory workshop preceded and helped to prepare further
 stakeholder consultations for the drafting of legislation on local ownership relevant
 not only for the municipality in question, but with a broader applicability as other local
 governments are in a similar process of drafting such legislation.

Furthermore, the Dutch and Bulgarian case studies illustrate the model's adaptability in different institutional, political, and regulatory environments, showcasing how participatory governance, policy advocacy, and community-driven solutions can be leveraged to create locally tailored and socially just energy policies. By embedding these collaborative principles into real-world policy dialogues, the report contributes to the ongoing refinement of inclusive governance mechanisms that align with the TANDEMS vision for a more democratic and fair energy transition.

4.2 Capacity building, advocacy and impact

Below, we reflect on achievements in each region regarding capacity building, advocacy, and impact.

In Belgium, both preliminary interviews and the dialogue session itself centred on making community energy initiatives more inclusive for energy-vulnerable households. Key stakeholders - including municipality representatives, energy communities, and intermediaries - participated alongside TANDEMS partners. Their collaborative effort to discuss and formulate requirements for enhancing social justice in the energy transition constituted capacity building as participants committed to ongoing collaboration.

These interactions generated insights and action-oriented suggestions that were disseminated via a widely-shared policy brief. The recommendations emphasized organising energy community projects and efforts in such a manner that solidarity and social inclusion are addressed as key conditions upfront. Additionally, they highlighted local authorities' crucial role in ensuring vulnerable citizens' inclusion - either directly or by supporting energy communities' solidarity efforts.

Social justice remains central to ongoing policy advocacy by Bart de Bruyne from the city of Mechelen. His interview addressed how energy sharing should contribute to social justice and detailed his influence on policy and legislation. His recommendations included concrete measures to make energy sharing accessible and attractive for citizens in energy poverty. Partnerships between local government and energy communities emerged as essential for advancing social justice in the energy transition.

In Bulgaria, project partners maintain continuous engagement in policy dialogues across multiple governance levels. Their work includes active capacity building with other municipalities, as EnEffect and the municipalities of Gabrovo and Burgas provide practical guidance on establishing energy communities despite limited policy support. This approach fosters a bottom-up movement where energy communities emerge at the local level, supported or initiated by municipalities, contributing to a critical mass that can enhance pressure on national policymakers to support energy community scaling.

Through ongoing dialogue with policy stakeholders on topics related to equitable energy transition (including energy poverty, building renovation, and market liberalization), EnEffect has developed comprehensive insights of what is needed to take the next steps in the context of Bulgaria. The people of EnEffect are – for that reason – regarded as experts and consulted by policy makers on a regular basis.

The impact of their work shows itself in – of course – the establishment of the first energy communities in Bulgaria, based on a model that can be replicated.

In the Netherlands, a policy dialogue on local ownership focused on a specific case (wind power development in Search Area K) but yielded broadly applicable insights showing that local ownership can be structured in various ways with different implications for municipality and energy cooperative roles. The dialogue's justice focus was valued for clarifying how justice concepts can be operationalized in rules, policies, and guidelines. This dialogue contributed to capacity building by recognizing mutual expectations between municipalities and energy cooperatives and acknowledging the dialogue's importance in building trust as prerequisite for building successful public-civil partnerships.

The interview with Justin Pagden (Agem) highlighted his ongoing policy advocacy role regarding energy sharing in Dutch Energy Law. It demonstrated that while energy sharing

implementation is technically complex, incorporating energy communities' perspectives (i.e., an understanding of energy provision in line with social justice values, ecological values and economic feasibility considerations) is vital. Through active involvement, Justin directly influenced energy sharing definitions in the new energy law. While TANDEMS enabled his participation, continued structural support is needed to ensure energy cooperatives maintain a voice alongside other stakeholders in energy policy development.

4.3 Impact but not without policy support

Across all TANDEMS regions, our partners' active engagement and organization of policy dialogues has positioned them at the forefront of policy formulation on emerging topics. This leadership is essential. While specific policy recommendations from these dialogues will appear in Deliverable 5.2 and various national briefings, one overarching recommendation emerges: the critical importance of continuing the dialogue about energy communities' nature and their contribution to a just, inclusive energy transition.

This continued engagement requires structural financial support enabling energy community representatives to participate in policy formation and legislative processes, prepare their positions for more effective national lobbying, and engage in local/regional settings to improve collaboration with government entities. Such support facilitates partnerships based on shared understanding of and commitment to citizens' interests in the energy transition.

"We do not inherit this planet from our ancestors, we borrow it from our children." i15

In these times of confusion and uncertainty, we need to stay aware that climate change and the undermining of our democratic values are hugely intertwined and that both are under threat. The quote expresses the importance of reimagining our approach to democratic engagement and environmental stewardship. Energy communities represent a critical pathway to challenging existing power structures, but their potential is constrained by limited resources. Unlike corporate interests with substantial lobbying budgets, these community initiatives struggle to effectively amplify their vision of social and environmental justice.

It is key that the EU remains unequivocally committed to supporting energy communities and their policy advocacy efforts. This support is not a matter of political negotiation, but a fundamental necessity for democratic resilience. Funding and institutional backing for citizenled initiatives are essential to prevent policy-and decision-making from becoming an exclusive domain of incumbent interests. By ensuring that civil society can effectively participate in shaping energy transitions, the EU can safeguard both democratic principles and meaningful climate action against efforts at marginalising both.

54

¹⁵ This quote is often attributed to Native American culture and this perspective has been expressed by various indigenous cultures around the world that view us humans to be caretakers rather than the owners of our planet

TANDEMS: Policy dialogues: From shared learning and insights towards impact

REFERENCES

Bauwens, T. (2021). "Analyzing the socio-economic and environmental impacts of energy communities: A systematic review of the literature." Renewable and Sustainable Energy Reviews, 138, 110553. https://doi.org/10.1016/j.rser.2024.114956

Bielig, M. Kacperski, S., Kutzner, F., Klingert S. (2022). Evidence behind the narrative: Critically reviewing the social impact of energy communities in Europe, Energy Res. Soc. Sci. 94, 102859, https://doi.org/10.1016/j.erss.2022.102859

Della Valle, N., Czako, V. (2022). Empowering energy citizenship among the energy poor, Energy Res. Soc. Sci. 89: 102654, https://doi.org/10.1016/j.erss.2022.102654.

Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024L1711

EnergieSamen (2024) Energie delen door energiegemeenschappen. Op weg naar een duurzaam en rechtvaardig energiesysteem. Versie 1.0. Mei 2024.

Laes, E., Meynaerts, E., Naus, J. (2024) Deliverable 2.1 - Blueprint Design of an Open Collaboration Mode. Deliverable 2.1 of the TANDEMS project.

NVDE (Dutch Sustainable Energy Association) (2024). NVDE-aanbevelingen energiedelen met vrije leverancierskeuze. (In Dutch). Nederlandse Vereniging voor Duurzame Energie.

NPRES (2024) <u>Werkblad Lokaal Eigendom</u>. Handvaten voor het faciliteren van lokaal eigendom en het verankeren in beleid Voor gemeenten, provincies en RES-regio's Juridisch getoetst door de juridische afdeling van VNG. National Programma Regionale Energie Strategie.

Participatiecoalitie Noord-Holland (2021). Lokaal eigendom in de praktijk. Tips en voorbeelden voor gemeenten. Februari 2021

LIST OF PARTICIPATING ORGANIZATIONS

KAMP ©	AUTONOOM PROVINCIEBEDRIJF KAMP C (Kamp C)	•	BE
→ vito	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. (VITO)		BE
DuneWorks	DUNEWORKS BV (Duneworks)		NL
agem Eurga var nelsar.	ACHTERHOEKS ENERGIELOKET B.V. (Agem)		NL
MECHELEN	STAD MECHELEN (MECHELEN)		BE
KLI MAAN CV50	KLIMAAN (Klimaan)		BE
ZuidtrAnt	ZUIDTRANT (ZuidtrAnt)		BE
€n€ffect €	FONDATSIYA TSENTAR ZA ENERGIYNA EFEKTIVNOST - ENEFEKT (EnEffect)		BG
*	OBSHTINA BURGAS (BURGAS)		BG
Ö	MUNICIPALITY OF GABROVO (GABROVO)		BG
BINOPLUS	OIKOPLUS GMBH (OKP)		АТ

ANNEX 1: LIST OF ACTIONS AND INTERACTIONS

Type of interaction (consultation/	Date	Location	Participants
workshop/interview/meeting)			
Preparatory ideation an brainstorm on Belgium policy dialogue options	18-04-2024 (Vienna GA)	physical	All
Follow up with VITO on ideas workshop energy sharing	multiple dates	online	VITO, DuneWorks
Follow up with Klimaan and ZuidrAnt (exploring ideas around the Energy Houses as a topic for policy dialogue)	multiple dates	online	Klimaan, ZuidrAnt DuneWorks
Interview Stefan Goemaere (SAAMO)	29-8-2024	Online	Erik Laes, Erika Meynaerts
Interview Lize Vandyck (Vlaamse overheid)	3-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Kris Moonen (VVSG)	3-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Anouk Reusens (gemeente Wijnegem)	10-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Sam Baelus (stad Antwerpen)	13-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Yves Pepermans (provincie Antwerpen)	20-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Patrick Princen (stad Mechelen)	24-9-2024	Online	Erik Laes, Erika Meynaerts
Interview Arnout Ruelens (stad Mechelen)	1-10-2024	Online	Erik Laes, Erika Meynaerts
Deelname themaoverleg "Sociaal klimaatbeleid" (provincie Antwerpen)	12-11-2024	Turnhout	Erik Laes, Erika Meynaerts
Informal talks with Bart de Bruyne on policy dialogue ongoing	18-04-2024 (Vienna GA)	Vienna	Bart de Bruyne, Sylvia Breukers
Interview Bart de Bruyne on policy dialogue ongoing	4-3-2025	Online	Bart de Bruyne, Sylvia Breukers
Preparatory ideation an brainstorm on Dutch policy dialogue options	18-04-2024 (Vienna GA)	Vienna	Dutch partners
Follow up on this ideation	multiple dates	online	DuneWorks and Agem
Interview with Naoberwind	25-11-2024	online	Naoberwind, Sylvia Breukers
Interview with Naoberwind II	26-11-2024	online	Naoberwind, Sylvia Breukers
Interview with Berkelland Municipality	25-11-2024	online	Berkelland Municipality, Sylvia Breukers
Interview with Agem	22-11-2024	online	Agem, Sylvia Breukers
Policy dialogue session	3-12-2024	Wehl, NL	Berkelland Municipality, Naoberwind energy cooperative, Agem, Duneworks, VITO
Informal talks with Justin Pagden on policy dialogue ongoing	18-04-2024 (Vienna GA) & 15-10-2024 (Gabrovo GA)	Vienna and Gabrovo	Justin Pagden, Sylvia Breukers
Interview Justin Pagden on policy dialogue ongoing	4-2-2025	online	Justin Pagden, Sylvia Breukers
Preparatory ideation and brainstorm on Bulgarian policy dialogue options	18-04-2024 (Vienna GA) & 15-10-2024 (Gabrovo GA)	Vienna and Gabrovo	All
Preparatory ideation and brainstorm on Bulgarian policy dialogue options	15-10-2024 (Gabrovo GA)	Gabrovo	Stanislav Andreev, Kamen Simeonov, Sylvia Breukers
Online ideation	multiple dates	online	Eneffect, KampC, DuneWorks
Interview Stanislav	10-3-2025	online	Stanislav Andreev, Sylvia Breukers

ANNEX 2: INTERVIEW GUIDE

This interview guide was used as a basis for the interviews with Stanislav Andreev, Bart de Bruyne and Justin Pagden.

Interview Objective: gain insights into the policy dialogue process that you have been engaged in as a representative of your organisation, focusing on the specific objectives that are key to you. The focus will be on exploring the dialogue's dynamics, key substantive points, and its outcomes to date.

Interview Scope:

- 1. Engagement in policy dialogue
 - o Describe your involvement in energy sharing discussions in your country
 - Explain how TANDEMS facilitated your participation in policy dialogues
 - When did your involvement begin?
 - How frequently have you been involved?
 - What alternative ways could you have contributed?

2. Impact

- What added value did your participation bring to policy discussions?
- o Why is the involvement of energy community representatives critical?
- Are you and/or other energy community representatives now routinely invited to policy conversations? Can you provide a specific example that illustrates this?

3. Guiding values and principles

- What core values and mission drive your participation in these discussions?
- o How do these values intersect with principles of energy justice?
- o What transformative potential do you see in community energy representation?

Substantive Discussion:

- Provide a concise overview of the current state of energy sharing (and energy communities)
- Proposed working definition of energy sharing: [To be specified during the interview]
- Identify:
 - Major challenges in implementation
 - Emerging opportunities
 - Specific insights from Bulgaria/Belgian/Dutch pilot projects

Collaborative Improvement

- How can collaboration between energy communities and policymakers be enhanced?
- What systemic barriers currently impede effective dialogue?
- What communication strategies could bridge existing gaps?

Mutual Learning:

Practical Insights

- Key lessons for and from consortium partners in designing energy sharing models
- Practical considerations for implementation
- Potential pitfalls to avoid

Policy Formation Process

- Reflections on the policy development approach
- Mistakes that could have been prevented
- Recommendations for more inclusive policy development

Additional Reflections:

- Is there anything you would like to add or emphasize?
- Any aspects of the discussion not yet covered?

ANNEX 3: ANNEXES TO THE DUTCH POLICY DIALOGUE REPORT

A: Structure of the interview session

Background: interest in justice (and how energy communities contribute to greater justice in the energy transition) from the LIFE-TANDEMS project.

How can energy communities contribute to energy justice?

Zooming in further:

Local ownership is often proposed to contribute to better securing civic engagement and justice in the energy transition.

Governments are currently developing policies for this purpose. Berkelland municipality, together with Oost Gelre municipality, will draft regulation on local ownership. They also want to share this with the larger Achterhoek region. The dialogue session is to provide input for this. In addition, for an energy cooperative like Naoberwind it contributes to exploring various possibilities for local ownership to inform internal discussions about this.

So, zooming in even further:

- How can you flesh out the 3 justice dimensions through local ownership?
- How does each of the 3 scenarios allow for giving substance to these 3 dimensions?
- What does that mean for policy?

Agenda of the dialogue session:

- 1. Welcome and Background
- 2. Growing up space
- 3. Justice principles
- 4. Presenting each scenario
- 5. Coffee
- 6. Assessing scenarios and discussing them
- 7. Closing

B: Scenarios as used during the interview session

Scenario 1	Naoberwind is the main owner	
How	90% locally owned by Naoberwind, contracts have been signed with the participating farmers and they are also members (1 vote each) of the cooperative. The other 10% are owned by Windunie (a non-local cooperative with expertise in wind power development).	
Local control	The energy cooperative is 90% owned and the members all have 1 vote - independent of the investment made by the members. Through the general membership assembly, they influence planning and decision-making. Decision-making on the project takes place through e.g. a steering committee in which Naoberwind and Windunie are represented (with vote distribution 90-10%).	
	Cooperation with the municipality: in the process of site selection, planning, licensing. The cooperative also makes clear how it stands for the local social interest, by including in the statutes/articles of association how revenues and any surplus will benefit the local community.	
	Cost+ model: deliver renewable energy transparently and stably to local residents (if one joins in, this results in automatic membership)	
Funding	In the development phase: municipal or provincial grants.	
	Realisation: external funding (via funds, e.g. Realisation Fund) + own contribution of around 10% via members or crowdfunding.	
	Cost price model: financial revenues deployed as much as possible to keep energy prices as low as possible for all residents.	
	Windunie wants 10% return from operation.	
Legal form	Naoberwind is a cooperative. So is Windunie, but it is not participating in this for its members.	
	Together, they form a consortium/BV developing the Search Area K project. Cooperation agreement specifies roles, tasks, arrangements, consultation and decision-making structure.	
Why?	Naoberwind can tell a clear story to its members - a project by and for citizens. Farmers with land participate because they prioritise local social values and not just the financial part (they agree to a socialisation of financial benefits that also benefits land owners on whose land no turbines will be sited). In this model, members have a large say. The storyline remains clear: namely, if those wind turbines are to come, they must benefit the local citizens.	
Advantages	 Appealing form that explicitly shapes local control for all aspects of developing a more sustainable local energy supply. All in 'own' control, and thus limited risk of the interests of private and profit-oriented parties taking precedence. At the same time, being able to make use of Windunie's expertise Ability to include not only price but also sustainability and social value in developing the proposition. Community building: opportunity to change the social norm locally through the active involvement of citizens, where sustainable energy supply is no longer a given, but something you make a joint commitment to. Community strengthening: joining forces and enhancing value for the local community The municipality can ensure that revenues benefit all residents Developing partnership with municipality(s) 	
Challenge	 The cooperative has to organise a lot of the financing itself (high interest rates!) and bears a hefty risk The cooperative needs to organise broad representation from the community, ensuring that local ownership does not end up in the hands of an exclusive club (which in a worst-case scenario could abuse voting rights) What exactly will the collaboration with both municipalities look like? 	

Scenario 2	Municipality is initiator and owner	
How	This is purely 100% locally owned, but with a solid majority stake for the municipality (70%). Naoberwind has 30% ownership. This also means that the municipality has a casting vote. One of the turbines supplies power to the buildings of the (8) municipality(ies); the remaining turbines supply power to the residents in Search Area K. Naoberwind organises local involvement - and is facilitated in this by the municipality (with a structural subsidy). Other expertise required is hired by the municipality.	
	The project can be structured in different ways (e.g. a part is for the municipal energy supply; the rest is seen as a whole or also split again with a part 'for the municipality' and a part 'for Naoberwind'.)	
Local control	Municipality of Berkelland and Oost-Gelre, Naoberwind and the farmers enter into a cooperation agreement with clearly defined roles and tasks in the successive phases from ideation to operation and management.	
	The municipality also has a double hat on: it is the initiator but also has to go through the process of site selection, planning, licensing.	
	Local control is indirect, via the cooperative. Naoberwind takes care of involving and connecting local stakeholders: residents, farmers with land, local entrepreneurs. Needs and interests are invited in these processes, in order to take them properly into account in the design of the project.	
Funding	In the development phase, municipal or provincial grants can be used. For the realisation phase, financing through the BNG or Waterschapsbank (both public banks) can be involved. The cooperative can organise financial contributions through members and through crowdfunding (financial participation). The model for local social value creation can be set up in different ways. When using a cost+ model, it can be for the joint project part in which both municipality and cooperative are involved. But it can also be done differently.	
Legal form	The project partners can jointly set up a limited liability company, in which the municipality(s) and cooperative are partners.	
Why	The municipality retains control over the interpretation and design of the project - such that it contributes to the societal goals the municipality considers important and to its own municipal energy supply. The municipality is there for all residents and keeping control enables that it can ensure that the project benefits all residents.	
Advantages	 Financing is cheaper if the municipality can borrow publicly (lower interest rate) Risk lies with the municipality, which can bear it Some of the professionalism involved in project development is provided or organised by the municipality (tenders?). Naoberwind can focus on the resident participation component and conversations with farmers which it has proven to be successful at Municipality ensures proceeds benefit all residents 	
Challenge	 The control-focus works against innovative approaches A partnership between municipality and cooperative does not emerge because the municipality remains dominant in the cooperative relationship It does not contribute to the formation of an energy community with more direct control for citizens 	

Scenario 3	Steward ownership: nobody owns!	
How	Ownership of the generation facility lies with a foundation and through agreements it is ensured that decision-making is in line with certain principles (e.g. not-more-than-before/affordability; sustainability; cost+).	
Local control	Ownership and control are separated. Decisions are taken on the basis of the organisation's mission, by appointed 'stewards'. They set the direction in line with the mission and they have voting rights that otherwise lie with members or shareholders. The importance of the project and the mission are reflected in all decisions. The position of steward is temporary.	
	Besides the foundation, there is a company or consortium with a board that includes Naoberwind and the municipality, and a supervisory board that includes non-stakeholders from different backgrounds. So, if the board has formulated a vision, mission and resulting principles with clarity, then the stewards will steer accordingly. The choice of stewards and the interpretation of the vision, mission and principles can be done together with the members of the cooperative, so that the general members assembly has a role here as well.	
Funding	In the preparatory phase, municipal or provincial subsidies can be used. For the realisation phase, external funding can be involved (through funds), and possibly also from BNG and Waterschapsbank (both are public banks) through the municipality. Investments from partners and members are possible, and the cooperative can organise this e.g. through crowdfunding.	
	When the project is running, the cooperative and the other partners have no direct control over the financial flows, as this is decided by the stewards in line with the mission, vision, principles and standing agreements. Any profits are (partly) distributed or reinvested (for local social purpose in line with the mission), according to clear agreements.	
Legal form	The foundation manages the project and has a governance structure, allowing the foundation to act as a responsible manager. Ownership is in so-called 'dead hand'.	
Why?	This model is useful when the process with the local stakeholders shows that there is no need for ownership, but rather for co-determining the observance of values and principles. For the municipality and cooperative, it can be a form of unburdening, and a way to prevent the mixing up of their different roles.	
Advantages	 Unburdening: the consortium of cooperative and municipality It gives parties confidence because of the professionalism of the stewards. Financial drivers are separated from control and governance. Longer-term stability - if the cooperative or other partners discontinue their role It prevents from being hijacked by a minority in the community or by politics. Stewards ensure that proceeds benefit all residents 	
Challenge	 Who are the stewards? What is their importance and involvement? How are they chosen? Whose vision exactly and how do you set and establish it? What to do in case of disagreement on how to interpret the mission - e.g. due to changing circumstances and regulations? There is no direct control of citizens, how will it be clear to them if/how this foundation also considers their interest? How do you move with dynamics in policy and political developments? How does a stewardship model contribute to cooperation between municipalities and resident initiatives/cooperatives? 	

62