






## D.6.1 After-LIFE Plan | TANDEMS Pathways to impact in 3 regions and beyond

18 July 2025

Final Version

 [lifetandems.eu](https://lifetandems.eu)

 [@LifeTandems](https://twitter.com/LifeTandems)

 [Life TANDEMS](https://www.linkedin.com/company/life-tandems)



**Co-funded by  
the European Union**

*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	WP6
Deliverable Lead	Kamp C
Author(s)	dr. Maria Saridaki   Contributions from: Erik Laes, Bart De Bruyne, Thomas Stollenwerk, Jet Groen, Todor Popov, Steven Laurijssen, Liesbet Veulemans, Kamen Simeonov, Teodora Stanisheva, Justin Pagden, Sylvia Breukers, Ivaylo Trendafilov
Contact	<a href="mailto:maro.saridaki@kampc.be">maro.saridaki@kampc.be</a>
Grant Agreement Number/ Funding Body	101077514
Start Date / Project Duration	1 October 2022 / 36 Months
Type of Deliverable (R, DEM, DEC, Other) <sup>1</sup>	R
Dissemination Level (PU, SE) <sup>2</sup>	PU
Date of Last Update	18/07/2025
Project Website	<a href="https://lifetandems.eu/">https://lifetandems.eu/</a>

## REVISION HISTORY

Revision No.	Date	Description	Author(s)
0.1	31.05.2025	1 <sup>st</sup> draft	dr. Maria Saridaki
0.3	30.06.2025	1 <sup>st</sup> Review	Jet Groen
0.2	02.07.2025	2 <sup>nd</sup> draft	Partner contributions
0.4	18.07.2025	Final Review	dr. Maria Saridaki

*This document reflects only the authors' views. The Executive Agency European Union is not responsible for any use that may be made of the information it contains.*

<sup>1</sup> R = Document, Report; Dem = Demonstrator, pilot, prototype; DEC = website, patent filings, videos, etc; OTHER = other

<sup>2</sup> PU = Public, SE = Sensitive



**Co-funded by  
the European Union**

*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.*

## LIST OF FIGURES

**Figure 1:** [NWO Impact - Theory - The Impact Pathway](#)

## LIST OF TABLES

**Table 1:** Overview of the challenges for RECs and CECs in Bulgaria, the Netherlands, and Flanders (Belgium).



**Co-funded by  
the European Union**

*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.*

## LIST OF ABBREVIATIONS

<b>GA</b>	Grant Agreement
<b>LLM-based</b>	Large Language model - based (chatbot)
<b>RES</b>	Renewable Energy Sources
<b>REC</b>	Renewable Energy Communities
<b>CEC</b>	Citizen Energy Communities
<b>ESCO</b>	Energy Service Company
<b>SGEI</b>	Services of General Economic Interest
<b>HOA</b>	Homeowners Association
<b>NECP</b>	National Energy and Climate Plans
<b>EERSF</b>	Energy Efficiency and Renewable Sources Fund
<b>EUKI</b>	European Climate Initiative
<b>NGO</b>	Non-Governmental Organisation
<b>DHC</b>	District Heating and Cooling
<b>CRM</b>	Customer Relationship Management
<b>EUCF</b>	European City Facility
<b>SME</b>	Small and Medium-sized Enterprises
<b>DSO</b>	Distribution System Operator
<b>VVSG</b>	Association for Cities and Municipalities in Flanders



**Co-funded by  
the European Union**

*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.*

## TABLE OF CONTENTS

DOCUMENT DESCRIPTION .....	2
REVISION HISTORY .....	2
LIST OF FIGURES .....	3
LIST OF TABLES .....	3
LIST OF ABBREVIATIONS .....	4
TABLE OF CONTENTS .....	5
1 INTRODUCTION.....	7
1.1 AIM OF THE DELIVERABLE .....	7
2 PROJECT OVERVIEW AND END OF THE PROJECT ASSESSMENT .....	8
2.1 TANDEM BEFORE AND AFTER-LIFE   A CHANGING CONTEXT .....	8
2.2 THE CURRENT STATUS OF RENEWABLE ENERGY COMMUNITIES (RECs) AND CITIZEN ENERGY COMMUNITIES (CECs) IN THE 3 REGIONS .....	9
2.3 ASSESSING THE AMBITION OF IMPACT REACHED AT PROJECT END UNDER THE TESTING TANDEM THEMES IN THE 3 REGIONS .....	13
2.4 LIFE TANDEM (2022-2025)   OBJECTIVES AND OUTPUTS REVISITED .....	18
3 DEFINING THE TANDEM AFTER-LIFE EXPLOITATION FRAMEWORK.....	21
3.1 THE THREE LEVELS OF REPLICATION AND TRANSFER   OTHER ENTITIES, SECTORS, REGIONS .....	22
3.2 APPLYING THE FRAMEWORK FOR EXPLOITATION OF TANDEM PROJECT RESULTS .....	24
3.2.1 Approaching exploitation through a World Café setting.....	24
3.2.2 Replication Of Tandem Results to Other Entities .....	25
3.2.3 Transferrable Results to Other Regions And Countries .....	25
3.2.4 Additional Exploitation Ideas.....	26
3.2.5 Replication Of Tandem Results to Other Sectors .....	26
4 PATHWAYS TO IMPACT   A TANDEM AFTER-LIFE METHODOLOGY .....	28
4.1 SETTING THE SCENE: PATHWAYS TO IMPACT & CIRCLES OF INFLUENCE...28	
4.2 APPLICATION IN THE LIFE TANDEM PROJECT   FROM PARTNERS' STORIES TO ACTIONS.....	29
4.3 AFTER-LIFE STORIES OF THE TANDEM PARTNERS   BELGIUM.....	31
4.4 AFTER-LIFE STORIES OF THE TANDEM PARTNERS   BULGARIA.....	45



**Co-funded by  
the European Union**

*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.*

4.5	AFTER-LIFE STORIES OF THE TANDEMS PARTNERS   THE NETHERLANDS	.52
4.6	AFTER-LIFE STORIES OF THE TANDEMS PARTNERS   AUSTRIA	.....57
4.7	SWOT ANALYSIS TANDEMS IN THREE REGIONS	.....59
4.8	BRINGING IT HOME   CORE TANDEMS ACHIEVEMENTS AND VALUES AS AFTER-LIFE OBJECTIVES	.....64
4.9	TANDEMS AFTER-LIFE CONSERVATION PLAN   A TIMELINE OF ACTIONS & RESOURCES	.....67
5	CONCLUSION	.....69



**Co-funded by  
the European Union**

*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.*

## 1 INTRODUCTION

The TANDEM consortium began its journey in October 2022 bringing together three European regions from different starting blocks and speeds, different cultural backgrounds and conditions but all working towards the same goal: the empowerment and facilitation of citizens to participate in the clean energy transition and the catalytic role that local authorities can play to pave this important route towards solving the climate challenge we are all facing.

The meaning of a tandem is still at the core of this project. A tandem can only move forward when the actors in the driving seats work in unison, constantly adjusting their speed and taking into account each other's differences, strengths and weaknesses and their potential. In order for a tandem to succeed, **a partnership needs to be formed**, working in rhythm, open for and anticipating change while adapting accordingly. The **symbolism** reflects not only the collaboration between a local authority, the citizens and energy cooperatives (or starting energy communities) but also reflects the growing necessity between European regions to **meaningfully collaborate and learn from each other**.

Reaching the final months of the TANDEM project (2022-2025), the consortium is ready to take stock and look ahead, to ensure that outcomes of TANDEM remain relevant and sustainable and have operational persistence and impact for the 5 years of the After-LIFE of the funding period (2025-2030).

### 1.1 AIM OF THE DELIVERABLE

This deliverable "Del.6.1 After-LIFE Plan | TANDEM Pathways to impact in 3 regions and beyond" is designed and developed to present the ways the TANDEM consortium will continue to engage its growing number of stakeholders and interested parties towards replication. The core objectives of the project and the tools created will be revisited, and the circle of influence of the individual partners and the consortium as a whole will be updated. In this deliverable, the consortium has chosen storytelling, mirroring the learning processes that have been followed throughout the project, to relay the strategy that will be followed in an engaging manner. Finally, a SWOT analysis and a comprehensive Conservation After-LIFE plan will be presented for the 5 years after the project's end (2025-2030), to ensure that the KPIs promised in the Grant Agreement are reached or even surpassed.



**Co-funded by  
the European Union**

*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.*

## 2 PROJECT OVERVIEW AND END OF THE PROJECT ASSESSMENT

In this section, we will revisit the context under which the TANDEM project was written, the objectives and outputs set and the effect they have had, as well as their potential for the future. A number of important contextual changes have taken place, some due to the valuable work done by the partners. Many milestones were reached, and still more change is underway. Here, we will present this evolution, clarify the context now and look ahead towards the potential created in the After-LIFE timeline of 2025-2030 in the TANDEM regions, with a hope to inspire the regions beyond our own.

### 2.1 TANDEM BEFORE AND AFTER-LIFE | A CHANGING CONTEXT

The LIFE TANDEM project was initiated against the backdrop of a pressing need to accelerate the energy transition in a way that is both inclusive and citizen-led. While the EU has recognised energy communities (ECs) as pivotal to achieving the 2030 and 2050 climate targets, the on-the-ground realisation of this vision faces significant hurdles. The legal definitions of Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs), introduced through the Renewable Energy Directive and Electricity Market Directive, provide a foundation for citizen participation. However, the actual transposition of these directives by Member States has been slow, often ambiguous, and hampered by juridical and market-related obstacles. Citizens—the intended beneficiaries—frequently remain excluded or disillusioned, especially amidst rising energy prices and a rapidly evolving energy landscape.

The TANDEM project positioned energy cooperatives as the most suitable actors to mature and multiply RECs and CECs. Their grassroots structures, rooted in cooperative principles, offer the capacity to inspire, organise, and guide citizens through the complexities of the energy transition. However, several key questions remain: when is such a cooperative viable, what does it require in terms of staffing and scale, and how can cooperation prevail over competition among emerging initiatives? These questions, alongside the urgent need for capacity building, user-friendly tools, community engagement, and strategic support from local authorities, were central to the TANDEM project's mission.

To answer these questions and demonstrate replicable models, TANDEM focused on three regions: **Achterhoek** (Netherlands), the **Province of Antwerp** (Belgium), and the municipalities of **Gabrovo and Burgas** (Bulgaria), each region bringing unique challenges and assets.

In the Achterhoek, the Agem cooperative, founded by eight municipalities, has grown into a mature social enterprise supporting 15 Local Energy Communities (LECs). With a strong track record in rooftop solar and citizen engagement, Agem seeks to expand into larger solar and wind projects, promoting citizen ownership and ensuring local economic benefits through innovative business models. The province of Antwerp, home to active cooperatives like ZuidtrAnt and Klimaan, illustrates the potential of fostering collaboration between local



**Co-funded by  
the European Union**

*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.*



authorities and existing initiatives. Cities like Mechelen lead the way with co-created policies and efforts to integrate energy sharing, particularly in diverse, vulnerable and densely populated areas. Klimaan and ZuidtrAnt are exploring scalable collaboration models that maintain local identity while expanding impact.

Kamp C, as an innovation hub for Antwerp's municipalities, plays a pivotal role in facilitating these efforts by piloting its own REC and creating an open training centre for replication and learning. Meanwhile, VITO contributes methodological and policy expertise to assess the social and environmental impact of energy communities.

In Bulgaria, where energy cooperatives were virtually non-existent, the project aimed and succeeded to catalyse the creation of new energy communities in Gabrovo and Burgas and to attract five more municipalities to follow suit. EnEffect, Bulgaria's key energy policy actor, has anchored this initiative by drawing on its extensive municipal network and policy experience. Gabrovo, known for its award-winning sustainability work, has succeeded in piloting energy cooperatives across municipal, commercial, and multifamily buildings. Burgas, a frontrunner in green innovation, combined strong municipal leadership with crowdfunding and strategic partnerships to launch its own citizen-driven model.

Together, these regional efforts demonstrate how energy communities can move from the margins to the mainstream. Through local leadership, cross-sector collaboration, and citizen empowerment, TANDEM has provided the conditions, practices, and tools that will drive systemic change and inspire replication across Europe.

## **2.2 THE CURRENT STATUS OF RENEWABLE ENERGY COMMUNITIES (RECs) AND CITIZEN ENERGY COMMUNITIES (CECs) IN THE 3 REGIONS**

The transposition of the CEC and REC directives in national law has been and still is very challenging. Expecting a wide upscaling of its implementation within the maze of a rapidly changing energy market by citizens initiatives in semi or non-professional structures may prove unrealistic. Though, good first steps have been made, the current definitions require a correct and bold application, often despite policy. The TANDEM consortium used Rescoop EU's trackers to point out the challenges.

In Bulgaria, in 2022 there was "no draft legislation released yet and there is also no existing legislation for energy communities to be evaluated. The citizen participation in the energy sector and the model of energy communities is very new and the transposition process will be delayed there." In Belgium, citizen participation is not ensured, "although the recitals state that the objective of energy communities is to strengthen the involvement of citizens, local authorities, non-commercial institutions and companies is an important factor to accelerate the social acceptance of the energy transition and the further development of renewable energy projects." In the Netherlands, there was one EC definition and "it is open to all legal persons, regardless of form. With no authority to oversee compliance with the conditions for energy communities, this could result in abuse. Lastly, the definitions do not go into any



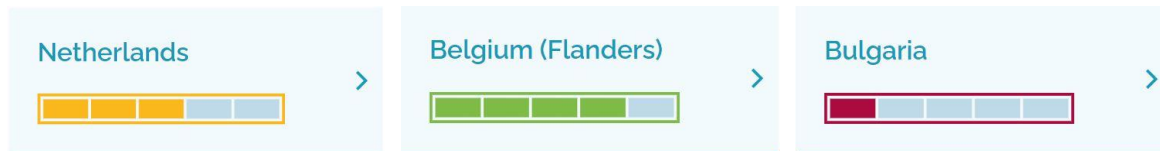
**Co-funded by  
the European Union**

*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.*

specific detail on the governance principles, which would help provide necessary clarity.” (Source: [Policy - REScoop](#)) In both BE and NL, there was and still is a valid worry that the CEC and REC model will be commercialised.

This is why in the TANDEMS project we argued that established Energy Cooperatives are the right ‘vehicles’ to ensure a just transition, including the citizen in every step.



Source 2022: [Policy - REScoop](#)

As of January 1<sup>st</sup> 2022 energy sharing and energy communities was permitted in Flemish locations. With the implementation of legislation speeded up in 2022, the distribution service operators are still developing their tools. This, however, is a brand new framework and the classic market players have been reluctant to implement this part of the energy transition or see opportunities for product development without the citizens. The TANDEMS project has attempted to overcome these barriers through intensive ‘Learning by Doing’ methods, interactions between the partners, applying an innovative Open Collaboration model and by combining co-creation with citizens with the facilitating role of local governments.

The table and the updated overview below, still show the evident challenges of the status of Renewable Energy Communities (RECs) and Citizen Energy Communities (CECs) in Bulgaria, the Netherlands, and Flanders (Belgium), regarding the **transposition of definitions, enabling frameworks, and financing mechanisms** (Cohesion & Regional Development Funds), based on the latest data from REScoop.eu. (Source: July 2025)

Transposition of REC/CEC Definitions	Enabling Frameworks	Financing Mechanisms Cohesion & Regional Development Funds
Belgium (Flanders) > 	Belgium (Flanders) > 	Belgium (Flanders) > 
Bulgaria > 	Bulgaria > 	Bulgaria > 
Netherlands > 	Netherlands > 	Netherlands > 

**Table 1:** Overview of the challenges for RECs and CECs in Bulgaria, the Netherlands, and Flanders (Belgium).



**Co-funded by  
the European Union**

*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.*

## BULGARIA

### Transposition of REC/CEC Definitions:

- In October 2023, Bulgaria amended its Law on Energy from Renewable Sources, introducing definitions for RECs and "civil energy communities" (CECs).
- While this marks progress, details on ensuring autonomy for RECs are lacking.
- The geographical proximity requirement is unclear and seems to restrict RECs to urban areas, limiting their growth and access for rural citizens. ([Bulgaria- REC/CEC definitions - REScoop](#))

### Enabling Frameworks:

- The Law promotes non-discriminatory treatment and accessibility for all users, including low-income households.
- However, there are no specific policies or measures to promote inclusiveness or target vulnerable households.
- Municipalities are mandated to establish one-stop shops for information and administrative support, but no dedicated resources have been allocated to ensure their effective operation. ([Bulgaria - REScoop](#))

### Financing Mechanisms:

- Bulgaria's Recovery and Resilience Plan (RRP) does not mention energy communities, and it is unlikely they will feature in the REPowerEU chapter.
- Under the Cohesion Policy for 2021-2027, Bulgaria has eight national operational programmes, but none include targeted support for RECs or CECs.
- The Modernisation Fund allocates over €16 million for Bulgaria, but currently, it supports only private energy companies, with no provisions for energy communities. ([Bulgaria - Recovery and Resilience Fund - REScoop](#), [Bulgaria - Cohesion & Regional Development Funds - REScoop](#), [Bulgaria - Modernisation Fund - REScoop](#))

## THE NETHERLANDS

### Transposition of REC/CEC Definitions:

- The Netherlands has defined energy communities in national law, allowing all legal persons to participate, regardless of form.
- However, there's no authority designated to oversee compliance with the conditions for energy communities, raising concerns about potential misuse.
- The definitions lack specific details on governance principles, which could provide necessary clarity.



**Co-funded by  
the European Union**

*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.*

### Enabling Frameworks:

- The Dutch REPowerEU plan refers to a new energy law under development, aiming to ensure new market initiatives, including energy communities, can play a role in the energy market.
- However, the plan lacks detailed provisions for supporting energy communities, and the development of the new law has been delayed due to political factors. ([Netherlands - REPowerEU - REScoop](#))

### Financing Mechanisms:

- The Dutch Recovery and Resilience Plan (RRP), supported by €4.7 billion in grants, does not mention energy communities.
- Under the Cohesion & Regional Development Funds, energy communities are mentioned in some regional programmes.
  - The West Regional Development Program includes energy communities as specific targets.
  - The North program offers a small subsidy for energy communities to hire legal experts.
  - The East program doesn't mention energy communities, and while the South programme does, no energy community has received funding through it to date. ([Netherlands - Recovery and Resilience Funds - REScoop](#), [Netherlands - Cohesion & Regional Development Funds - REScoop](#))

## **FLANDERS (Belgium)**

### Transposition of REC/CEC Definitions:

- Flanders has transposed energy community definitions into a single concept, with RECs and CECs representing slightly different notions.
- The Energy Decree emphasizes the participation and empowerment of citizens and households in the energy market.
- It clarifies that energy communities should not pursue purely economic goals or profit motives. ([Belgium \(Flanders\) - REC/CEC definitions - REScoop](#))

### Enabling Frameworks:

- Municipal-level "Energy Houses" have been established to provide information, financial, and other assistance to citizens and communities, including support for community solar PV projects, though their activities and support, has so far been lacking w.
- At the federal level, support schemes for offshore renewable energy development include provisions to ensure energy communities can participate in financing and ownership. ([Belgium \(Flanders\) - REScoop](#))



**Co-funded by  
the European Union**

*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.*

### Financing Mechanisms:

- The Flemish Recovery and Resilience Plan does not mention energy communities, nor are any supportive measures foreseen.
- Under the Cohesion & Regional Development Funds, energy communities are framed under objectives promoting a circular and eco-innovative approach to decentralized renewable energy generation.
  - However, there is no specific financial allocation for energy communities in the Flemish Operational Programme. ([Belgium \(Flanders\) - Cohesion & Regional Development Funds - REScoop](#), [Belgium \(Flanders\) - Recovery and Resilience Fund - REScoop](#))

### In summary:

- **Bulgaria** has recently defined RECs and CECs in law but lacks detailed frameworks and financing mechanisms to support their development.
- **The Netherlands** has inclusive definitions but lacks oversight and detailed governance principles, with limited financing support for energy communities.
- **Flanders** has coherent definitions and some enabling frameworks at the municipal and federal levels but lacks specific financial allocations in major funding programmes.

These insights highlight the varying degrees of progress and challenges in implementing energy community frameworks across these regions. Clearly a lot of work still ahead for the After-LIFE years of TANDEM.

## **2.3 ASSESSING THE AMBITION OF IMPACT REACHED AT PROJECT END UNDER THE TESTING TANDEM THEMES IN THE 3 REGIONS**

In this section, we will assess the ambition of the impact reached in the 3 regions of the TANDEM project and revisit the goals promised by 2030, through the pilots developed under the structure of the TESTING TANDEM themes (WP3): 1. Wind and Large-Scale Solar Tandems, 2. Solar Tandems and 3. Heat-Networks & Citizen-led renovation Tandems.

During the last KPIs check (end June 2025) the progress of the targets so far was as follows:

By the end of the project in September 2025, TANDEM aims to deliver a wide variety of replicable models and trainings, demonstrate and **trigger 83** (instead of 57) **community energy projects, support and/or create 60** (instead of 23) **citizen-led initiatives and trigger RES generation of 8.52 GWh/year** (instead of 10.15 GWh/year) **with 14.6m€** (instead of 7.9m€) **investments** in sustainable energy. The RES production is less because we want to be prudent with the estimation of the wind projects being triggered. By **2030** thought, the generation would jump to **95.37 GWh/year** instead of the promised **46.68 GWh/year**. Also worth mentioning is that due to the wonderful work in the Gabrovo multi-



**Co-funded by  
the European Union**

*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.*



family buildings, the final energy savings **Final Energy Saving (in GWh/year)** KPI reached by 2025 is now a much enhanced **7.85 GWh/year** (instead of the promised 0.58 GWh/year).

Other areas the TANDEM project is over-performing are:

- No. People trained with increased skills: **5052** instead of **350**
- Number of local and regional authorities committed to replicate best practice experiences: **68** instead of **37**
- People reached (Communication) : **680.000** instead of **30.000**

In the following section, we will approach these targets per region.

### **The Netherlands (Achterhoek region)**

In the Netherlands, the TANDEM project aimed to shift the paradigm of large-scale wind and solar project development by giving local governments and communities more control over site selection and project ownership. Agem, the local partner, pursued a strategy to ensure at least 50% local ownership in renewable energy projects in the Achterhoek region. While legal frameworks like the new 'Omgevingswet' facilitated citizen participation in planning, local energy cooperatives faced barriers such as land access, capital limitations, and lack of expertise. Agem addressed these by developing new models for early-stage land access, democratic participation and consumption of locally produced energy at cost price. This included piloting administrative and legal infrastructures that allow local communities to consume their own green energy and avoid market price volatility. In the solar theme, Agem contributed inspiration and business cases for rooftop solar with local cooperatives. For citizen-led renovation, Agem also shared its 'desk for energy efficiency' model with Belgian and Bulgarian partners, financed through a long-term SGEI framework.

In **2025**, the TANDEM project triggered one wind cooperative Noaberwind and one solar Parc Twijggraven, they are now in development. The two solar cooperatives, engaging **112** citizens. development took longer than expected. During the project, Agem focused on business models, policies and support. Local and regional authority support grew, with **28** local and regional authority committed to replicate the model. The training efforts reached **3078**, vast improvement from the 100 individuals aimed originally, raising capacity within municipalities and civil society. The project achieved **€1.08 million** in investments in sustainable energy and contributed to **1.5 GWh/year** of renewable energy generation but triggered **€53 million** in investments.

By **2030**, the ambition will be expanded significantly. One wind cooperative and six solar cooperatives will be realised, with around 1,600 citizens participating. The number of committed authorities will be doubled to 16 local and 2 regional entities. Investment volumes will reach €30.6 million, reflecting 33 GWh/year in renewable energy production. Although primary and final energy savings figures were originally not assessed, the impact in greenhouse gas (GHG) reduction, innovation, and capacity building will be substantial. X more stakeholders will be trained, communication efforts will reach 20,000 people, and employment is expected to grow to 6 FTE.



**Co-funded by  
the European Union**

*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.*

### **Belgium (Province of Antwerp)**

In Belgium, the TANDEMS project implemented a wide range of solar and heat network initiatives in Flanders, focusing on community ownership and social inclusion. In the Antwerp and Mechelen regions, project partners ZuidtrAnt and Klimaan led many pilot projects including rooftop solar on industrial sites, care institutions, schools, and social housing. Special attention was paid to integrating solar into apartment buildings and enabling energy sharing through cooperatives. Mechelen developed models to address energy poverty by educating social housing tenants and maximizing self-consumption of local energy, earning the **EUSEW 2025 award for their Energy Action in Otterbeek**, together with Klimaan and Woonland. Klimaan introduced shared e-mobility as an added layer of energy community services. Kamp C demonstrated leadership by creating a REC at its innovation campus, integrating multiple stakeholders. Under the heat networks and renovation theme, ZuidtrAnt developed cooperative ESCo models for sustainable heat networks, working in collaboration with local authorities in Mortsel and surrounding municipalities. Klimaan initiated a district heating network in Bonheiden, aligning local government ambitions with cooperative structures.

In Belgium, the project achieved a wide and deep footprint.

By **2025**, TANDEMS supported 29 initiatives in the province of which 23 are achieved and 6 projects are triggered.

ZuidtrAnt achieved 15 projects:

- Burenwerf Zoersel | Bloemenwijk renovation:
- Mortsel | Loods 409 : PV and circular batteries, energy sharing within the same company
- Burenwerf Hove/Kontich | Vredewijk: Kontich
- Schoten: burenwerf
- Burenwerf Zandhoven
- Burenwerf Edegem
- Burenwerf Lint
- Burenwerf Wuustwezel
- Zonnewerf( op basis van partnerschappen)
- Solar ZuidtrAnt
  - WZC woonzorgcentrum Mortsel
  - Technische dienst Mortsel
  - Zeurt sporthal Schoten
  - Ahoy Wijnegem
- Defensie Brasschaat

Klimaan/Mechelen achieved 7 projects

- Multiple family buildings – Mechelen



**Co-funded by  
the European Union**

*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.*

- Mechelen | Energiegemeenschap Otterbeekwijk
- Mechelen / Puurs-Sint-Amands / Bonheiden | Schools as Energy communities
- Mechelen and surroundings | Other citizen participation PV projects
- Mechelen and surroundings | Improving Zonnewijzer
- Mechelen | Improving Zonnewijzer.biz
- Mechelen and surroundings | E-mobility

Klimaan + ZuidtrAnt achieved 1 project

- Heist-op-den-Berg | Heatnetwork Averegten

Kamp C achieved 1 project

- - Energycommunity Kamp C / Oosterwijk

Belgium triggered 6 projects

- Mortsel | Sint Benedictus: BEO veld
- Mortsel | Extension heatnetwork Mortsel:
- Edegem | Extension heatnetwork Edegem:
- Burenwerf Lier
- Bonheiden | Extension Heatnetwork Rijmenam

These focused on energy sharing, collective renovations, and heating networks.

Around **1810** new cooperative members joined, and over **1896** stakeholders were reached through targeted trainings and events. Innovation uptake included new manuals, toolboxes, training materials, and models. (see 2.4 outputs) Notably, the province supported a range of replication actions via Kamp C and provincial housing and planning departments.

Investments totalled **€5.6** million, and renewable energy generation reached 6.42 GWh/year, exclusive contributions from collective heat networks. Primary energy savings reached **0.73 GWh/year** in spite of 8.13 GWh/year, and GHG reductions were estimated at **0.92 kton CO<sub>2</sub>/year** at spite of 2.63 kton CO<sub>2</sub>/year, because of the heating network projects. These require longer preparation time, but are triggered and will be realised in 2030.

By **2030**, the ambition will be scaled to include citizen-led initiatives in at least 23 more municipalities, expanding cooperative membership and engaging a total of 3,500 new citizens. Investments is aimed to rise to €7 million, contributing to 10 GWh/year of renewable generation and 5.8 kton CO<sub>2</sub>/year in emission reductions. Innovation uptake included new manuals, toolboxes, training materials, and models and these will be widely put to use in the 67 municipalities of the province of Antwerp. Employment should be doubled, and media and event outreach should reach another 20,000 stakeholders. The successful implementation of policies, legislation and training through Kamp C's training centre and collaboration with Kempen 2030 and Mechelen demonstrated the catalytic effect of the project.



**Co-funded by  
the European Union**

*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.*



## **Bulgaria (Gabrovo and Burgas)**

In Bulgaria, where energy cooperatives are still in their infancy, TANDEM focused on first-time implementation and capacity building. **In Gabrovo, the 1<sup>st</sup> Energy Community became a reality**, thanks to the hard work of our Tandems partners. The cities of Gabrovo and Burgas engaged in pilot projects for rooftop solar on municipal, commercial, and residential buildings. Financial models included municipal co-investment, crowdfunding, and national grants. Partner EnEffect coordinated the legal, technical, and community engagement aspects, supporting formation of new cooperatives with administrative and legal frameworks. For heat networks and renovations, the Bulgarian partners learned from Flemish best practices, and explored combining retrofitting of multifamily buildings with decentralized energy generation. In this context, Gabrovo's past as a European Green Leaf winner and Burgas's leadership in innovation provided strong local anchors for replication. WP2 analysis helped identify project sites while pilot learnings laid the foundation for national policy input and market development.

In Bulgaria, TANDEM addressed a near-absence of energy communities at project start. In **2025**, two PV cooperatives were realised:

- Energy Community Regional landfill for non-hazardous waste in Gabrovo
- Energy Community | City Swimming Pool in Burgas

In addition, efforts have been made in the sustainable renovation of apartment buildings and multi-family buildings:

- Support sustainable energy renovation of residential buildings in Gabrovo
- Renovation of multi-family building in Burgas

The energy communities were established engaging about **135** citizens. **78** key municipal and sectoral actors were trained, and **17** citizen led initiatives were supported as a result of the project. Although initial investments were more modest (**€0.3 million**), the foundations for renewable energy production and local legislative support were laid, with **0.599 GWh/year** generated annually.

Through the sustainable renovation of multi-family buildings there are **7.37 GWh/year** primary energy savings and **1593 tons** CO<sub>2</sub> saved annually. Two legislative frameworks were adapted to facilitate replication and national alignment.

By **2030**, the impact will be multiplied. At least 14 energy initiatives will be active, including 10 in other municipalities. Training should reach another 70 professionals, and investment €1 million. Renewable energy generation should rise to 0.682 GWh/year, and GHG savings to 1,881 tCO<sub>2</sub>/year. Final energy savings should grow from 0.051 to 0.23 GWh/year. Dissemination actions, such as the use of EcoEnergy and the National Association of Municipalities' platforms, will significantly boost the visibility and replicability of the models. With 7 FTE jobs to be created by 2030, the project will catalyse the development of Bulgaria's community energy sector and legislative framework.



**Co-funded by  
the European Union**

*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.*

Throughout the TANDEMS project, transition and participation processes (for citizens and policy stakeholder), guidelines and expertise were provided by partners VITO and DuneWorks, supporting and triggering the partners in their innovative pilots. Last but not least, the communication strategy created and realized expertly by partner Oikoplus proved very effective in its outreach.

## 2.4 LIFE TANDEMS (2022-2025) | OBJECTIVES AND OUTPUTS REVISITED

The TANDEMS project has been a success. The 'Learning by Doing' processes followed, the deep dives taken and the intensive interactions between the project partners from the start, as well as the individual drive of the partners to excel in their regions and in their own pilots, has been very inspiring. For us to reach our 2025 promised impacts, a number of key objectives and outputs were designed. In this section, we will revisit them, aiming to navigate the path towards the After-LIFE impact promised, by identifying the most exploitable outputs our project has created and assessing the opportunities that are ahead.

### TANDEMS OBJECTIVE 1:

To ensure an inspiring and meaningful collaboration and exchange of ideas and best-practices throughout the partnership... by spending the first months of the project in an immersion trajectory to learn not only about the challenges and potential of the collaboration of energy cooperatives and municipalities at each other's regions, taking turns in presenting their regions, pilot sites and potential replication; important also for project results, as the challenges of one region may find their answer in the strategies developed in another.

**Output at GA:** 1 immersion trajectory

### TANDEMS OBJECTIVE 2:

To develop a comprehensive blueprint of an open collaboration model for energy communities, based on a value-centred approach (beyond purely financial values) and the roles played by different actors in realising this added value... by testing different collaboration scenarios on a selection of the opportunities identified by the 'Urban Energy Pathfinder' model as well as the other TANDEMS implementation sites (cf. WP3) and continuing to improve the open model during the implementation phase.

**Output at GA:** 1 open collaboration model and example agreement that makes cooperation between local authorities and energy communities legally possible.

### TANDEMS OBJECTIVE 3:

To develop new processes and business models in order to remedy market barriers for large scale projects... by creating a new, democratic process for choosing locations for solar and wind farms; creating a new business model and infrastructure for local energy providers that



**Co-funded by  
the European Union**

*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.*

makes it possible to administratively and legally consume your own locally produced electricity from communally owned solar or wind farms; creating a business model that will make it possible to participate in (and own) wind and solar farms without an initial investment, making it accessible to all citizens to participate.

**Output at GA:** 2 new business models

#### **TANDEM OBJECTIVE 4:**

To test the models and scenarios developed in the identified pilot sites, in order to set up viable and innovative energy community projects... by developing hands-on tools and practices, gathered and combined to form comprehensive scripts/manuals, referring to the identifiable local conditions and value systems with extensive do's and don't advice. Their effectiveness will be validated in the implementation of Energy Community projects.

**Output at GA:** 1 practical guide to start sharing energy within a community, 1 practical guide to actively involve and participate in energy communities for the socially disadvantaged, 1 cooperative wind guide, 1 practical tool for local authorities and developers of wind energy projects who want to work together on local support for new and current projects, 1 citizen-led district renovation guide, 1 apartment block retrofitting and/or energy sharing guide, 1 heat network guide

#### **TANDEM OBJECTIVE 5:**

To demonstrate the effectiveness of the open collaboration model and tools developed in tangible pilot in diverse situations and contexts in 3 countries...by testing and implementing the model in the 3 regions under three thematic divisions: 'Wind and large scale solar', 'Solar' and 'Heating networks & citizen-led renovation', reflecting different scales, contexts and business models.

**Output at update KPI webtool M18:** KPI: 57 implemented projects, including 2 new collective renewable heat networks, 1 expansion of an existing heat network into existing homes, 2 district renovation projects, 4 collective energy sharing projects in apartment buildings, 2 projects on energy sharing in the district, 10 projects on social housing, 20 cooperative rooftop solar installations, 10 shared EVs deployed, 4 pv plants, 2 large scale solar 100% locally owned and the initiation of 1 wind project

**Output at M34:** KPI: 83 implemented projects, including 2 new collective renewable heat networks, 1 expansion of an existing heat network into existing homes, 2 district renovation projects, 4 collective energy sharing projects in apartment buildings, 2 projects on energy sharing in the district, 1 project on social housing, 20 cooperative rooftop solar installations, 20 shared EVs deployed, 4 pv plants, 2 large scale solar 100% locally owned and the initiation of 1 wind project

Bulgaria 11 | The Netherlands 2 | Belgium 70



**Co-funded by  
the European Union**

*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.*

### **TANDEMS OBJECTIVE 6:**

To foster the collaboration between local authorities and energy cooperatives... by empowering citizens and citizens initiatives and engaging local authorities in a dialogue with energy cooperatives; by creating the necessary fertile ground for new energy communities where none exist.

**Output at GA:** KPI: 23 citizen-led initiatives supported and/or created by the project, including 1 where the city of Mechelen participates in

### **TANDEMS OBJECTIVE 7:**

To develop methods for multi-and transdisciplinary collaboration and learning for participatory community energy development and to implement them on pilot regions, monitoring and evaluating the engagement approaches in each of the pilots... by holding co-creation workshops in order to develop the method based on environmental justice principles and placemaking; producing generic and more tailored training guides to be used in the participating pilots; applying an environmental justice framework to design, monitor and evaluate the engagement in each of the pilots; organising train-the-trainer workshops with the pilot holders and/or related stakeholders, in order to train them in the set-up and implementation of a stakeholder and citizen engagement trajectory; implementing, monitoring and evaluating the engagement approaches in each of the pilots; setting up an open learning and training centre at Kamp C during the initiation of working with pilots; and lastly by developing innovative awareness campaigns/ICT tools to enhance impact.

**Output at GA:** KPI: 3 trainings, 1 open learning training centre, 1 ICT tool

### **TANDEMS OBJECTIVE 8:**

To create a supportive local policy framework for the development of community energy projects and to facilitate a dialogue among different actors involved in community projects... by researching the potential of Energy Communities (RECs and CECs) to grow under the umbrella of Energy cooperatives; engaging local stakeholders in a structured dialogue and to develop informed, realistic, and feasible policy recommendations within specific policy and decision-making contexts as analysed for each TANDEMS pilots; aligning these policy recommendations with new European and national initiatives stemming from the pending implementation of the Green Deal, Fit-for-55 and national recovery and resilience plans; ensuring proper integration of the developed policy recommendations in the ongoing policy-making process, including in the revision of NECP, as applicable and supporting the replication of policy recommendations within different national and European contexts.

**Output at GA:** 5 policy / strategy recommendations

### **TANDEMS OBJECTIVE 9:**

To ensure the outcomes of the TANDEMS are relevant and sustainable and have operational persistence and impact even after the funding period... by defining and the TANDEMS models in replicable Business models; developing an After-LIFE exploitation Plan and a comprehensive Communication/Dissemination Strategy that ensures the widest possible



**Co-funded by  
the European Union**

*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.*

awareness and outreach of the project among policy makers, representatives of advocacy institutions, municipal agencies and the broader public; implementing the communication and dissemination efforts starting from the digital dissemination and communication hub; developing; implementing stakeholder specific actions in all partner countries and at the TANDEMS demonstration sites, including networking with other LIFE projects and share with other local and EU regions through self-organised events and participation in established EU events; and finally through creating inspirational guides with practical examples.

**Output at GA:** 30,000 people reached



**Co-funded by  
the European Union**

*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.*

### 3 DEFINING THE TANDEM AFTER-LIFE EXPLOITATION FRAMEWORK

In this section, we will dive into the After-LIFE exploitation Framework that the TANDEM partners will follow, as they navigate the path towards the After-LIFE impact promised. By identifying the most exploitable outputs our project has created and assessing the opportunities that lie ahead, the partners will then be ready to formulate their After-LIFE Stories, prepare their SWOT analyses and plan the After-LIFE Conservation actions in Section 4.

#### 3.1 THE THREE LEVELS OF REPLICATION AND TRANSFER | OTHER ENTITIES, SECTORS, REGIONS

Throughout its implementation, the LIFE TANDEM project placed a strong emphasis on the **replication and transfer** of its demonstrated strategies. This was pursued through a structured After-LIFE Plan initiating actions **across three levels**:

- 1) **Replication by Other Entities**
- 2) **Dissemination to Other Regions and Countries, and**
- 3) **Transfer to Other Sectors**

At the first level, TANDEM successfully ensured that its strategies were adopted by other **municipalities, energy communities and citizen initiatives**, acknowledging that no one-size-fits-all solution exists. By diversifying models of energy production, offering practical training to stakeholders, and applying a broad array of approaches, the project demonstrated that replication could succeed when stakeholders clearly understood both the benefits and the feasibility of the models presented. Practical dissemination materials, business models, and adaptable workshops were prepared and will continue to be rolled out to ensure maximum uptake. In Belgium, the **Open Learning and Training Centre at Kamp C**, now a blueprint, will become a focal point for learning, offering tailored training and fostering inter-municipal collaboration. In the Netherlands, dissemination through **HierOpgewekt** and collaboration with **EnergieSamen** ensured and will continue to ensure wide national reach. In Bulgaria, the project activated **local energy community ambassadors** and leveraged national funding schemes and renovation programmes to promote replication—particularly in multifamily housing contexts.

At the second level, the project extended its impact into **related sectors**. Key actors in the energy, housing and construction industries were engaged in demonstration activities and invited into knowledge exchange processes. In Bulgaria, the project's outputs were successfully integrated into **Sustainable Energy and Climate Action Plans (SECAPs)** in Burgas and Gabrovo. These will be further embedded into existing frameworks such as **ISO:50001** in Burgas and the **European Energy Award** in Gabrovo. The integration of smart net metering and partnerships with local IT industries demonstrated TANDEM's potential to shape innovation beyond energy communities alone.



**Co-funded by  
the European Union**

*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.*



At the third level, the project extended its reach **nationally and internationally**. In Flanders, the project benefited from the engagement of influential partners such as **REScoop Vlaanderen, Bond Beter Leefmilieu, Burgerenergie.be, VVSG**, and others, all of whom helped spread the project's insights through national networks, media, and municipal partnerships. In Bulgaria, **EnEffect** played a key role in disseminating good practices through networks like **EcoEnergy** and the **National Association of Municipalities in the Republic of Bulgaria**, and will continue to provide direct consultancy and policy support to municipalities.

The project's replication strategy also gained traction internationally. TANDEM partners were active in other EU projects and conferences, worked closely with **5 LIFE ENERCOM Sister projects** culminating to a **successful policy session at EUSEW 2025** and **Final post-EUSEW event** in Brussels, drawing on platforms such the **Energy Cities** and **Rescoop EU's** wide-reaching communication channels. EnEffect's involvement in the **Covenant of Mayors** and **European Energy Awards** provided further visibility, particularly in Central and Eastern Europe.

The catalytic potential of the project was particularly evident in Belgium, where the **Citizen Wind At Sea** initiative, coordinated by REScoop Belgium, aligned closely with TANDEM principles—demonstrating how citizens, municipalities, and cooperatives can co-govern renewable resources like offshore wind. In the province of Antwerp, replication was systematically embedded through the **'Experts' Group for Climate and Energy'** and collaboration with the province's **departments of Spatial Planning and Housing**. The aim is to incorporate the models and strategies developed into ongoing policy, renovation, and sustainability frameworks. TANDEM further aligned with the **Kempen 2030** initiative, and will aim to closely engage the 29 municipalities in the Kempen region to work towards shared climate goals, including renewable energy production, citizen participation, and deep renovation.

The city of **Mechelen**, despite spatial constraints, became a replicable model for cities of around 100,000 inhabitants by embedding energy sharing into its operations, funding local cooperatives, and testing inclusive models for apartment blocks and social housing. Its participation has and will continue to inspire city and larger municipalities across Flanders and Europe.

In Bulgaria, the catalytic effect has been substantial. The integration of TANDEM outcomes into SECAPs, investment plans, and high-profile platforms such as the **EU City Facility** and **Covenant of Mayors** will ensure long-term replicability. The driven municipality of Gabrovo as innovator and Burgas as replicator not only became national role models for energy community development but also served and will continue to serve as gateways for widespread uptake across Bulgaria. With broad access to key dissemination networks and strategic positioning within national and European initiatives, TANDEM demonstrated how local action can influence systemic change on a national and continental scale.



**Co-funded by  
the European Union**

*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.*

## 3.2 APPLYING THE FRAMEWORK FOR EXPLOITATION OF TANDEM PROJECT RESULTS

Each partner had clearly described their stakeholders and the potential for Sustainability, Replicability and Upscaling of the TANDEM results in the Grant Agreement. However, as a consortium we felt that we had to revisit the **‘Exploitability of the results’** and how they related to their **‘Catalytic potential’**.

Staying true to the co-creative DNA of the TANDEM project, this section summarizes the key findings and discussions from the **‘Exploitation World Café’** workshop at the **5<sup>th</sup> TANDEM Consortium Meeting in Gabrovo, Bulgaria on October 15<sup>th</sup>, 2024** and is based on the notes taken by the three ‘table anchors’ Michael Anranter and Thomas Stollenwerk from Oikoplus and Justin Pagden from AGEM.

### 3.2.1 Approaching exploitation through a World Café setting

The focus and objective of the World Café was to explore how TANDEM project results can be transferred, replicated, and exploited in other entities sectors and regions, following the direction the consortium proposed in the TANDEM Grant Agreement.

#### **‘Exploitation’ is not a dirty word**

During the discussions, it became obvious that the consortium generally did not find it easy to focus specifically on the reusability of the project results, even though the practical orientation of the project is very clearly present and is also clearly recognised and named by the project partners. It seemed to be the term, or rather the concept of exploitation as such, that was causing difficulties. The workshop in the form of a World Café was intended to break the ice and prepare the project's After-LIFE Plan WP6 deliverable.

At three discussion tables in the World Café, the TANDEM team discussed possible ways of reutilising project results in **1) Other Entities, 2) Other Regions and 3) Other Sectors**. It was not always easy to differentiate between the three levels, nor between exploitation and communication/dissemination activities. For example, the group on replication to other sectors mainly discussed which other sectors exist, but less about which TANDEM results could be of concrete use for these sectors. It was mentioned in the discussions by one participant, that it is generally hardly possible to utilise the results of projects and that it is usually better to develop everything yourself from an early stage.

These occasional difficulties in seeing clearly that the TANDEM project delivers a large number of concrete project results that can be utilised and built upon show how important it is to think about exploitation in a structured way. Exploitation refers to the process of **using project results** to create **economic, social, environmental, or scientific benefits, or value**. It involves ensuring that the **project's outcomes are utilized** beyond the duration of the project and **have a lasting impact**. Exploitation is focused on how the project's



**Co-funded by  
the European Union**

*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.*



deliverables (e.g., technologies, tools, data, knowledge) can be applied, transferred, or developed further to generate value.

In the discussions, it seemed as if the term exploitation blocked the natural view that it is completely normal in everyday working life to utilise the results of previously completed work - regardless of whether you have done this work yourself or whether it was done by others. The discussions in the Exploitation World Café have actually contributed to shift the perception of the partners to accept that 'exploitation' is not a dirty word and that their work within TANDEMS has the potential and value for the creation of greater impact.

In the following sections, we will present the World Café Workshop results at the 3 tables:

**1) Other Entities, 2) Other Regions and 3) Other Sectors.**

### 3.2.2 Replication Of Tandems Results to Other Entities

- **Energy Sharing Contract (BE):** A model contract for energy sharing between municipalities and Renewable Energy Cooperatives (RECs) in Belgium could be replicated, where injected power is used by others within the community.
- **Klimaan (BE):** The statutes and membership agreements of Klimaan REC are transferrable to other energy communities. Their selection process for energy-sharing platform organisers (WeSmart) provides a replicable template.
- **Heat Networks (BE&NL):** Guidance on starting and managing heat networks from the TANDEMS project could be shared with other entities looking to implement similar solutions.
- **Bulgarian Energy Community Model (BG):** This includes legal frameworks, political commitments, city council decisions, and communication strategies that could be transferred to other regions or entities, including SMEs and homeowner associations with microgrids.
- **Kamp C Blueprint (BE):** Kamp C's step-by-step blueprint for setting up an energy community is replicable, offering guidance for others who wish to establish similar communities.
- **Industrial Zones (EU):** There was a discussion about engaging businesses in industrial zones, highlighting the need to present energy sharing as part of a broader sustainability picture.
- **Document Packages (EU):** Essential documents for setting up energy communities, such as contracts, legal frameworks, and step-by-step guides, can be uploaded to relevant platforms (e.g., RescoopEU) for wider access.

### 3.2.3 Transferrable Results to Other Regions And Countries

- **Open Collaboration Model:** This model can be used across regions, helping stakeholders implement a result-oriented monitoring approach.



**Co-funded by  
the European Union**

*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.*

- **TANDEMS Chatbot:** This tool could serve as a knowledge base for energy cooperatives across the EU, though it may need regional adaptations.
- **Legal Contracts:** The models for setting up energy cooperatives, developed in Burgas and Gabrovo, can be shared within other regions (Flanders, Bulgaria, etc.).
- **Guides and Templates:** Business model templates, guidelines on crowdfunding, and citizen involvement strategies can be packaged and shared for replication.
- **Citizen Engagement Guidelines:** The justice frameworks and guidelines developed in TANDEMS can be applied across regions to enhance inclusivity and public engagement.
- **Public Deep Dive Sessions:** This method, used to foster deep discussion among limited participants, can be adapted for different languages.

### 3.2.4 Additional Exploitation Ideas

- **Developing Courses/Seminars:** Courses, seminars, and workshops based on TANDEMS project's results could be a key channel for knowledge transfer, potentially linked to existing projects.
- **Knowledge Transfer Networks:** Determine the best actors to transfer knowledge from TANDEMS to other sectors and ensure their involvement.
- **Harmonizing Legislation:** TANDEMS expertise could help align legislation in different regions, supporting the establishment of energy communities across various countries.

### 3.2.5 Replication Of Tandems Results to Other Sectors

- **Software Script/Requirements:** The TANDEMS software script for CRM clients, designed for energy sharing (invoicing, monitoring, metering), can be used by the IT sector to develop solutions.
- **Open Collaboration Model:** the TANDEMS' open collaboration model can be applied beyond energy projects to foster open cooperation in other fields.
- **Reflective Monitoring Workshops:** These workshops can be adapted for process improvement and stakeholder engagement in various sectors.
- **Communication Tools:** The chatbot and other digital tools can be adapted for other sectors and used to facilitate broader communication needs.
- **Engagement with Social and Poverty Organizations:** Energy sharing models could be introduced to social welfare or poverty alleviation organizations to support their mission.
- **Collaboration with Financial Institutions:** Banks and financial institutions could adopt energy-sharing models to enhance their support of the energy transition.
- **Citizen Engagement Guidelines (Duneworks):** These guidelines are essential and can be adapted for citizen participation efforts in different sectors.



**Co-funded by  
the European Union**

*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.*

- **Low-Risk Business Model for Car Sharing:** A well-defined, low-risk car-sharing model could serve as a tender template for municipalities looking to implement similar mobility-sharing projects.
- **Business Model Analysis and Development:**
  - Cost-price models and feasibility studies can be useful in evaluating local energy sources and organizing cash flow, even outside of energy projects.
  - Shared risk/liability models can help scale projects or integrate services in other sectors.
- **SME and Multi-family Building Applications:** SMEs and homeowner associations with microgrids could be targeted for implementing energy-sharing models.
- **Public Deep Dive Sessions:** This method, used to foster deep discussion among limited participants, can be adapted for different sectors.



**Co-funded by  
the European Union**

*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.*

## 4 PATHWAYS TO IMPACT | A TANDEM AFTER-LIFE METHODOLOGY

With the 'Exploitable Results' of the TANDEM project now clear in their minds, the partners were now able to revisit their Impact Strategy at GA level and stakeholders with a slightly different methodological approach, proposed by Lead Partner Kamp C. This approach is meant to clarify the Pathways to Impact and Circles of Influence for each TANDEM partner and region, using the theory developed by the Netherlands Organisation for Scientific Research (NWO). Together with the tried and tested Back-Casting process developed by DuneWorks, the TANDEM partners were able to formulate their inspiring After-LIFE Stories, prepare their SWOT analyses and plan their After-LIFE Conservation actions.

### 4.1 SETTING THE SCENE: PATHWAYS TO IMPACT & CIRCLES OF INFLUENCE

In this section, we will briefly explain the '**Pathways to Impact**' theory and methodology.

In the realm of research and innovation, achieving societal impact requires more than just generating knowledge; it necessitates a strategic approach that maps out how research activities lead to tangible societal benefits. The '**Pathways to Impact**' theory, as outlined by the Netherlands Organisation for Scientific Research (NWO), provides a framework for this strategic planning.

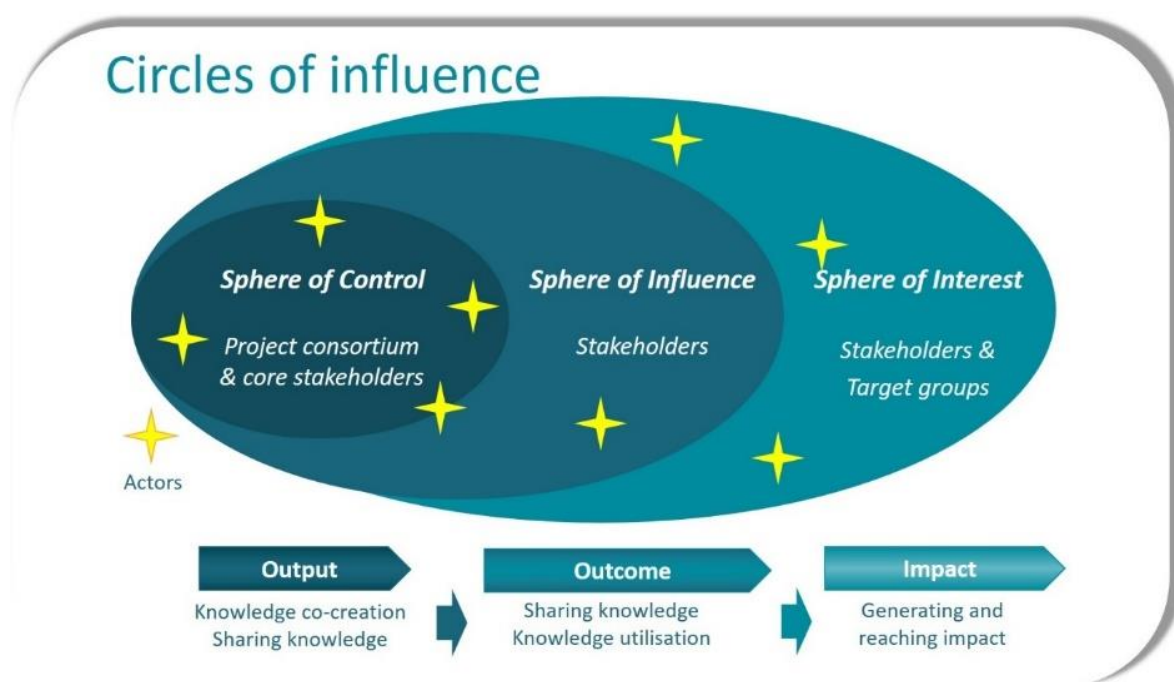


Figure 1: [NWO Impact - Theory - The Impact Pathway](#)



Co-funded by  
the European Union

*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.*

## Understanding the Impact Pathway

The Impact Pathway is a structured representation of the journey from research activities to societal impact. It delineates three key stages:

1. **Outputs:** These are the direct results of research activities, such as publications, data sets, or new methodologies.
2. **Outcomes:** These refer to the changes in behaviour, practices, or policies that occur as a result of the outputs. Outcomes are often achieved through engagement with stakeholders and are essential steps toward impact.
3. **Impact:** This is the ultimate goal; significant, lasting changes in society, the economy, or the environment that stem from the research outcomes.

By clearly defining these stages, researchers can plan and monitor the progression of their work toward achieving meaningful impact.

## The Role of Circles of Influence

Integral to the Impact Pathway is the concept of '**Circles of Influence**', which emphasizes the importance of engaging with various stakeholders throughout the research process. These circles represent the different groups that can influence or be influenced by the research:

- **Inner Circle:** Direct stakeholders who are closely involved in the research, such as collaborators and immediate users of the research outputs.
- **Middle Circle:** Indirect stakeholders who may be affected by the outcomes, including policymakers, industry partners, and community organisations.
- **Outer Circle:** The broader society that ultimately benefits from the societal impact of the research.

Engaging with these circles through **productive interactions** (such as co-designing research questions, co-creating solutions, and co-evaluating outcomes) enhances the relevance and applicability of the research, thereby increasing the likelihood of achieving impact.

## **4.2 APPLICATION IN THE LIFE TANDEM PROJECT | FROM PARTNERS' STORIES TO ACTIONS**

Throughout the LIFE TANDEM project's duration, employing the Impact Pathway methodology and actively engaging with the Circles of Influence, has ensured that the project's activities were aligned with the goal of promoting sustainable energy transitions. By mapping out the pathway from the research outputs to societal impact and fostering collaborations across various stakeholder groups, frequently engaging with the External



**Co-funded by  
the European Union**

*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.*

advisors and with the Letter of Support (LOS) stakeholders, as well as opening new avenues of impact, the TANDEMS Consortium has shown that it is capable to effectively contribute to meaningful and lasting change.

In the following sections, the partners took yet another 'Deep Dive', this time towards the future, to put pen to paper and compose their inspiring After-LIFE stories. These stories will serve not only the individual partners, but also the collective Consortium as we navigate the future of the Clean Energy Transition in our regions.



**Co-funded by  
the European Union**

*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.*



### 4.3 AFTER-LIFE STORIES OF THE TANDEM PARTNERS | BELGIUM

#### BELGIUM

#### Kamp C's After-LIFE story

Kamp C in 2030: An Energy Community Is a Process!

It is March 21<sup>st</sup> 2030, springtime and we are gathered together in the VONK! building to celebrate how far we have come with our Renewable Energy Community Kamp C with all the businesses and neighbourhood.

**(Values)** The energy transition belongs to all of us!

What we hoped for has become reality—even as early as 2030: the TANDEM trajectory empowered citizens and businesses **to take up an active role** in the energy transition. Our process has given all participants insight into how energy flows within and beyond the community. Based on that understanding, we can now make choices about our own **energy generation, storage, sharing, peer-to-peer exchange, and participation in demand-side flexibility**, and so on. These choices can be made both at the level of individual households and of the community—with an awareness of their broader impact. Isn't that fantastic?

**(Practices)** Kamp C, the municipality of Westerlo and energy cooperative Campina guide the community, each at their own pace

Kamp C, Campina, and the municipality of Westerlo have proven to be a strong organisational tandem for guiding the process. **Everyone can participate**, with or without a roof, with a thick or thin wallet. The businesses at Kamp C and neighbouring business park REME are also getting things started by producing and storing energy. At the same time, schools, after-school childcare run by the municipality of Westerlo, the football club, and the parish also joined in to generate, use, and share energy.

The neighbourhood centre at Kamp C has served as a central gathering space, helping to build **broad support** for the energy community. Some people prefer to be active members; others participate via the **virtual community**, which now also plays a central role. By 2030, the neighbourhood is actively involved in the energy community and **energy management has been extended to include schools, after-school programs, and the surrounding households**. People learn how it all works in practice, both at school and at home. The Renewable Energy Community coordinates supply and demand at the community level, aiming to **keep as much self-generated energy within the community as possible**.

**(Technical, Physical, Infrastructural)** Building the energy community step by step, with trial and error

By now, the energy community has a comprehensive infrastructure: **a large number of solar panels** on rooftops (both on the school building as on the Kamp C buildings), new carports at Kamp C, collective solar roofs on residential buildings; **electric vehicles** (private and shared), **electric cargo bikes**, **individual heat pumps**, **several batteries**, and **bi-directional charging stations**.

The buildings at Kamp C have been renovated, and **we are off gas**. A large number of houses took the opportunity to join a collective renovation trajectory, with the support of Campina, Kamp C and



**Co-funded by  
the European Union**

*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.*

Westerlo. The heat-pumps installed, and their solar panels are also connected together through the REC. The collective **Energy Management System (EMS)** is set up so that appliances and households (via meters) can easily be added.

The **Open Learning and Training Centre**, which officially opened at the TANDEMS final event on September 16<sup>th</sup> 2025, has now been expanded to include an **experiential space**, where citizens, cooperatives, businesses, and local authorities can gain a clear understanding of what a just energy transition looks like and how they can apply it in their own regions. All 24 local authorities in the Kempen region have followed the courses. They are now offered at 2 different levels of expertise, twice a year.

This year, the **municipal wind turbine tender in Westerlo was awarded**, with 50% citizen participation. This was a major milestone for the energy community.

**(Policy)** A process of **exploration**—the pieces are finally falling into place

Thanks to the policy dialogue initiated in TANDEMS and the policy recommendations and uptake in the following years, the potential for real citizen participation has finally been facilitated. Since 2025, policy changes opened up many opportunities, such as: peer-to-peer trading, dynamic pricing, and energy sharing between citizens and businesses.

**(Resources)** Steady growth in knowledge, networks, and financial capacity

Thanks to Kamp C's participation in the European **LIFE TANDEMS project** and **LIFE SHINE and LIFE SPICE**, we were able to make optimal use of partner expertise and financial support. This made it possible for Kamp C to reach where we are today in 2030.

Today, the **financial savings and returns**, combined with a growing number of members who invest, have opened up space for **new investments and next steps**.

The virtual and physical community that manages the energy community is, in 2030, **much more cohesive than in the early years!** The Renewable Energy Community Kamp C continues to belong to its members; ensuring that economic, ecological, and social values are central to decision-making and community priorities.

**REC Kamp C** now has strong relationships with many initiatives, having deepened cooperation over the years, and the buzz at today's celebration proves it! Relationships have also grown stronger with local businesses, **REME**, the schools, the **municipality**, the **neighbourhood**, **grid operator Fluvius**, and **various technology developers and system suppliers**.

It has been a huge success. The press was especially positive about the **synergy between neighborhood residents, businesses, the municipality, the energy cooperative, and the schools**. Thanks to its clear vision, Kamp C was prepared and able to respond quickly to policy developments, making energy sharing between businesses and citizens profitable at this scale.

### **Continuing to Learn Together!**

Learning what more we want, what is possible, achievable, and desirable... that's something we'll keep doing. This is the **core of Renewable Energy Community Kamp C**, today in 2030 and in the future.

In March 2024, Kamp C was still quiet, and the Info Centre stood empty... but something was bubbling at 't Centrum. Kamp C's team was working hard! In those months, the foundation was laid



**Co-funded by  
the European Union**

*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.*



for the beautiful idea of giving form to a Renewable Energy Community. And now, in 2030, we celebrate it together in the newly designed Open Learning and Training Centre at VONK!

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ Closely advised by VITO &amp; DuneWorks</li> <li>➤ All other TANDEM partners</li> <li>➤ Campina Energie (energy cooperative)</li> <li>➤ Westerlo &amp; Olen (municipalities)</li> <li>➤ SAAMO</li> <li>➤ Th!nkE (Belgium)</li> <li>➤ In <b>tandem</b> with Province of Antwerp               <ul style="list-style-type: none"> <li>○ department of Housing</li> <li>○ department of Sustainable Environment &amp; Nature</li> <li>○ department of Spatial planning (Energy Landscapes)</li> <li>○ Energy Broker</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Blueprint REC Kamp C</li> <li>✓ Blueprint Open Learning and Training Centre</li> <li>✓ Open Collaboration Model               <ul style="list-style-type: none"> <li>○ Business Park trajectory</li> <li>○ Safe Space for neighbourhood trajectory (Justice framework &amp; Participation Ladder)</li> </ul> </li> <li>✓ Business models, Contracts, Scripts</li> </ul>	2022-2025 €200.000 ✓ LIFE TANDEM
	<ul style="list-style-type: none"> <li>✓ Open Learning and Training Centre (OLTC) 6 Courses: x2 / year               <ul style="list-style-type: none"> <li>○ Trajectories with 15 municipalities (Energy Broker collaboration within Energy Landscapes)</li> <li>○ Infrastructure investments for the OLTC</li> </ul> </li> </ul>	2025-2028 €140.000 ✓ LIFE SHINE €200.000 ✓ Innovation Centre
	<ul style="list-style-type: none"> <li>➤ REC Kamp C               <ul style="list-style-type: none"> <li>○ Trajectories with Business Parks &amp; Neighbourhoods</li> <li>○ RES Investments</li> </ul> </li> </ul>	2027-2030 €250.000 Budget needed ➤ LIFE INDUSTRY ➤ LIFE ENERCOM ➤ LIFE ENERPOV ➤ DUT

## VITO's After-LIFE story

### VITO in 2030: Climate resilient neighbourhoods everywhere!

It is March 21<sup>st</sup>, 2030, springtime and we are gathered together with a wide coalition of Flemish stakeholders and citizens in the VITO Conference building to celebrate how far we have come. Over the past five years, our journey from visionary experimentation in TANDEM to the widespread realisation of *Weerbare Wijken* ("Resilient Neighbourhoods") across Flanders has blossomed into a resilient, socially just, and climate-proof reality.

**(Values)** Justice, inclusion and co-ownerships as our guiding stars

From the outset, we believed in the power of **co-creation, collective wisdom and resilience**. These were not abstract concepts but lived commitments. The Open Collaboration Model from TANDEM planted seeds of mutual trust and shared authorship, enabling neighbourhoods to **dream, decide, and do together**. **Reflexive monitoring** helped us stay true to our mission, continuously learning, adjusting, and re-aligning actions with purpose. We put the communities at the centre of our approach: residents became architects of their neighbourhoods. **Justice, inclusion, and collective ownership became guiding stars**. We learned that a resilient future is not built on efficiency alone, but on care and connection.

**(Practices)** Place-based innovation and systemic learning as the way forward



**Co-funded by  
the European Union**

*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.*

Our practice evolved into **learning coalitions** where residents, municipalities, energy houses, social housing companies, local cooperatives etc. jointly defined local transition paths. Inspired by the reflexive monitoring approach in TANDEM, **each pilot became a seed of collective learning**, each setback a learning moment. **We normalised systemic experimentation and peer-to-peer exchange.**

By 2027, the “**train the trainers**” program had equipped hundreds of local actors (e.g., energy advisors, planners, community workers) with the necessary skills and knowhow to become **Just Energy Transition Pioneers**. Through the *Voorsprongkader* (a financial de-risking instrument of the Flemish government), 100 neighbourhoods developed tailored transition pathways rooted in place-based logic and shared governance. *Wijkbarometers* (“Neighbourhood barometers”) mapped challenges, capacities, and momentum, blending hard data with lived stories. Dialogue formats from TANDEM allowed these insights to flourish into actionable, widely supported neighbourhood visions.

#### **(Technical, Physical, Infrastructural)** Coupled infrastructures for a climate-resilient future

The landscape has changed. What were once scattered pilot zones are now living systems of climate-resilient design and clean energy infrastructure:

- **Fossil-free heating** has become the norm: more than 100 neighbourhoods in Flanders transitioned through collective heat networks, BEO-fields, and building-integrated solutions.
- **Rainwater buffering, urban forests, and green-blue corridors** turned climate threats into community assets.
- Public space, once car-dominated, now hosts **shaded pedestrian paths and social meeting places**; all co-designed by residents.

This integration was only possible because we learned to “**stack opportunities**”, aligning mobility, housing, water, energy, and social infrastructure within single investment cycles.

#### **(Policy)** Adaptive policy creates enabling conditions for local co-creation

From the margins to the mainstream: the “**learning by doing**” approach influenced Flemish and EU-level policies. Barriers identified in TANDEM pilots and the Resilient Neighbourhood pilots fed into structural reforms:

- **Contracts for Difference, community energy rights, and building-bound finance mechanisms** became policy instruments, bridging the affordability gap and unlocking investment.
- The Flemish government institutionalized the Voorsprongfonds to **de-risk local investments** and correct skewed energy taxation until ETS2 fully matured.
- Regulations were modernized to **enable low-carbon, circular, and adaptive retrofits**, with special provisions for heritage and multi-owner buildings.

Policy co-evolved with practice. The covenant model, first tested in five pilots, became a legal backbone for public-private-community partnerships in every neighbourhood.

#### **(Resources)** Motivation, talent, time, trust... and some money

We leveraged more than money: we mobilized **talent, time, and trust**. The outcomes of the TANDEM project sustained the backbone, but **local coalitions were the true engines**. The *Voorsprongkader* activated regional pools of expertise: energy coaches, municipality facilitators,



**Co-funded by  
the European Union**

*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.*

citizen scientists. EU programs like Horizon Europe, along with Flemish instruments provided co-financing, but it was the **social return on investment** in the form of reduced health costs, lower energy poverty, and local jobs that ensured long-term resource flows. Each neighbourhood became a node in a self-strengthening network sharing lessons, tools, and solidarity.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ Closely advised by TANDEMS pilots (AGEM, ZuidtrAnt, Klimaan, Burgas, Gabrovo)</li> <li>➤ All other TANDEMS partners</li> <li>➤ Local governments and coalitions:               <ul style="list-style-type: none"> <li>○ Local energy houses</li> <li>○ Social housing companies</li> <li>○ Urban services</li> <li>○ Local community and citizen groups</li> <li>○ Renovation facilitators and architects</li> <li>○ Public utilities (e.g., Fluvius, Aquafin)</li> </ul> </li> <li>➤ Flemish government actors               <ul style="list-style-type: none"> <li>○ VEKA (Flemish Energy and Climate Agency)</li> <li>○ Departement Omgeving (dOMG)</li> <li>○ VMM (Flemish Environment Agency)</li> <li>○ ABB (Local Governance Agency)</li> <li>○ OVAM (Flemish Waste Management Agency)</li> </ul> </li> <li>➤ In <b>tandem</b> with:               <ul style="list-style-type: none"> <li>○ SAAMO</li> <li>○ VVSG</li> <li>○ Banks &amp; lenders</li> <li>○ Energy Service Companies</li> <li>○ Project developers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Open Collaboration Model tested in TANDEMS pilots</li> <li>✓ Reflexive Monitoring Approach tested in TANDEMS pilots</li> </ul>	2022-2025 €250.000 ✓ LIFE TANDEMS
	<ul style="list-style-type: none"> <li>✓ Development of Neighbourhood Barometer (Wijkbarometer)</li> <li>✓ Local execution support</li> <li>✓ Coordination of learning platform and policy dialogue</li> </ul>	2025-2028 € 500.000 Development of Wijkbarometer + support of first pilots ✓ Own funds ✓ LIFE ENERPOV ✓ DUT
	<ul style="list-style-type: none"> <li>➤ Further refinement of tools</li> <li>➤ Monitoring and evaluation</li> <li>➤ Further replication</li> </ul>	2028-2030 € unspecified Learning coalition and policy feedback ➤ LIFE ENERPOV ➤ DUT ➤ Support by Flemish government

## ZUIDTRANT's After-LIFE story

### ZuidtrAnt in 2030: An Energy Community Is a Process!

Early January 2030, start of a new year and we are gathered together in our offices in the city of Mortsel where we also installed our **One-Stop-Shop** (OSS). We have a meeting with the complete team to discuss the busy planning schedule of the next months, the new projects and collaborations.

**(Values)** Accelerate the energy transition towards a sustainable, citizen-driven future!

At ZuidtrAnt, we are committed to accelerating the transition towards a sustainable, citizen-driven energy future. Through cooperative renewable energy projects (such as solar rooftops, district heating, and offshore wind) **we empower local communities to participate directly in building a climate-neutral society**. We work towards a world where communities are at the heart of the energy transition.



**Co-funded by  
the European Union**

*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.*

Our most ambitious project yet, offshore wind energy, has sparked enormous interest and engagement from our members.

We believe in transparency, education, and the power of community. Join us as we build a cleaner, fairer energy system; together.

**(Practices)** ZuidtrAnt, citizens, municipalities, SMEs join forces to install renewable energy and heat projects

By 2030, ZuidtrAnt offers a broad range of services that go beyond sustainable energy supply. Projects are selected based on **criteria such as sustainability and inclusivity, rather than profitability**. Participation in research projects remains a core activity to stay informed about the latest developments. By 2030, ZuidtrAnt has significantly increased the number of projects with **high social value**, such as car sharing and the circular economy. As a result, ZuidtrAnt has become the primary point of contact for citizens in the southern outskirts of Antwerp regarding the energy transition.

By 2030, ZuidtrAnt is also the preferred partner of commercial players and local governments for renewable energy projects in the southern outskirts of Antwerp. **A clear and stable regulatory and supportive framework facilitates both project-based collaboration with commercial service providers, and structural collaboration with local authorities.** In this cooperation, each partner remains true to its core values, with citizen participation being part of ZuidtrAnt's DNA.

With the use of the **POWERFULL tool**, developed within the WESHARE project, SMEs are keen to start up a collaboration with ZuidtrAnt. Thanks to its proven success, the tool has been adopted by other cooperatives.

**(Technical, Physical, Infrastructural)** Building the energy community through professionalisation, collaboration and citizen engagement

In 2030, the number of full-time staff has slightly increased to 10 FTE. **Professionalisation** takes place in-house, the **Econobis CRM tool** has been successfully implemented and is now also installed with a large number of other Rescoop Flanders members. Nevertheless, ZuidtrAnt still relies on a strong base of volunteers who are actively involved in its operations. The vast majority of members choose ZuidtrAnt because they want to support the energy cooperative, not only because of the dividend they receive as shareholders. **The cooperative possesses strong social capital with a diversity of knowledge and expertise.** Personal and targeted communication contributes to active citizen engagement and the inclusivity of the energy cooperative.

In 2030, ZuidtrAnt still regards the southern fringe of Antwerp as its main working area. ZuidtrAnt is strengthening its existing collaboration with neighbouring energy cooperatives, such as Klimaan. Collaborations with other nearby cooperatives are initiated on an ad hoc project basis to create social value, maintain the connection with the local community, and share resources and knowledge.

The purchase of our office building in the centre of Mortsels where we set up our One-Stop-Shop provided both cooperatives (ZuidtrAnt and our sister heat-networks energy cooperative ZuidtrAnt-W) with a higher visibility; the openness of our office, the direct contact with clients and members, increasing our social capital and citizen participation. We have recently determined that the **physical location with low access barriers significantly increases participation by vulnerable households.**



**Co-funded by  
the European Union**

*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.*

**(Policy)** The acknowledged role of energy cooperatives

Thanks to the policy dialogue initiated in TANDEMS and the policy recommendations and uptake in the following years, the potential for real citizen participation has finally been facilitated.

Growth in the number of projects and full-time equivalents is only possible with supportive national and regional governments and a transparent and stable legislative and facilitating framework. By 2030, a clear business model for energy communities is in place. **National and regional governments have adopted a clear stance on energy communities, thereby fostering widespread support for local, renewable energy production.** Under this assumption, REScoop Vlaanderen has a key role to play, therefore has professionalised its lobbying efforts to compete with established players in the private energy market and to advocate for the added value of community energy to policymakers.

The tender for **Wind at Sea** was won due to its significant importance in citizen participation in the project. Policy makers are convinced that citizens need to be able to take part in ALL renewable energy projects in order to gain trust and public support and avoid juridical procedures from a small group of residents.

**(Resources)** Steady growth in collaboration with municipalities and SMEs ensures basic financial capacity

The growing number of cooperative members for both ZuidtrAnt and ZuidtrAnt-W has opened up space for **new investments and next steps**. Furthermore, **the extension of the heat-network** to both neighbourhoods has increased the number of clients, assuring a steady income for the heat-network consortium. Thanks to **new business case where surplus solar energy is being valorised within all our existing heat-projects and within the SME-zones in our region**, we have a steady basic financial system.

By 2030, Zuidtrant is the preferred partner of commercial players and local governments for renewable energy projects in the southern outskirts of Antwerp. A clear and stable regulatory and supportive framework facilitates both project-based collaboration with commercial service providers, and structural collaboration with local authorities. In this cooperation, each partner remains true to its core values, with citizen participation being part of Zuidtrant's DNA.

**Continuing to Learn Together!**

Learning by doing, the baseline of the Tandems project, is still key in all of our projects. We are keen as ever to share the knowledge built in our projects with other cooperatives. Thanks to our **long time collaboration with Opnieuw & Co** we can seize all interesting opportunities for innovative projects.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ All other TANDEMS partners</li> <li>➤ Klimaan (energy cooperative)</li> <li>➤ Opnieuw &amp; Co</li> <li>➤ City of Mortsel with regards to the extension of the heatnetwork</li> <li>➤ In <b>tandem</b> with Klimaan for the Averegten heat-network</li> <li>➤ Collaboration with 16 municipalities with regards to the Renovation projects and the Burenwerf projects</li> </ul>	<ul style="list-style-type: none"> <li>✓ Energy sharing with Opnieuw &amp; Co</li> <li>✓ Start of the participation trajectory for the extension of the heat-network phase 1</li> <li>✓ Open Collaboration Model               <ul style="list-style-type: none"> <li>○ Within the collaboration with municipalities</li> <li>○ Safe Space for extension trajectory (Justice framework &amp; Participation Ladder)</li> </ul> </li> </ul>	2022-2025 €155.000 ✓ LIFE TANDEMS



**Co-funded by  
the European Union**

*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.*



➤ Contacts with SMEs	✓ Energy sharing contracts, best practices for starting heatnetworks, best practices for collaboration with municipalities ( unique partnership agreement)	
	✓ Learning Trajectories with municipalities ✓ Set up OSS ✓ Providing tools and services to enable large, inspiring citizen-driven projects to be implemented, providing replicable models. The energy cooperatives become important stakeholders in the development and implementation of Antwerp's 13 Energy Landscapes (ELs)	2025-2028 €100.000 ✓ LIFE SHINE
	➤ Wind at Sea <ul style="list-style-type: none"> <li>○ Campaigns for citizen engagement trajectories</li> </ul> ➤ RES Investments for extension heat-network phase 1 and 2 with extra participation tools for vulnerable households in social housing ➤ Investments for further implementation and adaptation POWERFULL tool ➤ Business case for valorisation of excess solar energy	2027-2030 € 4 655 000 ➤ LIFE INDUSTRY ➤ LIFE ENERCOM ➤ LIFE ENERPOV ➤ LIFE DHC

## MECHELEN's After-LIFE story

### Mechelen in 2030

It is 2030 and we are celebrating that Mechelen was able to reach our target of 40% emission reductions. **45% of our energy comes from renewables** thanks to the energy transition fully supported by citizens and small enterprises of Mechelen. Through the collaboration with Klimaan and SAAMO also more vulnerable households access the potential offered by renewable energy.

The LIFE TANDEMS project generated a good functioning relationship between the city of Mechelen, the citizens movement Klimaan and the social housing company Woonland. Even after the closure of TANDEMS in 2025, this collaboration flourished and delivered significant results:

#### Rooftop solar own city buildings

On Mechelen's own buildings, we installed rooftop solar panels with a capacity of 123 KW. The investments were enabled through the citizen capital of Klimaan on 6 rooftops.

#### Support citizens for private solar and energy investments

The city of Mechelen continued to subsidize advice by Klimaans' Zonnewijzer on private solar installations for citizens, enterprises, multi-family apartment buildings, etc. All together we see that **the solar energy production in the city of Mechelen doubled between 2025 and 2030**. As such the % of suitable roofs covered with solar panels increased from 12 % to 25%, representing an installed capacity that increased from 58 MW to 120 MW. Zonnewijzer has grown to an overall



**Co-funded by  
the European Union**

*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.*



orientation advice on all aspects of the energy transition, including batteries, electric mobility, heat pumps, EMS, plug & play solutions, ...

### Build on social climate justice

The voice of vulnerable groups has been better heard in the development of our energy and climate policies. During the LIFE TANDEM project, a collaboration with SAAMO was established to build up co-creation in Otterbeek. Afterwards SAAMO continued representing the voice of the poor when the **heat plans for Mechelen** were developed. Finally, SAAMO generated and trained interested vulnerable citizens of Mechelen on energy and climate change and brings them regularly together to present their views on the energy transition in Mechelen. Even a new EU-Life project integrated SAAMO as new strategic partner. Equally, new projects between Woonland, Klimaan and the city of Mechelen have run smoothly, building on co-creation with social renters. **The 'social house' of Mechelen has set up various programs to provide access to energy services by vulnerable households.** Specific support programs with donated plug & play solar solutions and with leasing formula for heat, efficiency and energy production became accessible for vulnerable households.

The above **co-creation with vulnerable households has inspired Mechelen towards social climate justice.** In 2030 following specific results make us proud:

- Social energy generation of Otterbeek inspired to have now **social panels on almost all social houses**, realised by Klimaan and Aster. In Kriekerijveld, the first heat-network has been realised.
- Social mobility has been rolled out, with over 500 persons with mobility problems transported per month through actions as Klimavelo. Shared mobility has been introduced in neighbourhoods of Woonland, where **250 social renters subscribed to the shared vehicles of Klimaan**. Klimaan placed already 10 electric cars in social quarters of Woonland. This means 10 out of shared EVs of Klimaan are deployed in vulnerable neighbourhoods.
- **Otterbeek remained the leading neighbourhood** with not only shared vehicles, but also a neighbourhood battery has proved that collective self-consumption was also beneficial for grid stability and supported in maximising the efficient use of renewable energy. A combination of individual plug & play batteries for every household and a larger neighbourhood battery makes that **80% of the consumed household energy of the social renters is local renewable energy generated within Otterbeek.**
- The last 5 years were marked by a series of energy crises because of the tensions with Russia and the battles in the Middle East with at times skyrocketing energy prices. Also, the higher than expected European carbon taxes generate protests and tensions in many European countries, as the cost of life is rising, pushing more people in poverty. But Mechelen has done better, as the Klimaan energy remained at a low and stable price because of the investments made in renewable energy production that has been smartly connected to batteries and EMS systems.
- The **social house platform of Otterbeek supports people in energy poverty** with some energy systems to better control their energy bills.



**Co-funded by  
the European Union**

*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.*

- Annually, the city of Mechelen realised a **collective neighbourhood renovation**, and has already 2 active heat-networks, one of which serves also existing homes and households with a more vulnerable profile.

### Multi-family buildings

We are also proud that thanks to advocacy during and after TANDEM by the city of Mechelen and Rescoop Flanders, energy sharing in Mechelen has finally given positive results.

- **Energy sharing is now common practice in apartments**, since administrative costs, net costs and taxes were reduced for energy sharing in apartment buildings. Collective solar installations are used already in more than 50 building blocks, with production not only used for the energy needs of the individual living units, but also to supply collective batteries and loading stations for EVs.
- Finally, also owners of flats invest in collective renewable energy. After the EPC-reforms also the worth (selling price) of their flat profits from solar investments as collective PV also add points to the EPC-value of the individual flats.

### Mobility

Another inspiring achievement of the collaboration between the city of Mechelen en Klimaan is the **roll out of a dense network of public loading stations** reaching now 250 points. This allowed the city to obtain a differentiated offer of loading services with significant reductions for more vulnerable households or for citizens that could not install their own private loading station on their private lots. Consequently, **mobility inequality as such is less pronounced in Mechelen** compared to other Flemish cities.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ All TAndems partners</li> <li>➤ Important actors to help us realise our 2030 plans               <ul style="list-style-type: none"> <li>○ Woonland</li> <li>○ Klimaan cvso &amp; vzw</li> <li>○ SAAMO</li> <li>○ Fluvius</li> </ul> </li> <li>➤ Everything has been developed in tandem and exchange of other cities:               <ul style="list-style-type: none"> <li>• Exchange with municipalities through VVSG and with the 13 other centre cities of Flanders.</li> <li>• Exchange with other European cities through various European programs, Net Zero Cities, our membership of Energy Cities Decarbonization partnership of Urban Agenda, UIE program.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ 197 kWp roof top solar on 197 social renters' homes.</li> <li>✓ Introduction shared vehicles Klimaan and first 2 in social neighbourhoods.</li> <li>✓ First 3 multi-family buildings with collective solar rooftops.</li> <li>✓ Citizen financed solar roof tops on city buildings. Starting with 2 of ECOPOWER and 13 presented to be studied by Klimaan (in development).</li> </ul>	2022-2025 €190.000 ✓ LIFE TANDEM
	<ul style="list-style-type: none"> <li>✓ Investments in city buildings / city climate plan</li> <li>✓ Better climate plans integrating social climate justice</li> </ul>	2024-2028 Own: €10.000.000 ✓ LIFE REFINED €235.600 ✓ Interreg EUREKA
	<ul style="list-style-type: none"> <li>➤ Budget for the necessary shift to collective heat (public heat network?)</li> <li>➤ Deepening social climate justice with energy house &amp; social services of city.</li> <li>➤ Building on private financial support to finance climate &amp; energy transition. A multiplier of 4 to 40 for public finance must be connected on private finance. The city has become active in</li> </ul>	2027-2030 (budget needed) €5 million for district heating projects ➤ LIFE ENERCOM, ENERPOV, ..., ➤ Horizon ➤ UIE,



**Co-funded by  
the European Union**

*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.*

	smart risk sharing instruments.	<ul style="list-style-type: none"> <li>➤ Interreg</li> <li>➤ DUT</li> <li>➤ KBS, VLAIO</li> <li>➤ Flemish government support</li> </ul>
	➤ Social climate justice project pilots	€400.000 ➤ 2 larger programs
	➤ Finance mechanisms development	€500.000 ➤ project support
	➤ Unlocking sustainable private energy investments.	€100 to €1000 million

## KLIMAAN's After-LIFE story

### KLIMAAN in 2030: An Anchoring point in the regional energy transition!

It is June 2030. The annual Rivierenland Energy Congress takes place in the Cultural Centre of Mechelen. Local governments, citizens, energy cooperatives, social organisations, and youth ambassadors come together to reflect on ten years of collective climate action. **Klimaan is no longer an “innovative outsider”, but a recognised and structural partner in the regional energy ecosystem.**

When TANDEM started in 2022, Klimaan was a young citizen cooperative with a strong idealistic core. By 2025, we had already grown beyond expectations, reaching 1,636 cooperative members and generating over 4 GWh of local renewable energy annually. But from the very beginning, our focus was never just on energy production. **We have always believed that energy is a commons, and that collective intelligence and participation are key.**

#### **(Values)** Energy as a Commons, Democracy as a Method

At the heart of Klimaan's evolution is a simple yet radical belief: **energy is a common good**. We believe citizens have not only the right but also the capacity to participate meaningfully in the energy system. Our cooperative approach reflects a deeper commitment to **energy democracy—anchored in transparency, inclusivity, solidarity, and local ownership**. Every household, every street, every community matters in the transition, and we design our actions around that principle.

#### **(Practices)** A Connected Ecosystem of Solutions

Between 2025 and 2030, we moved from participation as an outreach activity to participation as the **organising principle**. Our **“energy ambassadors” programme** has matured into a full regional learning infrastructure, with volunteers, school partnerships, and even youth energy councils shaping real decisions.

We established **new pathways for structural inclusion** in energy transition processes, especially in socially vulnerable districts, through deep, long-term collaboration with housing actors and neighbourhood stakeholders. These **collaborations embedded participatory design principles into every phase of our projects**: from early feasibility studies to ownership models, capacity building, and shared governance frameworks.

Thermal energy planning and collective renovation became key domains **where citizen-led models proved their transformative potential**. We supported neighbourhoods not only with technical



**Co-funded by  
the European Union**

*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.*

guidance but with processes to strengthen social cohesion, increase energy autonomy, and anchor climate ambitions in lived reality.

#### **(Technical, Physical, Infrastructural) A Connected Ecosystem of Solutions**

By now, Klimaan operates as a cooperative integrator of regional energy solutions:

- **A robust mix of distributed renewable generation** exceeding 11 GWh annually, grounded in a blend of community-owned solar, citizen-advised installations, and partnerships with local SMEs.
- **A rapidly maturing ecosystem of heating and cooling networks**, co-developed with residents in areas where energy poverty and climate needs intersect. These infrastructures are not simply technical installations, they are **vehicles for social resilience**.
- **Tailored support for household-level technologies** including solar panels, battery storage, and thermal systems. These services are delivered through a regional renovation support mechanism rooted in citizen advice and cooperative follow-up.
- An **expanding role in electric mobility infrastructure**, including citizen-cooperative development of public charging stations as a response to price volatility and decentralised balancing needs.
- The **groundwork laid for regional cooperative wind generation**, adding diversity and scale to our clean energy portfolio. Our early investment in onshore opportunities complements the long-standing ambition to participate in offshore development zones.

#### **(Policy) From Pilots to Public Governance**

In the years following TANDEMS, Klimaan assumed an increasingly systemic role in how energy policy is shaped and implemented at the local and regional level.

Our **partnerships with local authorities matured into formal collaboration agreements**, placing the cooperative at the table for climate planning, renovation strategy, and long-term energy infrastructure development. We contributed practical governance models for citizen engagement in collective systems, especially in contexts with heightened social vulnerability.

Our voice gained weight not through lobbying, but through the **credibility of having built viable alternatives: living examples of just and inclusive transition pathways** that now shape the agenda of cities and networks across the region.

#### **(Resources) Investing in Citizens, not Just Infrastructure**

Our cooperative expanded not just in megawatts, but in capacity to guide, convene, and support. We built strong operational teams, reliable partnerships, and meaningful routes for citizen input and leadership.

**A new renovation support service, rooted in local knowledge and designed for broad accessibility**, now enables households to navigate the complex path of energy renovation. It is tailored, inclusive, and scalable, and built to integrate with public policies and climate targets.

Financially, we maintained a healthy blend of member capital, programmatic funding, and leveraged private investment, always prioritising the public good over extractive returns. **The trust of our community remains our greatest asset.**



**Co-funded by  
the European Union**

*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.*

### Continuing to Learn Together

Klimaan's growth has not been linear. It has been recursive: each success informed by the lessons of what came before, and each new step opening space for others to follow.

We have become a node in a wider web of mutual learning and system change. **Our cooperative story is one of careful expansion, grounded in place, people, and possibility.** We do not scale for the sake of growth, but to deepen the transition and make it irreversible.

Together, we continue learning, because **the transition is not just about energy.** It's about **democracy, dignity, and doing the work together.**

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ In <b>tandem</b> with               <ul style="list-style-type: none"> <li>○ Klimaan vzw</li> <li>○ City of Mechelen</li> </ul> </li> <li>➤ Pandschap Rivierenland</li> <li>➤ ZuidtrAnt</li> <li>➤ VITO</li> <li>➤ Kamp C</li> <li>➤ REScoop.Vlaanderen</li> <li>➤ REScoop.EU</li> <li>➤ Municipalities of the region (closer ties to Rivierenland region)</li> <li>➤ Social Housing Company Woonland</li> <li>➤ SAAMO</li> <li>➤ Fluvius</li> </ul>	<ul style="list-style-type: none"> <li>✓ Low-Risk Business Model for EVs Sharing</li> <li>✓ Data gathering and presenting tool for shared vehicle usage</li> <li>✓ Business model for providing citizens with personalized advice on plug-in devices</li> <li>✓ Business model for solar PV in a social housing district</li> <li>✓ Legal documents (statutes / membership agreements) for energy communities in a social context</li> <li>✓ vPPA (virtual Power Purchase Agreement) for risk-sharing on injected power of solar projects</li> <li>✓ Low-level feasibility-type business model for district heating projects</li> </ul>	2022-2025 €155.000 ✓ LIFE TANDEMS
	<ul style="list-style-type: none"> <li>✓ Grow from 1,636 to ~3.000 cooperative members</li> <li>✓ Empowerment of ~3,000 citizens, OSS services, workshops, P2P training</li> <li>✓ Additional 3-4 MWp of solar installed (citizen &amp; SME combined) 25% with battery integration or demand response</li> </ul>	2025-2028
	<ul style="list-style-type: none"> <li>✓ Technical partnership - Open Learning and Training Centre               <ul style="list-style-type: none"> <li>○ Fully operational OSS co-led with KampC and ZuidtrAnt</li> <li>○ 100+ home retrofits guided</li> <li>○ Expansion to wind and heating networks</li> </ul> </li> <li>✓ District heating projects               <ul style="list-style-type: none"> <li>○ 1 operational heating grid (Heist-op-den-berg with ZuidtrAnt)</li> <li>○ Design of 1–2 new grids initiated or scoped guiding set-up of an energy community by and for energy poor/energy vulnerable households</li> </ul> </li> <li>✓ Klimaan pilots in citizen-led support for renovation, linked to OSS. Training for volunteer "energy coaches".</li> </ul>	2025-2028 €140.000 ✓ LIFE SHINE
		2025-2028 €251.500 ✓ LIFE SOCIALNRG



**Co-funded by  
the European Union**

*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.*



	<ul style="list-style-type: none"> <li>✓ EV-sharing expanded to 50+ vehicles <ul style="list-style-type: none"> <li>○ Deployment in social housing areas with equity focus</li> <li>Research into smart charging</li> </ul> </li> </ul>	
	<ul style="list-style-type: none"> <li>✓ Energy sharing demonstrator operational in Otterbeek <ul style="list-style-type: none"> <li>○ Data integration with open-source platforms</li> </ul> </li> </ul>	2025-2028 €166.600 ✓ HORIZON U2DEMO
	<ul style="list-style-type: none"> <li>➤ 5.000+ members by 2030</li> <li>3.500+ citizens reached via own OSS, outreach, mobility, renovation &amp; energy sharing tools</li> <li>➤ Total installed capacity reaching &gt;10 MWp PV (cumulative)</li> <li>&gt;50% integrated with storage or smart controls</li> <li>➤ Klimaan-led One-Stop-Shop service in Rivierenland with own renovation staff and partner contractors</li> <li>➤ 2–3 low-temperature networks operational</li> <li>Integration of prosumer buildings and flexible demand</li> <li>➤ Klimaan operates 80-100 shared EVs</li> <li>➤ Klimaan owns &amp; operates regional public charging network focused on grid balancing</li> <li>➤ Operational on-shore wind turbine</li> <li>Offshore participation via SeaCoop scaled up or co-developed</li> <li>➤ Replication of sharing model in 2-3 additional neighbourhoods with &gt;200 households involved</li> <li>➤ Klimaan runs in-house renovation advice service, with links to regional energy loans and EPCs</li> </ul>	2027-2030 Budget needed <ul style="list-style-type: none"> <li>➤ LIFE INDUSTRY</li> <li>➤ LIFE ENERCOM</li> <li>➤ LIFE ENERPOV</li> <li>➤ DUT</li> </ul>



**Co-funded by  
the European Union**

*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.*



## 4.4 AFTER-LIFE STORIES OF THE TANDEM PARTNERS | BULGARIA

### BULGARIA

#### ENEFFECT's After-LIFE story

##### EnEffect in 2030: From Pioneering to Mainstreaming Community Energy

It is June 2030 and EnEffect celebrates yet another milestone for the development of energy communities in Bulgaria – the newest Energy community in Gabrovo!

(Values) Citizen Power, Equity, and Resilience

By 2030, community energy in Bulgaria is no longer a niche initiative—it is a **pillar of local development and citizen empowerment**. Driven by the belief that energy systems must be **fair, transparent, and participatory**, local authorities and civil society have turned energy communities into vehicles for **equity and resilience**. At the heart of this transformation is the principle of **"distributed power"**—where both energy and agency are co-owned by the people.

(Practices) From Projects to Systems/Ways of doing/ Processes

What began in 2025 with pilot PV communities with 135 citizens from all over the country engaged in the initiatives in Gabrovo and Burgas has now scaled to **18 fully operational energy communities**, with 900+ citizens involved, and **20 municipalities** actively replicating the model. The tools introduced under TANDEM have become staples across the country:

- The **Legal Contract Templates** developed for Burgas and Gabrovo are now **standardized through the EcoEnergy network** and included in guidance issued by the Ministry of Energy.
- **Citizen Engagement Guidelines** created by DuneWorks have been adapted in Bulgarian and embedded into **municipal community planning toolkits**, ensuring vulnerable groups have a seat at the table.
- **Public Deep Dive Sessions** are regularly used by mayors and community leaders to co-design local investment strategies.
- The **TANDEM Chatbot**, now regionally customized in Bulgarian, serves as a **"digital energy concierge"** helping citizens and Homeowners' Associations (HOAs) navigate financing, permits, and legal obligations.

(Technical, Physical, Infrastructural) Digital, Distributed, Decarbonized

By 2030, over **0.68 GWh/year** of renewable energy is generated by energy communities. Smart metering—now **mandatory for all new buildings**—allows communities to monitor usage in real-time. Building on the **TANDEM software script and CRM templates**, Bulgarian IT companies have developed **open-source platforms for energy sharing**, adapted for **multi-family buildings and SMEs**, including automated invoicing and virtual net metering tools.

Moreover, **energy communities now operate microgrids** in two pilot neighbourhoods in Gabrovo and Burgas, and the first **shared battery bank** has been installed in Plovdiv. These technical systems are coordinated via One-Stop-Shops, many of which were first launched as part of TANDEM pilot projects and are now integrated in municipal service portals.



Co-funded by  
the European Union

*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.*

**(Policy) From Gaps to Guarantees**

The policy landscape in 2030 looks significantly different thanks to the foundation laid by EnEffect and its partners. With strong input from the TANDEM project, Bulgaria now has:

- A **dedicated legal framework** for energy communities.
- **Mandatory smart metering** provisions for all new buildings.
- Simplified procedures for setting up and registering energy cooperatives.
- A **roadmap for energy community expansion**, backed by government-endorsed milestones. The **National Fund for Decarbonization**, also supported through TANDEM recommendations, now channels revenues from PV installations into a revolving fund for deep renovation and vulnerable households. These changes were catalysed by strategic inputs into the Energy Efficiency Act, the NECP, and coordination with the Ministry of energy and the Sustainable Energy Efficiency Agency.

**(Resources) Building the Ecosystem**

The ecosystem that powers Bulgaria's community energy revolution is robust and multi-layered:

- **500+ trained municipal officials** and 135+ engaged citizens (by 2025) have grown into a national network of trained energy community managers and cooperative board members.
- **Educational programs and courses**, inspired by TANDEM methodologies and hosted by EnEffect, Technical University – Sofia, and partner NGOs, have institutionalized capacity-building.
- **Financing mechanisms**—cost-price models, shared risk templates, and ESCO-lite arrangements—have been piloted in partnership with EERSF, **Fund FLAG**, and **National Trust EcoFund**.
- **SMEs and HOA-led cooperatives** are now eligible to apply through simplified digital procedures, many with the support of financial institutions that have embraced the TANDEM co-investment model.

**Scaling with Synergy**

The long-term impact of EnEffect's work has been made possible through a **powerful alliance of public, private, and civic actors**. Looking ahead, together we aim to support shaping the policy landscape towards integrating community energy deeper into **urban planning, digital infrastructure, and regional development**.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ Close collaboration with NGOs, civil organisations, researchers, sister initiatives;</li> <li>➤ TANDEM partners</li> <li>➤ Sustainable Energy Development Agency</li> <li>➤ Professionals from construction and energy sectors (SMEs, professional chambers, manufacturers, service providers etc.)</li> <li>➤ National Trust EcoFund, EERSF, Fund FLAG</li> <li>➤ Professional chambers</li> </ul>	<ul style="list-style-type: none"> <li>✓ A network of stakeholders interested in investing in energy capacities has been established.</li> <li>✓ Various technical, financial, and legal models for organising and operating energy capacities within the existing national regulatory framework have been developed and presented to a wide range of stakeholders. Some of these models have been successfully implemented in practice, while efforts are ongoing to realise the remaining ones.</li> </ul>	2022-2025 €165.000 ✓ LIFE TANDEM



**Co-funded by  
the European Union**

*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.*

<ul style="list-style-type: none"> <li>➤ In <b>tandem</b> with: <ul style="list-style-type: none"> <li>○ EcoEnergy municipalities</li> <li>○ Ministries of regional development and public works, energy, environment and water, education and science</li> </ul> </li> <li>➤ Vocational education centres</li> </ul>	<ul style="list-style-type: none"> <li>✓ Interest has been generated among other Bulgarian municipalities to apply the models developed for Gabrovo and Burgas.</li> <li>✓ Policy recommendations have been prepared and disseminated to facilitate and encourage the creation and operation of energy communities, drawing also on examples and good practices from the TANDEMS partner countries.</li> </ul>	
	<ul style="list-style-type: none"> <li>✓ Capacity building <ul style="list-style-type: none"> <li>○ courses/ trainings implementation</li> <li>○ programme design/elaboration</li> <li>○ possibility for certification of local experts (RES, EE, other building and energy topics of relevance)</li> </ul> </li> <li>✓ Public deep dive sessions in newly engaged municipalities</li> <li>✓ Cooperation with activities developed in the planned Energy Poverty Observatory to be set up in Bulgaria in 2026-28</li> </ul>	2026-2028 €175.000 EUKI SOLutions €145.000 LIFE Energy Poverty Nexus
	<ul style="list-style-type: none"> <li>➤ Support with development of project for new RES investments</li> <li>➤ New learning centre(s) support with building of necessary municipal infrastructure (Gabrovo, Burgas, Plovdiv, elsewhere)</li> </ul>	2028-2030 €200.000 LocalSolar DHC project Budget needed for larger infrastructural projects (municipalities in charge) <ul style="list-style-type: none"> <li>➤ Energy Cities</li> <li>➤ LIFE ENERCOM</li> <li>➤ LIFE ENERPOV</li> <li>➤ LIFE CET</li> </ul>

## GABROVO's After-LIFE story

### The GABROVO municipality in 2030: Energy that Unites Us!

It is March 21<sup>st</sup> 2030, and we are gathered in the heart of Gabrovo to celebrate how far we have come. Over the past five years, Gabrovo has transformed into a pioneer of **citizen-owned energy**, inclusive governance, and climate-conscious urban living. What began with a handful of active citizens and committed municipal leaders has grown into a living, **participatory ecosystem** — where **energy is not just a commodity, but also a driver of belonging, solidarity, and opportunity**.

#### (Values)

In Gabrovo, we believe that sustainable development must balance all its dimensions — environmental, social, and economic. Our energy transition was not just technical — it was anchored in **justice, citizen inclusion, and co-ownership**. We worked to build an active civil



**Co-funded by  
the European Union**

*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.*

society that shares the values of fairness, mutual responsibility, and ecological awareness. Energy became the unifying force for a new sense of community.

### (Practices)

Our key approach was collaborative and transparent co-creation. **The municipality developed concepts and solutions** — from energy sharing models to renovation programs — and shared them with citizens in open formats. **People engaged** not just as beneficiaries, but **as decision-makers**. Through **workshops, trainings, public discussions and inclusion**, we raised awareness and enabled participation across neighbourhoods. The **one-stop-shop** service model helped connect people with services and advice — not only about energy, but about broader issues of social and environmental relevance.

### (Technical, Physical, Infrastructural)

Between 2025 and 2030, Gabrovo scaled its efforts with concrete projects. Several PV installations were built and connected into **Local Energy Sharing Models** that reduced energy costs and enabled prosumer dynamics. A concept for citizen-owned local heating and cooling (CHP) was co-developed and awaits implementation. Dozens of residential buildings were renovated for energy efficiency or/and equipped with clean energy systems.

Importantly, socially vulnerable groups and cultural-educational institutions were included in the transition. Public transport has been electrified and is increasingly powered by local energy communities or small producers. Our **NetZeroHero neighbourhood** became a testing ground for carbon neutrality, sparking future replications.

### (Policy)

While national regulations have not always kept pace with local ambition, Gabrovo's political leadership — including the mayor and municipal council — supported every step forward. Legal obstacles around hourly metering, collective consumption, and fair tariff structures remain, but the city continues to push for change. We **advocate for reforms** to enable collective consumer models, tax incentives, and optimized access to grid services.

### (Resources)

None of this would have been possible without strategic use of European projects — notably LIFE TANDEM, LIFE LOOP, and POWER-E-COM — which **supported our first energy communities with knowledge, networks, and seed funding**. Our ties to the EcoEnergy municipal network and EnEffect brought expertise, while the participation of IT companies, PV installers, and volunteers gave technical capacity to the community.

The support of the Sustainable Energy Development Agency and its director, and the committed backing of Gabrovo's mayor, proved decisive. **This was never just about money — it was about vision, collaboration, and shared responsibility**. In Gabrovo, we built not only projects, but also a model for energy democracy — and we celebrate it together today.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ <b>Gabrovo Municipality internal team</b></li> <li>➤ All other TANDEM partners</li> <li>➤ <b>EnEffect</b>: trusted long-term partner and national-level facilitator beyond</li> </ul>	<ul style="list-style-type: none"> <li>✓ Open Collaboration Model tested in TANDEM pilots</li> <li>✓ Price cost model</li> <li>✓ Adoption of a municipal policy to</li> </ul>	2022-2025 € 64.000 ✓ LIFE TANDEM € 30.000



**Co-funded by  
the European Union**

*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.*

<p><b>TANDEM</b></p> <ul style="list-style-type: none"> <li>➤ <b>Banks and financial institutions</b> involved in supporting RES investments and community financing models</li> <li>➤ <b>Energy experts and consultants</b> providing project design, planning and implementation support</li> <li>➤ <b>Citizens</b> involved in the two established energy communities (TANDEM and LifeLOOP) – the core driver of all actions</li> <li>➤ <b>Residential building owners' associations</b> – key partners in renovation and energy efficiency efforts</li> <li>➤ <b>Technical University of Gabrovo</b> – academic partner supporting solution design and validation</li> <li>➤ <b>Local installers</b> and technical service providers, contributing to the roll-out of PV systems and community infrastructure.</li> <li>➤ <b>Energy traders and balancing service providers</b> engaged in piloting collective energy consumption models</li> <li>➤ <b>DSOs and infrastructure operators</b>, ensuring technical feasibility and integration of local energy systems</li> <li>➤ <b>Local SMEs</b>, especially those participating in community energy initiatives or interested in local production and use</li> <li>➤ <b>Bulgarian municipalities</b> looking to replicate community energy models</li> <li>➤ <b>National energy institutions and regulators</b></li> <li>➤ Regional and EU networks (e.g. Energy Cities, Covenant of Mayors)</li> <li>➤ Media and regional knowledge-sharing platforms</li> <li>➤ The general public and households not yet directly involved but benefiting from the wider system</li> <li>➤ <b>Professional associations</b> and energy management networks</li> </ul>	<p>promote energy communities</p> <ul style="list-style-type: none"> <li>✓ Energy Sharing model</li> <li>✓ Awareness-raising campaigns, workshops, citizen trainings</li> </ul>	<ul style="list-style-type: none"> <li>✓ LIFE LOOP</li> <li>✓ Municipal budget</li> </ul>
	<ul style="list-style-type: none"> <li>✓ Peer learning and support for other municipalities</li> <li>✓ Conceptualisation of a low-carbon, replicable neighbourhood</li> <li>✓ Development of one-stop-shop services and citizen capacity building</li> </ul>	<p>2024-2026</p> <p>€ 58.000</p> <ul style="list-style-type: none"> <li>✓ POWER-E-COM</li> <li>€ 285.000</li> <li>✓ NetZeroHero</li> <li>€ 98.000</li> <li>✓ Sheerenov+</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Implementation support for Local Heating &amp; Cooling Plans, incl. financing and decommissioning</li> <li>➤ Preparation of complementary project proposals under national operational programmes</li> <li>➤ Consolidation of one-stop-shop services and replication of NetZeroCities approach</li> <li>➤ Further replication</li> </ul>	<p>2026-2030</p> <p>€ 200.000</p> <ul style="list-style-type: none"> <li>➤ LIFE-CET-LOCAL (TBC)</li> <li>€ unspecified</li> <li>Learning coalition and policy feedback</li> <li>➤ NetZeroCities</li> <li>➤ Operational and national funds</li> </ul>

## BURGAS' After-LIFE story

### The BURGAS municipality in 2030: Local Energy for Sustainable Development

Energy cooperative Burgas is the largest cooperative in South-East Bulgaria, managing 7 sights in Burgas region, and has 500 members. In its portfolio the organization has constructed 3 MWs of PV installations, as well as manages 10 EV charging stations. 5% of the annual income of the cooperative is dedicated to support social campaigns in Burgas region.



**Co-funded by  
the European Union**

*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.*



**(Values)**

Core values of Energy Cooperative Burgas are based on transparency, equality and decisions based on detailed preliminary studies and mutual agreement.

**(Practices)**

After its establishment in 2025 with the support of Burgas Municipality, the cooperative gained administrative knowledge, experience and financial sustainability, which allowed the unit to become independent and thus optimize its work. Every year we organize several events in favour of the local community, as cleaning public areas, supporting social initiatives, discussions and info days to increase the knowledge among people on the importance of RES.

**(Technical, Physical, Infrastructural)**

**In the portfolio of Burgas Energy Cooperative there are 7 buildings (1 swimming pool, 2 hospitals, 3 kindergartens and 1 school).** Total constructed power of PVs is 3 MW. One of the great achievements of the cooperative is that it succeeded to negotiate with the electricity provider to use the electricity grid for sharing the energy between the different sights for free. Considering the fact that all sites are of high public importance, the electricity provider fulfilled its social obligations.

**(Policy)**

With the change of legislation in 2028, energy cooperatives become more and more popular in Bulgaria. Organizations have been contacting us regularly, to share our experience. Still, the best solution for cooperative is to invest in energy, which is consumed at the place of its productions, because the transfer of energy is still subject to taxation, and it is a matter of individual negotiations of the price of the service.

**(Resources)**

In 2025 it all became possible, thanks to the support of an EU project, called TANDEM in which Burgas Municipality was a partner, as well as the support of energy consultant company EnEffect and Gabrovo Municipality, which established the first energy cooperative in Bulgaria. After that several other EU projects supported the enlargement of the energy community in Burgas, and Burgas Municipality supported the implementation by co-financing the infrastructure measures.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ Burgas Municipality</li> <li>➤ TANDEM project</li> <li>➤ EnEffect</li> <li>➤ Citizens</li> <li>➤ SMEs</li> <li>➤ Directors of municipal buildings, where investments were made by the cooperative.</li> <li>➤ Municipalities</li> <li>➤ Electricity providers, institutions and regulators</li> <li>➤ National and EU networks (ICLEI, Euro CITIES, National Association of</li> </ul>	<ul style="list-style-type: none"> <li>✓ Open Collaboration Model</li> <li>✓ Open Collaboration Model tested in TANDEM pilots</li> <li>✓ Cost Price model</li> <li>✓ Info campaigns and trainings</li> </ul>	2022-2025 €50.000 ✓ LIFE TANDEM €210.000 euro (130 members of 1 <sup>st</sup> energy cooperative in Burgas) €150.000 euro (Burgas Municipality)
	<ul style="list-style-type: none"> <li>✓ Digital simulation and pilot actions for climate neutral neighbourhood in Burgas.</li> <li>✓ Upgrade of services provided in</li> </ul>	2026-2028 €110.000 ✓ EUI programme



**Co-funded by  
the European Union**

*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.*



<p>Bulgarian Municipalities, Energy network of municipalities Eco Energy)</p> <p>➤ Media</p>	<p>Burgas Energy Office.</p> <ul style="list-style-type: none"> <li>✓ Implemented PV installations on 3 kindergartens.</li> <li>✓ Appointed 1 person as energy manager.</li> </ul>	<p>€200.000</p> <p>LIFE programme</p> <p>€450.000</p> <ul style="list-style-type: none"> <li>✓ Budget to be raised by the cooperative</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Implemented PV installations on                             <ul style="list-style-type: none"> <li>○ 2 hospitals</li> <li>○ 1 school</li> </ul> </li> </ul>	<p>2028-2030</p> <p>€850.000</p> <ul style="list-style-type: none"> <li>➤ Budget to be raised by the cooperative</li> </ul>



**Co-funded by  
the European Union**

*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.*

## 4.5 AFTER-LIFE STORIES OF THE TANDEM PARTNERS | THE NETHERLANDS

### THE NETHERLANDS

#### AGEM's After-LIFE story

##### AGEM in 2030: The Achterhoek Energy Community Vision 2030

It is November 2030. The annual Hier Opgewekt conference brings together energy communities from across the Netherlands to share success stories and learn from each other's challenges. This year's event is entirely funded by Energie Samen, and Agem is set to take the main stage to present **how the Achterhoek region transformed into a showcase for decentralized energy systems through energy communities and innovative energy sharing models.**

##### Wind Development Success

The Achterhoek's transformation began with the remarkable success of the Naaberwind wind turbines, developed in record-breaking time through a model of 100% local ownership. The project gained widespread support through a pragmatic narrative: since **wind development was inevitable** in the region, **local community ownership was clearly preferable to external corporate development.** This approach converted potential opponents into supporters, as residents recognized that local ownership offered the best possible outcome. The close collaboration between the energy community and municipal authorities created an efficient development process that dramatically reduced costs while maximizing local benefits.

##### Community Energy Sharing

The wind turbines' electricity is now available to local users through an innovative energy sharing model that offers **cost-based pricing significantly below market rates.** This attractive proposition combines immediate affordability with long-term price stability and tangible local impact, attracting growing memberships from municipal authorities, civil society organizations, businesses, and households alike.

For **vulnerable households**, the community has developed a **tailored support program** that ensures access to affordable, low-risk energy through the solidarity principles that unite the energy community.

##### Regional Energy Integration

The success of affordable local wind power has catalyzed the evolution of the entire Achterhoek region into an interconnected energy community focused on system integration and decentralized optimization. **Real-time matching of production and consumption has become a regional priority, minimizing exposure to volatile energy markets while maximizing local value creation.**

Smart planning and strategic investments in flexibility solutions optimize available grid capacity, creating space for low-carbon economic growth that attracts innovative high-tech companies to the region.



**Co-funded by  
the European Union**

*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.*

## Electrification and Innovation

Access to **affordable local electricity has accelerated household electrification** throughout the Achterhoek, enabling the transition away from gas heating through smart design, attractive propositions, and innovative financing solutions. Residents now embrace both individual and collective power-to-heat systems as practical, affordable alternatives.

The region's commitment to local energy extends to **transportation infrastructure**. Public EV charging stations offer the Netherlands' most competitive rates because municipalities supply electricity at cost price. **The growing municipal EV fleet operates through smart charging systems that balance the local grid while optimizing direct energy use.**

## The Foundation for Success

This comprehensive transformation is supported by **a robust facilitating framework anchored by Agem Energy Experts**. As the region's knowledge partner, Agem brings together diverse stakeholders, expertise, and capacity to create the seamless integration essential for managing this sophisticated and complex decentralized energy system.

The success extends beyond regional boundaries through strategic collaboration at multiple levels. At the European level, partnerships with energy communities across EU member states foster mutual learning and knowledge exchange, while jointly developing guidelines for implementing energy sharing models and creating supportive regulatory frameworks that can be replicated across different national contexts.

Nationally, the **close collaboration with Energie Samen** has been instrumental in maintaining ongoing policy dialogue with politicians, national and local governments, DSO's, research institutes like TNO, and other energy sector stakeholders. This **multi-stakeholder approach** ensures that **local innovations inform national policy development while benefiting from supportive regulatory environments**.

A crucial enabler has been the energy service provider's role in facilitating dynamic energy sharing models for energy communities. By offering low-cost, specialized services, they empower communities to navigate the complex energy landscape while maintaining focus on their core community-building activities.

The **development of local expertise** has proven equally vital. Trained local professionals now provide on-the-ground support to energy communities throughout the region, helping implement energy sharing models with deep understanding of local contexts and needs. This **grassroots capacity building** ensures sustainable growth and replication of successful approaches.

The **Achterhoek's success story demonstrates that rural regions can lead the energy transition**, creating economic opportunity, environmental benefits, and community resilience through collaborative innovation and local ownership at every level—from local professionals to European partnerships.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ <b>In the Achterhoek</b> <ul style="list-style-type: none"> <li>○ Regio Achterhoek</li> <li>○ 8 municipalities in the Achterhoek Region</li> <li>○ RES (Regional Energy Strategy)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Business models for energy sharing</li> <li>✓ Trainings on energy sharing</li> <li>✓ Policy for local ownership windfarm</li> <li>✓ Ongoing policy dialogue</li> <li>✓ Founding of EDV-Publiek</li> </ul>	2022-2025 €280.000 ✓ LIFE TANDEM



**Co-funded by  
the European Union**

*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.*

<ul style="list-style-type: none"> <li>Achterhoek <ul style="list-style-type: none"> <li>Province of Gelderland</li> <li>Alliander</li> <li>Duurzaam Ondernemen Achterhoek</li> <li>Streekenergie</li> </ul> </li> <li>➤ <b>At national level</b> <ul style="list-style-type: none"> <li>Energie Samen</li> <li>Trinova</li> <li>DSO's</li> <li>Entrnce</li> <li>NVDE</li> <li>KGG</li> <li>Het Normo</li> <li>TNO</li> </ul> </li> <li>➤ <b>EU level</b> <ul style="list-style-type: none"> <li>Rescoop EU</li> <li>Flemish Tandem partners</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ New Agem strategy for facilitating collaboration between local government and Energy Communities.</li> </ul>	
	<ul style="list-style-type: none"> <li>✓ Regional strategy and funding for the implementation of a decentralized energy system based on energy sharing models by energy communities.</li> <li>✓ Strong position of Agem as central knowledge partner for the regional energy transition</li> <li>✓ Locally trained energy sharing experts.</li> <li>✓ Naoberwind wins tender for Zoekgebied-K.</li> <li>✓ Standardised energy sharing proposition by Community Energy Service Provider (C-ESP)</li> <li>✓ New pilots for <ul style="list-style-type: none"> <li>Flexibility pilots</li> <li>Storage and conversion pilots</li> <li>Smart Charging</li> </ul> </li> <li>✓ Ongoing policy dialogue</li> <li>✓ Energy Poverty propositions</li> </ul>	2025-2027 €800.000 <ul style="list-style-type: none"> <li>✓ Regiodeal</li> <li>✓ Mooi</li> <li>✓ Horizon</li> <li>✓ Life Enerpov</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Realisation Naoberwind</li> <li>➤ Two extra wind development projects in 100% local ownership</li> <li>➤ Further scaling of <ul style="list-style-type: none"> <li>Energy Sharing</li> <li>Flexibility</li> <li>Storage</li> <li>Conversion</li> <li>Charging and car sharing</li> </ul> </li> </ul>	2027-2030 €1.200.000 Budget needed <ul style="list-style-type: none"> <li>➤ Regio deal</li> <li>➤ Mooi</li> <li>➤ Life</li> <li>➤ Horizon</li> <li>➤ Coop Sector investment</li> </ul>

## DUNEWORKS' After-LIFE story

### 'DuneWorks' in 2030

It is March 21<sup>st</sup> 2030, springtime and we are gathered together to celebrate how far we have come, even though Duneworks as such no longer exists. We have found other ways to continue our work as action researchers, whereby we **actively contribute to sustainability transformations** through translating between research and practice and supporting others in doing so. And the great thing is that we still collaborate with (some) of the TANDEM partners, so the **joint learning-by-doing**, the inspiration and reflexive monitoring workshops as well as the bi-lateral sessions to support the partners in setting up their citizen and stakeholder engagement have helped to create trusted relationships.

**(Values)** Social justice, solidarity in the energy transition; communities to revitalise democracy and relationships of care



**Co-funded by  
the European Union**

*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.*

**Values** such as **social justice, solidarity and inclusivity in the energy transition** and in other transitions still are central to the work we do. We are involved in a variety of projects, as self-employed/one-person-SME's, whereby we make use of what we have learned, to co-create with others, and to learn from what we do, in order to contribute to the **societal transformations** that are needed in view of addressing climate change and other planetary crisis. The challenges are still huge, but at the same **time a wide variety of cross-sectoral, multi-level, transdisciplinary networks contribute to the thriving of resilient communities**. In 2030 we are no longer stuck in our bubbles, but have opened up to others, with attention, care and lots of good ideas and actions that strengthen **a citizen-centred and sustainable energy provision**. We ourselves work increasingly transdisciplinary – as action-researchers, as citizens, as activists and as caretakers; we are all caretakers after all. We combine paid and unpaid work; both done in a variety of roles.

### **(Practices)**

Our ways of working (as practices) are continued in collaboration with the networks that we have been involved in before (i.e. the TANDEM partners and other partners from EU projects).

Next to that we have become more **directly involved in local community building** (partially around energy, but not solely) as a means to contribute to improved resilience that is important in order **to alleviate (energy) poverty and to improve societal readiness** to deal with ongoing and possibly deepening multi-crises. This local community building has as a first focus on social inclusion (recognition justice) and solidarity.

In most of our work, we make use of tools that have been developed in previous projects such as Tandems. The usefulness of tools is based on how well they can (fully or partially) support processes in real-life.

Furthermore, the organisational/business model in which solidarity and social justice stand central that has been developed by **a social enterprise and umbrella cooperative GOED** (both based in NL), has been further developed, acknowledged, tried and tested and improved. Next to, and in combination with other models (e.g. **cost-price+**), we see that these **experiments** have now **matured into robust niches** and move towards becoming more mainstream and widely accepted.

### **(Technical, Physical, Infrastructural)**

**Community-based district heating has become more widespread**, as well as other community provisioning (think of care, greening, etc). The electricity infrastructure is still in a troubling state, but energy communities are taken seriously in their contributions to help balance the grid, share energy locally. We see **a more distributed and decentralised physical and social infrastructure getting shape, contributing to enhanced social and societal resilience**. This goes together with a (slow) change in norms and values.

### **(Policy)**

We still need improvements of the institutional context. We continue to **translate outcomes of co-creation processes and dialogues into targeted, tailored and concrete policy advice (multi-level)**. We use a **policy-dialogue method** for initiating and improving such conversations, to enhance mutual understanding as a basis for working towards policies that include the values mentioned above, at several scale-levels. Our approach is furthermore helpful to clarify where consensus is not achievable, where trade-offs are to be made. Legislative changes have resulted in



**Co-funded by  
the European Union**

*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.*

an improved level-playing field, but we still have a lot of work to do; also in response to the increasing seriousness of climate change impacts.

### (Resources)

Our resources are diverse, based on participation in projects such as LIFE or Horizon, but next to that we work on a local scale, for municipalities, energy communities and other **(semi)public and non-commercial stakeholders**. These collaborations are dear to us as they reflect not only financial, but also knowledge and relational capital to us. Compared to the old times, when DuneWorks was still up and running, we now have decreased financial stability but have more time to spend according to what we consider meaningful and important.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ Closely collaborating with Kamp C, Agem, VITO</li> <li>➤ All other TANDEMS partners</li> <li>➤ In <b>tandem</b> with               <ul style="list-style-type: none"> <li>○ Municipalities</li> <li>○ Energy communities</li> <li>○ Social housing associations</li> <li>○ Knowledge institutes</li> <li>○ Branches (of energy communities)</li> <li>○ Local citizen initiatives</li> <li>○ Policy makers at all levels</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Models that improve social justice of energy transitions</li> <li>✓ Improved policies</li> <li>✓ Local projects that contribute to energy poverty alleviation and solidarity               <ul style="list-style-type: none"> <li>○ Zon op Kattenburg; AmsterdamsGOED; GOED</li> <li>○ Ongoing improvement of Models</li> </ul> </li> </ul>	2022-2025 €127.000 ✓ LIFE TANDEMS
	<ul style="list-style-type: none"> <li>✓ Enabling energy community models that prioritize energy poverty alleviation (+ policy and gov-ce recommendations)</li> <li>✓ Improving public-civil collaborations in the energy transition (+ policy and gov-ce recommendations)</li> <li>✓ Concretizing energy justice in internal energy community policies; and in policy and legislation (multi-levels) e.g. around local ownership</li> <li>✓ Showcasing successful projects in collaboration with citizen initiatives that deliver direct local value</li> <li>✓ New ventures?!</li> </ul>	2025-2028 € 250.000 ✓ LIFE ENERPOV ✓ Other (DUT)
	<ul style="list-style-type: none"> <li>➤ Continuation of the above</li> <li>➤ New ventures?! Unexpected turns?</li> </ul>	2027-2030 € 250.000 ➤ LIFE ➤ Horizon ➤ Other



**Co-funded by  
the European Union**

*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.*



## 4.6 AFTER-LIFE STORIES OF THE TANDEM PARTNERS | AUSTRIA

### AUSTRIA

#### OIKOPLUS' After-LIFE story

##### OIKOPLUS in 2030:

##### It is 2030, and we at Oikoplus...

...look back at the TANDEM project as a pivotal chapter in our company's journey. What began as a communications role in energy transition related initiatives has since **blossomed into a defining element of our identity**. Today, Oikoplus is not only a communications agency with recognized expertise in the field of energy communities — we are a member of one ourselves, as are our employees.

**Becoming part of an energy community in our home region was a natural and immediate consequence** of what we learned and helped communicate during TANDEM. But it did not stop there. The years following the project saw us **deepen our commitment to energy democracy, supporting local initiatives and energy system stakeholders across Europe** through strategic communication, co-creation processes, and tailored dissemination. In doing so, we have extended our impact far beyond the 'LIFE' of the project.

What started as Communication and Dissemination work has **expanded into substantial contributions in the areas of knowledge transfer and exploitation**. We now actively shape how project results are translated into practical applications, policies, and follow-up initiatives. In several projects, **Oikoplus has initiated innovation tracks of its own** — developing tools, formats, and frameworks that help make research and innovation results more accessible, reusable, and impactful.

This development was enabled by the **unique position Oikoplus holds at the intersection of diverse fields**. Drawing from a deep reservoir of insights into sustainable transitions — ranging from the energy sector to biotechnology and the space domain — **we are able to identify cross-sectoral synergies, create narratives that resonate beyond disciplinary boundaries, and connect stakeholders who would otherwise remain siloed**.

Thanks to the tools, methodologies, and especially the network we helped shape during TANDEM, Oikoplus has since contributed to multiple follow-up projects. In these, our role was not limited to comms work. We became **knowledge carriers — translating complex technical setups and policy frameworks into human-centered narratives that inspire trust, participation, and action**. A cornerstone of this evolution has been our work at the interface of energy and Earth observation (EO). Drawing on our company's roots in **science communication and geospatial analytics**, we integrated EO data into communication materials for local energy communities and into services targeted and local energy initiatives. This helped visualise the environmental and economic impact of their decisions — turning abstract metrics into tangible, shared goals.

The legacy of TANDEM is present in the partnerships we maintain to this day. **The open collaboration model we co-developed lives on in our approach to stakeholder engagement**. Through it, we have contributed to shaping inclusive governance processes in local energy systems. Oikoplus' role in the dissemination work package became a **blueprint for how we now**



**Co-funded by  
the European Union**

*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.*

**approach communications strategy in complex, multi-stakeholder projects.** We've scaled that approach to projects with a European, national, and increasingly municipal reach.

We still actively use the resources developed in TANDEMS: the stakeholder involvement templates, the Open Collaboration Model, the Cost-Price-Model, and even visual elements have become staples in our toolkit.

**The TANDEMS network, once a project partnership, is now a professional ecosystem** we regularly draw on and contribute to. Several partnerships born in the project have led to long-term collaborations — some in communication, others more technical. **In many ways, our “circle of influence” has expanded.**

In 2030, Oikoplus is **a trusted voice in the energy transition** — not because we know all the answers, but because we ask the right questions, stay curious, and never stop translating complexity into collective empowerment.

Actors   Sphere of Control & Influence	Outputs → Outcome through Actions	Timeline & Budget
<ul style="list-style-type: none"> <li>➤ All TANDEMS partners</li> <li>➤ Ongoing Collaboration with KampC, Duneworks</li> <li>➤ Stadt St.Pölten Klimakoordinationsstelle</li> <li>➤ Climate Hebrides</li> <li>➤ Österreichische Koordinationsstelle für Energiegemeinschaften</li> <li>➤ TU Wien Institut für Stadt- und Raumplanung (Institute of Spatial Planning)</li> <li>➤ EarthDaily (GeoSys)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Open Collaboration Model Brochure</li> <li>✓ Energy Sharing Business Model Brochure</li> <li>✓ Energy Community GPT and ChatBot</li> <li>✓ TANDEMS project video series</li> <li>✓ TANDEMS social media campaigns</li> </ul>	2022-2025 € 168.000 ✓ LIFE TANDEMS
	<ul style="list-style-type: none"> <li>✓ Sharpen profile in energy related communication services</li> <li>✓ Focus on energy system literacy campaigns</li> </ul>	2025-2027 €180.000 ✓ Prospect Follow-up Project
	<ul style="list-style-type: none"> <li>➤ As an enterprise, Oikoplus look optimistically into the future, open for new endeavours, activities and topics...</li> </ul>	2027-2030



**Co-funded by  
the European Union**

*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.*

## 4.7 SWOT ANALYSIS TANDEM IN THREE REGIONS

### BELGIUM | KAMP C – VITO – ZUIDTRANT

#### strengths

##### Kamp C:

- + Strong bonds with Province of Antwerp departments & 67 municipalities

##### VITO:

- + Leading research centre with integrated climate and energy expertise
- + Proven reflexive monitoring and open collaboration methods from TANDEM
- + Multi-disciplinary capabilities across 40+ research domains

##### ZuidtrAnt & ZuidtrAnt-W:

- + Strong bonds with municipalities of our region
- + Good link with the province of Antwerp
- + Increasing number of cooperative members
- + Known for innovative projects
- + Good collaboration with Opnieuw & Co

S

#### weaknesses

##### Kamp C:

- Investment budgets depend on EU projects

##### VITO:

- Limited execution power at local government level
- Success highly dependent on intermediary actors' capacity and motivation
- VITO's technocratic image may limit influence

##### ZuidtrAnt & ZuidtrAnt-W:

- Investment budgets depend on EU projects
- Current revenues are declining under the feed-in (injection) tariff system. A new business case is necessary.

W

#### opportunities

O

##### Kamp C:

- + Engaged local network for the REC Kamp C pilot
- + Replication opportunities for other business and industrial parks

##### VITO:

- + Strategic positioning as system orchestrator
- + Influence on future Flemish and EU climate policy via pilot learnings
- + Export potential of digital tools and modelling methodologies
- + Legacy-building through capacity development in local ecosystems

##### ZuidtrAnt & ZuidtrAnt-W:

- + Replication opportunities for other business parks or social economy organisations with regards to energy sharing
- + Replication opportunities neighbourhood renovation as this is not provided by Energy Houses within our region

T

#### threats

##### Kamp C:

- Difficult Business model for REC Kamp C, due to network costs and energy sharing policy

##### VITO:

- Political turnover or shifting priorities may disrupt momentum
- Infrastructure and permitting delays could hinder implementation
- Fragmented engagement by key stakeholders poses risks for underperformance

##### ZuidtrAnt & ZuidtrAnt-W:

- Difficult Business model for the Renovation cases due to new subsidising scheme that only benefits the Energy Houses within Flanders
- Policy non-decisions /delays in political processes
- Investing time and effort to ensure viable collaborations with municipalities throughout election cycles and staff-changes
- Competition with Energy Houses



Co-funded by  
the European Union

*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.*

## BELGIUM | MECHELEN – KLIMAAN

### strengths

#### City of MECHELEN:

- + Strong connection and collaboration between the city, Woonland, citizen initiatives as Klimaan, and poverty organizations as SAAMO.
- + Willingness to go for climate justice, recognised by winning the EUSEW award 2025 for best local energy project of the EU.
- + Smart risk sharing mechanisms mobilises important private and citizen investments into the energy transition.

#### KLIMAAN:

- + Local trust & presence in Rivierenland communities
- + Strong EU project experience across energy, mobility, renovation, ...
- + Citizen-led approach with democratic ownership at its core
- + Integrated services across energy production, renovation, and mobility
- + Track record in social inclusion through concrete pilots

S

### weaknesses

#### City of MECHELEN:

- Reduced support for solar energy and slow electrification pushes regularly solar energy to negative prices.
- Tariffs of energy suppliers pushed shared energy out of the market.

#### KLIMAAN:

- Limited team capacity vs. growing operations
- Regulatory complexity in emerging domains (e.g. sharing, charging)
- Reliance on volunteers in key community-facing roles
- Fragmented tools across services and platforms

W

### opportunities

O

#### City of MECHELEN:

- + Strong European support for the energy transition, where Mechelen is well connected through its participation in decarbonisation project (EUI) and its membership of EnergyCities.
- + Connecting energy sharing to flex services and batteries can return the positive business case for renewable energy.
- + Generating social fairness in the electrification of transportation.

#### KLIMAAN:

- + Scaling successful pilots like Otterbeek and OSS
- + Development of EV charging & wind as new long-term assets
- + Influence on policy via SHINE, U2DEMO, local governance
- + Partnerships with key actors across sectors
- + New market roles in flexibility and citizen balancing

T

### threats

#### City of MECHELEN:

- Counteractions of legislation and pricing by promoters of fossil sectors: fossil energy supplier or the automobile-sector.
- Less remunerative business cases for energy sharing and private solar installations can reduce public support for the energy transition.

#### KLIMAAN:

- Grid congestion limiting new capacity
- Policy delays at Flemish or federal level
- Commercial competition in citizen energy space
- Equity & trust risks if benefits are not widely felt



**Co-funded by  
the European Union**

*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.*

## BULGARIA | ENEFFECT

### strengths

#### EnEffect:

- + Nationally recognized NGO with deep expertise in sustainable energy, building renovation, and climate planning.
- + Key role in managing the EcoEnergy network, connecting 19+ Bulgarian municipalities for peer learning and replication.
- + Strong track record in EU-funded projects, bridging technical, policy, and communication gaps effectively.
- + Strong links with local authorities and HOAs, enabling real-world implementation of citizen-led energy initiatives.

S

### weaknesses

#### EnEffect:

- Limited formal authority to implement large-scale infrastructure or regulatory reforms independently.
- Dependent on external funding cycles, which may delay scaling and continuity.
- Relatively small core team, which may constrain simultaneous national-scale coordination and local-level delivery.
- Variability in municipal capacity and engagement, especially in smaller or under-resourced communities.

W

### opportunities

O

#### EnEffect:

- + High replication potential of successful models for PV cooperatives and municipal-community partnerships.
- + Growing national focus on energy poverty and social inclusion, opening pathways for deeper integration of citizen energy models.
- + Inclusion in national policymaking and funding bodies, offering a platform to embed community energy frameworks systemically.
- + Potential to export Bulgarian good practices across the Balkan region via transnational partnerships.
- + Leveraging TANDEM tools and methodologies (e.g., engagement templates, co-ownership models, digital energy-sharing guides) to build out a national support framework for energy communities.
- + Building strategic alliances with financial institutions and social actors, expanding beyond the technical sector into social equity.

T

### threats

#### EnEffect:

- Political instability and delayed regulatory reforms may hinder the operationalization of supportive frameworks.
- Fragmented institutional coordination may result in policy overlaps or missed opportunities for integration.
- Risk of pilot fatigue, if policy follow-through or financing mechanisms are delayed.
- Limited public awareness and scepticism, especially in regions with low civic engagement or limited digital literacy.
- Competition for funding and political attention from larger, high-visibility infrastructure projects.



**Co-funded by  
the European Union**

*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.*

## BURGAS SWOT

### BULGARIA | municipalities of GABROVO

#### strengths

##### Municipality of GABROVO:

- + Strong municipal leadership with political support from the Mayor and Council
- + Experienced in EU-funded projects (e.g. TANDEM, LifeLOOP, Power-E-Com)
- + Active and engaged citizen base in energy communities
- + Long-term partnerships with EnEffect, SEDA, TU Gabrovo

S

#### weaknesses

##### Municipality of GABROVO:

- Limited regulatory authority to enable collective metering or local energy trading
- Dependence on external funding for infrastructure deployment
- Limited internal technical staff for full-scale energy planning and engineering
- Complexity in coordinating between multiple stakeholder types (citizens, SMEs, DSOs)

W

#### opportunities

O

##### Municipality of GABROVO:

- + Replication of low-carbon district model (NetZeroHero) in other city areas
- + Upcoming LIFE CET-LOCAL project to support Heating & Cooling Plan deployment
- + Scaling up the one-stop-shop and citizen training approach
- + Expanding cooperation with SMEs, schools, and cultural institutions

T

#### threats

##### Municipality of GABROVO:

- Regulatory instability or slow policy reform at national level
- Public fatigue or declining participation over time
- Energy poverty and rising prices may affect equity of participation
- Delays in access to grid or bureaucratic barriers to RES expansion



**Co-funded by  
the European Union**

*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.*



## THE NETHERLANDS | Agem - DuneWorks

### strengths

#### Agem:

- + Established expertise and reputation
- + Not for profit and independent
- + Innovative ideas
- + Strong existing collaboration between EC's and municipalities
- + Strong stakeholder network
- + Multi-level collaboration experience
- + Policy dialogue access

#### DuneWorks:

- + Connections with energy coops & direct involvement in some of them
- + Engagement -, dialogue -, and design methods and tools that can be adapted to different contexts and processes
- + In-depth understanding of co-evolution of institutional and agency dimensions
- + Experience in setting justice dimensions for design, monitoring and evaluation

S

### weaknesses

#### Agem:

- Reputation as energy supplier and not independent knowledge partner
- Dependent on large network and politics can slow you down.
- No cheap wind energy yet
- Funding dependency based on projects and subsidies
- Dependency on regulation

#### DuneWorks:

- DuneWorks will no longer exist, need to find new way of working together with others as self-employed individuals
- Striking balance between EU funding and other sources of income
- Small size, difficult to position ourselves

W

### opportunities

O

#### Agem:

- + Energy communities and energy sharing have momentum.
- + New energy sharing models
- + Naaberwind
- + New policies

#### DuneWorks:

- + Strong networks based on Tandems and other LIFE and EU projects
- + Involvement in local (energy) communities in NL and in umbrella org GOED
- + Joint acquisition with former Tandems partners
- + Flexibility of self-employed individuals (limited overhead)
- + Openness to new ventures

T

### threats

#### Agem:

- Low energy prices and high imbalance cost
- Complexity
- Grid congestions
- Anti wind sentiment
- Large energy companies taking over with large budgets

#### DuneWorks:

- Need for new business models for the self-employed one-person SMEs after DuneWorks' liquidation
- Competition from consultants that are better at marketing but have little expertise and commitment to improving solidarity and justice in transitions
- Current political climate which (in NL) leads to decreased budgets for energy transition related work



**Co-funded by  
the European Union**

*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.*

## 4.8 BRINGING IT HOME | CORE TANDEM ACHIEVEMENTS AND VALUES AS AFTER-LIFE OBJECTIVES

The TANDEM consortium has aimed to empower citizens to lead the clean energy transition by developing and supporting community energy initiatives across Belgium, the Netherlands, and Bulgaria. Through practical pilots and policy engagement, it has aimed to create replicable models for energy sharing, community collaboration, and renewable energy uptake.

TANDEM has brought together regions with different cultural, political and technical contexts – **the province of Antwerp (Belgium), Achterhoek (Netherlands) and Gabrovo and Burgas (Bulgaria)** – to empower citizens to participate in the clean energy transition. In TANDEM key partners have demonstrated the potential of a streamlined collaboration, in tandem and ensure uptake in other regions in Europe. By the end of the project in September 2025, TANDEM aims to deliver a wide variety of replicable models and trainings, demonstrate and **trigger 83 community energy projects, support and/or create 60 citizen-led initiatives and trigger RES generation of 8.52 GWh/year with 14.6m€ investments** in sustainable energy.

### Achievements / Expected Achievements

- **83 very diverse projects are ongoing across three thematic Tandem areas:** wind and large-solar projects in the Netherlands, heat networks, solar and district renovation projects in Belgium and Bulgaria. These pilots represent different scales, contexts and business models, offering valuable insight into the challenges and opportunities faced by energy communities.
- In Bulgaria, [Gabrovo](#) has created the country's **first energy community led by a municipality**. In Belgium, the award-winning Otterbeek energy community, Belgium's first social energy community – recognised at the [2025 European Sustainable Energy awards](#) with the first prize in the Local Energy Action category – is broadly followed by many actors, providing inspiration for a just clean energy transition. In the Netherlands, the project has worked with the Dutch Federation of Energy Communities Energie Samen, to further operationalise, develop and implement a cost price model within Dutch energy communities.
- **Key policy outputs include EU and national-level recommendations**, including on [business models for energy sharing](#). In addition, a '**Blueprint design for an open collaboration model**' has also been developed to help local governments and energy communities build partnerships using value network mapping as a central approach.

### Contribution of the project to EU policy implementation

Policy dialogues have been held across pilot regions and have ensured that policy recommendations are grounded in real-world experiences. The TANDEM partners have actively engaged with policy makers and stakeholders to address the legal and practical



**Co-funded by  
the European Union**

*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.*

barriers, contributing to national and regional legislation on energy communities. Analysis of cases in Belgium, Bulgaria and the Netherlands informs policy recommendations aligned with the recasts of the EED, RES, and the EPBD directives. A whitepaper on [business models for energy sharing](#) has been shared with the European Commission, providing actionable insights.

With these successes and their After-LIFE stories in mind, the TANDEM consortium formulated the following objectives for the After-LIFE period.

### **TANDEM After-LIFE Objectives**

Building upon the successes and core values of TANDEM, the After-LIFE period will focus on the continued application, adaptation, and replication of the project's tested models, with a strong commitment to deepening the collaboration between municipalities and citizen energy communities across Europe. The following After-LIFE objectives have been formulated based on the legacy of the project's key objectives and their associated outputs:

#### **After-LIFE Objective 1: Sustain and Expand the Open Collaboration Model**

The open collaboration model co-developed during TANDEM will continue to serve as a foundational approach for fostering meaningful partnerships between municipalities and energy cooperatives. The objective is to ensure that this value-based model, grounded in reciprocity, shared benefits, and trust, is adopted by new regions and actors, particularly through the training trajectories and example agreements piloted during the project. Kamp C will commence widespread operation the Open Learning Centre to facilitate this uptake.

#### **After-LIFE Objective 2: Replicate Innovative Business Models and New Processes**

The After-LIFE period will see further implementation and scaling of the new business models for democratised wind and solar energy production developed by TANDEM. These include cost-price consumption of locally generated electricity and participation without upfront investment. The goal is to refine and share these models across Flanders, the Netherlands, Bulgaria and Austria, enabling greater access to energy transition for all citizens.

#### **After-LIFE Objective 3: Scale Up Pilot Demonstrations in New Contexts**

A core After-LIFE objective is to scale the 83 pilot projects developed under WP3 through replication in other sectors, cities, and regions. Practical guides produced during the project (e.g. for cooperative wind, apartment retrofits, energy sharing, heat networks, and citizen-led renovations) will support local authorities and cooperatives in launching similar initiatives, while enabling tailored adaptations to their specific local contexts.



**Co-funded by  
the European Union**

*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.*

#### **After-LIFE Objective 4: Empower and Multiply Citizen Initiatives**

The After-LIFE phase will maintain strong support for citizen-led energy initiatives by nurturing new energy communities, particularly in areas where they do not yet exist. The aim is to continue fostering municipal support for grassroots action, ensuring that vulnerable groups and energy-poor households are not left behind in the transition.

#### **After-LIFE Objective 5: Deepen and Disseminate Engagement & Learning Practices**

The TANDEM training tools, environmental justice-based engagement methods, and ICT solutions for citizen involvement will be further disseminated and applied. Train-the-trainer sessions and local capacity-building efforts will be pursued through project partner networks and future EU projects, aiming to embed participatory methods across energy transition planning processes.

#### **After-LIFE Objective 6: Embed Community Energy into Local Policy Frameworks**

Using the insights and policy recommendations developed under WP5, project partners will pursue the integration of energy communities into local and regional climate, housing, and spatial planning strategies. Engagement with ongoing NECP revisions and national funding plans will ensure that community energy is part of the policy mainstream.

#### **After-LIFE Objective 7: Ensure Long-Term Outreach, Replication and Visibility**

TANDEM will continue to inspire and inform other EU regions through active dissemination of success stories, inspirational guides, and replication pathways. The final deliverables and training resources will be hosted via open-access platforms. Communication efforts will focus on policymakers, civil society, and local actors, with the aim of reaching over 30,000 people in the After-LIFE period.

#### **After-LIFE Objective 8: Upscale Reflexive Monitoring and Impact Evaluation**

Finally, to measure progress and impact, the key performance indicators (KPIs) developed in the project will continue to be used by partners to track replication and adaptation efforts. These will be documented and shared via reports and events, with the support of umbrella organisations such as REScoop.eu, EnergieSamen, and EcoEnergy. Going beyond this result-oriented monitoring, the consortium will continue to apply the action-oriented monitoring approach followed throughout TANDEM, promoting reflective learning, enhancing collaboration, and facilitating adaptive responses to the complex challenges that undoubtedly are lying ahead.



**Co-funded by  
the European Union**

*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.*

#### 4.9 TANDEM AFTER-LIFE CONSERVATION PLAN | A TIMELINE OF ACTIONS & RESOURCES

No	TANDEM After-LIFE Conservation Actions	Responsible Partner	Timetable	Budget (€)
1.	Open Learning and Training Centre (infrastructure)	Kamp C	3 years (2025–2028)	€150.000 (ok)
2.	Open Learning and Training Centre (training Connecting LAs and Energy Cooperatives)	Kamp C	5 years (2025–2030)	€25.000 (€5000/y) (ok)
3.	Mission Resilient Neighbourhoods	VITO	5 years (2025-2030)	€500.000 (ok, own budget)
4.	CRM Econobis tool (together with other ECs in Flanders)	ZuidtrAnt	5 years (2025–2030)	€2000/y
5.	Office building / physical OSS	ZuidtrAnt	5 years (2025–2030)	€15.000/y
6.	Extension heatnetworks (Zuidtrant-W / consortium Warmte Verzilverd / City of Mortsel)	Zuidtrant-W	5 years (2025–2030)	€75.000/y personnel €6m infrastructure
7.	Seacoop project   Wind at Sea (Seacoop and all included Energy Cooperatives)	Seacoop	25 years	€15.000/y (personnel/ participating EC)
8.	Climate plan to neutrality – governance (EUREKA)	Mechelen	4 years (2025-2029)	€235.600
9.	Own buildings rooftop PV and energy saving	Mechelen	5 years (2025-2030)	€10.000.000
10.	Voice of the vulnerable and climate justice	Mechelen & SAAMO	5 years (2025-2030)	€400.000
11.	District heat networks and heat coalition	Mechelen	5 years (2025-2030)	€5.000.000
12.	Private finance multiplier and risk sharing	Mechelen	5 years (2025-2030)	€500.000
13.	Expansion of one-stop-shop services for citizens and stakeholders	Gabrovo Municipality	5 years (2025-2030)	€75,000 (€15,000/year)
14.	Maintenance and moderation of local energy communities' online platforms	Gabrovo Municipality	5 years (2025-2030)	€10,000



**Co-funded by  
the European Union**

*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.*

15.	Bi-annual public workshops and forums on energy and climate topics	<b>Gabrovo Municipality &amp; EnEffect</b>	5 years (2025-2030)	Own budgeted and projects
16.	Participation in EU peer-learning and knowledge sharing platforms (e.g. via Power-E-Com)	<b>Gabrovo Municipality</b>	2 years (2024-2026)	Funded via project
17.	Support other Bulgarian municipalities in developing local energy community concepts	<b>Gabrovo Municipality &amp; EnEffect</b>	5 years (2025-2030)	In-kind (staff budget)
18.	Expansion of courses, possibility for certification of local experts	<b>EnEffect</b>	5 years (2025-2030)	Funded via various initiatives (LIFE, EUKI)
19.	Collaboration with Energy Poverty Observatory and other energy related initiatives	<b>EnEffect</b>	2 years (2028-2030)	In-kind (staff budget)
20.	Trainings, workshops, public events, deep dives world cafes, overall engagement municipalities	<b>EnEffect (via EcoEnergy)</b>	5 years (2025-2030)	€175,000 Staff time & funds from ongoing sister initiatives / projects
21.	Tendering process (design phase) Naoberwind	<b>Agem</b>	3 years	300.000
22.	Ongoing policy dialogue	<b>Agem</b>	5 years	40.000/year
23.	Locally trained energy sharing experts	<b>Agem</b>	3 years	150.000
24.	Regional implementation of energy sharing models by energy communities in 8 municipalities	<b>Agem</b>	3 years	300.000
25.	Support in policy dialogues; citizen engagement and other interactions and interventions using a justice framework	<b>Duneworks</b>	5 years	150.000
26.	Action-research for resilience and energy solidarity	<b>Duneworks</b>	5 yeras	100.000
27.	Maintenance of website <a href="http://www.lifetandems.be">www.lifetandems.be</a>	<b>Oikoplus</b>	5 years (2025–2030)	Staff time (maintenance) funded from project overheads



**Co-funded by  
the European Union**

*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.*



<b>28.</b>	Chatbot	<b>Oikoplus/ ZuidtrAnt</b>		Funded as Saas (Software as a Service)
<b>29.</b>	Digital simulation and pilot actions for climate neutral neighbourhood in Burgas.	<b>Burgas Municipality</b>	2 years (2026–2028)	€110.000 EUI programme
<b>30.</b>	Implemented PV installations on 3 kindergartens	<b>Burgas Municipality</b>	5 years (2025–2030)	€450.000 Budget raised by cooperative
<b>31.</b>	Implemented PV installations on 2 hospitals and 1 school	<b>Burgas Municipality</b>	2 years (2028–2030)	€850.000 Budget raised by cooperative



**Co-funded by  
the European Union**

*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.*

## 5 CONCLUSION

The LIFE TANDEM project has demonstrated that meaningful collaboration between municipalities and energy cooperatives is not only possible, it is essential for a just and inclusive energy transition. Over three years of intensive co-creation, testing, and learning, TANDEM partners in Belgium, the Netherlands, Bulgaria and Austria have developed practical models, tools, and partnerships that have already generated tangible local impact and laid the groundwork for wider replication across Europe.

TANDEM's core ambition to foster structural, trust-based cooperation between local governments and citizen-led energy initiatives, has materialised through over 80 concrete pilot actions. These include initiation of community-owned wind and solar projects, cooperative heat networks, energy sharing models for apartment buildings, cooperative ev-sharing and citizen-led renovation initiatives. Each pilot was embedded in a real-life context, navigating social, legal, and economic complexity while always keeping citizen empowerment at its core. The business models and collaboration frameworks that emerged are adaptable and scalable, offering viable solutions for regions with different governance, financial, and infrastructural contexts.

Crucially, the project went beyond implementation to create lasting enablers: a blueprint for open collaboration, a toolbox of accessible trainings, inspirational policy recommendations, and robust knowledge exchange across countries and disciplines. These are not just project outputs, they are seeds for future impact. TANDEM has already begun to influence regional and national policies, strengthen local capacity, and inspire new alliances between cooperatives and public authorities.

As the project transitions into its After-LIFE phase, partners remain committed to upscaling the models developed, sharing their insights, and championing a transition that is not only green but also democratic, fair, and locally grounded. The After-LIFE period will not mark an end, but a new chapter in the movement toward citizen-centred energy systems, powered by cooperation, guided by shared values, and sustained by communities themselves.



**Co-funded by  
the European Union**

*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.*